

**Company:** Brambles Ltd.  
**Title:** 2018 Investor Day  
**Date:** 14 March 2018  
**Time:** 7:30pm AEDT / 8:30am GMT

### Start of Transcript

Sean O'Sullivan: Hello, everyone, and welcome to Canary Wharf and the 2018 Brambles Investor Day. For those who don't know me, my name is Sean O'Sullivan and I'm the Vice President of Investor Relations at Brambles. Before we kick off, I'd like to cover off on some housekeeping items. Firstly, in accordance with our zero harm policy I'd like to take you through the hotel evacuation plan in case of an emergency.

As you can see on the slide the exits are behind me or through the doors that you came through. The evacuation assembly area is outside the entrance of the hotel, in the car park. The bathrooms are located across the bridge and at the end of the corridor. There will be refreshments and coffee dotted around this whole area throughout the day, so please do get up and grab whatever you need to stay alert. I know a lot of you have just arrived, so if you need to get up, walk around et cetera, please do so. There is, as you probably notice, a showroom across the bridge to the left in the River Room. Please take a moment during the breaks to engage with our teams there, showcasing our sustainability program and the CHEP virtual reality tool.

Now, turning to the screen, where you can see the agenda for today. It's also in your presentation packs. If you have any questions about the schedule, or anything else regarding the event over the next few days, please do ask Raluca, [Lu] or I.

Now, in this first session we'll have presentations from Graham, Nessa and Carmelo. We have allocated enough time for each presenter to allow for Q&A. However, as Graham is conducting a Q&A session at the end of the day, we'll leave all questions for him until then.

Finally, as is our usual practice when talking about our financials, unless otherwise advised all currency is in US dollars. Growth rates, unless otherwise stated, are in constant currency, and all forward-looking statements are subject to our disclaimer.

With all that done I'd like to thank you once more for coming and hand over to Graham.

Graham Chipchase: Thanks, Sean. Good morning, everybody. I hope you enjoyed last night, those of you who were here. I think some of you have done a lot of your pre-work already from some of the questions I gather you were firing at one or two people. If you want to leave now, go ahead. For those of us who were talking about football, I'm wearing black for the obvious reason, about Man United last night, Liverpool, so that's - those of us - just that we're glad we didn't make any predictions last night because I would have lost a lot of money. I hope you had a good time and, hopefully, tonight we'll have a good time as well.

What I'm going to talk about today, before we kick off, is the business model, what we're doing with the retail landscape, our strategic priorities and the progress we're making in relation to our investment proposition. Before I do that I want to talk about our purpose. We're doing some work - we just started it - about the purpose of the Company, and it's absolutely fundamental to our culture. You can see some things up on the slides here which relate to our purpose. I won't go through all of them, but it's really important if it really motivates our people, it helps us to attract new talent and it defines not only what we do, but why we do it.

We're not simply addressing an internal need when we talk about purpose. It's something that we're increasingly being asked to clarify by our customers, by broader stakeholders and by investors. Those of you who will have seen the Larry Fink letter - which, obviously, he's the CEO of BlackRock, one of our biggest shareholders - he's very, very clear about it, which - it says without a sense of purpose no company, public or private, can achieve its full potential and, in fact, without a sense of purpose many companies will lose their licence to operate with their stakeholders. So it's really important.

Now, the really good thing - and the great thing for Brambles and our people - is that we've got a great story to tell around this. I'll talk about that in a minute, but our purpose and what we do, it addresses the concerns of our time and it's making a positive contribution to society. I think that's something that is really important for us to understand. It's important for our broader stakeholders to understand.

When we talk about purpose we often talk about this - and you've seen this model before, this slide before - it's around our sustainable business model, our share and reuse model. I think the important thing to say here and to understand is that at Brambles we move more goods to more people in more countries than any other organisation on earth. That's a very powerful statement.

I'm using this slide just to tell you a little bit about what's going on in the retail landscape and our operating environment. Essentially, the way the world makes moves and sells goods is changing. Traditional retailers are facing increasing pressures from the hard discounters and, obviously, the new and the disruptive e-commerce retailers. Consumers are demanding more choice and control of what they buy, how they buy it, when they buy it but, at the same time, we're seeing labour shortages across all our geographies and various sectors in industry. We're also seeing an exploding trend in technological experimentation. When you put all that together you can see there's going to be opportunities and threats for everybody in the supply chain.

This now talks about one of those opportunities and threats. About a year ago, I would say, every single meeting with an investor commented on Amazon and what's the threat. I'm going to try and answer that. Hopefully, we've got - we have already answered it because I think probably only 75% of the meetings in the last month talked about Amazon rather than 100%, so we're getting there slowly.

What this tries to show - if you look from left to right - is that the fundamental relationship between the manufacturers and retailers - be they either the traditional bricks and mortar retailers or the e-commerce retailers - doesn't really change, and there's no real impact on Brambles.

If you're thinking about the most effective way for a manufacturer to transport their goods to a retailer it's still in bulk on a pallet, one of our pallets. The real destruction is happening further downstream. If you go to the right there it's between the retailers and the consumers, which we all know, as consumers. Now, in the first instance this is not disruptive to our business model. You can see that through our results. Our results are still showing great growth, so it's not disruptive to our business model.

That doesn't mean that we're complacent about the changes that might evolve in the retail landscape. What it does mean though is that we're focussing on the opportunities, and those are, largely, in the First and Last Mile Solution. As we go through the day you'll hear a bit more about that.

One of the other things that we've just done is an internal high. We've promoted someone to be a global head of innovation. One of the reasons that we're doing that is to make sure that we're staying ahead of the trends, both in our business and our customers' businesses as this model evolves. Obviously, there are going to be other things relating to products and process innovation as well.

This slide shows you why we are actually working proactively with some of the key players in the e-commerce landscape. We're working with people like Amazon, JD.com and Blue Apron. They're all customers. They're all - we have good relationships with them and we're working with them to try and solve some of the problems they're seeing in the supply chain as they grow their businesses.

Some of them we've set out here. As you see this rapid growth in e-commerce it exposes the challenges of owning and operating and maintaining a proprietary pool of pallets because, clearly, it takes away management distraction for them, managing their own business, and also there's a dollar cost to them having their own proprietary pool. That is why the model we have, in terms of pooling assets, is attractive to them.

The other thing that we see is, of course, with e-commerce in particular there's much more automation in their replenishment and distribution centres. With more automation you need to have much higher quality platforms and pallets because the standard whitewood pallet will not survive in that environment, so we see another reason why our model becomes attractive to them.

Finally - and it's very important for Brambles - a lot of these players - the sustainability values that they have are completely aligned with ours, so it's very exciting for them to work with us because our sustainability drive allows them to meet their own sustainability objectives, particularly in things around in and out bound packaging waste, which we're helping them reduce.

Now I'll move on to the strategic priorities. Again, this is a slide you've seen before. We talked about this last August. These very much guide what we do on a day-to-day basis. Throughout the day you'll hear members of the leadership team talking about what they're doing and how that's aligned to these five strategic priorities. It's really important that this message is going down through the organisation, which it is. Just a slight anecdote: our auditors are asked by the Board to do many things apart from checking the numbers. One of the things that they're asked to do is to see what the focus around the Group is, driven by what senior management are saying. They go throughout the Group. They go round the world. They go quite deep down into the organisation, and they reported back to the audit committee fairly recently.

One of the things they said was it was absolutely amazing that a very consistent message back from everywhere in the organisation they went, was that the focus from senior management and the Company was on cash generation and asset efficiency. I was very happy to see that. Nessa was absolutely delighted to hear that, to see that our messages around what's important are really going down through the whole organisation. That's not as easy as you might think because Brambles is a big organisation. It has operated in cultural silos in the past, so to be able to get a consistent message going right down through the organisation is very important.

Let's talk about investment value proposition. The good news is it hasn't changed, so it's what it was when we first started off about a year ago. What we believe is if we can execute against this value creation model we will deliver sustainable - through the cycle - sustainable growth at returns well in excess of the cost of capital, with sufficient cash generation to fund growth, innovation and shareholder returns - exactly the same the same thing that we said all throughout the last year.

If I look at the different elements of this in a bit more detail - so we look at the mid-single digit revenue growth - again, we believe we can deliver this primarily through conversion of customers to our pooled solutions, away from alternative one-way platforms. That's what's driving the growth, as well as, obviously, the GDP element. I would say the other point to make here - I think through the next few years pricing we would expect to remain broadly flat.

IFCO and CHEP EMEA are expected to continue to grow in the mid to high single digits. CHEP Americas, as you saw in the first half results, have returned to the historic growth trends that we've seen in the past, and we would expect to see them continue to maintain that growth rate.

As you would expect of a prominently mature business, EMEA - sorry, the Asia-Pac business with CHEP - you'd expect to see modest to low single digit growth rates, which is what we've seen for some time. For those of you, like me, who are ex-accountants in the audience I know you're going to want to do the weighted average there against the growth rates. I did that last night - 5.4%, just to save yourself the work. When the individual business leaders do their presentations they'll go into the drivers behind some of these growth rates in a lot more detail.

The next one is actually a really critical one. This is one of the first things I talked about when we spoke to the markets last year. A key part of this proposition is that we can get the bottom line growing faster than the top line. Now, given where we're starting, it is definitely going to be a multi-year process. That's why we use that term through the cycle. I think if you look at the first step there it's really about us addressing the fundamental operational weaknesses in our underperforming businesses, primarily through the leverage of global best practice and our scale.

When Ness and both Carmelo talk later on they'll talk about a very key action we're going to take. We've identified a way to make a step change in our operational performance, particularly in the US, by focussing on this accelerated automation program which we talked about at the half year results. They're going to talk about that in a lot more detail, but the key thing is that it's tried and tested technology. We expect a very good return in a relatively short period of time.

We're going to make some other investments as well - which you see on the slide there - particularly around investing in our procurement process and some customer centric technological solutions. When we've done all these investments we expect to be a significantly better business with improved operational efficiency, increased capacity and strengthened capabilities. What that should do is then allow us to deliver this operating profit leverage in a much more sustained way.

ROCI - again, this was a cause of a lot of discussion a year ago. Hopefully, now, everyone's comfortable with it. We've called it out as being mid-teens. The reason we've done that is it allows us flexibility to invest in the business when we see opportunities to build a better business. You can see some of the opportunities on the right. If we don't see these opportunities we won't invest and, as a result, the ROCI would be at the top end of that range.

In summary, I think you can expect to hear us talking a lot more about our sustainable business model. It talks to our purpose, excites our employees and it is a competitive differentiator for us. We're also going to partner with customers in increasingly innovative ways to help them navigate the evolving retail landscape. Whilst we acknowledge that we are still some distance from our own and the market's financial expectations, we are making really good progress against our strategic priorities and we've got a plan to improve the returns to get us where we need to be. Finally, the business is fundamentally strong. Our people are highly motivated and our value proposition is robust. We remain well positioned to deliver long term value and attractive shareholder returns.

With that, I will pass on to Nessa. Thank you.

Nessa O'Sullivan: Thanks, Graham, and good morning, everybody. First of all, I'd like to start with a high level overview of the progress that we've made on cash flow generation, capital allocation and also on our balance sheet. While we're yet to achieve our objective of fully funding dividends from free cash flow, we did materially increase cash flow generation in the first half. That was through a combination of asset efficiency improvements, disciplined capital allocation, as well as improved management of both working capital and asset compensations. Importantly, we've also identified clear areas of opportunity for further improvement, and I'm going to cover these shortly.

In line with our focus on our core business we're allocating our capital to opportunities that grow and strengthen the operational performance of our core pooling businesses. Pleasingly, we also continued to strengthen our balance sheet position through a recent market issuance, and we maintain our investment grade ratings.

Looking at cash flow generation in more detail, at the FY17 full year results we reported \$120 million free cash outflow after dividends and we articulated our commitment to fully funding dividends from free cash flows. In light of this commitment, I think it's important for us to outline how we are going about improving our free cash flow generation and where we see the opportunities.

As you can see on slide 3 we've identified three areas of opportunity which will collectively deliver between \$100 million and \$170 million of annual improvement in cash flow over the medium term. The first and largest area of opportunity is around capital efficiency and allocation, which is expected to deliver cash flow improvements of between \$50 million to \$100 million.

In addition to our refocused capital allocation strategy we have initiatives in place to reduce the capital intensity of our business and leveraging our global scale and expertise to also lower the capital cost for platforms. We'll address these in more detail shortly.

The second area of focus is working capital. Specifically, we're improving our cash collection processes, renegotiating payment terms and improving overall compliance to contractual terms. We anticipate these initiatives will generate between \$10 million to \$20 million of additional cash flow per annum. Pleasingly, we've already seen improvements in working capital during the first half.

Finally, significant items also represented an opportunity. In the first half of FY18 significant item expenses were minimal and related to completion of legacy projects and a material decrease over prior year.

Looking in more detail at our capital allocation, the first step we've taken to address capital efficiency is to refocus our capital allocation towards our existing core pallet, RPC and container pooling businesses. As Brambles is a growth Company we'll continue to expand our high returning core businesses and take a disciplined approach to allocating capital in developing markets and to emerging pooled business opportunities.

As you'll hear in all of the presentations today, we're also keenly focussed on innovations, ranging from new platforms, customer solutions and digital technology. It's our objective to reduce the pooling capital intensity of the business and, at the same time, support growth in our core businesses and ensure the quality of our pooled assets. To achieve this objective we are identifying opportunities for efficiencies within our operations. And to improve the efficiency in the business we're also investing to deliver productivity improvements in the core business.

Taking a more detailed look at the opportunities to reduce the capital intensity of the business, looking at the chart on the left, you'll note that between FY14 and FY16 pooling capital intensity was increasing at an unsustainable rate. Pooling CapEx to sales increased by 3 percentage points over the period. In FY17 we took immediate action to, firstly, arrest this accelerating trend and, secondly, to reduce the trend. To date we've delivered a 1 percentage point reduction, with opportunity for a further two points' reduction.

Moving forward, we would expect pooling CapEx to sales to reduce by up to 2 percentage points from the current levels due to a range of actions to improve asset efficiency. These actions are focussed around cycle times, loss rates, damage rates and pallet costs. We're seeing to improve cycle times through the automation of - through a combination of customer collaboration initiatives and changing contract terms to better align with the compensations we get for the use of our assets. As previously announced, we've also clearly linked management's short term incentives to asset efficiency improvements.

We're also seeking to improve loss and damage rates and reduce our pallet costs through a combination of digital and product innovation and to change as to how we procure our platforms. Carmelo will outline lumber procurement strategy and, as part of Prasad's presentation, you will see examples of how digital technology can help our businesses to reduce loss rates.

Now, turning to non-pooling CapEx, we believe there's an untapped opportunity to elevate the operational performance of our largest business, CHEP US pallets through increased service centre automation. To address this opportunity we intend to invest between \$150 million and \$160 million of non-pooling CapEx over the next three years in an accelerated automation project. This is reflected in the yellow bar in the short- to medium-term outlook. We would expect the non-pooling PP&E CapEx to reduce to between \$70 million to \$80 million over the longer term.

While Laura and Carmelo will address the specifics of this automation project in their presentations, I'd like to highlight a few key points. This project is taking best practice automation solutions already in place in Europe to the US market. Importantly, the investment is expected to be high returning with a four year payback. Savings from the project will be delivered progressively within 9 to 12 months of the initial investment.

In terms of funding the project, the first two years - which also requires two thirds of the total capital outlay - will be fully funded by the proceeds from the sale of the CHEP Recycled business, the proceeds which were received after the end of the first half. In addition to this project there will also be a small increase in the level of non-pooling automation investment in other regions, as well as investment in lumber initiatives.

Turning to slide 7, we remain committed to retaining a strong balance sheet as we continue to invest in the business. As you'll see from the chart on the left, net debt to EBITDA has remained around 1.7 times over the last three financial years. We remain in line with our conservative financial policies. I note that the increase in net debt at the end of the first half was largely driven by FX translation on euro debt. We have significant headroom with \$1.8 billion of committed undrawn facilities and our interest cover remains strong at 14.7 times.

Recently we refinanced a EUR500 million note that matures in April 2018. This was refinanced with a 10-year EUR500 million EMTN at a significantly lower coupon rate of 1.5%. Following this issue, our average term to maturity is 4.7 years. In light of our strong balance sheet and funding profile we continue to maintain high investment grade ratings from both Moody's and Standard & Poor's.

In terms of dividends you'll be aware that we have an Australian dollar progressive dividend policy. This policy has been delivering a payout ratio of between 55% and 60%, and we do not anticipate any impediments to continuing to pay within this range. The level of franking, which is at 30%, is expected to be maintained for the foreseeable future.

In summary, we have clear plans to fully fund dividends from cash flow generation, and we have already made meaningful progress in the first half. We have refocussed our capital allocation strategy and have identified opportunities to further strengthen the operational performance of the business by increasing automation investment, particularly in the US. Our balance sheet remains strong and we remain committed to striking the right balance between growth and shareholder returns.

We've a few minutes now for Q&A related to our financial framework and position. However, if you have any questions relating to the operationals, operations or operational improvements, I'd suggest you wait to hear from our business leaders. There will be more question and answers throughout the day, at the end of the day, and also we'll have plenty of time to interact. Sean...

Sean O'Sullivan: Everybody, just - this presentation is being webcast, so if you can wait until you have a mike before you ask your question. Also, when asking questions, can you please state your name and the name of the organisation that you are representing.

Scott Ryall: (Rimor Equity Research, Analyst) Thanks, Nessa. Scott Ryall from Rimor Equity Research. I was hoping you could talk to your management incentives linked to asset efficiency, and if you're able to give the specific targets or changes from where we are in terms of asset efficiency now, but also talk to what I understand you've introduced, which

is negative incentives, as well so people can actually lose pay if they don't hit their targets. Could you just talk to those as well please?

Nessa O'Sullivan: In terms of the asset efficiency targets, first, that we set for each of the businesses, this was done in conjunction with the management teams of each of the businesses. What we did was we looked at, historically, where have the businesses been in terms of cycle times, historically. We also went through what the pattern of current flows and what their businesses were like, where they expected it to be, in order to determine what was the appropriate level of improvement that we should set for each of the business units.

The initial target does not get us to the full efficiency that we would expect to get, progressively, over three years, but does get us to where we wanted to be initially, which was to get at least one point out in terms of asset efficiency in the first year of its introduction. As you pointed out, Scott, we've introduced it in the short term incentives, so it's actually as an add-on to - the current focus in terms of short term incentive is very much directed towards financial performance. There is a 20% adjustment for performance on asset efficiency.

Therefore, if the asset efficiency targets are not achieved, there is a withholding, or a loss, of some of the short term incentives by the management teams. As we go forward, how that will look in the future, that's something that we'll learn as we complete the first year and how successful that is, and also based on feedback from the businesses and the management teams in those businesses.

Simon Mitchell: (UBS, Analyst) Simon Mitchell, UBS. You've talked a lot to reducing CapEx, and partly through lower loss rates, and also you've talked about remuneration being tied to that. How do you ensure that costs don't creep in as a way to reduce loss rates? We always know, with Brambles, over time, your able to increase transport cost to recover pallets and repair them. You make that decision and balance OpEx and CapEx all the time, so how do you ensure that the CapEx and OpEx are looked at holistically?

Nessa O'Sullivan: Look, I think it's by making sure that everybody's clear on cash flow targets, underlying profit performance targets and asset efficiency targets. That's why it's never going to be one dimensional. As I referenced in the presentation, it's really important. We also maintain the quality of the assets in our pool while we do this. We also have to recognise, if we take on more complicated lanes, that there will be longer lead times. Therefore, we have to make sure that we are - we continue to watch what the cost to serve is and charge appropriately for that.

Prasad will give some good insights as to how we're actually illuminating further the supply chain and understanding more about that, which will help as part of that combination of making sure that we get the right returns for the use of our assets and that we correctly balance, potentially, putting in additional cost to collect assets and trading that off against the extra cost of capital.

Simon Mitchell: (UBS, Analyst) I guess another way of just putting that is should we think of the reduced CapEx as being return neutral; so, therefore, there are some additional costs to achieve that?

Nessa O'Sullivan: We would expect that by the time we have put the additional capital in to automate and to get efficiencies that we should be ahead because the trade-off should put us ahead in terms of why we don't have to spend as much CapEx. You may have to spend some expense, but we would still expect, from a shareholder value perspective, that this puts us ahead, not neutral.

Anthony Moulder: (CLSA, Analyst) Anthony Moulder from CLSA. You talked about customer terms changing. Can you elaborate as to what the changes that you're making to customer terms please?

Nessa O'Sullivan: Look, about a third of our contracts come up every year for renewal. As part of that we always look at what are the terms. One of the key things that we've been doing quite successfully in our businesses has been working

with customers to better align our interests. If we can speed up the velocity of the asset through the supply chain to get it back quicker and the customer's interests are aligned with that, we will do that.

That may mean that you look at your daily hire charge versus your issue fee. It may mean that there are certain pricing incentives to hit cycle times, or various penalties if you exceed those cycle times, reflecting a higher cost to serve. It's done on a case-by-case basis, but one of the key things - particularly in an inflationary environment - we're very keen to make sure that we have appropriate clauses in contracts to make sure that we can recover costs and that we can reflect our cost to serve in those contracts.

Simon Mitchell: (UBS, Analyst) Conceivably, that would be a smaller component of the improvement in cycle times.

Nessa O'Sullivan: Yeah, it would be a smaller component, but it's all part of the work that we're doing - and particularly when you look at Prasad's presentation. We're getting smarter about identifying where are the areas that we are more subject to losing value or where it's higher cost to serve. It's helping us to either work out initiatives - how do we take out that cost to serve or, ultimately, how do we charge for it. We do try and balance those up to get the right mix.

Simon Mitchell: (UBS, Analyst) Maintenance CapEx is probably the biggest level as far as improvement and cash flow, I would imagine - loss rates, damage rates. Can you talk to some of the initiatives that you're driving through the business to deliver those?

Nessa O'Sullivan: Yeah. I think what - the presentations today will cover that through the business unit presentations, and particularly through Prasad's. If you don't feel it answers your questions, then we can come back to that at the end of the day, when we do the Q&A.

Simon Mitchell: (UBS, Analyst) Fair enough. Thank you.

Nessa O'Sullivan: Thank you.

Owen Birrell: (Goldman Sachs, Analyst) Hi Nessa. Owen Birrell from Goldman Sachs. Just a quick question. On slide 25 you showed the pooling CapEx to sales ratio and the fact that it had gone from 17% in FY14 up to 20% in FY16. Then you're basically bringing it back down to where we saw it three years ago. Can you give us a sense of what were the key drivers in terms of why that pooling CapEx rose during that period? And in terms of bringing it back, is it structural changes that are required? Or is it just an unwind of those drivers that you identify?

Nessa O'Sullivan: We were certainly seeing, while the business was growing stronger, that there was more and more CapEx going into the business. Despite having return targets we weren't seeing the focus on managing that capital efficiency. I think there was a lot of great focus on customers and growing the overall business, but I don't think we had as disciplined approach as we could have had around adding capital into the business.

I think, seeing the escalating trend, and then seeing the reversal and being able to take it back a point, just shows that when you focus on something that's important to the business and you engage the entire business in it, it is possible to do this in a way that doesn't damage how you service your customers and you keep the quality in your pool. I do think it was about a lack of focus on capital efficiency in the business, and we were presented with an opportunity that we now have to deliver on.

Owen Birrell: (Goldman Sachs, Analyst) Is it fair to say that shall we just buy high discipline at the sales level, that you should just naturally fall back to that, broadly, 17%?

Nessa O'Sullivan: No. It would be great if it was that easy to flick a switch and say we'll all change our focus and it'll go right back to where we were. Given that the pallets turn about three times a year and given that we're in - over that time

we've also increased to some higher risk flows, we've also grown in some of the emerging markets with longer cycle times. Some of it requires more finite work and granular work in each of the business units, which is why, when we set the targets, we haven't just set a blanket efficiency target. We very much looked at what's happening in each of the businesses and developed those targets in conjunction with the general managers of those businesses.

Sean O'Sullivan: Any more questions?

Simon Mitchell: (UBS, Analyst) Just one follow-up, if I could? CapEx to sales is such a blunt force as far as how you manage the pooling intensity of this business. How long does it take before CapEx translates to sales in pooling?

Nessa O'Sullivan: I don't think it's necessary if you - you can - I - we could buy loads more pallets now, but it may not translate into sales. I think we're trying to look at this from a different way, saying we want to continue to grow the business and we want to have the right number of pallets to service our customers with - of the right quality. To be able to do that we're saying if we can improve automation we can get the velocity faster through so that we need less pallets. If we can be more focussed on asset collection and also collaborate with our customers better to get the pallets back and to reduce damage rates, then that means that we need less pallets in the pool.

We're still very much committed to growth. It's not about trading off and saying as soon as we get CapEx we get - that the level of CapEx is directly linked to sales. We are saying, reasonably, if you grow you have to increase your pool, you have to increase the pallets that are damaged, but we believe we can do it in a more efficient way so that the linear level of increasing capital at that very accelerated rate is now required to support growth in the way that we think we can do in a way that still is good quality.

Simon Mitchell: (UBS, Analyst) Which I agree with. I'd just - I guess I struggle with why CapEx to sales is the measure that you're tying that measure to, or that focus to.

Nessa O'Sullivan: Well, it's not just about CapEx to sales. That's just one dimension of the measurement. I think a lot of the market look at CapEx to sales, so we've tried to help people about how they might think about it. For us the big thing is the cash flow generation from the business and the overall returns of the business. We've set a framework round it so that people can understand what are we targeting to get. It is never going to be just very simply about one dimension. This is about managing the business holistically so, in three years' time, it's a great business, five years' time it's a great business.

Simon Mitchell: (UBS, Analyst) Thank you.

Paul Butler: (Credit Suisse, Analyst) Hey, Nessa. Paul Butler from Credit Suisse. Could you just - just had a question on the non-pooling CapEx. Out of this \$150 million, \$160 million investment how many facilities is that going to be? And what proportion of pallets are going to be going through those facilities of the US pool?

Nessa O'Sullivan: Okay. Well, now I'm going to - because Carmelo is going to cover that in his presentation I won't cover that, but in terms of automation level - to give you an idea of comparatives - Europe is at about 80% automation level and the US is about 20%, so there's significant opportunity. Carmelo will talk to that. Again, if you don't feel that we've properly answered that we can come back to that at the end of the day.

Paul Butler: (Credit Suisse, Analyst) Okay. Maybe if I try another one then. You've delivered a one percentage point reduction in CapEx, in this CapEx to sales ratio. How much of that is because you have actually improved cycle times and you've improved loss rates versus you've just cut CapEx?

Nessa O'Sullivan: It's all been driven by improving cycle times, and particularly in the US and Europe, which are our two biggest markets. Both those markets, half-on-half, have shown a good improvement in cycle times. We've also

refocussed on asset collections. Because everybody round the organisation has been looking at cash flow, there's been knock-on benefits, but there have been material improvements in cycle times in both Europe and the US in the first half, year-on-year.

Paul Butler: (Credit Suisse, Analyst) Thanks.

Matt Ryan: (UBS, Analyst) Hi Nessa. It's Matt Ryan from UBS. Just interested in your comments about flat pricing over the medium term and, I guess, the ability to mitigate costs as they come through. Can you talk through how much flexibility there is in those comments around flat pricing?

Nessa O'Sullivan: Look, I think when we were talking about expectations, particularly in - I'm largely referring to FY17, as we looked at the numbers - the flat pricing was referencing we recognised competitors in the market, and we were very much aware that we wanted to continue to grow the business and ensure that we continued to maintain the network density, which is a material competitive advantage to us.

You will expect, however, that as we get through inflation, that we will see some pricing that recovers some of those inflation impacts. We don't expect that we fully pass on all those. We expect to be able to deliver some efficiencies within our own business, but we just wanted to be clear that we didn't expect that this improvement in underlying profit was going to be an easy flow-through from being able to take material amounts of incremental pricing on the top line.

Paul Butler: (Credit Suisse, Analyst) I mean can you give us any update on the US pricing pressures that you're seeing in regards to lumber, labour, wages, that sort of thing, and whether you've been able to pass any of that on yet?

Nessa O'Sullivan: Well, the great news is we're going to have a presentation from Laura, who runs that business. She's going to address that as part of her presentation later on. [Whispers] [Are you okay]?

John Guadagnuolo: (Antares, Analyst) Straight in front of you, Nessa.

Nessa O'Sullivan: All right. How are you?

John Guadagnuolo: (Antares, Analyst) Good. It's John Guadagnuolo from Antares. I'm curious about your four-year payback on automation. Does that - is that taking the costs as they are today and assuming that they're saved on that four year basis? Or are you assuming levels of inflation and that you're leaning into that and that's - so there's implicit cost increases that you're saving through your automation. Is it a genuine saving? Or is it an offset?

Nessa O'Sullivan: It's a genuine saving. One of the reasons - if you look at our European business - I know one of the questions that constantly comes up - and I know Mike will talk to it in his presentation - has been that despite investment and pricing in Europe, one of the reasons why the margins have been kept as strong as they have has been because of the ability to continue to get efficiencies and productivity gains. That has very much been supported by the investment which has been done over six, seven years, consistently in the European business. That has been a big advantage, that business that the US business has not had.

John Guadagnuolo: (Antares, Analyst) So in four years' time the US EBIT margin will be higher than it is today.

Nessa O'Sullivan: Yes, we would expect it to be.

John Guadagnuolo: (Antares, Analyst) Not EBITDA.

Unidentified Participant: If there's no more questions, we'll move on.

Nessa O'Sullivan: Okay. Thanks. Thank you.

Sean O'Sullivan: Our next presenter today is Carmelo Alonso. Carmelo is our Senior Vice President of our Global Supply Chain. Carmelo joined Brambles in 1992 and was appointed to his current role for CHEP global operations in February 2011. At Brambles, Carmelo has served in a range of supply chain roles ranging from Quality Manager in Iberia, Logistics Director for south Europe, Vice President Logistics Europe and Senior Vice President Supply Chain, also for Europe. Carmelo is based in our Madrid office. Carmelo...

Carmelo Alonso-Bernaola: Thank you, Sean. Good morning, everyone. Something that you missed to say, Sean, is that is that I'm a Spanish citizen, so just in case you don't notice this because of my accent. So, over the next 30 minutes or so, I'm going to touch upon the main challenges that we are facing within supply chain impacting our direct cost, but more important I'm going to cover the main programs that we are driving globally to address those challenges. Not only addressing them but overcoming them.

Before doing that, I would like to start spending a couple of minutes on our understanding of supply chain. The way we add value as a global function is by driving the standardisation and enabling best practice sharing. We always do that keeping in mind a very unnegotiable principle which is what you can see in the left side of this slide which is the way we optimise our direct cost spend. We always do it thinking in terms of cost. We optimise the total cost system for this company. We don't do isolated optimisations of our transportation spend, or our plant operations spend, but we look at the total capital we put in this business.

That means that sometimes we can increase our transportation spend, or our plant operations spend to optimise the full equation, to optimise our asset efficiency which is what is driving our cashflow at the end. We do that, as you can imagine, always at the best customer service and in a safe environment.

How we are organised to achieve that is we got a good combination between truly global functions which are driving standardisation and sharing best practices, and then the local execution which we are aligned with the regions where we operate with the markets where we operate.

The global functions are mainly three which are product and process supply, which is in charge of our product development initiatives, our engineering initiatives, it's all innovation, procurement, and quality. Then we've got another area which what we call strategic planning where we are constantly challenging and modelling our network. Do we have the right density? Do we have the right number of nodes? Are we operating at the lowest distances we possibly can? The third area is safety as you can imagine. So, we are driving and sharing best practices on how we can make our operations a safer place.

So, over the past months something which is not new, we are experiencing many challenges impacting our direct costs. It's not only that the market is changing, but we are seeing higher inflation levels. Higher than before. Especially in our main markets, in the US and in Europe. So, the macro economies conditions are driving higher levels of activities is becoming for us more challenging to get access to labour. Do you know that our process is very labour intensive, so getting access to labour is becoming more and more challenging?

As well, the transportation industry is seeing high levels of inflation. Something common both in the US and in Europe is a significant shortage of drivers. It's more severe in the US, but it's also impacting Europe. Also, the fuel costs are going up. So, we've got right now the oil prices getting to \$60 per barrel.

Then as well the lumber markets following the construction industry is going up. For example, we saw inflation [level] in December in the lumber industry in the US reaching 9%. We have seen in February getting over 14%. In Europe we have seen as well, levels of around 7% with the lumber. That [problem] in Europe is having an impact as well on the

markets where are procuring lumber and being impacted by different exchange rates like in the UK. The UK for us is our biggest operations in Europe, and the British pound is devaluating versus the euro.

So, overall a high inflation situation. How are we addressing that? What kind of response are we putting in place? Last year we define a supply chain as strategic network which is based in six strategic priorities. I'm going cover today our top five strategic programs on how we are addressing the challenge that we're having.

The six strategic priorities, the first one is leverage on our resources, on our global presence, on our global expertise. The second one, as I said before, is constantly driving flexibility within our network. We keep modelling and modelling our network using technology. The third one is given the labour market situation, how we can become less labour dependent, and how we can also reduce the manual interventions which are happening in our processes today. Every manual intervention is an opportunity for a mistake. It's an opportunity for driving variances in our processes. The fourth one is, of course, delivering best-in-class services, while at the same time creating opportunities to develop a strong supply chain leaders and in a safe environment.

The five programs I'm going to cover today, the first one is plant automation. What have we done over the history and what we are going to do especially in the US, but also in other markets. The second one is what kind of transportation procurement initiatives are we putting in place to fight against the high inflation in transportation. The third one is addressing one of our biggest expense items, which is lumber, and how we are using, as well, technology to address opportunity.

The fourth one is not only how we are procuring lumber, but how we can reduce our needs in lumber. So, we keep innovating. We don't give up and keep trying on how we can reduce the damage rates of our pallets by using different designs, but also introducing new materials, new components. The last one is how we're using information systems all across our supply chain processes.

So, moving into the next one, into plant automation. For those of you who have been visiting traditional operation sites, pallet sites, you have seen that it is extremely labour intensive. As well, it's quite a dangerous operations. So, when pallets are returning from the field from retailers, they are being unloaded by forklift trucks. Those agreements have been moved to inventories with forklift trucks, then attached by people, by the operators taking decisions on how they are sorting those pallets against quality standards. They are moving back again with forklift trucks to repair [sort] to benches with another operator and is taking again different decisions. So, it's a very intensive process, and very manual dependent.

More than 10 years ago we initiated the journey in Europe with the first focus of removing the danger of having forklift trucks interacting with pedestrians. So, we thought that integrating the sort process with the repair process was the first step towards driving automation and improving our processes. We did the first experience in a plant that we've got in Madrid and we tried to roll that out to the US. As with any new technology we were facing many challenges. It's fair to say that. One of them is because we're not dealing with brand new pallets. Whenever pallets are coming back to our plants they are broken. When they are broken they don't move as smoothly through any kind of automation.

We kept trying to improve that while in the US, they were facing different challenges, different priorities, towards the times. For most of you have been around for years, we were facing problem with quality and were needing capacity. Another time back in 2010, the US economy dropped down and unemployment rates reached above 10% so there were easy access to labour, so they didn't invest in automation.

But in Europe we kept trying, and we've made it work. Not only we made it work, the integration of lines, but we kept investing in different pieces of technology to further improve the processes. We invest in infeed lines, high infeed lines. We invest in automatic digital inspection lines which are removing the decision of an operator deciding which pallet is

good, which pallet is wrong, and we kept also investing in automatic repairs, and the having robots performing the full operation.

So, today, 10 years later, you will see tomorrow the results of a fully automated plant for those of you that will visit South Ockendon. All those pieces of equipment to which is then in operation.

Which levels of penetration we've got across the world? When I talk about automation penetration I mean we've got two different definitions there. One is the amount of plants where we've got this process of sort to repair integrated, and the second one is how many automatic repairs robotics we've got in the operations.

So, you see that in Europe we're in quite a healthy situation. We've got an 85% integration in penetration in terms of integrated sort to repair and we're adding a 75% penetration of robotic repairs. If you go to North America, we are in the 25% penetration and integration and only 10% penetration in robotics repairs. So, it's clear where the opportunity is.

With this in mind, we have established a very detailed program on how we can move the US network at the same levels as in Europe. So, we have defined a three-years plan where we will invest between \$150 million to \$160 million expecting a four-year payback return. We realise this is going to be a very aggressive program. We will need to touch more than 50 plants. I think some of you made the question. It's going to be more than 50 plants. We are going to need to deploy more than 48 automatic digital inspections, and more than 120 robotics repairs.

But we are very optimistic that we could do that because we are going to leverage in our global resources. We are going to move our expertise that we got in Europe creating a [unclear] in the US that is going to be charge not only of ramping up this installation, the new installations, but more important in ensuring that we are doing a proper transfer of expertise into the US network.

With these investments we're not only expecting to reduce our labour dependence, but we are also going to create additional capacity. What we are experiencing in euros is when we are driving this automation, capacity goals up by 30% to 40%. It depends on the plant and the level of penetration that we got. More important, as you will see tomorrow, in South Ockendon, we are reducing the manual interventions, the variability, and the processes.

So, our plant operations process becomes much more flexible. But we are not going to do just the US. We are now keep investing in Europe to get the European network towards 100% of penetration, we are going to start upgrading the plants in Australia. Some of the plants we've got there, the big ones, are becoming right now having average age of 20 to 30 years. So, it's time to upgrade them.

Also, we're going to keep investing in the journey. We started again as well in countries like Canada, and more importantly in Latin America where in each country we've got already integrated lines, and as we speak, last month, we ramp up a fully automated plant in Sao Paulo in Brazil, similar to the one you will see tomorrow in South Ockendon. So, it's a global initiative.

Here you can see some of the equipment you will see tomorrow. So, in the upper row you see the high-speed infeed lines, the ADI booth, the first robotic repair that we started up in Europe with a Euro sized pallet. Then in the lower row, you see the new developments on robotics. Being able to repair the US pallet of 48 by 40. What we call the Combo Klippa which is something to repair the different sizes of pallets because in Europe we are having different SKUs.

Then the last one is a prototype that we are piloting in Europe right now, which is to complete the final process, which is once we remove a broken element how we can replace and re-nail it using robotics as well.

As an image is worth a thousand words, we are going to see a video on how our technology has evolved. Please, get ready with the video.

[Video playing]

So, going a bit more on the daily needs of specific piece of technology, because they were using many terminologies just to explain you the logic, so what we call it high speed infeed lines, when we say G300 or a G600, what it means is the pallets per hour that can go through that installation. So, when you see a manual process, well, we saw it starting in the video flipping pallets between two operators, normally they could do 150 pallets an hour. With these lines you can do 300 with one operator or 600 with one operator.

The next piece of technology is the ADI, what we call the automatic digital inspection. This is a system using high definition cameras, and laser sensors that are checking the dimensions of the pallets and the structural damage on the pallet. It's comparing to a standard using algorithms. What we are doing right now is thinking how we can introduce techniques like machine learning to improve efficiencies of these machines because one of the complexities we got whenever we are dealing with different type of platforms, we need to change the algorithms, and that takes a lot of effort. So, with machine learnings we are hoping to speed up the process.

Right now, we have got 25 of these equipments running Europe. But also, the Americas we are having 22. So, we are quite close there. Why we need that is because in the last 18 months we really accelerating the US and start driving this automation. This is a key piece for getting under control our sort process, but then being able to connect to the robotics repairs given them instructions.

So, another piece of equipment that you saw in the video is the sorting and stacking robots. This is a piece of innovation that started in South America. So, an example of how we can easily translate best practices. The first intention of this was how we could reduce the cost of capital in the installations where we got the outfeed lines that require more than four or five stackers, de-stackers, each of them are costing like \$60,000. One robot can do the same of four stackers. So, you reduce by 75% your capital invested in specific operation. At the same time, as I said before, moving broken pallets in a stackers or de-stackers are creating opportunities for germs. With the robots you are reducing those germs, so you are overall improving the efficiencies of the plant.

The last piece of technology is the robot repairs. This is something that we've developed in partnership with a company called Yaskawa MOTOMAN based in Sweden. They were working first with the European-sized pallet. We're working with them to improve efficiencies and to connect with our systems, especially with the ADI. As you saw in the video we spend two years developing a solution that will work with the pallets in the US or the 1210s in the UK because it's a complete different platform of how we can approach the [cuttings].

We've got today 40 units working in Europe. You will see tomorrow again in Ockendon on the Aqua Klippas, and the in Americas we got four.

So, that's about automation. Moving into the second strategic program is around transportation. How we are procuring transportation. We're approaching this program from two different angles. The first one is by using the density of our transportation, the visibility we got across all the flows happening in the market with our customers and using technology, which in this case is a bit of technology that Brambles Digital has developed for us to support our operations, we can very easily match all those flows, and connect CHEP to customers, from Brambles to customers, and customers to customers. That's what we call transport collaboration.

When we are put in contact one flow from Brambles, and one flow for each customer and trying to close loops, we call that transport collaboration. When we are connecting to customers, and they're closing loops, we call that transport orchestration.

We are also offering a tenders processes for our customers basing our experiences and our technology. But I don't want to spend more on this because Mike Pooley is going to cover that under Europe and the specific programs we are doing there.

The second work stream that we work in transportation is some initiative that we started in the US back in 2014, the last time that the transportation inflation went up fairly drastically and we decide to move away for using massively export market linehaul in the US because before that it was quite cheap. As a way to mitigate exposure to those high inflation lines, we move more volumes into what we call dedicated fleets. With dedicated fleets we are reducing our exposure to high inflation situations.

Right now, in the US we are operating like 60% of our volume under dedicated fleets. In Europe like 70%. Our target is moving that to levels of around 80% in both geographies. Why not to 100%, you could question. It's because we're always going to need to make long distance rebalancing. It's something that's part of the nature of a pool. For both long distance rebalances is much more efficient to use back haul instead of dedicated fleets. You can get much better utilisation of your dedicated fleets in short distance transportation.

So, this is an example of the three collaboration modes, as I said before, but Mike Pooley is going to expand on this.

The next work stream is about lumber. How we are procuring lumber. So, you know that traditionally we have been producing lumber in the regions where we were needing that lumber. We were heavily exposed to any market fluctuations within those regions.

So, the first action we're putting in place if diversifying the supply of our lumber needs in the different regions. For example, in the US we are today procuring significant volumes from Latin America. With inflation in the US we are divesting more volumes towards Latin America and importing into the US market. In Europe ,for example, we are developing in partnership with local suppliers Russia as an alternative market. It's in early stages. Still you know that for us sustainability credentials is a commitment from Brambles and no tall lumber coming from Russia is yet certified. Also, the saw milling capacities are not at the European levels, so they cannot produce at our quality demand, but we are, as I said, partnering with local players there to develop them as a way to create alternatives for the European market.

Then the second work stream is again leverage on our local presence and using technology. When you saw the different sawmilling processes used in different geographies, you can see the variances. In the US, for example, all the sawmill industry has been set up to produce standard cuts for the building industry, not for packaging. While in Europe most of those sawmills are producing 100% for packaging materials. That means in the US there is quite a lot of rework. We are right now starting a couple of pilots with a couple of partners in the US to translate the learnings of what we do in Europe into the US to reduce the rework.

But another opportunity is not only how we can procure our lumber cheaper, it's how we can become less dependent on lumber. How we can reduce the damage of our pallets. So, we keep exploring and taking the learnings of the pallet durability actions that we launched in the US a couple of years ago. Still we are not seeing a full benefit of what we were expecting, but we keep insisting.

So, as you remember we are talking about two main actions in the US pallet using clinched nails and using nail plates. One of them we have already seen the benefit, the clinched nail because the level of penetration that we got already in the pool in the US. The second one, nail plate is still too early. We're introducing that improvement through new pallet injections so the speed of penetration is still low. We are in 20% penetration so we are still we don't see the benefits.

But we are already translating some of the benefits to other platforms in other geographies. We are challenging that the designs of the European platforms, we are using hardwood in Canada for instance. We are planning to use hardwood

in European platforms as well, and we are changing the nail patterns with the Australian pallet, or we are coming up to a standard platform between Argentina and Brazil that today are having differing type of designs.

But not only we are working on keep improving the designs but in introducing new materials. New material science. This is more innovation type of horizon [free], but we keep working on finding a solution for a full-sized plastic pallet for the market. That is a market need. There, we are in the US as well working in two different work streams. One is with a local player that had a very good solution. We partner with them. We improved the quality of the platforms. Some of the problems that the plastic pallets are having, apart from cost, is that they are not performing well under racking, under weight. So, when you put 2800 pounds on top, the deflection is falling far below the ISO standards. So, partnership with this local player in the US we improve that significantly, so we meet already the ISO standards.

But in parallel, we are working in a completely different concept that with a target of significantly reduce the costs of the plastic pallets, but also not only the cost of acquisition, but the cost across the lifecycle of the plastic pallet.

In parallel as well, we are introducing new materials. We are testing hybrids between, for example, sawdust and plastics and producing much more durable blocks. We are testing as well different materials like a bamboo or protein for composite blocks to avoid one of the main customers concerns which is flaking. We're working on all of that. So, this is innovation but helping towards improving the pallet durability.

Then last but not least, the last work stream we're working on is how we keep deploying information systems across our processes. I talked here before about planning and the importance of having accurate and sophisticated planning tools. So, we have been using JVA for many years. What we have been doing in the past two years is having a single standard suite of JVA for the US and for Europe. So, today the systems we are using in both sides of the Atlantic is the same. At the same time, we have started to roll that out to all the regions. So, as we speak, we've got the demand planning, which is the forecasting module already up and running in Australia, in South Africa, in the Middle East and in Mexico. We are keeping rolling that out the other different modules.

Then we are deploying electronic communication from our transporters by deploying them or giving them access to a mobile application that we created for them. So, we cannot only track them, but they can receive their jobs they have to do every day on time. That information is connected with another piece of technology that we are deploying in our plants, our forklift trucks, and our equipment with the PDAs so they can connect with the trucks, they can see when the trucks are arriving, they can plan for a better turnaround. But more important we are already using the manual interventions.

So, traditionally the process is using paperwork. The trucks are coming with papers, with quantities, it's been checking their job, they are confirming the quantities, the quantities goes to the clerks in the plant, they have to key in the numbers in our systems. We are eliminating all that manual processes by driving technology.

So, this is just a few examples of how we are driving those technologies, for instance here in the left side you've got a traditional operation. This is real in Germany. This is a fully optimised version of what we could have done with no constraints. We realise that we will always have constraints in operating any market, but something in between that worst case which is actual within the fully optimised that this still a good opportunity to go after.

Here is just how the mobile applications looks like for the trucks, for the vehicles. How the forklift trucks are equipped with these PDAs, and they are confirming the movements. Then with all that flow of information being electronic, we are setting up control centres where we can have visibility on time, real time of all of our operations.

This is an example which is up and running in our plant in Erskine Park in Australia. So, all in all, we believe that despite all the challenges that we've got we are very well prepared within Brambles to address them. So, we got established areas of operational excellence that provides opportunities for leveraging best practices.

We are accelerating the use of technology, of proven technology and deploying that across all of our processes, from plant automation to procurement to transportation. We keep innovating in how we can make our platforms more durable and how we can introduce different materials, new materials.

All of that with a strong commitment from Brambles to invest \$150 million to \$160 million in the US network, to upgrade the network to the same levels as we got in Europe. So, within selling best practices, deploying proven technology, and our global expertise, we believe we've got the ingredients for achieving our targets.

So, with that I finish my presentation and open for questions.

Owen Birrell: (Goldman Sachs, Analyst) Hi, Carmelo, Owen Birrell from Goldman Sachs. Just a quick question on the planning and the flow optimisation technology that you were talking about. You had two maps. What the current situation is, and the ideal situation. Can you tell us when you implemented this technology? How many years has it been in place, and how far between those two maps are we actually at this point? How far can we go?

Carmelo Alonso-Bernaola: I don't think we will ever go the fully optimised situation because as I said there are many constraints in the market. But we have been using this technology for quite a long. In fact, we started to use the previous version of JDA that was called Manugistics. I don't know if you are familiar with those. But we didn't get the full benefits of the technology.

One of the reasons was because we have not enough skills in house to properly get the best use of these technologies. So, we upgrade on that in the past year. In the last two years we are seeing a significant improvement, especially in Europe as well because that was the first country where we drove this practice. We put the skills and we are starting to see the full benefit. Now we are seeing the benefits as well coming from the US.

So, when you see both regions, we are reducing significantly our average length of haul, which is a consequence of doing these optimisations. How far are we? We estimate that probably within the next two years we'll get to the best years of the systems and the getting the full value.

Owen Birrell: (Goldman Sachs, Analyst) So, to give a sense in Europe, a couple more years before we hit peak. How many years do you think you've been running with this system for at the moment?

Carmelo Alonso-Bernaola: In the system as it is today with the upgraded version that we are using is 18 months or so.

Owen Birrell: (Goldman Sachs, Analyst) Okay, so about halfway through in Europe. Then yet to start in the US.

Carmelo Alonso-Bernaola: We have started in the US. We have started to see the benefits, but we are still slightly behind Europe because the implementation was six months later following Europe.

Owen Birrell: (Goldman Sachs, Analyst) Okay, thanks.

Paul Butler: (Credit Suisse, Analyst) Hi, Carmelo. Paul Butler here. A couple of questions. How much of the margin difference between the Americas, and EMEA's business can be explained by the level of automation?

Carmelo Alonso-Bernaola: That's a good question. Probably it's not that significant when you put all other factors on top. So, I think the main drivers of the difference in plant cost to sales in the two operations is mainly the condition in ratio. So, how many repairs we do.

In Europe we were much more efficient, and we are much more flexible, but the biggest impact is the amount of repairs we do in each geography. So, if would go to the specifics of how much we can improve our plant costs by driving automation the specific operation of repair, I would say it's around 15%, the difference in the cost of repair.

Paul Butler: (Credit Suisse, Analyst) On page 34 where you've gone through the inflationary impact you've seen, can you just go through these items. So, labour, lumber, transport, et cetera, what proportion of the cost base do these make up? Because you were saying lumber--

Carmelo Alonso-Bernaola: Labour is around in the repair process, may vary between regions, but it's around 40% to 50% of the repair cost. Lumber is let's say, 30%, and the other is overheads, real estate which is another piece, which is under big inflation especially in the US. The US market is very hot with real estate.

Paul Butler: (Credit Suisse, Analyst) That must be different between the Americas and Europe.

Carmelo Alonso-Bernaola: Yeah, that changes it slightly when you start putting the wages for example. So, in Europe and the US, that's why I said there is a range between 40% to 50%. It's around 30% to 25% with lumber, but it's in those ranges, plus that or minus 5%. One way or the other.

Paul Butler: (Credit Suisse, Analyst) Just one more. When you introduce the automation to these 50 plus plants in the US, are they all going to be Brambles operated plants?

Carmelo Alonso-Bernaola: No. They will be a mix. The same as in Europe. Right now, we are having in Europe like 25% of our plants have CHEP owned, or Brambles owned, and 75% are outsourced. In the US we are in the same situation, so we are going to replicate the same model. That doesn't mean that as we keep progressing with automation probably the opportunity for Brambles taking over more sites will be there because as we are becoming less labour dependent, and we are putting the capital, you could question, well, do we still need third parties. There will always be a healthy combination between the two, but probably there is opportunity and the upside to move more sites into CHEP managed.

Paul Butler: (Credit Suisse, Analyst) Okay, thank you.

Scott Ryall: (Rimor Equity Research, Analyst) Carmelo. Sorry, Scott Ryall from Rimor again. Could you tell us how often you go out and see customers to explain what you're doing and how it's going to help them?

Carmelo Alonso-Bernaola: I go to visit customers more when they are facing problems with the quality of our equipment. Then is when I explain then what are we doing to improve the consistency of our processes. Let's say that roughly I will see customers once a month roughly.

Scott Ryall: (Rimor Equity Research, Analyst) But it's reactive, not proactive.

Carmelo Alonso-Bernaola: Yes.

Scott Ryall: (Rimor Equity Research, Analyst) Thank you.

Jake Cakarnis: (Citi, Analyst) It's Jake Cakarnis from Citi. I was just wondering if you would give us an overview if there is any structure differences in the appeal of automation between the North American and European markets. If there's anything that could impede the integration of more automation.

Carmelo Alonso-Bernaola: No, the process is the same. Probably, as I said before, the US platform, the 48x40, is a bit more difficult to automate in terms of doing the cutting of the broken elements. But that's something that we figure out

how to overcome that. So, all the other stuff is the same. So, pallets are flowing the same directions. Work exactly the same. The inspection is the same. The criteria are different, but the principles are the same. I don't see any material difference there. It's the same process.

Jake Cakarnis: (Citi, Analyst) So, what you've seen in the European market, what's the ongoing OpEx maintenance that's required for the automated equipment once it's in?

Carmelo Alonso-Bernaola: It's very low because for example robots, doesn't almost require any maintenance. So, compare with even old technology will have significantly reduced the maintenance of our equipment. So, in our plant operation costs, it's less than 1%.

Mohsin Ahmad: (Hermes Investment Management, Analyst) Just a question on the materials, the innovations that you've been investing in in terms of looking at plastic pallets and other materials. In terms of your commitment to sustainability, how do you tie that in terms of looking at plastic pallets? Can you expand on that please?

Carmelo Alonso-Bernaola: Well, it's a clear relationship. So, we are using lumber for our current platforms, from sustainable sources, certified sources. But we can't avoid or reduce the uses of lumber that will go supporting our sustainability credentials. We can use for our plastic platforms, recycled plastics that we can be reused is even for the better, I would say.

Anthony Moulder: (CLSA, Analyst) Just the US, the justification for not going to the US is that they were facing issues post GFC. Conceivably Europe was facing the same post GFC, low labour costs. Why has it taken so long to go to the US?

Carmelo Alonso-Bernaola: Well, as I said they had different priorities, but also remember that around back 2011 when we made the acquisition of [Heathcote], the recycled business, the priority there were integrating both networks. So, all the focus were in doing a proper integration and delivering the synergies that we committed to deliver. So, when we completed that, that put us in a much better situation to start driving automation. Fair to say that because at the time there were the conviction that labour was still accessible in the US, it was not such a big appetite to drive automation with the US business.

Anthony Moulder: (CLSA, Analyst) But it's still--I understand that, but the value that you're describing from automation is so significant that it removes that issue of the lower labour costs differential in the US market, doesn't it?

Carmelo Alonso-Bernaola: Yep, it does. It does, but at the same time you can always avoid, or it's difficult to avoid the resistance from people to something which is new. It's not only with automation, you see that happening almost everywhere, that resistance to change and the way we were operating the US network, 100% based on third parties, third parties that were not having the skills to adopt automation. So, there were a lot of resistance there to move into automation.

Anthony Moulder: (CLSA, Analyst) So, those third parties, the large repairers in the US market, what's changed as far as your relationship with them that means that--

Carmelo Alonso-Bernaola: The first thing is that they're seeing that we can take over more operations. So, something that is really supporting in our journey there is that the move we did from 100% of the network outsourced to 25% controlled by Brambles, that's a big wake up call for any third parties, and we can go further.

At the same time, we are working on sizing them down. So, some of the big players that we have there in the market running 15, 20 plants, we are reducing them down, and we are bringing new players as well. For example, we got right

now, two third parties that we brought from Europe operating in the US. They were one of the pioneers as well in using technology in Europe.

Anthony Moulder: (CLSA, Analyst) So, with that pressure, why do you have to invest the CapEx into their facilities for them to do repairs of your network?

Carmelo Alonso-Bernaola: Well, our cost of capital in the US is lower than the ones that our third parties can get. So, overall, it's much more efficient for Brambles to invest than asking a third party, a small company make an investment on our behalf. But also, there's a component of flexibility. So, if we got a third party which is operating our equipment, if that third party is not performing according to our standards, we can replace them with one-month notice. Equipment will still be there, it will be our equipment. So, we can bring another one or even taking over and still operating the same equipment without a disruption in the network.

Anthony Moulder: (CLSA, Analyst) So, it's your lease of their land that they operate on? So, that's the switch out--

Carmelo Alonso-Bernaola: We are owning the lease as well.

Anthony Moulder: (CLSA, Analyst) So what visibility do you get to their repair rates? Do you see the benefit that comes from this automation?

Carmelo Alonso-Bernaola: As we are driving more automation, we can get more visibility, but not only with third parties as well, with our own operation where everything is manual. So, the more automation, the more real on-time visibility we will have in all processes. So, there's more opportunity for keep developing, things like lean manufacturing, and improving the processes. That will help us to get more visibility.

Anthony Moulder: (CLSA, Analyst) Lastly, can you talk to how much of that labour is displaced with these robots as you automate the facilities?

Carmelo Alonso-Bernaola: Well it depends which bits of technology. For example, a robot is doing the same productivity of two heads, of two workers per shift. It depends on the plant, and the volumes that we got. We've got many plants with one robot. We've got other plants with two robots, we can even go to three robots. It depends on the size of the plant, and the type of damage of the pallets as well. So, there is not a single solution for every plant.

Sean O'Sullivan: Thanks, Carmelo. We got one more question.

Anthony Moulder: (CLSA, Analyst) I was going to ask the colour of the robots, but I'll move on to something different now. Just the TPM network, can you just touch on the wind down of that and how much you're relying still on the retailers and what the challenge that's presented to a network are.

Carmelo Alonso-Bernaola: Especially in the US we got a quite dense network of TPMs. The main reason of doing that is because first, you are getting more embedded within that retail operations, but also, it's a more efficient operation because you are saving one transportation leg.

The challenge we got is that when you are not directly controlling that operation, it's someone else that sometimes it's not even your supplier, you have to deal with a lot of variances there in how you are getting access to your supply of equipment because you don't get that it control that. But in theory the principle is that it's still much more efficient because you're saving one transportation. One leg of transportation.

Anthony Moulder: (CLSA, Analyst) But how much are you relying on retailers now to cut out that leg in transport? I mean it must have dropped over time hasn't it?

Carmelo Alonso-Bernaola: Yep, well, right now it has not dropped. I would say it's flat. It's like if you look at the total nodes in the network in the US, probably like 50% of that is on TPM, on retailers' TPMs. It doesn't mean it's 50% of the volume.

Sean O'Sullivan: Thanks, Carmelo. We now have the opportunity for a short break. So, we will have a break for 25 minutes. If you can make your way across to the river room, which is across the bridge, you can interact with some of our teams over there. If you can all be back at 10:30 that would be great. Thank you.

(Break)

Sean O'Sullivan: Thanks, everyone. Can you please take your seats? This session will include presentations from Mike and Laura where they will focus on the larger businesses in their portfolios. For Mike, this is the European pallet business and for Laura, the US pallet business. First up will be Mike Pooley, President CHEP EMEA. Mike originally joined Brambles in 2002 and became President of CHEP EMEA in 2017, prior to that Mike held the following positions within Brambles: President CHEP Europe, Senior Vice President Sales & Customer Operations CHEP USA, Managing Director CHEP UK and Ireland and Vice President European Key Accounts.

Mike also worked for two and a half years in private equity at Exonal where he was part of a team that IPO'd that business in 2014. He is based in our Weybridge office, South London. Mike?

Mike Pooley: Thank you very much, Sean, and good morning, everybody. As Sean said, I look after our Europe, Middle East, Africa and India business, but this morning I'm going to focus predominantly on our Europe business because that does make up the great majority of our activity and our revenue in my region.

So just looking at the scale of our business, you can see that we're a very established business and a very established network here in Europe. We have over 115 million pallets and containers and if you look at how we compare to our nearest pooling competitor we are generally about an order of magnitude bigger than they are. We deliver to 315,000 delivery points throughout Europe and we have 260 service centres in 32 countries. We employ 2600 people in our European business. So you can see we are a business that already is at some scale in Europe. But for me personally what makes my role most exciting is the fact that despite the fact that we are already an established and large business in Europe, there's still an awful lot of opportunity for us within the European market.

So what this bar chart shows is that in many of our largest markets, we actually are not extremely heavily penetrated. So for instance, in Germany where we think there are about 180 million pallet movement opportunities, we only have about 11% market share. In Italy 20%, Poland 28% et cetera. Even in our most established businesses where we've been there the longest such as the UK and Spain and France, we still have significant opportunities for growth, both from converting from whitewood use, whether that's exchange or one way, and also taking share, of course, from our pooling competitors.

If you then look into some of the smaller regions within Europe such as Central Eastern European Countries and Scandinavia, we have another half a billion pallet opportunities, movement opportunities and again we only have an 11% market share in those regions. So of the 1.5 billion pallet potential that we have here across Europe, we only have a 28% market share. So we think there's a lot of runway for us to continue to grow.

In terms of how we've been growing, over the last five years, if you look at our compound annual growth rate, it's running around about 4%, that's been driven by some organic growth. Our customers have grown their volumes and we've grown with them. Also, what we call net new wins. That's where we've won share away from either whitewood exchange, one-way whitewood or directly from one of our pooling competitors. Historically, that rate has been at around about 3%. Our pricing has been predominantly flat over the last five years and that's because we've been in a relatively

low inflationary environment and we are in a very competitive market place. Our competitors want to win market share and therefore they are pricing aggressively and many of our customers of course have very professional procurement operations and they want to take advantage of that. So our pricing has been flat over the last five years.

If you look at what's happened over the last 18 months or two years, we've actually started to see an acceleration of our growth rates within our Europe and EMEA business in general. We see that organic - our expectations for organic growth is going to remain by and large unchanged and the same for our ability to convert white space over to our business model. We see pricing - there is some uncertainty around pricing, but we have a combination of effects. Carmelo talked about the fact that there is a lot of inflationary pressure just emerging now within the market place, but we work extremely hard to offset that through efficiencies, and I'll talk about that in a little bit more detail later on.

We're also in a situation where, as I said, we've got very competitive environment, our direct pooling competitors are very keen to win share from us. So we don't expect to see significant ability to get large price increases across the market in the near term.

One thing that has fundamentally changed over the last couple of years is that we've been focussing our efforts to expand into new parts of the supply chain where previously we haven't really played, or we haven't really focussed very much of our resource on those areas. That's actually started to deliver some really good growth. We've seen 1 to 1.5% in the last couple of years acceleration in growth. So as Graham mentioned at the beginning of his presentation, we would anticipate seeing the European and the EMEA business grow at sort of mid to high, single digit growth over the next few years.

In order to understand our business a little bit, I think it's also important to understand the retail ecosystem in which we're operating. It is evolving very fast. It makes actually a very exciting place for us to be. The traditional modern retailer, bricks and mortar retailer, is being squeezed on all fronts. The way we look at retail in our business is we segment based on the price level at which retailers make their offering and the assortment that they carry. So if you're a very low priced retailer with a small assortment, you're typically a hard discounter, like Lidl or Aldi.

If, on the other hand, you would like to be able to sample 35 different flavours of balsamic vinegar, you probably will be shopping at a Waitrose or a department store where they carry a far larger range, but because of that extra complexity in their supply chain, typically you pay premium prices for that availability of choice.

Many of us are changing our shopping habits now so rather than going and doing our weekly shop, particularly in Europe, any of us are now actually only shopping maybe 25 hours ahead and on our way home from work we'll decide what it is we want to eat, and because many of us are now living in urban environments, we all want to shop in a small store format, like a convenience store, and we'll go home and buy our meal for that evening on the way home. Of course, we're seeing a significant rise in online shopping in Europe. We haven't really seen much penetration yet from grocery but we do expect to see that happen, but we're seeing many of our traditional bricks and mortar retailers also being squeezed from the online side as well.

Now the good news for our business is that despite this evolution in the retail market place, we still have solutions in our business that can help all of the players in our ecosystem. What I'm going to do now is just very quickly run you through some of the examples of where we're investing our resources to allow us to grow and continue to remain very relevant as our market place evolves.

So we've selected, in our leadership team we've selected six key areas where we wanted to focus our efforts. I'll start at the beginning of the supply chain, so the first mile. The first mile of the supply chain, this is where we're bringing raw materials and ingredients into the manufacturing process. That's a very different supply chain to the rest of the supply chain and it requires bespoke solutions for that. I'll talk about that more in some detail later on.

At the other end of the supply chain, the last mile, particularly from the manufacturer through the distribution centre of a retailer and into store, to the point of sale, is another area where historically we haven't maybe put as much focus as we could, and that's an area that we're now really focussing our efforts on. Those of you who maybe took some time out in the breakout session just before - just during the break, may have seen some of the work that we're doing in that area and again I'll talk about that in more detail.

Supply chain collaboration is also very important for us. We're working in an environment where we've got an inefficient supply chain across the FMCG sector and there's work we can do there to help that. Our customers have historically told us that we're difficult to do business with, so we're focussing a lot of effort on improving ourselves there and then geographical expansion is another level for growth for our business. As I showed you at the beginning, there are many areas within the European continent where we have a lot of runway for expanding our business.

In order to be able to do that, clearly it has to be underpinned by the quality of our people. So the sixth area of focus is around developing our people. So let's just go through each of those in a little bit more detail. I'll start at the beginning of the supply chain with the First Mile Solutions.

As I mentioned this is raw materials packaging and ingredients into manufacturers and quite often they require an hygienic solution. So in this area, we typically will see the use of plastic pallets, full size plastic pallets. Tomorrow when we're doing one of our visits to one of our manufacturing customers, you will see this in operation where they're bringing raw materials into operation using these types of full size plastic pallets. They will also be using - those types of manufacturers will be using intermediate bulk containers for wet and dry ingredients and raw materials. So we acquired a business called Pallecon a few years ago, and we've now decided to integrate that into our First Mile Solution business and that will allow us to get some economies of scale. It will allow us to standardise both businesses using the same systems and the same centralised infrastructure and that will give us real competitive advantage.

We've been working on this now for just over a year. We only have a small market share at the moment, about 6%, but the business is growing at 30%. It's accelerated from 0% to 30% growth in just over a year. So we're very excited that this is a good, substantial opportunity for the market, for our market, and one that we think is worth putting some effort into.

Going to the other end of the supply chain where we are talking about manufacturers taking their product all the way to the point of sale, typically retail customers have two challenges. One is that they need to efficiently replenish their stores, you'll see that if you go into a hard discount environment where they have a relatively low number of SKUs but those SKUs are shopped very, very rapidly and it's not efficient to have store employees putting product on shelf, because they typically will sell directly off something like a half pallet, the wooden half pallet here. Also manufacturers are also keen, particularly branded manufacturers are keen for their products to stand out and to sell against the rising tide of private label products. So they will often want to promote their product in a store and the way that they will often do that is on one of our promotional units such as a quarter display pallet or a dolly, and you can see examples again in the breakout room of that in action.

Those actually significantly increase those manufacturer brand's ability to increase their sales, but it also is a benefit to the retailer. The retailer sells more, it reduces their cost of replenishment and it improves the store efficiency by doing that. We've been developing some quite innovative technology to help both manufacturers and retailers understand the benefits of using these types of equipment, virtually reality - we're not using it as a game. It really does work. Retailers do like it and they are using it. Many of them do not have the in-house capability to do some of that work themselves. So they are using us and the virtual reality capability that we've created to help them do some of their store planning so that they can improve the replenishment rates and the efficiency of their store operations.

Again, 18 months ago, this was a part of our business that wasn't really growing, and by putting a lot of effort into it over the last 18 months, it's now growing at double digit growth. So again, an area that we think is substantial opportunity and one that's worth our effort to really drive.

In the transport supply chain within Europe, we've got a big problem at the moment. Drivers are getting older and they are retiring and millennials, most millennials - if you've got millennial children, as I have, you'll know they don't want to learn to drive and the last thing they want to do is have a career as a lorry driver. So there is a real problem in Europe and it's also in North America where there's a shortage of drivers in the industry. That is causing a big problem with transport availability. But we don't use the transport in our supply chain very efficiently in FMCG. Many of the vehicles that you see travelling around are not fully loaded. They will have a lot of empty space in them and that's partly because as we move to an environment where retailers are asking manufacturers to deliver at higher frequencies, but in smaller quantities, it's causing - manufacturers are finding it very difficult to fully utilise their transportation.

So about eight years ago, we started to look at, could we collaborate with some of our customers in a very simple way to try and better utilise what transport was available. So this is transport collaboration. It's a very simple model. We would provide a vehicle that would deliver our pallets from our service centre to a manufacturer, the manufacturer would then use that vehicle to deliver their products to a retailer and while we were at the retailer using that same vehicle we would collect the pallets and using that same vehicle to bring those pallets, empty pallets, back to our service centre.

That's a great way to buy closed loops and if you buy closed loops in logistics, that typically is a cheaper way and it avoids empty legs in the supply chain. We've been doing that with 135 customers so far and saved our customers, shared between us and our customers, €6.6 million. So that is meaningful numbers for us and for them. We've obviously substantially reduced the amount of carbon dioxide going into the atmosphere as well as a result of that. So that's the simplest form of transport collaboration.

A more sophisticated form is where we look at our manufacturing customers and using the data that we have about the supply chain, and you have to remember that our customers tell us where they've sent all of our equipment and as a result we have a fairly unique visibility of what's happening in the supply chain in real time. So we can identify where manufacturer A is going from one location to another and manufacturer B is going in the reverse direction, and that happens quite a lot, but they may not be aware of that and we can bring them together to collaborate and share transport and again by closed loops.

We only started to do that work really in Spain a couple of years ago and really put some effort into it last year and in the first year of operation in Spain we saved €750,000 for our customers.

The next level up from that is to say, okay how can you fully utilise every vehicle and fill it to capacity, because that's where a lot of the waste is coming from. So what I'm going to do now is just share a short video that shows some of the work we're working on in that area.

[Video playing]

So this afternoon we'll talk a little bit more about how BXB Digital are helping us scale that program and the reason that we're doing those projects is not because we necessarily think that the savings on their own are massive yet, we think they've got potential to be big, but one thing they really do drive is customer loyalty. We we're collaborating closely with our customers, many of them really feel much closer to our business and we've had a number of situations recently where customers working on some of these pilot programs have actually got to the end of their contract period and have decided not to tender their business and have just renewed the contract with us because they've felt that the value that they're getting from some of these collaboration projects have been really significant.

We were told over many years that we needed to be simpler to do business with and we've reacted and worked very hard to be simple. Our business reflects the complexity of the European supply chain, so by definition it is quite a complicated business, but there are many things that we can and have done to really improve the way in which our customers interact with us.

Those of you who have been to investor days before may have seen a slide that was similar to this and I'm going to give you an update on where we are with this. We were asked by our customers, could we make our pricing system simpler and more adaptable so that it matches their needs in terms of the way in which they want visibility of pricing. We've done that, we've created a new pricing management system. We've rolled it out to 450 customers so far in seven countries. The feedback has been fantastically positive. So we're going to roll that out over the next 18 months across all of our customers. In order to make the invoicing process simpler and allow our customers visibility of how they're spending their money with us and what's the most efficient way in which they can spend that money, we've created an interactive invoice. We've rolled that out this year. Already 14,000 of our customers in Europe have it and by the end of this calendar year, all of our customers will have that as well.

We had historically a self-service platform called Portfolio Plus. It was coming towards the end of its life. It was very functional but it was a little bit old fashioned and we've now upgraded it to a far more intuitive system called My CHEP. It gives our customers more flexibility, they've got more functionality with it and it's much faster for them to use. That's now almost fully rolled out across Europe, 85% of our customers have it now and by the end of this fiscal year, all of our customers will have it and we'll retire the legacy system at the end of this fiscal year.

Then there are things we can do, bespoke for some of our biggest customers. Many of them are saying, look you don't actually fall in line with our normal procure to pay process, can you do more to help us. The answer is, yes, in many cases we can. A good example of that was Coca-Cola wanted visibility of delivery by delivery with an individual invoice for every single delivery we make to them which is many, many thousands a year and we've said, yes we can. Those sorts of simple things really help our customers in terms of their simplicity, but it also allows them to pay us on time. So it helps us from a cash perspective as well. So it's a win-win.

Talked already a little bit about geographic expansion. We do think there's great opportunity for us to continue to expand our business. A good example is the Nordics, historically we've been present in the Nordics for about 15 years. It's only last year we got the retailers in Sweden to suddenly support the CHEP business and they're now very open to the CHEP business in Sweden, and that's really allowing us to accelerate our growth rate in the Nordic region, but there's still a lot more for us to go after there.

Germany, historically has been a challenge, because it is the home of whitewood exchange with EPAL and UIC embedded and collaborating in that region. They've actually stopped collaborating with each other this year, and that's causing some problems for our customers and they're now beginning to come to us and we're seeing our growth rate in Germany accelerate as well.

Poland is a business that we entered about 15 years ago and it's already now at 28% market share and we're really seeing economies of scale there and it continues to grow rapidly. Then central Europe. Central Europe is a great opportunity for our business. I'll give you an example, five years ago we didn't have a business in Romania, now we have a \$15 million a year turnover business in Romania that's growing at 35% a year. So really, really great opportunities in those smaller countries, where they have very developed retail supply chains.

We've recently launched in Russia as well. Russia is challenging. It's a complicated market place and you've got to make sure that we really understand that market place well before we fully launch. It's very fragmented in - somewhere like the UK, for instance, top six retailers make up 70 to 80% of the retailer environment. In Russian the top-50 retailers only make up 50% of the market. So it's a very fragmented space. But it is somewhere where we think there is a lot of

opportunity because it is a palletised supply change and the total scale of it is about the same size as Germany is at the moment. So it's somewhere we're really interested in continuing to grow.

As I mentioned, in order to be successful in delivering these growth initiatives, we've got to have the right team in place, and I'm very fortunate that I lead a team of very engaged people who really feel that what they do is important. We've done some things to continue that momentum. The first is that this year we've launched our graduate training program. In Europe we'll have about 15 graduates join us this year. We've introduced role rotations for our high calibre, high potential people so that they get a real range of experiences in different regions and different functions, so that we're building those general managers for the future.

We've also worked and partnered with the institute of grocery distribution to upskill our sales force so they've really been embedded in a lot of retail environments. They work night shifts in retailers, they've collaborated locally with their local retail DCs. So they understand the challenges that our customers are having. They're now far better placed to have the right conversations with the right people in retail to help solve their problems, and we've created a commercial academy to share that learning.

In terms of our leadership, obviously it's really critical that we have new leaders coming through our business. So we've got a very good leadership program. It's both online and face to face training, but we've also adopted what we call styles and climates where we give our leaders real feedback about the styles that they've adopted and how that affects the climate that they operate in. Obviously, we want a very engaged workforce, so it's absolutely critical that we create the right climate.

Then we've been recognised externally. We're members of LEAD and also Business in the Community. We think that diversity and inclusivity is absolutely critical for the future success of our business. We have a very diverse team in Europe. We want to make sure every single person in that team feels valued and feels like they have equal opportunities and has the opportunity to share their talent across the business. We're working hard to make sure that happens and we've been recognised for that in being awarded top employer status for all of Europe and also South Africa this year. So we're very proud of that recognition.

Underpinning all of that is the fact that we have an intrinsically sustainable business model. Many people coming to our business are really attracted by the fact that it's sustainable, fundamentally sustainable. Young people, particularly, think this is a really nice part of coming to work for Brambles. It's a circular economy model that depends on the share and reuse of equipment rather than recycling and reuse is far more energy efficient and sustainable than recycling.

We have been recognised by many external institutions for the work that we've done on sustainability including being number one in our service category in the Dow Jones Sustainability Index and also having, for the third year running, an EcoVadis gold rating. So that's very important and many of our customers now look at that when they are looking at who they're going to use as a supply chain partner. We're helping our customers to deliver their own supply chain CSR targets as well. When they collaborate with us, it's not just us that saves the money and the carbon dioxide, it's they who save the money and the carbon dioxide as well. Many of them are now using that in their CSR reports.

So I'm not going to share actual margin numbers, you'll notice that this slide has no numbers on it. We don't share margin numbers for Europe because we don't want our competitors to understand that and also, just broadly, they're very similar to what we've reported in the EMEA region. But you can see that over the last few years our margins grew from 14 through to 16 and then have pretty much stabilised. The reason that we're able to sustain quite strong margins in the European business is for a number of reasons. I mean firstly we had first mover advantage in every region that we operate in across Europe. That means we were the ones who got the scale first. We got that network advantage first. We got those economies of scale as a result of that. But also, the European market is very fragmented. In Europe we operate in 32 countries. Every one of those countries has its own different manufacturer and retailer landscape and as a result of that, it's taken us 45 years to get to the point we're at now. That's been a huge amount of work to get to that

point and it's also a huge amount of work for a competitor to penetrate a market, particularly if there's already an established operator like us that's already delivering real value through those economies of scale.

Then in terms of - we've worked very hard to make sure that even in a competitive environment, we are able to continuously be competitive on price because, yes we've got a - we've had a low inflationary environment, but we've delivered very strong efficiency improvements through supply chain, efficiencies and also through some of the initiatives that we've been working on for the last five or six years such as automation in our supply chain.

Now obviously if you're making strong margins, the real critical question is can you maintain them and we have a plan for making sure that we can. So again, plant automation, we've done a lot of it. Carmelo's already talked a little bit about that, but there is some more still to do. While many of our largest plants, we use ADI and we use a robot for taking the pallet to pieces, we've only got one example so far of where we're putting the pallet back together again with a robot and we think that there is a lot of opportunity there. So this year we're going to roll three of those units out and we're going to see how that works. It will take some time for us to develop it, but I would see a point in the future where a large number of our pallets go all the way through one of our service centres without being touched by a human being. So we think there's a lot more runway still for us to take some advantage in that fully automated repair.

Carmelo's also mentioned the fact that we could improve the robustness of our pallet. If it gets damaged less frequently, then clearly we don't have to repair it so often, and the cost of repair is lower. So we're continuously working, looking at new materials, looking at new design layouts to see if we can reduce those damaged rates in the supply chain.

Asset productivity is very important for us. Making sure we get our pallets back quickly so that we can reuse them again, and we work very closely with our retailer customers so that we get them back without them being reused. If our retailers do want to reuse them, and many of them do, that's fine, but we expect them to pay for it. So we have been working to put contracts in place to make sure that retail customers pay us when they reuse our assets, and that means that typically we get them back and we have a very good team of asset managers all across Europe who are making sure that we're identifying points of leakage, and that we're plugging those points wherever possible.

Transport efficiency is also very important for us because a large proportion of our direct cost is transportation. We now work with over a thousand carriers in Europe and that gives us the opportunity to really get the best prices out there, but not only that, we still have to buy from the spot market particularly to allow for the peaks and troughs of the seasonal demand of our business. When we do buy from the spot market, historically that's been quite expensive. So we've put a dedicated team in place that does nothing but transport negotiation on spot market pricing. That's actually had a surprisingly big impact on helping us to offset some of the inflation that's in the market right now. Then collaboration helps us. We're only at the start of that journey, but we really think that collaboration is going to be a very important part of the next few years for making sure that we get good transport efficiency in our business.

We don't want to spend too much on overheads, every year we look to try and get our overheads, as a percentage of sales down year on year on year and we've been successful in doing that. Some of that's been done through centralisation of key functions such as logistics, such as finance, such as customer service, and that's helped us get our costs down and some of it through automation, making sure we've got the right IT systems in place so that many of the processes that were previously manual have been systemised.

Then finally, we do have indexation clauses in a large number of our contracts, the great majority in fact. We're not always able to implement all of the indexation because we are in a very competitive environment, but wherever possible we do index our customers so that inflationary pressures that we see, we are able to pass on, usually on an annualised basis so we base that indexation on the last 12 months of activity. We're able to pass that on to our customers.

So in summary, it's quite an exciting place for us to be at the moment because we do think there's still - even though we're a big organisation, we still think there's a lot of growth opportunity here within the European business. Our network

advantage and our economies of scale give us a real advantage over our direct pooling competitors and over the whitewood exchange system as well. So we think there's still opportunity to continue to grow there. We're expanding what we do with our customers to differentiate ourselves more, particularly around the first mile and the last mile of the supply chain and also those collaboration opportunities, but in order to do that we've got to have that very strong and engaged team. So we will be spending, and continuing to spend a lot of time and resource in investing in our people to make sure that we have a great team that's there to help our customers solve their supply chain challenges.

Thank you very much and with that I'll open the floor to some questions.

Paul Butler: (Credit Suisse, Analyst) Paul Butler from Credit Suisse, can you just tell us a little bit more about what you're seeing happening in the Nordics and in Germany and exactly what's changed and how that's enabling you to grow faster?

Mike Pooley: In Sweden, particularly, which is obviously the biggest economy in that region, there was a pallet pool in place that was sponsored by the retailers and as a result they didn't accept our pallets into the Swedish market place and many of the retailers didn't accept CHEP, but they've changed their position now and last year they agreed to accept CHEP through their supply chain. So we're not competing on a much more level playing field and that's allowed us to accelerate our growth rate in Sweden, and it really has accelerated in the last 12 months as a result of that.

In Germany, historically there are two main cooperatives that operate the whitewood exchange. There's UIC and EPAL and they've always worked together. They've effectively allowed their assets to be exchanged, so if you have a pile of UIC pallets you can exchange them for EPAL pallets. The actual design of the pallet is very similar, but both sides of those cooperatives have had real problems lately with an influx of substandard counterfeit assets from places like the Ukraine coming into the market place. So as a result of that they've stopped working with each other and they've stopped allowing customers to exchange between - their pallets between each of those cooperatives. That's added some complexity to many of our customers. So we're beginning to see a bit of an acceleration in Germany. Not entirely as a result of that. We've also put a lot of effort as well, ourselves, into really selling the benefits of pooling. But that's certainly an issue that our customers are seeing.

Paul Butler: (Credit Suisse, Analyst) Okay, thank you.

Simon Mitchell: (UBS, Analyst) Simon Mitchell UBS.

Mike Pooley: Oh, sorry, Simon.

Simon Mitchell: (UBS, Analyst) Just an extension to the question on Germany. I mean Germany, if you look at that slide, it's by far the biggest single opportunity in Europe, but it has been for - I mean I can remember 15 years. I understand the change you've just mentioned, but is this still a really slow, long grind or is - do you see a tipping point coming where you can actually get some meaningful growth?

Mike Pooley: We often do see that once you get to a certain market share you do get that tipping point. We saw it in Italy. It took us a long time to get to that point in Italy and Italy has reached that point where you get those economies of scale and it accelerated away. We saw it in Poland recently as well. The last few years in Poland have done that. We're close to that point in Germany, but we're not there yet. You know I think you've got to get somewhere around 15, 20% market share and then you suddenly have that network advantage that you can really use. It's hard yards in Germany. We are - the German white exchange pool works well, but we are seeing our growth rates accelerate in Germany, so we are optimistic that we're on the right track, but I wouldn't tell you that next year we'll be seeing 20% market share, certainly not. It's going to be a few years, I think, until we reach that point where we really start to see an acceleration take place.

Simon Mitchell: (UBS, Analyst) Maybe if you could touch on the competitive landscape as well. You mentioned it briefly, but if you go into a bit more detail.

Mike Pooley: Well we have two direct pooling competitors who operate in most of Western Europe and are beginning to also step into parts of Central and Eastern Europe as well and Southern Europe and they're very keen to get a share. They're very keen, every single time one of our large customers goes to a tender process, you can guarantee they'll both be there. They are credible, they can serve markets and while they can't do all of the things that we can do, if a customer just needs a basic pooling option in a region, they're capable of doing that. So that means that we have to be very competitive on price. We cannot be complacent about that and we have to continue to be - you know, work hard to get our cost base down so that we can defend our market position. We don't want to lose share because if you lose share you lose that network advantage. We want to make sure that we retain our market position.

Simon Mitchell: (UBS, Analyst) So there's been no change in that situation recently?

Mike Pooley: No. I mean it's very similar to how it was last year.

Anthony Mulder: (CLSA, Analyst) Generally you've lost share in the Euro pallet over the last five years, can you talk about the growth in the half pallet, quarter pallet?

Mike Pooley: We - certainly - I think if you look over five years we probably have lost share. I would argue that the last two years we're probably at least holding our own, if not maybe doing slightly better. The growth in the half pallet and the quarter pallet has been pretty spectacular in the last 12 months because we focussed a lot of time and effort on it. We put a dedicated team in place, a centralised team, one of our most experienced business leaders was dedicated to leading that operation. We gave him a team of product managers and marketing experts and product developers. They've created a whole series of solutions and projects to work very closely with our customers. They've taken a category management approach to how we work with retailers and focussed on specific categories, and we've had a lot of nice wins as a result of that. You know if you put a lot of effort and the right people onto a project, then typically you get some results.

So we thought it was really important to focus in that area because (a) we see that being a real challenge for retailers, how they replenish efficiently and how manufacturers promote branded goods in store, so there is a need out there. And secondly because we're quite differentiated in that area, we can get premium margins in the last mile of the supply chain.

Anthony Mulder: (CLSA, Analyst) So is the Euro pallet in Germany still the best way to look at, still the size of opportunity?

Mike Pooley: Overall, yes, in terms of the total market there is a big last mile solution opportunity in Germany. We're fairly well penetrated in that in Germany, but in Euro pallets, that's where I think the biggest available opportunity for us is, it's in the Euro pallet size. That's where the 180 number comes from.

Anthony Mulder: (CLSA, Analyst) Thank you.

Scott Ryall: (Rimor Equity Research, Analyst) Hi, Mike, Scott Ryall from Rimor. I've got one question on pricing. Your outlook looks at an expectation of flat, give or take 1%. You saw a tick up in cost, you've talked about transport costs and the outlook over three to five years, how important is it in terms of dealing with your customers that you are able to keep that pricing flat, give or take a bit over the next three to five years please?

Mike Pooley: Well, I think it's very important for our customers to see that we're working very hard to try and offset inflationary pressures wherever possible, they expect that from us and we do whatever we can to do that. But, you

know, there are certain inflationary pressures we cannot directly affect. Our contracts are made up with indexation clauses that are driven by things like transport indices and if there is a significant amount of inflation in those areas, we will try and pass that onto our customers. Contractually we can do that, usually, but as Nessa mentioned earlier, we are typically on a three-year contractual cycle with our biggest customers and they will go back to tender with two or three players in a tender process. Quite often it's very difficult to implement full indexation across that whole cycle.

So we do what we can to get pricing where we can and we do what we can to make sure we offset as much as possible through efficiency gains in our own automation and transport execution.

Scott Ryall: (Rimor Equity Research, Analyst) Can I just ask one on people? Now I'll start out by saying you have the lowest staff turnover ratios across the business, so that's clearly a good thing, but they have crept up over the last three years on your reported numbers, is there anything that has driven that? Is that a change out of capability, things like that that you can talk to?

Mike Pooley: Typically, in our business, I think at the moment within Europe people stay in our business, on average, for about seven years which is great. We like them to - many of them to stay longer, but we are also seeing that as a lot of young people come and work in our business, particularly in places like our logistics execution team and some of our central finances teams, there is an expectation. I know I'm being sort of very stereotyping the millennial generation here, but people do not want to necessarily work in one company all their lives. It's not unusual for us to have higher turnover in those younger population teams.

One of the reasons why we're implementing our graduate training program is we want to give them an environment to work in where they get lots of different experiences quite quickly over a period of time and we hope that will allow us to retain our high potential staff for longer. But I think it's just a function that many companies are seeing with that higher turnover rate.

Scott Ryall: (Rimor Equity Research, Analyst) Thank you.

Owen Birrell: (Goldman Sachs, Analyst): Hi Mike, Owen Birrell Barrel from Goldman Sachs. I've noticed that your first mile solutions and your last mile solutions are contributing up to roughly about a third of your incremental growth - I think you're talking 1% to 1.5% growth.

Mike Pooley: Yeah.

Owen Birrell: (Goldman Sachs, Analyst) They look very much plastic-led in terms of the solutions that are being offered.

Mike Pooley: Yes.

Owen Birrell: (Goldman Sachs, Analyst) Can I just ask, is there an issue longer term that the plastic then starts to cannibalise the wooden product in the middle mile solutions?

Mike Pooley: The plastic is used in the first mile predominantly for hygiene reasons. It's product that's actually going to go into a factory, often a food factory, and therefore it has to be washable and a timber pallet can't be washed in the same way so that's the reason we use plastic. Plastic works in that for us - plastic works very well in that environment because of its relatively fast cycle times and so we get the asset back and it's quite productive, even though the base price of buying a plastic asset is higher than buying a timber asset.

Those pallets that you see on my slide are not designed to go all the way through the supply chain. They could but we would design a different pallet if we wanted something to go all the way through the supply chain. The way in which they're handled in that first mile of the supply chain is very different from the way in which they'd be handled all the way

through the supply chain with automation, how they're warehousing, forklifts et cetera so they are specifically bespoke for that part of the supply chain.

At the other end, at the last mile of the supply chain, obviously it's mostly fractional pallets and dollies for things like small footprint stores, convenience stores or high discount environments where you need to replenish very rapidly. For fast replenishment typically although not always, we use wood because it gets a lot more impact and is moved around a lot, so typically we use wood - it's very robust. For promotion, we use plastic because it looks aesthetically very pleasing. It's very easy to put marketing shrouds onto - you can design the plastic to be very functional for the requirement of that promotion.

Owen Birrell: (Goldman Sachs, Analyst) Is there an inefficiency there though that you provide a customer with a first mile solution and a middle mile solution and a last mile solution - so the truck rolls to be swapping those pallets out?

Mike Pooley: Previously I think that we weren't really focussing very much on the first mile at all. It was being served by others. So by us serving it in a way that we can leverage our network advantage, we're just taking advantage of a space that we haven't played in before.

For the last mile of the supply chain, actually if you look at the proportion of goods that get down to store on a fractional pallet, it's relatively small. The majority of it will go typically either in a roll cage or on a full-size pallet to the store where it will be replenished manually. As we see a rise in urbanisation in Europe we see more and more of these small footprint stores where these fractional pallets tend to be more applicable, but you're absolutely right, it does cause a challenge for the efficiency of the overall supply chain.

Where we see a challenge, we also see an opportunity because we're working on ways in which we can allow our customers to get those fractional pallets down to store level in a far more efficient way and we're developing some actual technology right now to help them do that.

Owen Birrell: (Goldman Sachs, Analyst) Just finally, can I just ask the growth rates look very appealing - 10% for last mile and 30% in first mile. Is that driven more by the underlying market growth or is it the fact that you guys are coming in late to these businesses and you're claiming share from incumbents?

Mike Pooley: Definitely the 30% we're getting in first mile solution is because we're now putting some effort into it and we weren't before. I think the last mile is partly down to the fact we're trying to create the market. We're working with a lot of retailers who just don't use that type of equipment and we're trying to demonstrate to them the value that they will get and manufacturers will get from using it so in a number of cases, we're trying to create a market. So partly it's because we're now focussing more effort onto meeting demand that was already there and partly it's because we're trying to create more demand.

Sean O'Sullivan: Alright. I think we'll move onto the next presenter now. Thank you, Mike.

Okay, the next presentation is from Laura Nador, President of our North American business. Laura joined Brambles in 2003 and became Present of CHEP North America in 2018. Laura's previous roles include Director, Distributor Sales for Europe, Vice President RPCs Europe, Country General Manager Iberia, Vice President Supply Chain Latin America and Senior Vice President of the US Pool Pallet Business. Laura is based in our Atlanta, USA office.

Laura Nador: Good morning, everyone. At this point I feel that we've covered about half of my presentation with all the information from everybody else but hopefully you're going to have a lot of relevant content and information and space for questions as well.

So as Sean said, I joined the Company 15 years ago and I have a tremendous privilege which is the fact that I could work in different regions and in different business units across our global operations. Most of that time, 10 years - more than 10 years actually in Europe, so between the UK and the Southern European region and then even in emerging markets in Latin America where the challenges were completely different. So this brings to my toolkit a few learnings and the opportunity to use best practices that I have lived with throughout the course of those 15 years that hopefully are going to help me lead this business in the way that we need in the next three to five years.

You've been made aware of the results last month so the first half results have indicated very pleasing trajectory in terms of our top line growth. We are very happy to see actually that momentum coming back to the business. If you remember just a few months ago - about a year ago, there were questions about that particular topic can the US business grow at the rates that historically we have shown and actually the answer is yes. We are seeing that momentum and it's coming from nice volumes both in our existing contracts which are progressing nicely and we're continuing to expand with through lane expansion. It's coming through very good rates of conversions of new - of very nice and healthy [unclear] that is converting faster this year and we expect that to continue in the mid-term.

We have also made significant progress in improving our asset efficiency. I'm going to show you a few more details later but that growth that we are able to obtain, we can do it with fewer pallet purchases. Our capital intensity - pooling capital intensity is reducing and to a large extent is due to the initiative that we have put in place to address cycle time. So there's a lot of good initiatives and good work that is translating into good results.

We're not so happy with the trajectory of our profit margins. There's been an erosion in the first half and that's going to be a topic of a large part of my presentation today - how are we going to address that. As a team we are committed to continue to leverage our scale and drive efficiencies in our supply chain. We are going to address our cost pressures and there are significant cost pressures - Carmelo touched on a few of them already this morning. I'm going to go into more detail about what we're doing on those. But we are going to continue focussing on addressing those in the immediate-term and the short-term with regards to inflation pressures but also the other cost pressures that we face in the more near to mid-term.

We're going to continue focussing on our asset efficiencies, that is a core and a fundamental part of driving the financials that we need and releasing the cash required for us to continue investing and innovating for our customers whose needs are also evolving. Finally, we are very committed to the development of a very strong team to lead this and this company to the financial returns that we actually expect and you all here expect.

I'm going to get my - oops, I was too fast. There we go, okay.

So we have a very strong network and similarly to what Mike was saying about Europe, we have built a very strong logistic platform. We have about 100 million assets that are constantly flowing from East to West and North to South and crossing the borders, helping our customers transport their goods from the very source from the farm all the way to the shop floor eventually - at the end of the chain when a consumer picks the product from the shelf and that is enabled by a very dense network. That is important, it's important because it creates value to the customer, not because we say we have many sizes and many plants or many locations or many trailers, it's because we are able to serve any customer across the country in the US in less than half a day transit time.

Now in a geography like the US, that is a fundamental difference - less than half a day of transit time anywhere help us ensure that we have a warranty of availability for our customers regardless of where they are. We may achieve that through our own sites, our own service centres being placed optimally across the country, but also our flexible approach to having onsite operations for example where it makes sense - where we can actually generate the efficiencies and reduce costs end-to-end by doing so. So we operate at sites that belong to our manufacturing customers and also our retail customers - the ones that you normally hear us call TPMs, that's what we do.

So in summary, we do have a very strong network, the scale and the density coupled with the expertise of our teams provide scale related efficiencies that we can offer our customers that have differential value. That is why the vast majority of the top companies, the best and most important companies in the FMCG trust CHEP with their business and they keep staying with us for a long time. So we tend to have long a tenure with our customers once they join our pool.

So the same case as Mike was saying before in the US, I many times receive the question about how much more can grow? Is that a mature market? Are you in such a leading position that there's not going to be enough growth for you to go and capture and the reality is the market is very large. We are talking about 770 million equivalent pallet moves as a total market size, of which half is not served by pooling companies. So half of that, 385 million are potential issues of pallets that are there for grabs, that are not served by pooling. Yes, we are the leader but there's a lot of white space there for us to go capture and we compete against two different types of competitor companies.

The first block, the white block on the top, represents our whitewood recycling competitors and this is, many of you know, it's a very fragmented industry. We have more than 2500 companies, mums and dads - local shops and that type of fragmentation with some consolidation going on. You may say that now there's been some merging recently but not an awful lot. Some brokers, for example, [Norway's] Pallet or PALNET - are typical brokers that what they do is they leverage relationships with individual independent recyclers across the country in order to be able to compete on a regional or a national scale with other bigger companies but there's not many of those.

There's some private equity activity. You may have heard a year and a half ago or so, Huron Capital bought Northwest Pallet and Gray Mountain Partners recently bought our recycle arm but that's as much. So by and large, this industry is extremely fragmented, very transactional in nature and very local or regionalised [unclear].

The national players are the typical pooling companies, like us. So the typical ones would be PECO and iGPS. Their value proposition, the product they promote is similar to ours in the type of product it is. iGPS offers a plastic solution so it's different to PECO in that respect, but they are well-established companies that have been there for a while and are rational competitors that we deal with constantly.

There are another subgroup of competitors that I would call emerging competitors in the industry. There are more - or claim to have more disruptive offerings, either because of a change in the type of material of their product or more recently actually, the Internet of Things - the IoT technologies that they associate with their offering - so they sell smart assets essentially - that's their proposal. We tend to see in this space a lot of change so the timeframes between entry and exit of these companies tend to be pretty short.

Some examples, recently Axios is one company that came in the market - more of a niche player so they were concentrating very heavily on a certain group of categories, so they were very high, for example, in [unclear] products that had sensitivity to damage and they went out of business in February last year. RM Square is the most recent one where as I said the IoT of things is what is driving the noise [unclear] in the proposal they make. They are disclosing publicly financing issues, so cash constraints, but we continue to monitor all of these potential competitors and their offerings constantly. They are on our radar - we're always looking for [unclear] to see what else may be happening in the market that we may not be picking up.

The next question is about - and I get this question quite a lot - about our value proposition [unclear] versus our competitors and do we have a winning one? The answer is, yes, we do have a superior value proposition compared to both, the white wood recyclers and our pooling competitors. This slide tries to pick on some of the key items that differentiate ourselves from our competitors.

In the case of whitewood, it's very clear that the product, the platform itself, if a differentiator so certain features like the four way entry make the operation completely different. So for retailers in particular - and from manufacturers as well - but retailers having the opportunity to manipulate from any side the pallet generates a lot of handling efficiencies and

transport efficiencies and that means they many times - often they mandate the use of block pallets in their supply chains. They also recognise the important benefits of protecting the product from damage and this is something that is more prone to occur with less reliable platforms - so that's also another reason why retailers, large retailers in particular tend to prefer these massively. This consistent quality is a benefit that our manufacturing customers also recognise.

The network, what I said at the beginning - the scale of the network, the density of the network, implies significant transport cost efficiencies as well, as well as the capital reduction, of course. So all of that in addition to the circular model that Mike and Graham referred to before, that make a key differentiator of our business, business model and our offering to our customers. Talking about that, I want to expand a bit more because I do really believe that this is a key differential part of our offering.

So in world where everybody, all stakeholders from consumers to manufacturing companies, governments, regulators, investors in this room are being a lot more conscious and willing to do the right thing to preserve the resources that this planet has that are not limitless. Everybody wants to behave more responsibly and we have an offering that can help everybody in the supply chain to deliver on those objectives. I have just a few examples here of engagements with different customers in CHEP and the US and in North America, I'm sharing the names because they have allowed that to happen, otherwise normally I would not share the names.

The first one is JBS. JBS is a leading company in processing of meat, poultry and pork. They are huge. They have a significant fleet as well to do transportation. We found the opportunity, working together - our logistics experts working together with their transportation team and leveraging the scale of that network that I just mentioned to you a moment ago - found significant opportunities to collaborate on transport. In doing so, in just the last 12 months, we've been able to reduce 880,000 empty miles from the supply chain. So that's a fantastic outstanding result, collaborating with one of our largest customers in the US and helping them deliver on their sustainability objectives.

Walmart Canada is a different example, so again it's in North America not strictly in the US. We helped them reduce waste. Now this is leveraging our capabilities and scales and again, our network to dispose safely of their lumber waste. They do generate a lot of waste related to crates and features they use in their gardening seasonal campaigns and it was creating a big issue for them. We helped them intervene in their - and implement a reverse logistic solution to get rid of that waste - so that's another way in which we help in this case a very massive retailer achieve their objectives.

The final one is PepsiCo, again a different example of how we can help achieve improvements in sustainability. This was about using our innovation centre in Orlando where we have a set of people, experts, in topics such as product and unit load optimisation. So we sat down with PepsiCo's team and helped them redesign completely their unit load. From the packaging itself that we actually help them reduce and therefore there was a saving there. They could move more product per pallet and more loads per truck so saving transport as well. At the same time, we caused a significant improvement in damage reduction - so there's a double win there.

So again, it's about the scale, it's about our networks, it's about our skills and experiences, our credentials in sustainability and these are just some of the examples of the things that we can do to help our customers deliver on their own sustainability agendas.

I mentioned just a moment ago that we have a significant opportunity to continuing growing in the US and let me just give you a few more details about how that's going to materialise we do expect in the same shape and form that you saw before from Mike. These three components are organic growth, net new wins and pricing and mix to deliver between 2% and 5% of top line growth in the mid-term. So we're looking at the planning cycle - this is on the left hand side how we have tried historically so we don't expect massive changes around the organic growth. We do continue to work very closely with our customers to maintain those long-lasting relationships and nurture those partnerships continuing to deliver value and continue to expand where possible with them.

We do expect that our ability to continue to capturing the new business is going to be there - so 1% to 3% in new business win, net of any losses to competition. In pricing, we do expect that in the mid term - and I'm going to make a distinction here between the mid-term and the short term. In the mid-term in a competitive market like the US, we do expect that we are going to have to make certain investments in price difference clearly to protect some of our strategic accounts that enable our scale, but we are going to fund that with pricing initiatives that we are also going to place at the same time.

Now in the immediate term, in the short term, and given the inflationary environment that we are in the middle of, we are certainly taking more aggressive actions and therefore, we do expect in the short-term contribution from pricing to help us offset those inflationary costs. So you need to distinguish here - one thing is the very immediate term and what we're doing now and what we see to be the trajectory for the mid term, which is roughly flat because we will fund the price difference with our own price updates. I will cover how we are going to do this in a moment, this is just the overview.

So the market is large and I just said there's about 50% of unserved market - the 385 million. Where do we focus - the question is where do you put your sales efforts to capture the opportunity? So have defined what are the four categories that we should concentrate those efforts on. The four on the left-hand side of this slide are those sectors. So we are talking about beverage and beverage here includes all non-alcoholic and alcoholic as a whole. We have produce - we have meat, fish and eggs and we have dairy. So these are the four categories that we are going to go after with emphasis.

Now we want to know in a more granular level and in a more detail level the different degree of addressability considering the barriers that exist today to convert some of those volumes. It may mean that even within the same category, there may be volumes that are available today versus some that will be available more longer term. So we looked at this to understand that addressability, considering what will be here and now in the near to mid-term and what would be a longer term opportunity. That's what you see in the pie on the right-hand side of the chart. So we see about 200 million potential issues as near to mid-term opportunity. This is the 52%.

Just to clarify a little bit what that means, what we consider to be near to mid-term opportunities include things like - well, the obvious one is those volumes that are already somehow being moved in a 48x40 equivalent platform - so our existing platforms and our existing value proposition are well suited to capture that volume, that's one piece. There could be some challenge where actually we have not penetrated too much yet so we are gradually penetrating those but we have already the collection engines, the controls in place to make sure that we can progress on those. There are some cases where for example with a plastic pallet that we are trialling, and I will to in a moment - this is a product that we intend to launch and therefore we see it happening within the timeframe that is considered near to mid-term.

Now other opportunities that will be long-term for example would be nonstandard. For example, in certain categories like beverage, you have certain sectors with 36 x 36 format or dairy with 40 x 40 - completely nonstandard types of pools. In those cases, we consider the opportunity to be a lot longer term - more difficult to achieve unless we wanted to go and buy those pools ourselves and run them.

So even though in some industries like the example I gave you with the 36 x 36 in beverage, the industry itself is already starting to move in the direction of converting to 48 x 40. It's going to take seven to 10 years probably before they manage to change completely their fleets and their trucks to different sizes so that's going to be a more painful process and it's going to be longer term. So this is how we define the near-term versus long-term and the 200 million that I'm talking about as opportunity.

Now, the size is a very significant size so there's an opportunity that is very interesting there and we know what categories we can go after. How do we go about them is not always the same across the board. We do have different go-to markets strategies to be able to capture that across. So we segment the customers in four broad groups and the

table here shows what the broad groups. But briefly if you look at the first two rows, the strategic accounts and the protect accounts, this represents a very large portion of our portfolio of revenue today. So about 80% of our revenue is in those two buckets and traditionally, we have already very well-established relationships at senior levels within those customer organisations.

We continue to work on developing new value-added propositions and comprehensive joint business programs with them so that we can warranty that that loyalty stays. They really value our offerings and want to continue with us for the longer term. It's a very different story with the two groups at the bottom where we concentrate what we would call our handling efforts. So all of these are processes in which we have to develop the relationships for the first time, educate them normally in what benefits of pooling are because these are by and large customers that are using whitewood right now so we have to raise their awareness and educate them on what the pooling brings to the table. So this has the typical handling efforts.

So hopefully - and I've been running through this somehow fast - this is giving you an idea of how we are tackling growth, one of the approaches that we are taking which are discipline, and the targeted strategies that we have in place for go-to market.

Now, while we continue to look for opportunities to grow our share and continue to leverage our scale which is a benefit that we have, clearly, we are facing significant cost pressures, and that is shown in our margin decline in the first half of the year. We did have in the US specifically in the first half, 2.9 percentage points of ULP margin decline based on those challenges, which are essentially related to transport and transport inflation, transport costs pressures, labour costs and also some of the changes that are happening in the retail environment - mostly similarly to what many customers of ours are facing, but is translating into that erosion.

I'm going to get into a lot more detail about how we are addressing those. The immediate inflationary environment that we are living through right now, is actually costing a lot of additional pressure and we are protected to a large extent through our contracts against that inflationary pressure so that is a good thing, but not completely. So we have to offset the rest of that additional cost pressures to supply chain and cost out initiatives that are going to help us improve our profits.

So if we look at the near to mid-term, this is how we see our profit margins evolving. So you see that we continue to expect cost pressures in the near to mid-term, represented in the red bars, but we do have plans and actions in place to mitigate them, to offset them and actually give us the opportunity to gain back margin improvements. So over the cycle we're looking at 2% to 3% improvement in percentage points of ULP margin. I'm going to cover this in more detail in a moment, but you can see already what the areas are that we are going to concentrate on. So supply chain optimisation and leveraging our network, making a significant investment in that network actually to be able to capture those benefits in full - and Carmelo did a good job at explaining a lot of what's going to happen in that sense.

We're going to continue working on our sourcing strategies to gain advantage and reduce costs of sourcing organic materials, not just lumber but all of our raw materials, and also being diligent and disciplined around pricing to capture the right compensation for the cost to sell for our customers.

Now before leaving that slide I want to make sure for transparency, that we are going to experience continued cost pressure and continued margin pressures in the short-term given both the inflationary environment and the time lag in between the application of the pricing initiatives to offset inflation, and also the investments that we need to make in automation and the timing in which we will start to see those things flowing through. So while we are going to see that improvement in the cycle, the 2% to 3% percentage points in the cycle - at the beginning of the cycle we're going to continue to see that margin pressure.

So I'd like to go now into addressing each one of the different challenges and the different plans and actions that we have to mitigate them. The first one is what's happening in the retailer environment. It's fair to say that over the recent years, there's been an increase in the cost that are driven by changes in retailer behaviours and retailer supply chains, so there's a combination of factors here. On the one hand, the continuous pressure on retailers' margin and they are fighting a big battle there against their potential competitive threats - the online and the high discounters all fighting for the share, so they are under significant pressure there.

There's also the emergence of opportunities as they see them as some competitors are willing to pay fees for extraction of assets from the retailer networks. Some of the parties like, for example, some recyclers, are also offering some incentives to retrieve materials like cores, like white cores from the retailer. So with all of that, they see the opportunity and they try to seize the opportunity by means of asking or requesting, for example, the pooling companies for payment of fees. That's a reality. It's happening. It's been there for a while and it continues.

So as a leading supply chain solutions provider, what we do normally obviously is not our strategy or policy to accept paying for fees. So what we're trying to do is find solutions where the cost that is actually creating the trouble for the retailer in this case can be eliminated. So if we can find ways in which we actually reduce the cost as opposed to paying a fee for it - that's a much better option and that's what we're trying to do. In this table, I tried to give some examples of opportunities or strategies that we can use, and some of them in combination, to actually try to mitigate that in permanent ways that we see with retailers.

So for example, if there is a - and this is real case, I don't give names but a very large grocery retailer in the US that came to us with the notion of this is your transport cost by the way, why don't you pay me such-and-such number for fees. So what we did is actually is obviously take care of the collection transport, the return of our pallets from the retailer distribution centres, but at the same time asked them to help us with implementation of onsite operations. So by doing a TPM, we are eliminating half of the transport anyway. So yes, we are having to do the transport, but it's already half of what it would have been otherwise because we can operate]the TPMs and by doing the TPMs we are also helping with labour challenges as well. Then for the remainder of the transport then we look for opportunities where we can optimise.

There are opportunities with the retailer fleets, or with customer fleets, where maybe we can reduce that cost even further because of synergies. Then we engage with them to say okay, so we need actually to reduce costs as well and improve our set of efficiencies, so why don't we work together to eliminate reuse? Reuse is another topic that is relevant in the US and like Europe or other regions, we do have legacy contracts where retailers are entitled to reuse our pallets many, many times - sometimes unrestricted use. So working with them to try to eliminate that reuse is a win for us and that's what we did. So with this particular retailer, they agreed to a switch - to change for a nestable pallet solution to be used downstream replacing our lumber pallets. That resulted in us returning about 600,000 pallets back to us in just this last year, so that's helping us on the cycle time that I was mentioning before.

Finally, there are ways in which we can collaborate and get their help to convert more volumes as well. So with this particular retailer they helped us convert all of their private-label volumes to CHEP so there was a revenue opportunity for us. So these are ways in which sometimes - obviously, we have a challenge and it's always challenging to deal with this always changing retail environment but there opportunities for us to win as well.

Talking about transport inflation so and Carmelo touched on this already in his presentation, but this is the hot topic of conversation other than Trump tweets. Everybody is talking about transport inflation in the US right now. So by December we were looking at a 6.2% exit rate. In January that already picked up another point. In February it has maintained above 7% - 7.2%, 7.5% - so we are seeing sustained levels of unprecedented high inflation. This is driven by driver shortages as Mike was pointing out, it's driven by also some weather events that don't help - they create disruption and lack of capacity in certain regions, and also some very specific US events or developments like the

implementation of the electronic driver log rule very recently - which in itself has already cut capacity by 5% to 7% according to the industry. So clearly that's all a cocktail that is triggering that unprecedented level of transport inflation.

So we do have a number of strategies in place to mitigate this, part of which Carmelo touched on. So continuing to optimise our network, making sure that that length of haul continues to reduce constantly because the shorter the distance the more the chance that we can use dedicated fleets. We do have 57 different dedicated fleets currently in the US. When we have these dedicated fleets, first obviously we can optimise them but also when we're protected - because these tends to be contracts that we have that could run two to three years - so they tend to protect us a lot better from exposure to inflation. You see the effect - if you look at the table where we compare ourselves against the market, we tend to over perform precisely because we have a large proportion of our loads being carried by dedicated fleets that are optimised by us.

Now in January you see - well, they asked the question why January? Now, the two lines cross. Unfortunately, January and February are for us the seasonal peaks, the absolute seasonal peaks where the surge of pallets after the holidays - the Christmas campaigns happen - so we have the highest level of transport and the most volatile type of behaviour - so have to resort a lot more to the spot market in those particular two months. It's very different to what happens in the rest of the year - so that's the reason why. But certainly, without a doubt, the transport inflation is accelerating and it's there to stay for a while according to all the industries that we are looking at.

So I've covered the supply chain optimisation and the fact that optimising our network is key. This is another reason why when I talk about automation that there's a connection here. So the fact that we are so reliant on a limited capacity in the network that is almost 100% manual creates also inefficiencies here and a longer length of hauls sometimes here. We have a plant that is the optimal location for us to deliver from and we cannot staff properly all the repair tables. What happens is we have to take a suboptimal plant and do over time to compensate for that production and then run more miles with those pallets to deliver to the location that we were intending to. So there's definitely a connection there and that's why the optimisation of the network and the automation of the network are going to help us also deliver these transport efficiencies.

Finally, and very importantly, we are taking clear action around pricing. Our contracts tend to protect us with regard to transport charges - transport and fuel. I'm not covering fuel separately, but we do have a large proportion of our contracts which include already fuel surcharges - about 80% of our contracts cover fuel and about 70% of our contracts cover transport surcharges in some way or form. So that's the insulation that we currently have and we did make our way from 30% at the beginning of the year to now having 65% to 70% so we have been progressing. Clearly, we have long-term contracts with fixed conditions and firm prices that we have to respect, and as these comes to renewal, we are actually addressing this to make sure that in new negotiations we do include this protection in the cases that we don't have it today.

The other key element to our direct cost is lumber, and again Carmelo covered a good part of this, but in the US specifically we have seen inflation trigger significant increases. There were a couple of very specific events, so we did have this year unusual level of weather disasters. We did have hurricanes - you may remember Texas and Florida we had a number of consecutive series of events - a lot of fires in California - so there was a reason, a specific reason, why there started to be a lot more movement in the construction industry and as Carmelo said before, that's where we tend to source domestically our lumber from - so that triggered part of it. The other thing was related to changes the government made - so the application of tariffs on softwood, Canadian Softwood, did also generate a lot of speculation and inflation started to rise.

This one, this chart, only shows the first half but if you look at January and February that's gone up as Carmelo said. We've seen up to 14% of inflation in February. So the good news is we have really good strategies in procurement to help us offset this in the mid-term. In the short to mid-term actually and one of them is using a global scale. So being able to affect our mix and increase the proportion of imports versus domestic lumber is one of them, and also generate

a portfolio of suppliers, so optimise our mix locally as well. Using the expertise with [so many in] technology as Carmelo was pointing out earlier in the morning - that's going to give us a significant, significant benefit starting as quickly as this year. We are starting to see some of the benefits already and this will continue for the rest of the next three years.

Finally, also contractual pricing so we do have also a lumber surcharge which is present in a large number of our customers, about 60% of our contracts do have lumber surcharges as well. So they have already been rolled out as per February. When I talk about all these surcharges, clearly there's a lagging effect, there's a timing between when trends start to happen and the indices reflect them and we have to give some notice to customers, so there's a few months, three to four months between when we start to see the cost occur and when we actually start to invoice for the surcharges. But we do have that 65% to 70% coverage.

So that takes me to the topic we covered at length today but it's very significant, probably the most important single program that we have, started in the US right now which is bringing the network up to the level that it needs to be for a business our size and our maturity. So the investment of \$150 million to \$160 million to deliver in excess of \$40 million of savings sustainably for a business. Now I do believe having lived through the journey in Europe and Latin America as well, from the beginning of the first robots that Carmelo was talking about, I was the country General Manager for Spain when we were installing the first Klippas in Madrid in [unclear] all the way to where Europe is now and have seen the tremendous impact that this has in transforming not only our operations, the safety of our operations but the financials, the P&L.

I'm looking forward to making that same transformation in the US. It's definitely needed, I'm not going to discuss why for the last 10 years there wasn't investment in the US, I'm just keen that we actually take the world action now and bring the network to catch up with Europe in the next three years. So it's going to allow us to as I said impact our numbers clearly a cost is going to reduce quite significantly for years to come as a result of this and we will continue to improve on top of that. But it's also going to provide a significant impact for our customers because the sustainable predictable outcome in terms of quality and in every process actually throughout the plant, is a tremendous benefit. Customers notice it; it's also a very good way to show leadership.

So when we talk about extracting a premium versus some competitors actually and being different, thought leadership and leadership, technological leadership are things that customers actually also value, so that's a big plus. We are going to concentrate first on generating capacity. So up front the way we sequenced the plan and the way we're going to go about which of the service centres we attack first and then the second year and then the third year is clearly intended to give us that capacity that we badly need first off. So the first year is all about going to those facilities where we can create that impact so that we can facilitate then the transition in more complex implementations in the following years.

We are considering clearly some key criteria, so where we have the most challenges in labour, there are certain estates and certain geographies where the challenge is the highest and where as a result we end up having inefficiencies because of lack of capacity to produce enough. So we are going to address those with priority. Also, obviously encompassing optimisation of the network, so what are the new facilities that we need to bring on board to continue in serving the growth and lowering the length of haul. So, really exciting, the whole team is behind this and the good news is, as Carmelo said, the technology is proven, so we are going to be doing what you're going to see tomorrow when we go to the plant visit, that's exactly what we are planning to do in the US.

Hopefully, next time we meet we can take you to one of the plants now in the US and say you see, now we are at similar levels of productivity and automation as we have in other regions like Europe. So talking about pricing, I did touch on this a moment ago but now looking more with a lens of the mid-term, so past the immediacy of the surcharges and the inflationary pressures, what's going to happen in the next three years of a planning cycle. We expect that margin compression continuing to affect our customers, so that's a challenge, and they are subject to the same pressures that

we are as well. So that's something that we live with and we need to be aware of as well as the competitiveness of the market. We do have very active and competitive players there that we have to face.

So we do know that we are going to have to invest some price in protecting our scale and protecting our strategic accounts. However, we have market-based pricing methodology in place that we're actually enabling in a more systematic way. Actually, we are rolling out a system that is going to help us activate this automatically without having to intervene manually. That's going to help us take price where we can, so smartly addressing those markets where headroom exists and where the cost of the alternative would allow actually that our price can rise while we understand that we're going to need to use part of that to fund investments in price as well. So that's the reason why we expect overall in the mid-term that price contribution to margin to be reasonably flat yet in the first years and these next 12 months, in the short term we do expect price to be positive and actually is already.

So I will turn your attention now to capital efficiency. We did touch on this through the course of this morning and in the US in particular we are seeing a positive trend. I know you're familiar with this chart, I think it was shared at the half one results release. You can see there that actually that capital intensity, the pooling capital intensity is reducing. We have been very disciplined about it since the late part of fiscal '17 and into this year. We are putting a lot of focus in reducing our cycle time, so addressing reuse, addressing the idle stocks that are in the supply chain across the supply chain, it's not just retailers, although they are a very significant focal point for our efforts. But also, manufacturers and also in our own network, in our plans, in our trailers, where there is stock that is detained for longer than necessary we are taking action to reduce that cycle time, and it's showing good results.

So we have a comprehensive set of actions to address this and we have some very exciting ways in which we can effect that capital efficiency going forward, which we're going to talk about this afternoon with Prasad when we look at the BXB, and Nessa mentioned this before. We're very excited about the opportunities there and I'm going to talk specifically about some of the trials that we did in the US with BXB enabled pallets and where we already are actioning upon the insights that we got just from a small sample and pilot that we did in the Carolinas.

Now very importantly we are very pleased with this improvement in capital efficiency and the fact that we are seeing our pallets turn faster, that is good news for our business. But we also are very mindful of the lessons of the past, and I'm sure that many people in this room will recall what those lessons were from a number of years ago. So we are very keen that none of those get ever repeated. We need to get the balance right and there is a trade-off here, an equilibrium that needs to be managed between getting that asset productivity and those pallets turning and turning and maintaining the health of the pool the way it needs to be. That is why we made a conscious decision in the US that despite the challenges that we have and the cost pressures that we have, we had to continue with investing in our quality, because that is a key of success, that balance needs to be maintained.

So I'm going to change gears a little bit and go now into some very exciting projects that we have to innovate for our customers, to deliver more customer value. The industry is certainly looking for more efficiencies, and when I was talking about the challenges that we face in terms of labour, labour cost, and labour availability in particular, our customers are facing exactly the same. That's why they are investing so much in automation themselves, so we are seeing ASRS systems being deployed constantly at manufacturers and retailers. That means there are more requirements, more [unclear] requirements for the platforms to interact with them. That's where we're going to offer certain solutions that we call platform solutions for automation.

The other area where retailers are focusing a lot of the attention is improving the efficiencies in their stores, because the store is where the majority of the labour cost for the retailer resides. So it's not just a cost but it's also they are not getting enough people to staff their stores, so they cannot conduct their tasks because they don't have enough people. That then translates in a bigger problem for the retailer which is out of stocks. So in a moment in time when they are competing so hard to get that loyalty, so get the customers to the store in the first place because they're fighting against online and other convenient formats, the fact that the product may not be on the shelf is a real issue. The industry in the

US is stubbornly showing an 8% out of stock as an average, 8% is a huge number in terms of potential loss of revenue for retailers, and promotional is as much as 10% so it's huge.

Therefore, you have [containment] managers at retailers really keen that this problem is addressed. So the good news is we have replenishment solutions that we can offer them to address these challenges. Let me first cover automation, so as I said we recognise there are different needs for our pallets when they have to interact with very highly automated facilities. So we decided to introduce a different spec which is actually designed to address these particular requirements. So we have introduced an automation spec which complements the offering that we have on our standard pool, and with this we cover the needs for pretty much all of the market, regardless of the level of automation.

We are also trialling a plastic pallet, and this is a very specific use, so we've designed this with the intention of focusing on very specific circuits where the control of the asset is proven and the turns are very fast, very fast cycles, very well controlled. That's why we're trialling these in the cluster channel, that's the intention. We are trialling these with one of the largest global retailers in this space, you can take your guess, with a very large manufacturer [unclear] manufacturer and the trial is going on right now. It's a trial [in scale], the pallets are enabled with sensors with BXB technology, so we're going to be able to monitor and value the business case throughout the pilot to make sure that we actually make the right decision at deciding to launch it, if, and set up the right model from the beginning.

So we are not thinking we're going to launch this with the same commercial and pricing architecture that we may have for the lumber pool. We are going to have a very specific pricing architecture for this one because we need to cater for the fact that this is a higher asset, a high-priced asset, and therefore we need to have the proper commercials in place. Finally, our expertise and our capabilities, our applications engineers are deployed to help our customers from the beginning of their installation, so when they are going about automating their sites we do offer this assistance of our application engineers to make sure that the definition, the parameters, the design of the actual systems is done in a way that it would allow it to interact seamlessly with pooled pallets, not new pallets, pooled pallets, and that makes a significant difference. We also deploy them going forward so to ensure that the calibration of the systems continues to be the right one and so on.

So replenishment, the half pallet and Mike has been talking about the last mile extensively in his presentation. In the case of the US we are way behind where you see Europe in this particular space. So we are starting with this. I'm sure that you've heard before about the half pallet in the US in the context of promotions, promotional activity, and that is progressing. So that we are seeing a 45% increase in our volumes for promotional activities, which is great, we have very large customers like P&G, and Campbell's and Smucker's and Nestle Waters, a number of them are using already a half pallet in the US for promotions. But where the big-ticket item is in replenishment, this is where the big volume are going to happen and this is the massive change in labour efficiencies in the store for our retailers. That's why we're keen to make this breakthrough.

So we're working with two major international retailers and we are piloting these through 10 different SKUs. These are the typical SKUs that are difficult to replenish where you have heavy packet of flour or sugar or a bulky bin or a bottle. These are the kind of categories that we are addressing in the pilot and we're already seeing and sharing with our customers the benefits that are being observed just throughout this more than 100 stores actually and 10 SKUs. We've seen more than 25% reduction in labour intensity, so real tangible concrete and big improvements in labour efficiencies that are as you can see very welcome, because those employees that are released from these type of basic tasks can either be removed. So you can have a saving, or they can be redeployed to other activities that the retailer needs to undertake to make the consumer experience a lot better so they can continue keeping that stickiness, that loyalty, bringing those customers back. So they see this with very positive eyes.

We've also measured on-shelf availability improvements of several percentage points, we need to keep the information confidential here but there's several percentage points of improvement and sales have also improved several

percentage points. So we are expecting this trial to continue expanding in 2018 and the expectation is that actually this is going to be a big item for us going forward in the next three years.

So we're innovating around the product itself, we're innovating around the solutions and the store and we're also innovating beyond the pallet. This is where we're going to have a good session this afternoon talking about the opportunities ahead by leveraging the emerging capabilities that BXB Digital can offer to us. So there are a number of areas in which we see strategic benefits that we can capture by digitising our pool.

The basic ones around track and trace and this can be used to help us address the asset efficiency area, so helping us increase our asset efficiencies and controls. They can also help us simplify our business. So our mission is to get to a point where our service offer is completely seamless and hassle-free for our customers. This visibility with BXB Digital enhanced assets could help us eliminate transactions, eliminate declarations, eliminate audits. That would be something that our customers would absolutely love, it would make our business significantly simpler and it would make it also simpler for us to administer and improve the accuracy and reduce service and invoicing and everything else that comes with it.

It can also help us transform our business. I'm going to talk about that pilot later in the afternoon but you'll see that there's a number of windows of opportunity that open up for us. That could mean new service offerings to tap into uses of our assets that currently we don't allow but there's an appetite for that in the market and we could monetise those profitably and eventually create solutions that give additional value to our customers. So I won't steal the thunder because Prasar has his session this afternoon but we will be talking in a lot more detail about what that means and for the US in particular.

Finally, none of this can be achieved without a very strong leadership team. The ability of leading this business to the next three years to a successful result and capturing the level of financial returns that we want, it's going to be based in our people. Now the good thing is we are very privileged to be part of an organisation where we can leverage a lot of skills and a lot of experience and competencies that we have and centres of excellence that we have across the globe, and that's what we are doing. So we are tapping into our central resources to deliver our commercial academies and learning and development tools that we are applying in the same way that Europe and other regions are also doing. We are very conscious that in this journey we're going to need significantly different skills, so we are focusing our efforts in recruitment in acquiring those new skills.

That's part of our strategic work-planning program, we were identifying those roles that actually may not even exist today but we are going to need as we embark in the next three to five years in capturing those. We're also using again the benefits of our organisation to tap into that talent ourselves and cross-pollinate by bringing people with the experiences that we need also to our team. That automation roadmap acceleration is a key example; we are going to run that with a team of experts that come from other places in the world. So a lot of work going on concentrating on developing the right set of skills and the leadership team that we need to succeed here.

So I think I'm on my time, but I want to finish with reinforcing some of the messages. So first of all, it's great to see our business now going back to a growth trajectory and seeing that actually that momentum will be able to extend over the mid-term. We do have a discipline approach; we do have targeted strategies to be able to capture that growth successfully. Also continuing to leverage our scale and gaining more efficiencies, more productivity improvements, investing in that network to ensure that we actually can capture that full potential through the cycle. We also have, as I mentioned, a number of other mitigant actions in place to address the other cost pressures beyond just the immediate ones of transport, inflation and lumber and fuel, but all the others, and continuing to improve our cash generation.

So continuing to focus on generating better asset efficiencies so that we can release cash to invest appropriately and strategically and addressing the changing needs of the market, so at the end this is what we're here for. So we are finding new value solutions and value propositions including innovation in product] as well to deliver on those changing

needs. So hopefully I've given you a good overview and confident that actually given the sets of challenges that we face as a business we have strong plans in place that we are going to deliver against to provide an improvement in our margins in the next three years.

With that I think I can open up for questions.

Sean O'Sullivan: I know there's going to be a lot of questions in the room, so if we can...

Laura Nador: You bet.

Sean O'Sullivan: If we can limit the questions to maximum of two per person. So yes, Anthony, I'm looking at you.

Laura Nador: He's taking notes so I know he's going to be active.

Matt Ryan: (UBS, Analyst) Hi, it's Matt Ryan from UBS. You spoke a lot about network scale advantages which you've got and I assume a lot of the cost pressures that you guys are seeing are going to be felt by both the whitewood guys and also your pooling competitors. Just interested in your thoughts on how rational you think they're going to be moving forward and trying to mitigate some of those costs?

Laura Nador: Look, I think definitely there's evidence that they are feeling the same things and if not more I should say. Because that density of our network means that actually we are in a better position to cope with less exposure to spot so I do think that if you would imagine them taking their own initiatives and actions to cover offset some of our interest cost. Having said that they continue to be very competitive, so we do see them actively competing in all of the contract renewals, RFQs, so that doesn't diminish. But they are taking some rational actions and in some cases, we've seen some problems with the service side of these additional cost pressures, so not being able to service certain regions, certain markets, certain campaigns.

Matt Ryan: (UBS, Analyst) Just a question on staff turnover. I think there was a comment a bit earlier on Europe and I guess on the flipside even taking out the recycle business, the turnover is quite high in North America. Could you just talk through whether you think that's an issue and maybe what you're doing moving forward to reduce that turnover rate?

Laura Nador: That is not dissimilar to what Mike was saying, just add to that the US market is at an historic low unemployment rate, so the market is very competitive, it's very fluid. We are seeing that impacting us particularly in the lower bands, particularly in the younger populations similar to what Europe is facing. Clearly in the plants, so in the plant is where we see the highest turnover. I mean you can understand that you are competing, you need to flip a pallet that is heavy and it's a tough job in winter or summer, and you can flip a hamburger for a similar salary. So there's that challenge in there, we continue to work on that, but it is a market dynamic. I wouldn't say that we have necessarily an alarming or a super high turnover compared to other similar companies in the area.

Paul Butler: (Credit Suisse, Analyst) Just a question for you on the network costs you were talking about. You described it as being that the retailers have costs and so they're trying to pass that onto you with fees. But I mean isn't it partly also that retailer's margins are under pressure and they're trying to extract more value...

Laura Nador: They tried to subsidise their cost as well, so part of the challenge is in labour and transport too yeah, I agree with you that's part of it. But the fact that other players offer actively payments doesn't help.

Paul Butler: (Credit Suisse, Analyst) Which way is the trend moving now? Are you seeing more pressure here or is it starting to level off? Where are we headed?

Laura Nador: I do expect the pressure to continue, so we're having multiple conversations with a number of retailers constantly, so if you're talking about the fees, the specific handling fees, that's something that I expect a continuous pressure. The other piece of it is transport, so we have already gone through the majority of that, so in our numbers you see the impact of that already so the reminder is less than what we've already seen happening, but handling fees will continue.

Paul Butler: (Credit Suisse, Analyst) If I could have one more, you were saying on lumber surcharges that you've taken some action in February. So it'll take another two, three months from now until you start getting a benefit there, is that...

Laura Nador: So lumber has already been invoiced, transport, there are elements of transport surcharge that are going to be deferred a few months. Lumber is one that is more present across our contracts and there's the trigger points. So when you feed that trigger point then - and it's sustained for three months then you have to take action. So lumber is already starting to hit our numbers now, the surcharge, but transport surcharges are the ones that are going to take three to four months.

Paul Butler: (Credit Suisse, Analyst) Thank you.

Scott Ryall: (Rimor Equity Research, Analyst) Laura, thank you, Scott Ryall from Rimor. I was wondering if you could just help me out with your dedicated transport charges. Carmelo implied, and maybe I'm wrong, that that 60% dedicated...

Laura Nador: Correct.

Scott Ryall: (Rimor Equity Research, Analyst) ...has increased over the last few years. Would that be a fair...

Laura Nador: Yeah, it's fair so...

Scott Ryall: (Rimor Equity Research, Analyst) Can you just give us a sense of how much it was two years ago or something?

Laura Nador: Yeah, about 49% three years ago and it's about 60% now. So it is increasing, yeah.

Scott Ryall: (Rimor Equity Research, Analyst) Where do you think you can get it to please? Where do you think that...

Laura Nador: Our target is to get as much as 80% but that's going to be - it's a journey, right, that's what we want to. But you have very seasonal peaks, as Carmelo was saying, so there are moments in the year, moments and lengths actually, long hauls rebalancing flows that we need to do constantly, that are not efficient to do and delegate to [unclear]. But yeah, [unclear].

Scott Ryall: (Rimor Equity Research, Analyst) Understood, then there was one, Mike presented a slide on customer integration looking at pricing management, interactive invoicing et cetera.

Laura Nador: We're doing the same.

Scott Ryall: (Rimor Equity Research, Analyst) How far behind in that respect do you think the North American business...

Laura Nador: Well, we are right now launching this, so we've been piloting the interactive invoice with a small - we always do that, so we engage first with a small number of customers that are very competitive and like to be on the

leading edge, so they're the ones that trial, give us feedback and then we expect to launch between now and the end of the year the rest of the customer base.

Scott Ryall: (Rimor, Analyst) So how many years does that make you behind the European business sorry, roughly?

Laura Nador: So you did it last year, Mike? Twelve months yeah, not too much.

John Gaudagnuolo: (Antares, Analyst) It's John Gaudagnuolo from Antares. I'm just slightly confused by your chart on slide 83 of our pack.

Laura Nador: Of what sorry?

John Gaudagnuolo: (Antares, Analyst) Slide 83 of the pack which gives the waterfall of the margin improvement expectation. Because you said that in the short term you'd be taking pricing action to recover costs such as we've just been discussing.

Laura Nador: Yeah, to offset increased costs.

John Gaudagnuolo: (Antares, Analyst) So on that chart you have price and surcharges as a contributor to FY21 margin uplift, but you're telling us that in the medium term we shouldn't expect to see price because of the competitive environment. So is that offset the net worth...

Laura Nador: But that's offsetting if you see the inflation is more.

John Gaudagnuolo: (Antares, Analyst) Yes, I understand that. So there will be ongoing price in that?

Laura Nador: Indeed, so we are taking prices, not that we are not - in fact this year we are taking price.

John Gaudagnuolo: (Antares, Analyst) I took your initial comments to mean that you were taking price now as a short term and then you would give that back...

Laura Nador: No, we continue to take price and in fact we are rolling out a system that will be ready by around the summer this year, where we are able to automate now how we deal with pricing. So being able to use the market pricing methodology which incorporates a number of different variables in it like cost of the alternative, cost to serve, all these things that I explained before, but in a systematic way, in an automated way. So we are taking price on a large number of customers, we are funding with that price, well part of it is offsetting obviously some of the pressures, but then finding investment in pricing where we need to because of competitive activity. But yes, we are taking price, and we're being very diligent on managing our contingencies so some of our contracts, a significant portion of our contracts is set on fixed terms, so fixed term and fixed firm price.

But we do have wording in those contracts and contingencies that if the cost to serve changes significantly, be it because cycle time gets longer than expected or other things change, the distribution profile changes and so on, then we can enforce certain pricing changes. So we are also automating that.

Jake Cakarnis: (Citibank, Analyst) Jake Cakarnis from Citi, just sticking on the themes of surcharges, can I just get an idea how broad they're going to be across the portfolio of customers and then with the strategic accounts that you're calling out for price investment, how you're looking at them. Is it in terms of size or profitability of those accounts?

Laura Nador: For the surcharge in particular?

Jake Cakarnis: (Citibank, Analyst) Sorry, for the strategic accounts, they've obviously carved out, just wondering how you're carving them out.

Laura Nador: Well, we are dealing with all of the contracts right now, so there are contracts that already protect us, and when I was talking about the different percentages depending on what the surcharge, getting us to about 65%, 60% to 70% of insulation, that's included also some of the larger accounts. Those accounts that don't have - some of the strategic accounts or the larger accounts I should say more accurately, may have other types of [indexation clauses in them, CPI related, other types of commercial considerations, but we are undertaking this discussion with customers as we go to renew. We renew about a third of them every year, it's about three-year length on average. So when we're taking these conversations forward we are introducing as much as possible these components for future protection.

Jake Cakarnis: (Citibank, Analyst) I suppose the second part to that question, I think we've been here before in the North American market, it's a bit of a marginalisation of the customer base which led to some market share drifting to competitors. Do you think that there's a risk that we go back to that environment where potentially you lose more profitable accounts if your competitors are more aggressive?

Laura Nador: Look I respect the competition, I don't fear the competition, I think we have enough value to add to our customers to be able to defend our position in the market properly. We have a very disciplined approach to how we're going to deal with pricing, so we are identifying proactively where we may think risks could be happening, so who could be the potential targets the competitors may go after and being very proactive there and ensuring that we're delivering value. So having comprehensive joint business programs where we can actually demonstrate year after year to customers that we are taking costs down, that's the best protection we can have.

John [Forster: Impax Analyst) Jon Forster from Impax, just a quick one. I was wondering if you could give us a bit more insight on the timing of the \$45 million savings from automation. A little bit confused by the fact that the capacity comes first but the savings only later. If I've understood your messaging on pricing it seems like the momentum's likely downwards, so is the overall momentum in margins still down from where we are now and to be recovered later on?

Laura Nador: So that's what I was trying to explain. I think it is to be expected that the margin is going to be under pressure in the beginning, so we are going to have to make a significant investment up front and we'll start to see the savings as we ramp up those operations to capture the savings later. That's why I said bear in mind this is a cycle and we are seeing maybe cutting \$45 million of costs at the end of it, but at the very beginning we're going to have margin compression. So this is the shape of the curve.

Jon Forster: (Impax, Analyst) Okay, any more visibility on the timing of the \$45 million? When would the first - how would you phase that over the three years?

Laura Nador: It would be gradual, so after the first year of implementation we'll start to see those savings occur. So it's not that long but the first year is the tricky.

Jon Forster: (Impax, Analyst) Great, thanks.

Sean O'Sullivan: If there's no more questions, yeah ,one more, okay.

Laura Nador: Oh, you want to shine]

Antony Moulder: (CLSA, Analyst) Antony Moulder from CLSA, wanted to talk about plastic pallets, there may be a few parts to this question, but the 600,000 pallets that you've gotten back from Walmart I think...

Laura Nador: No, it wasn't Walmart, I didn't say a name and I won't.

Antony Moulder: (CLSA, Analyst) So they came out because a nestable rackable pallet was put down to store, is that your nestable pallet?

Laura Nador: No, it's their nestable and actually we offered the solution if they want it, but because the downstream - bear in mind that's a closed loop kind of thing so they go from the distribution centre to their store and back, they don't rack them. Normally when you send the pallet to the store you don't have racks necessarily in the store most of times, so those go back and forth quickly, but it's a closed loop. So they decided to buy them themselves, that's why we flashed immediately all of the lumber pallets.

Antony Moulder: (CLSA, Analyst) Plastic, you're starting to talk about plastic and offering that. Can you talk about the pricing differential relative to wood?

Laura Nador: I would prefer not to discuss commercials here but what I can say is you would expect a premium, so clearly, it's a more expensive asset, it's an innovation and we would expect to extract value from it as a big investment. We are validating the case and the commercial model as we do the pilot. That's why we're doing the pilot with BXB Digital Technology, to make sure that we've from the beginning set it up right.

Antony Moulder: (CLSA, Analyst) This other thing that's this premium pallet, can you talk about why you're starting to take another step into putting a premium pallet into the US?

Laura Nador: This is, well, it's not another so we'll just have one, we have a standard what we call the US Plus pallet, that's the one we have, but we recognise that actually the specifications that serve and are fit for use for 90% of the customer base may not be necessarily the best for highly automated environments. So there are certain restrictions in how these machines interact with our assets, which require, for example, the leading boards, the missing material in the leading boards becomes an issue so the new spec is more [stringent] in that respect, superior in that respect. We aren't just addressing the key issues that automation faces us with.

Antony Moulder: (CLSA, Analyst) All right, thank you.

Sean O'Sullivan: We're now going to take a break. Lunch is downstairs in the restaurant where we ate last night and if everyone can be back at 1:30, that would be fantastic for the next session. Thank you.

(Break)

Sean O'Sullivan: Thank you, everyone. In this session we will have presentations from Phillip and Wolfgang. First up will be Phillip Austin, president of our Asia Pacific business. Phillip joined Brambles in 1989 and became president CHEP Asia Pacific in 2014. He previously held the position of president CHEP Australia and New Zealand. Prior to that Phillip has held a variety of senior roles across Brambles including chief financial officer of Brambles Transport Group, chief financial officer of CHEP Australia, operations manager for Wreckair Hire and executive roles in the CHEP Australian business responsible for sales, asset management and business development. Phillip is based in our North Ryde, Sydney office. Phillip.

Phillip Austin: Alright, well, good afternoon. Delighted to share with you this afternoon some insights and some information on our Asia Pacific business and look forward to any questions you might have at the end of the session. I think Sean has kind of adequately covered my bio. Over 28 years with Brambles I've had the pleasure of doing most of the jobs in CHEP, to be involved in a wide range of global projects. One of the reasons I'm still here is that this business still continues to teach me new things, present new challenges. I still remain very excited by the power and the potential of our business.

So today within this presentation we're going to focus primarily on the pallet and RPC markets in Australia, the evolution of pallet usage in China and just the role that we are playing in the making of that market. It's quite an interesting dynamic in having both the kind of, as it were, founding business of Brambles and also one of the markets that can play an integral role in shaping the future of Brambles inside the region.

It's a diverse region geographically, culturally, in the maturity of the supply chains that operate there and accordingly in the maturity of our business. In the developed markets they are now deeply penetrated. They are strongly competitive. We have a wide range of product and service-based solutions that leverage a common network infrastructure.

Our developing markets, and notably China, are still very early in their path to maturity. They're being built on the same framework and model that underpins our business in Australia and New Zealand. So first we're going to have a look at the developed markets. Whilst the focus today will be on Australia I do want to provide a quick insight into our business in New Zealand. It's not one that we often talk about. It is a great business. It is a deeply penetrated and competitive market for pallets. Our primary competitor left the market around 15 years ago. They re-entered five years ago. We still hold over 95% market share for pallets in the New Zealand market.

It's an equally deeply penetrated and competitive RPC market. There are three pooling operators of which CHEP is by a significant margin the largest. We're particularly encouraged by the Woolworths-owned Progressive Countdown retail chain's recent decision to renew our contract with them for a further 10 year period for the supply of PCs in New Zealand. At the same time our Pallecon IBC business competes with a wide range of product alternatives. But again it is by a significant margin the largest provider of pooled intermediate bulk containers in the New Zealand market.

Now if we turn to Australia the very first thing that you'll notice here perhaps unsurprisingly is the very deep penetration of pooled pallets. It makes a lot of sense in the market in which the innovation of pooled pallets came up at the same time as the actual utilisation of pallets themselves. In this market CHEP maintains a strong relative advantage to its competitor in the number, the capacity and the geographic diversity of its physical network. It holds those same advantages in the depth and breadth of its customer network.

Those network advantages are delivering both a stable market share over time within a highly active and competitive environment but also delivering low but consistent growth in both organic volume and price. Competitively, first to volume, both companies strongly defend their customers. It is some time since any customer of scale moved between the two market competitors. Across the wider range of customers there is a balancing of movements over time.

Turning to price, our competitor is also gaining price in this market at levels that are not dissimilar to CHEP. It's important to note here I think in this market that the changing nature of retail which some of the other presenters have spoken about today and the growth of online has not impacted on rates of usage of our core products and in fact is presenting CHEP in this market with an opportunity for first mover advantage and future growth which we'll talk about later today.

So in this business for our customers and our shareholders we are continuing a range of investments to improve the customer experience and our core business. Our NPS scores continue to trend higher in the Australian market with significantly positive scores from key customer segments including major FMCG customers and our retail partners. Equally we get very strong scores from respondents who have been with us across multiple years of our NPS surveys. Within these surveys we also score highly on the quality and performance of the pallet. Amongst respondents to the survey who utilise both pooling companies we again performed very strongly against our competitor.

In this area - it's been spoken about a little in some of the other presentations - as customers have the need or the perceived need for a higher pallet quality beyond that which they already acknowledge to us in our NPS surveys - we're already in the market with a service offer that provides, for a fee, a pallet with greater dimensional specificity and tighter

tolerances to assist our customers particularly as they invest tens and sometimes hundreds of millions in their own DC automation.

At the same time over the next few years we're increasing our own automation of our core plants that serve over 30% of the pallet activity in Australia leveraging best practices and the capability of our global resources to further drive the quality of our platforms and the efficiency with which we provide them.

Finally, here we're also in the market with new products to drive growth. We continue to innovate and work with our customers to meet their current and future needs as their own supply chains evolve. So to some extent despite the age of this business and the very penetrated nature of the market it's not a steady as she goes environment. We are competing activity to both protect what we have and grow and striving to improve customer, employee and shareholder outcomes.

If we turn to - sorry I just need to check that that worked - okay, we're staying in Australia now but turning to the RPC market. You can see from the chart that it remains a market with significant opportunity across a range of areas. There may perhaps be no one here in the room that's more keenly aware and conscious of the impact of the loss of a large retailer contract in this market in the last year. Our focus now is firmly on winning new business to replace that lost revenue. If you do have questions about that particular issue I will be happy to take them at the end of the session.

So looking forward, whilst at the market is more competitive it remains attractive. I would note particularly our competitor's own commitment to their shareholders that they will deliver a 20% return on capital from their operations in this market. So it's a large unserved market. It remains attractive. The financial, environmental and product benefits of RPCs versus cardboard are increasingly understood and desired.

In a short period of time we've made very solid headway in creating both a framework and an entry point into the largest segment of this market. In an environment where the historically cooperative based major fresh produce markets are increasingly corporatising many of the prior models and activities that have operated in the markets are no longer best practice and in some cases no longer legally appropriate. So to that end CHEP has in Australia been able to gain the singular endorsement of the national body that represents all of the central fresh produce markets for the adoption of a new integrated model that provides a number of benefits.

Firstly, it provides the best practice in the governance and handling of all hired assets in the fresh supply chain. Secondly it enables the introduction of CHEP RPCs into that end to end supply chain utilising our extensive physical network and the retained existing service infrastructure that we have in that market. It uses an innovative time-based fixed fee pricing model to give simplicity and certainty to the market whilst maintaining our fundamental asset responsibility terms.

I'm delighted that with this model and that endorsement we've just commenced RPC operations in the South Australian produce markets and we are engaging with each of the five state-based operators in Australia to roll this model out over the next few years to the scale of our prior RPC operations.

Looking beyond RPC we're also looking for new ways to create value in this market. There is no doubt that new opportunities are emerging as fundamentally consumer behaviour changes and in that drive for a changed retail environment around convenience, smaller shops and the growth of online there are new opportunities emerging for us. Today in this space we are already active, adaptive and highly engaged with a range of retail partners as together we look for the new unitised and standardised solutions that will form the backbone of their future supply chains.

Look, again I'm just going to pass here before highlighting some of the activities that we're doing. I do want to make a few brief comments on online as it relates to our experience in the Australian marketplace. I would also caveat this with

we continue to monitor it. It's a space in the market that can move quite quickly. But for now in terms of the Australian market I'd make the following comments.

The large-scale categories that are being sold online if you look at beauty, electronics, fashion, were never historically large users of standard pooled pallets in the Australian marketplace. Their pre-existing supply chains in the sales of those products did not rely on either CHEP or our competitors' pallets to move through the supply chain. Accordingly we are not seeing any readable impacts from the trend to online or new entrants in our core product volumes.

I would also note that in Australia at scale there is a large presence of the existing bricks and mortar retailers in that online space. They are our customers and just as those traditional retailers are working with us today as they experiment and look for solutions to those more agile, responsive customers facing supply chains of the future so too are a range of other partners in the Australian marketplace. Today we are in with start-ups in the fresh meal delivery sector. We're working with 3PLs and LSPs in the convenience and quick service restaurant sectors. We have an in-principle agreement for the largest and newest entrant to online in the Australian marketplace to join the traditional CHEP pool.

But to illustrate what we're doing here to create new value - for instance here we're working with one very large retailer to co-design and innovate new totes that will work for them both in store pick and in the delivery of online orders to home shoppers. We are working here with the largest supplier to retail of bananas in the Australian marketplace to leverage both some of Wolfgang's global IP and the local knowledge and IP that we have in our existing RPC operations to create significant cost and product benefit in the delivery of those RPCs end to end into another major retailer solving particularly here some challenges around what is the largest selling SKU in fresh in the Australian marketplace.

With another major retailer we have a five year exclusive supply arrangement for our existing and development of new smaller fractional plastic display pallets so that as their supply chain evolves and particularly here whether it be around online, whether it be around the smaller more frequent replenishment's in aisle as well is in promo, we are working with that retailer to drive those changes that changing consumer behaviour is happening. This is one I think it's patient to be CHEP. We've been in market with a couple of these products in Australia for a couple of years. I have around half a million of them already out in one sector. But all we've been able to do to date is kind of get into two SKUs with one retailer to drive this through.

The collaborative studies that we've done here suggest that with those retailers there are at least 64 further SKUs at over another 1200 stores that these new platforms are suitable for in the supply chains of today and tomorrow that are being driven by changed retailer behaviour. Here we're doing much more than just building a better mousetrap when you look at the product. Critically what we're doing here is operating as a solution provider. So as well is co-designing with them we are conducting and using third parties to create full end to end value chain analysis of each point of value capture and the costs of adoption and integration of these new platforms into the manufacturer and retailer supply chain.

We deliver using real store data and real supplier data, 3D visual planograms so that the manufacturer and retailer can execute the end to end solution. So it's about actually bringing that whole solution and IP of CHEP to life so that we can execute faster and gain deeper penetration than we would simply standing in a market with a pallet.

At the same time there is a lot of experimentation and a lot of activity in the Australian marketplace around digitising the supply chain. I think none of that is yet at a point where anybody has cracked the code or identified the solution. So we are I think very encouraged. We will leverage the work that BXB Digital is doing currently in the Northern hemisphere. I was told to say that we are waiting patiently. I think Prasad we are impatiently patiently waiting for BXB to kind of build out the work that it's doing in the northern hemisphere. But we very much hope to be able to begin to deploy some of those innovations and insights in our marketplace in both Australia and Asia in the year ahead.

So if you look at what is fundamentally a drive to smaller and smarter, we're active, we're highly engaged in these new supply chains through innovation to create and capture value into the future.

So we're going to turn now to some of the developing markets. Again, our focus today will be on China but I'll make a few brief comments first on South East Asia. It remains a relatively stable business for us serving both local businesses and multinational corporations in those markets. In addition, we have a small presence of our containers business in South East Asia. We're still exploring out just their potential for scope and scale.

As noted on the slide we do continue to evaluate other countries in this region. But their relative maturity, their scale, the market conditions today suggest that it would not be a very disciplined capital allocation just to fill in colours on a map to start to invest in those countries. We maintain constant monitoring of those.

If we turn to China, our focus for the past five years has been on timber pallets having commenced and some may say bravely with an all plastic pool. What we found in China is that the early customers to palletisation preferred the cost benefit of timber for general applications. As a result, in China now the plastic pool is positioned as a viable but more specialised product within the market.

In China we operate in five chosen geographies. We have a portfolio again of multinational and local manufacturers and retailers. At the same time in the China market we do have a focused opportunity in our existing automotive business there to create value in the application of a simplified product and service offering that will meet the needs of certain segments of the China auto market.

I think one of the critical things is probably to outline the state first of the market for pallets in China before we talk too much about our business in China. Like the assessment of any industry in China it is not hard to find anecdotes or examples at any end of the spectrum. So in China I have walked some of the most advanced and efficient supply chains that I've seen in my 28 years with Brambles. I think that you can only marvel at the delivery capabilities of the logistics arm of the online retailers in China.

But at the same time, and perhaps far more common, you find the most rudimentary and manual facilities and practices that rely fundamentally on incredibly unsafe and overloaded vehicles that have been hand loaded and hand unloaded whether it's for MNC or for local manufacturers. So we are to some extent at both ends and everywhere in between in that spectrum of supply chain maturity in China.

The way that I've tried to describe it here is that the pattern of modernising any supply chain in its simplest terms is about moving from use to move to share. The reality despite what the chart says, and I authored the chart but on reflection, where it says we are here today which is in that use case I would suggest that the market most likely is still back here. We are kind of still in that point where most of the movements in China and most of the handling of goods in China occur without any pallets at all.

So it's very early in the day in the, if you like, the evolutionary stages of palletisation in China. Even where a pallet is used - again two weeks ago I was at a major European global consumer goods, personal goods, manufacturers warehouse just outside Shanghai - even today where there are pallets used they will be used inside the warehouse. So goods will be placed on them you may or may not have a forklift. There may or may not be racking inside the warehouse.

But when the time comes for the distribution of goods that pallet will be wheeled up to what may or may not be a dock. A bunch of cheap labour will descend, will hand unloaded each of those cartons onto a truck and the pallet will empty go back inside the warehouse to await the next time. One thousand or 2000 miles away when that truck gets to its end point again all the cartons will be hand unloaded. One of our customers particularly, five and a half hours to unload a truck, and will be placed potentially back onto a pallet to be taken back inside another DC.

So logically even in that position to the left of this continuum there is not a whole lot of economic value creation for the customer or a pooling company in this simple use case until you start to move to the right. As you do, the value increases for all as does the need and the demand for the product and the service. So too does actually the scale and density of the network of customers that then lock in participants to that mutual benefit of palletisation.

So today we serve and target customers quite selectively across this continuum. We look to grow a network of customers that are either already early adopters of more modern supply chain practices or who are likely over time to move towards the move and the share segments.

So as a result of that sort of state of supply chain practices the overall market for pallets and the size and pooling of rental companies within that market remains very much at the lower end of the scale of the potential for the mid to long term state for the China market. What is apparent however is that the key drivers that will drive palletisation are in place in this market.

The domestic economic growth imperative to lower what is currently a far too high cost of logistics as a percentage of GDP, the rising price and reducing supply over time of the unskilled labour that would enable the continuation of the current manual handling practices in the supply chain and the rise of the wealth and scale well documented of the middle class and the resulting demand for modern retail in that market.

All of those are the factors that will drive palletisation and movement across that scale in the China market. What remains uncertain though is simply the - in terms of the outcome and interaction of those factors - is the timeframe and the pace at which that conversion will occur.

So if you then turn to our business in China I guess we've just kind of talked about why China is part of the Brambles portfolio. I think what this also has shown and what this slide will show is why it remains in the very early stages of its role in our portfolio. What we have here is a reasonable estimate of the total market for standard sized pallets today. I would caveat that it probably has a reasonable to wide margin for variation. The most straightforward and the key takeout is really the very small current scale that rental or pooling providers hold within an addressable market that will become contestable over time.

The focus for CHEP therefore as the global leader is on the activities that we are taking that will shape the market conditions for long-term success. Those activities can be grouped into three key areas. On the economics of market making we're choosing to operate a business model that critically holds all users to asset responsibility. It would be very easy to put 50 million pallets into China right now. They would end up in Mongolia or places that you would never want us to be able to get them back from; that's if we could prove our ownership.

So we're going to put - we operate under a model and we will hold the model that holds all users to asset responsibility, that provides ongoing rental across the cycle time of the assets in order to protect across the early stage maturity of that market. It incorporates a pricing architecture that captures additional value for CHEP as the users themselves capture value by moving across that continuum. Critically that same model has been adopted by our competitor in the market as we both seek to explore the potential for China.

On the physical side of making the market we remain very focused on those five key city clusters that were identified by the State Council in 2014 as being the areas for development in China. Within our business we have a dedicated team that conducts value chain analysis and modelling tools for our customers and our potential customers to map their supply chain even at the SKU level to identify the end to end a value creation and the change management that's required for them to capture the benefits of moving to the palletised distribution of goods.

We are continuing to grow from a small base, the customer awareness, their engagement and their adoption of these physical practices. What I find particularly intriguing in this market given I think both the strength of online in the China market which is well known and some of the - again historical commentary around our business - is that one of the current largest users of pallets in this market and of the flow of shared use pallets between manufacturers and distributors is one of China's leading e-commerce retailers. The scale of their points of demand and consolidation in their supply chains has driven their move to outsourcing pallets to CHEP and to increasingly gaining the full benefits of moving and sharing the use of pallets in the inbound receipt of palletised deliveries from a wide variety of suppliers.

So we're taking a range of actions to set the business up the right way economically. We're taking a range of actions to stimulate and promote the practices that will occur in the physical supply chain and at the same time in these early stages of market making we've played an active role particularly with the Chinese Academy for International Trade and Economic Cooperation who are leading think tank that work with the Ministry of Commerce in China. We do that under a strategic partnership framework agreement.

That relationship has not only driven collaborative work in the field that define and promote the value of pallet pooling. It's enabled some fundamental, critical long-term building blocks for palletisation to be established in China. The first phases of that has been - there have been two that are most notable - the simple declaration and adoption of a standard for pallets in China because until 2015 there was none. So that now enables investment and people to adopt and build the infrastructure around a common known platform which is the CHEP 12x1 pallet.

Equally around 18 months ago we were able to extend that into the adoption and new regulatory standards for truck trailers that are all now built around the fundamental unit specifications of the pallet. So we have two very simple pieces of regulatory achievement here through our work with the Ministry of Commerce that start to build certainty and the right ecosystem for the adoption of palletisation and the accompanying infrastructure that will drive it.

What we've also facilitated if you like is the very hard coding of the future role of pallets into the Chinese domestic economy. So I'm now going to read to you which is not an experience that you often get to have, some extracts from the thirteenth 5-year plan of commercial logistics development from the Ministry of Commerce and four other departments which directs policymakers and enterprises to do the following. I just note that in this market for those of you that deal with China from afar or up close, these regulations do actually drive the future behaviours and actions of policymakers and enterprises in this market.

So the first direction is that policymakers and enterprises must, and I quote, standardise commercial logistics with the standard pallet and its circulation which is the flow in Chinese and sharing as the entry point. It notes to all players that it is required to promote the use and greatly improve the penetration of standard pallets. It further notes that all the players are required to accelerate the construction of the standard pallet circulation system to foster the market entities. Further it is required that they must develop unit load logistics, the circulation and sharing of standard pallets in order to mobilise the standardisation of both upstream and downstream logistics.

So in the regulatory space - again I think the shorthand way I would describe it is we've been able to hardcode into the instructions to policymakers and enterprises across federal and state operations and market entities in China that the future of China is to palletise around the standard pallet and around the flow and circulation of those pallets.

Equally within that plan as China drives what it calls quality growth the plan explicitly calls out the requirements for green logistics to reduce resource depletion and environmental pollution. We would clearly see that our share and reuse model provides a clear and proven path to also enabling those outcomes.

So to kind of close out this section it's important that we recognise the early stage of the overall market in China, the dynamics of the market as it evolves and how that will be influenced by both some of the micro economic and market driven factors. We will continue to take a very disciplined approach to our capital investment. We'll look to match that to

any material changes to the outcomes that come from the changing economic, physical and regulatory actions in the market.

So we're going to pivot now to some of the other areas in which we look to drive and create value inside the business. Again firstly we'll turn to revenue growth expectations. If we talk across the markets here I'd just make the following comments.

In the developed markets we would expect for pallets low single digit growth across price and volume. Largely that comes from one or two points in organic volume that's driven particularly by population growth. We expect over time a sort of net neutral movement from competitive activity. We target between one and two points in price each year.

In the developed markets for RPC we are obviously targeting net new wins from areas such as the produce markets, ongoing organic growth from our existing contracts. We do expect price to be constrained given the entry of new competitors into that market.

In South East Asia our organic growth is normally in low double-digit range. In our timber pallet business in China we again target low double-digit growth driven by volume both from organic growth and wins. As noted earlier price uplift in China is very much tied to that movement and development of the supply chain as customers create more value and we capture more value as they move to the movement of palletised goods through the supply chain. That currently looks much more like a mid to long term proposition than anything over the shorter part of the cycle.

If we look at our approach to disciplined capital allocation, in the developed markets we have a relatively constant base of replacement capital in our core products. Across the broader business we are continuing to invest in growth, be that in RPC's, in bins, in fractional pallets and in our other new products.

Equally in Asia we have older pools with ongoing replacement expenditure in South East Asia, the replacement of plastic for timber in China and then ongoing growth in our pallet and automotive product ranges. As noted on the slide even in some of the older or I guess the more practised businesses we continue to undertake a range of activities to improve cash flow from what is an already strong position.

To illustrate with just one example using some of the new global tools that Carmelo talked about in JDA in planning, for just one of our key Australian cities in dealing with the peak this Christmas we were able to utilise those tools at the same service levels but deployed \$2 million less capital into the business to be able to achieve the same outcome in just one city in Australia.

That's just one example of the activities that with the continued focus on being disciplined around capital and on driving cash we are able to benefit and continue to improve the business. So we are diligent in the application of capital. We do not chase growth simply for the sake of growth in any market. We relentlessly focus on continuing to improve our cash position.

The business does maintain a strong financial position. The key information here is really on the slide. But as an overview I would suggest that the combination of our market positions, the activities that we undertake and that disciplined approach to capital in protecting and growing responsibly means that we are able to move across the cycle whether that includes such things as the one-off loss of contracts or the long decline for instance of the well-served automotive sector in Australia. Through our approach we adaptively reshape the profile of the business while also identifying and executing new growth opportunities that deliver appropriate margins and returns.

In looking at delivering operational and organisational efficiencies this has always been part of our DNA. It's an additional focus now as one of our global strategic priorities. On our key input costs they remain very tightly managed

and under the average of relevant industrial benchmarks. We have a range of mitigations that assist in offsetting and delivering leverage to underlying profit. We see no change in these trends over the next few years.

On the broader cost areas, we've maintained our RPC capacity but also been able to rationalise sites to deliver immediate savings. We have a property plan over the next four years that will present similar opportunities. We are driving greater network efficiencies with the renewal and optimisation of four key plants using global best practice technology over the next few years. It's not always about the new. A simple example in the last financial year - simple maybe not fair to Carmelo's team again - we simply changed the layout of one of our existing plants and optimised it. That change in layout was able to deliver \$2 million of annualised savings and a 30% increase in capacity inside an existing plant. So we're just consciously and relentlessly searching for these opportunities to drive organisational efficiencies.

On overheads - we've been good at this for the past few years - we spend little more in dollar terms now than we did in 2009. Notwithstanding that as we transition our business with our new focus on RPC we've already reduced the headcount of the business. We're continuing to look at other areas of cost savings across expense lines. We have more synergy benefits to be realised next year from the integration and optimisation of the containers business.

Finally, in this market particularly in Australia and New Zealand I would note that we get very clear operational and organisational efficiency that all new growth delivers being able to be leveraged across the well-established physical, customer and human capital infrastructure that we have to deliver positively incremental profits and returns.

If we turn to asset efficiency in the region, a different business model which any of you who have - go all the way back to 2009 and the understanding CHEP presentation would know - the key metric for us is the field stock ratio which is simply the proportion of assets in the field that are earning money versus those of them that are back in the plants awaiting inspection, repair or reissue.

In the developed market obviously, we have years of data and experience in managing these. But as the graph indicates we've improved those recently as well. One way we've done that again has been leveraging the local application and optimisation of planning tools such as JDA, getting much more integrated with our customers as well in understanding their future demand forecast and being able to manage the assets in a better fashion.

In our developing markets given the less dynamic nature of pallet usage the field stock ratios remain high as the assets return to our network less often. But as the graph indicates we have had a slight easing of the prior levels of field stock ratio there which has really been about the evolution of some of our customers' supply chains to now move more between partners. That requires a greater opportunity for us to inspect, repair and reissue the asset.

As we look forward to the potential of supporting scale future growth in China it's quite an interesting market in that unlike most others it has four peaks across the year between Singles Day, the Lunar New Year, Founders Day and then the summer period. These represent good opportunities for us as we go forward to inject the product and service into the market and then have the field stock ratio maintained as the underlying demand for palletisation lifts up underneath those peaks. So fundamentally across the different maturity profiles we have a continual focus in supporting both growth and optimisation of the assets efficiently.

In the final area of developing world-class talent it is the nature of our business that a large part of our intellectual property is the collective experience, intelligence and wisdom of our people. Now none of that however is worth anything if we can't keep the fundamental promise of keeping them safe at work. That is a heightened challenge particularly in the Asia Pacific region where we have a strong concentration of company owned and operated plants.

We've made substantive progress in this area. In my first year in responsibility for the Australian business we injured 122 people in that year. In the eight months so far of this year we've injured nine. If you're one of those nine, that's still

nine too many so we have a way to go in terms of our progress towards zero. But we've made substantive progress in being able to keep our people safe at work and continue to strive for that.

In Australia again, the industry benchmark lost time industry frequency rate, CHEP is three times better than the national average. We hold a similarly strong position in each of the markets we operate in across Asia Pacific. Having met that fundamental if you come back to the intellectual property of our people and our business the attraction, development and retention of those human assets is critical to the ongoing success of our business. That's why we focus heavily on our engagement and enablement programs and our talent programs, some of the details of which you can see are on the screen.

We are encouraged and we may even be a little bit proud particularly if you look to the right of the external recognition that we've had of strength of those programs as we take both the best of Brambles global and our own local programs to invest in our people to the benefit of the business as we go forward. So our ability to utilise the skills and experience across the different maturity profiles of the business, to move people to and from around the world is an integral component of how we grow our businesses and our people in a very holistic and disciplined fashion.

So our actions and our commitment to driving world-class talent are well embedded in the business. They remain an integral and important part of the dynamic of our business as we go forward.

So in summary Asia Pacific is in a simple way it kind of represents all of Brambles in one region. We have established resilient businesses in competitive marketplaces that have great opportunities for growth as supply chains are reshaped by changing consumer retail expectations. We have growing emerging market businesses where we are shaping the evolution of economics, the physical practices and the regulatory environment of the supply chain in order to support future investment and growth.

So to close out CHEP Asia Pacific remains well positioned to continue to deliver strong returns with ongoing disciplined investment and strong cash management. So thank you for the opportunity to talk about Asia Pacific. I'm happy to take any questions you may have.

Paul Butler: (Credit Suisse, Analyst) Hi it's Paul Butler from Credit Suisse. It strikes me that it - I mean as you say at some point the supply chain in China is going to modernise. I would imagine when that happens it might happen extremely rapidly. How do you position yourself to be able to participate in that? Because you could have a period of time where the capital you need to put in over a very short period of time could be very large.

Phillip Austin: I think probably - I may challenge the assumption that it would happen very quickly. I think to some extent it is one retailer, one manufacturer, you could almost argue one truck, one warehouse at a time. I think you'd certainly anticipate over time that there would be an acceleration. So the key for us is to be undertaking those activities so that the economics of the market can support the capital. I think at that point that's the very key fundamental that we have to have in place.

Then again we choose where to be. So part of it is about having a relevant customer portfolio. We don't want to be everywhere in China. We don't per se want to be with every customer in China. There's a scale there where obviously you achieve a degree of network efficiency and network advantage. That's clearly part of what enables us to provide the service and the returns.

But I think yeah part of what we're doing is building out that customer portfolio and creating the economic conditions. I think when it comes the scale is attractive assuming that the conditions are right for investment. But I think it will build over time. I'm not as convinced as you are perhaps that there would be an explosion. Simply the sheer scale and complexity and the number of market players I think would make it very hard, not just from a pallet side of view but from the balance of the supporting infrastructure to do it.

Now China is good at getting things done quickly particularly when it sets its mind to it. But no I think at the moment when we look at our forward horizon we're comfortable that we're in the right position and that that's simply something we continue to monitor.

Paul Butler: (Credit Suisse, Analyst) In the RPC business I think you're targeting some higher revenue growth. What's driving that?

Phillip Austin: I think the key opportunity for us if you go back to that graph. So in Australia particularly 50% of all fruit and vegetables are not sold through the retailers, through the supermarket retailers. So before you get to protein or before you get to even an SKU like bananas there's half the market that's available. Historically we've not gone there and neither has anybody else. So they still use cardboard and styrene and all of those issues.

So that's the piece where we can grow. What we're delighted by here when you talk about leveraging the potential we've gone to the body that controls those markets and directs them. We've been able to bundle together an offer that covers pallets, crates, bins and any other product that CHEP offers to provide a standard, simplified way of being able to move assets through those markets where today only pallets go through those markets. So what we're delighted by is that with the change in the environment in those markets the time is right for a more systematised rule-bound way to do that.

But the opportunity, what we enable for the markets, is a significant improvement in product quality. For growers it gives them significantly easier ability to pick, pack and sell to a range of folks. We take out all the waste streams at the back end of the market this. So the disposal for them of card and styrene is a major issue. To be fair if any of you have played around in the markets there's a lot of illegal activity that goes on in the markets, perhaps only in Australia. I'm not sure. But - so the requirement - trading of our products, trading of other products and if you are now on the board of one of the markets which used to be a lovely sinecure if you were a potato grower from 30 years ago, you now have the same directors liability as anybody else.

So we're helping them actually create environment in which appropriate practices can be undertaken in those markets. What that lets us do is confidently let RPCs move through those markets. I've spent the last 10 years keeping crates out of the markets because it just meant they would get lost. Our shareholders would earn no value from them. But this model which is integrated and again perhaps I should have been clearer, the markets are promoting as singular provider to do that because that enables them to have simplicity and a straightforward approach to it. That's where we see particularly now very high opportunity for growth.

I spoke to bananas up there again. That market alone in Australia is \$15 million to \$20 million a year simply because Australians buy so many - I think it was Michael Luscombe from Woolies who said his business failed if he didn't have bananas on shelf. I won't go into the history of that but I think that's such a critical SKU that that's another area where we're innovating right now and hopeful of some future growth. So they're the two big ones for us. That still doesn't deal with the opportunity in protein and a range of other areas. So it's a good market.

Scott Ryall: (Rimor Equity Research, Analyst) Yeah Phil, Scott Ryall from Rimor. I'm going to follow on with that one. You mentioned in your presentation that you were looking forward to getting your RPC business back up to the scale that it was previously.

Phillip Austin: Yes.

Scott Ryall: (Rimor Equity Research, Analyst) I don't want to put words in your mouth. So given you had \$10 million of headwind from the Woolworths loss and the automotive winding down in the first half but you still delivered growth. You've got a \$23 million headwind for the full year. Part of that is automotive. Does this mean that the contract you've

signed if you're able to get it up to scale over whatever period of time, you think that's a \$20 million opportunity for underlying profit please?

Phillip Austin: Look I think - the first caveat I'd give you is it's early days. But yeah you didn't put words in my mouth. We genuinely believe that we can get that to the scale of our previous operations. If you look at the size of the market if we do well we'd like to keep growing in that space. But this is a model - we have to go and win - we have an endorsement. I'm delighted with the progress we've made in South Australia. But I have to go and win each market. So it's not just a turn up and do it. So the timing and pacing of this we have over the next couple of years. Then obviously inside each market there is then a penetration to be achieved. But certainly we believe it can achieve that scale. We'd like to believe in leveraging the infrastructure that we've got that it would be very positive to profit.

Scott Ryall: (Rimor Equity Research, Analyst) Sure, so there are still some contracts and things to sign I guess, that's...

Phillip Austin: Absolutely, yes. Yeah, I'm not promising that we have it. I think the language I used we have a framework. We have an endorsement and we have an entry point as I stand here today.

Scott Ryall: (Rimor Equity Research, Analyst) Alright, great. Then a bit bigger picture - over the last 12 months one of Graham's focuses has been introducing global best practice and a little bit more integration between the businesses. Could you give us a sense of what you think have been the couple of more transformational introductions? Or obviously you'd like the digital guys to move a bit quicker for you.

Phillip Austin: I think it's very important they do what they're doing now. Then we'll take the benefit.

Scott Ryall: (Rimor Equity Research, Analyst) Yeah. What is it that you think makes the most difference in your core profits markets, I guess - Australia and New Zealand?

Phillip Austin: Yeah, look I think - hopefully I gave a couple of illustrations of that. The first point I'd give is that some things can't translate because Australia is still using that weird 11x65 bearer pallet that the US army left behind. So I can't take best practice in 12x10 or 48x40 and immediately apply it. I can in New Zealand and I can in Asia which is delightful.

But I think what you've got is - to be fair we figure we run - my team run a pretty good business in Australia. But as we focus on, go back and have another look at best practice sharing. We've accelerated what we're doing on JDA and optimisation tools. We're accelerating what we've been doing with TMS there. Now those two alone have given me a \$3 million or \$4 million benefit this year that without going back and having another look as part of that global focus with the new leadership wouldn't have done.

The drive from Nessa on cash and field stock ratio - we run at really high levels in Australia. I can run Melbourne with two hours' supply two and a half weeks before Christmas and not service fail a customer. So to some extent we can sit back and go, well these global programs don't apply to us because we're pretty good. Instead we go back and have another look and discover that again in one city we can pull \$2 million CapEx out. Now what can I do next? What can I do next?

So I think part of it is actually the call to arms. Go back - they're all things that we do in the business anyway. Okay, but go back and have another look. Go back and truly test whether you are at maximum or you're just doing well. Go back and test whether you're truly grabbing and accelerating the deployment of best practice tools. So I think even in our most developed market in Australia that's been quite transformational. It's put a great energy into our people as well. I think it's important that you operate as part of the group.

It applies everywhere. It's not just something for the Northern hemisphere. So I think again the focus coming back to talent, I took one of Laura's good people out of CHEP Spain six years ago. She's taking him back in a couple of months now to the US. I've got one of Mike's great people coming out from Germany to run my retail business. There are a couple of Aussies now in Kegstar. So I think again we're finding a much easier way now to really take those people and move them around. I've got a good New Zealander in Malaysia. I've got a new Aussie over in NZ. We're drawing really well from the outside market.

I think to the point that Laura made, there's some skills that today and going forward we don't have and we need to hire. We're bringing some really good people into the business. It's the language of the strategy. They're fundamentals but choosing to go back and refocus on them is yielding good results.

Jake Cakarnis: (Citi, Analyst) Jake Cakarnis from Citi. Over here, Phil.

Philip Austin: Sorry.

Jake Cakarnis: (Citi, Analyst) Shifting back to China and the opportunity that you see there, just wondering what your opinions are about the risks that that market fully step-changes and leapfrogs if you like pallets and maybe moves to a more direct to consumer straight from manufacture. Do you see any risks? I appreciate that it's mandated.

Philip Austin: Yeah, we appreciate the mandate but again, I'd come back. I think it's - here you have the market with the largest online shopping presence and again I think Singles Day scales Black Friday by about five to one. If you wanted to say, well, where are they at the leading edge of this penetration and this way of shopping and yet as I say, one of the largest e-commerce retailers there simply by virtue of scale of it, has enough volume and enough points of presence in its network that it needs to receive palletised deliveries to its DCs.

Pallets today don't go to consumer. They won't go to consumer in the future but any time that you have a consolidated point of production or a consolidated point of distribution in the supply chain, even in a place like China, the online players are using pallets. They're using full sized pallets and they're using increasingly more and more of them. They're going through the same cycle that we saw in Australia many years ago and we've seen in other markets. They will often start by owning them themselves. Then they start to discover the problems as others have talked about of owning them and quality and getting them back and achieving a flow through their supply chain rather than just a stack. What we're probably seeing is in an accelerated timeframe people working out what it is to use a pallet and then working out I want to own them and then quickly working out no, I don't want to own them so who's out there that can help me?

The world will continue to evolve but there's nothing today on the ground in China and there's nothing in the practices of the people who are leading the way in China that suggests that there is that leapfrog or that step-change. There will be a drone delivering something X to Y but I still can't believe in the economics of a supply chain where every single tube of toothpaste is picked - wherever there's points of production and distribution or consumption at scale you've got to be able to move scale product. I'm open to continuing to see what else might come.

Jake Cakarnis: (Citi, Analyst) Thank you.

Philip Austin: All good? Thank you.

Sean O'Sullivan: We now have a presentation from Wolfgang Orgeldinger. Wolfgang became the Group President in IFCO in 2013 having first joined Brambles in March 2011 following the acquisition of IFCO Systems. Wolfgang served as Chief Operating Officer of IFCO from January 2002 to August 2011 and Chief Information Officer with responsibility for e-logistics and IT from 2000 to 2002. Wolfgang is based in our Munich - German office. Thank you.

Wolfgang Orgeldinger: Great. Thanks very much, Sean, for the introduction and good afternoon to all of you. I hope you are not too exhausted. I have the pleasure to give you some information about IFCO, the RPC pooling company within the Brambles Group. As my colleagues, I would like to start to give you some information about the scale of the business.

IFCO is today working in more than 35 countries around the world and we are serving more than 330 retail customers and more than 13,500 producer/grower customers. We are running a service centre network of currently 78 service centres and in fiscal year 2017 we issued 1.5 billion RPCs and I'm sure at the end of this fiscal year this number will be significantly higher.

IFCO is specialised in RPC solutions which are used for fresh products, perishables in the retail supply chain. We are trusted by the world's largest retailers and on the right side of this chart you can see some of our most prominent customers grouped by IFCO region. We have the largest suite of products and you can see some examples of the products which we have. Our range covers all kinds of perishable products.

As I said, we are specialised on the retail supply chain and for that reason I want to give you some information about the key trends in the retail industry because they typically have a relevance for the business we do. The most important trend is that there is a continuation of consolidation in the retail industry and there's also a continuous very strong margin pressure.

Hard discounters are taking share from traditional retailers and new players like Amazon Fresh are entering the market. Retailers are responding to that by taking cost out and some examples which are important for us are there is continuous vertical integration of the fresh produce procurement so, middlemen are taken out. There's also an increasing trend that warehouses are getting automated. Now this is positive because this drives packaging standardisation. It helps us to grow our share.

At the same time, retailers are looking for ways to differentiate their merchandising and they focus more and more on fresh produce quality and shelf life because fresh produce is one of the most important categories in the retail industry to drive traffic into the store.

Now we have to respond to this challenging retail environment to help our retail customers to be successful and we're doing this by bringing a lot of value to them. For retailers, there are three areas where we generate value. The most important one is that we help them to optimise their supply chain by taking out cost. I will cover this in more detail on the next slide. The second area where we really bring value is that we help to bring the product in optimal quality to the store. RPCs are helping to achieve a superior product quality and better freshness. Last but not least, RPCs help to reduce the environmental footprint and this becomes more and more important for the customers of the retailers, the end consumers.

But we are of course also bringing value to the growers. I'm very proud that IFCO is a truly customer-centric organisation. Most of our people have an industry background, they are passionate about this business, they understand, they talk, they think fresh produce and they talk the language of the customers and they know the problems. This leads to the second area where we bring value to the growers and this is our superior service quality and our reliability. This is very important in this industry and again we have a lot of industry knowhow and we know what our grower customers need. Last but not least, as we are the market leaders, we also aim to be the thought leaders of the industry and we really aim to find solutions for industry issues and to lead the industry.

Now I said I would go in further detail with two of the most important parts of our value proposition. The first one relates to cost. We have done total packaging cost studies both in Europe and in the US and both studies came to a pretty similar result. Using RPCs can save between 23% and up to 27% of the total packaging cost. It is important to understand that only 30% of the total packaging cost relates to the cost of the platform being the purchasing cost of the

RPC or the rental price for the purchasing cost of the cardboard or the rental price of the RPC but 70% relates to handling, relates to product damage, relates to transportation. It's really important to see the full picture and this is an important part of our value proposition. You can see on the slide that the main saving areas are in handling, in transportation, in the reduction of product damage. We add value along the entire supply chain.

Also, very important is the contribution we can bring to reduce the environmental footprint. Compared to cardboard boxes, RPCs can save up to 60% CO<sub>2</sub>, 64% less energy, 80% less water, 80% [sic - see slide 120 - 86%] less solid waste and 93% fewer cases damaged. These numbers are very impressive. They are based on scientific studies and I think RPCs really help to make the planet a better world.

Now, due to this strong value proposition and of course due to the passion of our team, we were able to grow this business over the last four-and-a-half years significantly. In this period of time, we achieved a continuous average revenue growth rate of 12% and you see that there is not a single year where we were below 9% revenue growth. We're still growing the business strongly. Europe is still our largest and most important region with more than 70% share on total revenues but the other regions, North America, South America and Asia are also growing and increasing their share.

Now you may wonder whether we have reached the point where the growth will slow down. I can say that the opposite is the case. What you see in these four bars is the total packaging potential of retailers. This doesn't cover the informal markets. This is just the potential of the retailers in these regions. You see that between 40% and 80% of this opportunity is still unserved, meaning this is today covered by cardboard. You can also see that IFCO has by far the largest share in the RPC area and we are the clear market leaders in every region we are operating. That's why we think that we are best positioned with our network, with our coverage, with our product portfolio to outgrow our competitors and to grow this business into the wide space.

We will do this by ongoing conversion of commodities and existing retailers but we are also aiming to win and expand with new retail customers. We are also planning to take over proprietary pools and to integrate them into regional pools. In parallel, equally important, there is an additional opportunity which is not included in these numbers and this is an opportunity for other perishable applications like meat, like eggs, like fish, like bread.

We have a tremendous growth potential in all regions and this growth will not come to an end. Based on this opportunity, we are very confident that we can continue our growth and expand with new and existing customers and we expect that in the next three to five years we can achieve an average annual growth rate between 7% and 10%. Most of that growth is expected to come from organic growth, from volume. A certain part of that will be pricing.

Now, even more important than revenue growth is obviously profitability. As you can see again by the graphs, IFCO has managed a pretty stable profit margin of around 12% and we were able to improve our ROCI every year. If you look at the ROCI you have to take into account that our ROCI includes significant goodwill from the acquisition. If you exclude that, then our ROCI goes up by approximately six percentage points so the ROCI which we are currently achieving is close to 14%.

To maintain and to improve our profitability we have an ongoing focus on improving operational efficiency. This is a business in a very competitive environment so we really focus not only on the cent but on the second digit behind the cent. We really focus to optimise everything. We continuously optimise our processes, we do best practice sharing, like Carmelo we're constantly monitoring and analysing our network and improving it. Also similar to what the colleagues from CHEP do, we continue to roll out automated wash facilities and we continue to outsource these wash facilities wherever it makes sense. Last but not least, we also improve the platform efficiency by introducing new RPC designs which have better transportation efficiency and lower breakage rates.

You can see the cost development in the last three years. We were able to reduce our transportation and our wash cost year-over-year. Not on this slide, we were also able to reduce our overhead cost in per cent of revenue because we're running a pretty lean organisation and we have a real tight overhead management. Both areas, our operational cost and the overhead cost, helped us to almost compensate for increases which we have in logistic reimbursements to retailers.

Also, very important for the profitability but even more for the cash flow is asset efficiency. Again, you can see that we improved our turn rates over the last couple of years. You may also notice that there is some fluctuation, some ups and downs. This is simply caused by the fact that depending on the country where we operate and depending on which application we grow, we have variances, significant variance in the turn rates. Just to give you two examples, in Brazil all fresh produce is grown in a circle of about 100 kilometres around the big cities like Sao Paolo and it's grown year-round. There's one RPC type so the turns are extremely high.

At the other end you have Scandinavia where you have a very short summer season. You have a large territory with comparably few people spread out in the country and most of the fresh produce has to be imported from countries like Spain and Italy so the distances are long, the dwell times are longer and for that reason, obviously the turn rates are lower.

Now, having said that, asset efficiency is an integral part of our pricing. A customer with a low turn rate is not necessarily less profitable than a customer with a high turn rate. Nevertheless, we have a number of initiatives in place to improve our asset efficiency and these initiatives consist of streamlining our pool variance, tighter asset control, implementation of counter-seasonal applications and a very disciplined capital allocation and a tightly managed CapEx spending. Actually, we approve CapEx POs every month and I do it myself.

With that, I'm at the end of the global overview of IFCO and I want to talk a little bit about the regions and the different characteristics. I would like to start with Europe.

Europe is a developed market. That's where we started. In terms of the retail industry you have a pretty consolidated industry in Northern and Central Europe but we still have many small retailers in Southern Europe. This is a mixed picture. In terms of the growers, we still have many comparably small or medium sized growers, most of them family businesses.

In Europe, the retailers work exclusively with a pooler. In most cases, fortunately with us. For that reason, the retailer takes the decision which RPCs should be used and most growers actually follow the recommendation of the retailer and use the preferred packaging. We pay logistic reimbursement in Europe for logistics services which the retailers provide to us and we also share some economies of scale with the retailers which are generated by high volumes. Prices in Europe are standard prices. They apply for all growers. RPCs are widely accepted as the preferred platform for transporting fresh produce.

Again, I touched on this before, although the market in Europe is pretty developed there's still a significant opportunity. These two bars represent our two IFCO regions, North and Central Europe and Southern Europe and you see that in both regions we still have about 40% of the addressable opportunity into which we can grow. We are the market leaders in both of these regions and in Europe in total and we continue to roll out our strategy to strengthen our network advantage by ongoing commodity conversions away from cardboard, also by entry into new verticals and by new retailer wins from pooling competitors, cardboard and takeover proprietary pools. We also extend the RPC pooling in Eastern Europe and in Turkey, countries where we have just entered the market. We entered last year, for example, into Russia, won the first customer there. We entered into Romania. We entered into Bulgaria to just pick three examples. Also, into Poland and we are now winning additional retailers in these countries.

Now let's come to North America. The North American market is significantly different to the European market. In North America you have a high share of large nationwide operating retailers. I think five retailers in the US add up to probably 70% of the total retail market. You have a similar situation with the growers. You have some very large growers with significant negotiation power. Some of these growers have a market share of beyond 50% in their category. In some categories you have two players who have 80% market share.

In the US or in North America, retailers do not work exclusively with one pooling company. They leave the choice which pooler to use to the grower. This is why in North America we have to convince retailers about the advantages of RPCs and we have to sell our value proposition to the growers. It's a more complex sales process in this geography and growers because they have such a strong negotiation power, sometimes push back when retailers ask them to use RPCs as the preferred packaging. In the US we have standard prices but every grower negotiates specific prices depending on the volume and also depending on the cost to serve, which may vary significantly.

We see RPCs as the preferred platform for transporting fresh produce and I would think that in a couple of years we should arrive at similar levels as we have currently in Europe. I think there are some very strong arguments which support that. So far, you see the uncovered market is still beyond 80% both in the US and in Canada. We are by far the largest pooling company in North America and I think for that reason we are best positioned to outgrow our competitors. We will manage our growth by focusing on strengthening and growing our core fresh produce business and this will be achieved by continuing category conversions with current retailers but also by winning new retailers, smaller retailers, preferably at less cost. At the same time, we are also aiming to diversify into less cyclical categories like meats and deli.

Now, North America as we heard today from Carmelo and of course from Laura has some very specific challenges and these challenges are pretty similar for us. In essence, we currently have a price and cost to serve mismatch in some cases and we are hit by cost inflation and by some scale related inefficiencies. We have prepared a clear strategy to improve profitability and asset efficiency and that strategy has four elements. The first is transportation procurement and we're doing all the same things like our colleagues from CHEP and where we can, we collaborate even. The idea is really less dependency on spot markets, more fixed rates for lanes and more dedicated carriers.

In terms of pricing, we continue to implement a strategy where we base our prices on the cost to serve.

Another element is the flow optimisation. This is a project which we initiated a couple of months ago. It really focuses on all aspects of the entire RPC flow. It starts with reduction of RPC stock levels at growers. It aims to reduce stock levels at retailers. We are working on the improvement of recollection efficiency from DCs to our service centres and we also are working to streamline our sort network.

Last but not least, the fourth element is outsourcing and automation. Again, some similarity to the colleagues from CHEP. We continue to outsource our service centres because we have strong partners who actually are very good in managing such facilities. These partners come from Europe so they have the expertise and the knowhow to run automated plants and they have now started to implement automation into their US plants because we have wage inflation and it is harder and harder to find people for that kind of job.

Now let's come to the rest of the world which is South America and Asia. In both areas we are again the clear market leaders. South America is a mix of developed countries and comparably new countries. Argentina, Chile and Uruguay are developed countries. In these countries we still can continue to grow by implementing new vertical applications but we also expect to grow because the modern retail will take more share over time from the informal retail. In the other two countries, we have the same growth opportunities but in addition we can win new retailers. In Colombia and in Brazil there is also an opportunity to win some new retailers as RPC users.

In Asia we are operating in Japan and in China. Japan is an established business which was founded 20 years ago. The market has still significant growth potential and we expect that we can grow in this market in line with the expected consolidation of the retail and grower industry because both industries are really very fragmented but with the demographic changes in Japan it is expected that this will change.

China is a comparably new market and we see significant future growth potential in this market not only because you have 1.4 billion consumers but also because both the government and the retailers are really seeking to improve supply chain cost, to reduce food waste by damaged products and also to reduce the environmental impact. All our value points can be addressed here. At the same time, we see a growing interest of consumers in terms of quality of fresh produce. Again, we can bring value. We are currently working with two retailers. We are covering all provinces in China which have a high population density and large cities and we have a solid sales pipeline. We see real good growth potential in this market going forward.

Now let's come to innovation. The first aspect of innovation is product innovation. You can think an RPC is an RPC, it's a box. This is true but we are constantly improving the design of our RPCs and even if it's only small changes, these changes help us to improve the functionality and the economics for our customers and also to reduce complexity and efficiency for us. We are currently introducing our latest product generation into the markets in Europe and North America.

You may have heard, and I addressed this, that it's a trend that retailers want to differentiate their merchandising. We have responded to that. We are now offering black RPCs, green RPCs and woodgrain RPCs. This is hopefully the maximum of variance which we will have. To limit this trend to retail specific pools, we also developed some applications, some alternative customising solutions to customise standard RPCs. On this picture you see some examples. We have wraparounds. We also have an invention which is called Promo Plate and these solutions help to customise a standard RPC. Then of course we are also continuing to develop new products for new applications. The latest product introduction was actually a fish crate.

Now, we also innovate by technology and by digital innovation. One part of that is our proprietary IT system, MyIFCO. This is a web enabled system which allows our customers to do all their transactions and interactions with IFCO online. We have recently enhanced this system. We have just rolled out a state of the art online ordering and management system and we have further enhancements in the pipeline like a mobile application but also collaboration tools which will help our customers and us to better predict RPC demands in future and to better plan.

The other element is really an area where we strongly benefit from Prasad and BXB Digital. We are working on a pilot with an IFCO retail customer and the idea is really to monitor their entire fresh supply chain by smart assets. This is early stages and I think Prasad is much better to explain what we're doing here than I am so I'll leave that to him.

The last innovation area really aims to proactively respond to e-commerce and omnichannel trends. On one hand we are really trying to work together with all new players which are upcoming and so far, we were successful to do that. All the major new players who sell fresh produce products on line are starting to work with IFCO products. Still small volumes but as we expect these players take market share, it is important that they also are our customers.

The second area is really something where we thought about how can we extend the usage of RPCs towards the end consumer? The biggest challenge here was asset control. We thought about how we could manage that and we came up with an idea where we establish shared collection points which allow customers to pick up all their online orders at one point. Our role in this area is to provide RPC packaging for the retailers, to organise the transport of the online orders to these collection stores, to store these online orders at these stores until they are picked up by the customer. We have a small start-up in Munich called Qool Collect and this start-up was recently covered by the public German TV, a format which is called Plusminus. I just want to share with you a sequence out of that report. It's easier to understand what we're doing there.

Can we play the video, please?

[Video playing]

Wolfgang Orgeldinger: You see, this is something that we really tried to think out of the box and I think it's great that Brambles supports us and lets us experiment with that because this is a classic start-up situation. We don't know yet where this thing will go. It could be very big or we could come to the conclusion one day that it's not accepted but it is one idea to experiment with new services which hopefully help us to ensure the growth beyond the three to five-year horizon.

With that I come to the most important success factor which we have, which are our people. Now, IFCO benefits from a very low fluctuation rate. Many of our people have been serving for many years. This is great but this also means that we really need to concentrate on succession and talent management because over time, some of these great colleagues will actually retire. This is a focus area when it comes to people development and we're really leveraging the Group in this aspect. In terms of talent development, we recruit people from sister companies but also from outside. We also encourage our people to look for jobs in other companies of the Group which is also great because as we have such a lean organisation and low fluctuation there is not a lot of opportunity and this is a great way to keep the people in the Group.

We also focus on commercial development. All our commercial people participated in a professional negotiation training. This becomes more and more important for us because both retailers and growers tend to give us a hard time when it comes to the negotiation of terms. This year, we will conduct solutions skill training and we also are putting a training in place which is called finance for sales people. We want that sales people understand what impact turns can have on the profitability.

We are actively participating in the Group's leadership development programs and I must say this is really great. For example, as part of the emerging leaders program we got the opportunity to place two young talents into two developing markets. One is Russia, the other one is Turkey. We also are participating in the graduate development program and bringing up some young guys from university to learn our business and we are also participating in the senior executive development program.

With that, I'm at the end of my presentation. I'd like to summarise that IFCO is the clear global market leader when it comes to RPC pooling. We have still significant growth potential in all markets. I think we delivered excellent growth rates and solid profit margins in a very challenging and competitive environment and we have a strong performance in Europe and in South America and a promising development in Asia. We have a very clear plan to improve the performance in North America. With that and our market position and our people, I think we are very well positioned to continue to deliver profitable growth in future.

With that, I'm open to any question you may have.

Simon Mitchell: (UBS, Analyst) Simon Mitchell, UBS. Wolfgang, you made a comment that the unit cost savings you've achieved have been largely absorbed by increases in the logistics reimbursement to retailers.

Wolfgang Orgeldinger: Yep.

Simon Mitchell: (UBS, Analyst) Do you expect that to continue and therefore should we expect returns and margins to be pretty flat going forward?

Wolfgang Orgeldinger: Yeah, that is our expectation and we will do everything possible to maintain our margins. Also, we already have a pretty lean organisation and also, we have very good cost. As we grow we can gain further economies of scale.

Simon Mitchell: (UBS, Analyst) Okay and if we go back in time, I think the commentary from management's always been that you put a new crate into the market you'd expect something like a 20% return on that crate. You've just talked here about your ex intangibles return being about 14%. Is that difference the US or is it that 20% is not right?

Wolfgang Orgeldinger: The 14% first of all reflects the entire business globally. Now we have significant variances in profitability in the different regions and we have variances in the pricing for products which have been in the marketplace for a while and for products which are newly introduced. As a general rule, if we introduce new pools in the market we try to have a higher pricing because it's a new product with better functionality.

Simon Mitchell: (UBS, Analyst) Is there any way for us to quantify the drag on returns that the US is causing?

Wolfgang Orgeldinger: That's something which we don't disclose because we don't want to give that kind of information to our competitors. I apologise but I can say I think this is an open secret that in North America our profit levels are lower than, for example, in Europe. We're working hard to improve that.

Owen Birrell: (Goldman Sachs, Analyst) Wolfgang, it's Owen Birrell from Goldman Sachs. Just focusing again on North America and the challenges that you talk about, you put a good table in there which highlights where you think your return on invested capital improvement's going to come from over the next two years. It sounds like it's a pretty big step up that you have to deliver in North America. 30% is led by pricing. Now you talked about the structural challenges in the US where growers can choose whoever they pick their crate from. How do you have confidence that you can deliver such a big step up in returns in the US purely on pricing?

Wolfgang Orgeldinger: I have the confidence because we are now in the second year of this strategy and we were able to improve the pricing based on the cost to serve. I think we have good arguments because we can demonstrate to our customers why a price needs to be improved. If we, for example, have a customer who is located at the West Coast in the US and ships all his products to the East Coast and we have to redeploy the asset then there is a cost. Most customers understand that. It's a hard and tough process but we're making progress and I think the market understands it. In [unclear] once in a while we are losing a customer but we are on our path and we are confident that we can get there.

Owen Birrell: (Goldman Sachs, Analyst) Can I just ask, increasing pricing, does that just open the door for competitors to come in and claim that volume?

Wolfgang Orgeldinger: In some cases, it does but if we have a hard time to make any profit on a certain customer, I wonder how a smaller competitor can make money. In doubt, I think - we walk away from cases where we really can't generate the returns which we need. In some cases, customers came back after a while because we provided a better service and, in the end, they understood that we had to increase prices.

Owen Birrell: (Goldman Sachs, Analyst) Can I ask, are your hurdles comparable to that with the wooden pooling business? Graham talks about high teens return on invested capital. Is IFCO held to the same standard?

Wolfgang Orgeldinger: Generally, yes. Of course. But I think what we can bring to the Group is higher growth rates and slightly lower returns. I think it's the mix which is attractive also for investors.

Anthony Moulder: (CLSA, Analyst) Thank you. Anthony Moulder for CLSA. I wanted to ask about Safeway Albertsons. Obviously, that was a contract loss a few years ago. I think at that time there was still some confidence post integration of Safety into Albertsons that you could re-win that contract. Can you give some update as to where discussions are?

Wolfgang Orgeldinger: So far, we haven't won this business back but we will continue to speak to them. I think we have a real great value proposition. Sometimes you also have changes of people in companies and you have a new entry point. I must say Safeway Albertson is the only retailer globally I'm aware of who ever went back from RPCs to cardboard. I think there must be a chance to convince them again and actually in an automated warehouse we're still doing business with them. It's much smaller than it used to be but our strategy is never give up and always try to get a second chance.

Anthony Moulder: (CLSA, Analyst) So do I. One more question if I could. The amount of crates that you've got now and obviously we're now introducing meat and fish, that brings a complexity, that brings a cost to serve and as retailers want that differentiation, how do you push back to retailers given the desire would be to have a single - seven different sizes but a single SKU within that?

Wolfgang Orgeldinger: I think it's impossible to convince retailers to just accept one pool. That train has left the station. It is what it is but I think due to our overall volume we can even run three different pools in an economic way. We have demonstrated this by the way we have good experience by acquiring companies and by taking over proprietary pools or legacy pools from these companies. We have experience to do that and I would say as long as a pool size is big enough to manage it in an efficient way it can be handled. It would be more ideal to have less variance but we can deal with that situation. When you mention things like meat crates and so on, the complexity is not that big because we're picking up the empty crates together so we don't lose efficiency there. That is not a big deal.

Sean O'Sullivan: Great. Thanks, Wolfgang.

Wolfgang Orgeldinger: Thanks very much.

Sean O'Sullivan: We're going to have a 20-minute break now so if we see you back at approximately 3:30. Thank you.

(Break)

Sean O'Sullivan: Thank you everyone, if you could please take a seat. Before I introduce our final presenters for this afternoon, I want to provide you with some details regarding this evening's and tomorrow's events. Dinner tonight for those who are attending is at Tom's Kitchen, across the road from the hotel, starting at 6:30, please be there on time.

For those attending the site tour tomorrow, we'll be departing the hotel at 8:00am sharp. For safety reasons we'll be providing safety toe caps, so please you need to wear closed covered shoes, and flat shoes. If you need to check out of the hotel, please bring your luggage with you on the coach. The site tour will end at 4:00pm in Reading, and we have organised drop offs at Reading Train Station, Heathrow, and back here at the hotel.

In our final session this afternoon we have presentations from Prasad Srinivasamurthy, and a Q&A session moderated by Graham. First half is Prasad. Prasad joined Brambles in 2016 as the President of Brambles Silicon Valley-based business BXB Digital. Before joining Brambles Prasad was the Senior Vice President of the Internet of Things & Customer Innovation at SAP where he led a global organisation in building and commercialising new digital innovations.

Before I welcome Prasad to the stage we'll play a short video, which introduces BXB Digital.

[Video plays]

Prasad Srinivasamurthy: Thank you, Sean, for your attempt at pronouncing my last name. Good afternoon, everyone, I am Prasad Srinivasamurthy, President of BXB Digital, and I'm really excited to be here today to share with you all the cool things that we are doing in BXB Digital together with other business and customers.

As a little bit of a background, I have spent the last 20 years in Silicon Valley, a good portion of that working at SAP in leadership positions, building some of their game changing applications in supply chain and Internet of Things. I joined Brambles about two years back, and I'm really excited working at Brambles and seeing basically the potential that we have with other global business.

I'm going to talk a little bit about the why, and what we are doing, and how we are doing it. When we talk about the potential for Brambles, and how technology can be a key differentiator. As we are all acutely aware, technology is growing at a very relentless pace, growing leaps and bounds. Most recent advancements in areas such as Internet of Things, also advanced robotics, and artificial intelligence, what companies are doing is basically they are digitising the cognitive and physical capabilities of humans.

Take the car for example. On a recent trip from San Francisco to Los Angeles, my Tesla drove my family and me from San Francisco to Los Angeles with 70% of the time on autopilot. Yes, you heard that right, 70% of the time. How it does it is basically uses a combination of sensors and software, and basically it pretty much uses all the mapping technology to get from point A to point B.

It is predicted that by 2030 technology's cognitive capability will parallel that of human brains. Why is it that we are seeing the Jetsons becoming a reality? For three reasons, first of all Moore's law of technology is in hyperdrive, that means computing hardware, software, and connectivity is becoming faster, smaller and cheaper. Secondly, companies are combining these technologies across all these layers in unforeseen way to capture data and create new value. Lastly, paranoid and ambitious investors and companies are looking for the next disruption in traditional industries. Start-ups are looking to become the next leaders and incumbents, unless of course incumbents innovate and dominate using these new technologies.

For Brambles it presents an immense opportunity by combining proactively our existing pool network and operations with technology, emerging technologies, as well as established technologies to really redefine supply chain logistics. By using this combination of physical and digital, we'll be able to leverage it in the short to mid term for improving the efficiency of our business and supply chains by giving more visibility into supply chains through track and trace, and the data that we collect as a result of that. Also, for our customers to highlight what's happening within their supply chains. The key KPIs, as you have heard from our leaders today, is reducing losses, reducing damage, and increasing velocity. For our customers on-time delivery, without damage, and visibility into what's happening within the supply chains.

Let me take an analogy, in a human MRI when the doctor wants to determine what's wrong with the patient, the doctor basically localises the treatment by injecting a dye within the area and seeing - imaging it and seeing the data from that, and seeing what's wrong, and then basically recommending a course of action. In our case by injecting digitised pallets into the darkest parts of our supply chains, we can gain that visibility that we did not have before. We can also map out essentially the flows and the various patterns that happen within that part of the supply chain.

As we start to increase our penetration in terms of the pool, we can move from more of a supply chain visibility to a digital supply chain. More from diagnostic MRI to more of a predictive, preventive supply chain. Think Fitbit rather than using antibiotics, think about continuous data stream rather than a one-time static report.

Our short to mid term focus is really focused on supply chain visibility, but our strategic intent is to build this up and overall progress in the direction of digital supply chain. Why do we see this as a strategic opportunity? It is because of our physical pool has a linear growth model. When you combine physical and digital it opens up opportunities for exponential growth. Let me illustrate that with an example.

I think you're all familiar with this kind of a phone, I think ET used a phone like this to dial home. It did work, and ET did get home, so how come today we are hooked onto this kind of a smartphone? It's because this phone with its combination of sensors, intelligence, applications, offers me unprecedented value and convenience. All of this is based on the existing telecommunication network, both this and this works off the same physical telecommunication network.

Extrapolate that to what we do and the opportunity in front of us in Brambles. When we look at digitised pallets, and we look at basically injecting that into our existing physical network, so using the same physical network, but injecting first of all some amount of pallets into the existing network, and then building it up in terms of full penetration. The kinds of applications and opportunities it presents us is vast.

By doing that step-by-step, we will build a digital fabric in supply chain. As we step by step build that digital fabric, we can illuminate, re-imagine, and transform supply chain solutions with data driven solutions. Illuminate for asset productivity. Re-imagine customer value that we can offer with such solutions. Transform with solutions that we have never done before. All based on data that we can capture through our supply chains, and combining that with data that we already have.

I want to focus for a few minutes on the approach that we are taking to build these capabilities. We follow a three-step approach. The first one is build the core capabilities that includes the team, and the technology. Step two is validate those capabilities through pilots with our business and customers. Lastly, scale those solutions which we feel basically have the viability to be able to go beyond a few customers, where we see a huge business opportunity. Right now, two years into BXB Digital, we are in step two where we are validating the value of the technology that we have built.

One of the things I want to really focus upon is the team that we have built. Most of the team has come on board since the last one year, the core set of people we brought on board during the first year. The kind of capabilities that we have within the team is basically technology capabilities across hardware, software, data science, as well as domain expertise in supply chain. We have mixed that together with folks from within Brambles whom we have brought within the team to form a holistic team.

Some of the team comes from companies like - with experience from companies like Lockheed Martin, SAP, IBM, Intel, Cisco, and many start-ups. We also have partnership with top universities where we are tapping into local talent, and we can even boast of having a rocket scientist on our team. However, BXB Digital is not just about - our digital journey is not just about BXB Digital, it is an overall Brambles initiative. We are partnering very closely with our business and customers to determine the desirability as well as the viability of the solutions we are building. We are partnering with our supply chain and IT teams for operationability, and of course there many other cross functional aspects that bring this holistic picture together.

The work that we are doing, together with other cross functional teams, is crucial because think about it like this. As we pilot all the asset tracking solutions within our business, and we work with our cross functional teams such as supply chain, IT and others, we are building the blueprint and the template that we can take the solution to our customers, because our customers have their own supply chain and business teams, they have their own IT teams. In a sense by doing a lot of the pilots that we are doing, internally we are, quote unquote, eating our own dog food, and then taking those capabilities and then working with our customers to deploy those capabilities.

Here I want to dig a little bit deeper into the technology. I promise you this is going to be the only technical slide in my presentation, but let me try to illustrate that with an example. What we are doing is we are building Brambles intelligence exchange, what we call that as core technology, or BRIX as we call that. To illustrate that let me use an analogy.

All of us are familiar with Google. Google collects location information from your phones, from your laptops, and sends that location information into Google cloud. In Google cloud, what Google has already done is index all the millions and millions of webpages around the world, it takes that information plus the location information, feeds it into its proprietary algorithm called a page rank algorithm, which is the most popular example in search engines, and from that it delivers the search

results through Google search, adverts, as well as Google maps.

The power of this algorithm 20 years back with that Google was able to disintermediate the likes of Infoseek, Lycos, AltaVista, Netscape, which had already existed at that point in time. To use the Google analogy in what we are doing, we are capturing data from other platforms, whether it is pallets, RPCs, containers, it's agnostic on the type of platform, through two types of devices. One is called the ultra device, which has a number of sensors to capture and transmit the information in real time. The second type of device is the basic device, which has Bluetooth capability. It uses Bluetooth readers and mobile apps to transmit that information. This type of device you would use when you want real time insight into your supply chain, and you want data streams to be sent to you on a continuous basis.

This type of device, the basic device, you would use when you are looking at more of a closer loop, and more visible part of your supply chains to collect the data. Data from both of these devices, again to use the Google analogy, we send it to the cloud. In the cloud we have already with the Brambles data that we have, and movement data that we have, indexed all of that information, just like Google indexes all the millions of webpages around the world, we have indexed our movement data, all the supply chain location data. We take that information, plus the location information that we get from these devices, feed that into our algorithms, which we call geolocation algorithm, anomaly detection algorithm, movement algorithm, all of these algorithms, and we provide three different application as of date. One is asset tracking, goods visibility and transport orchestration. All built on one engine, BRIX.

Again, going back to the phone analogy, this is basically just the, quote unquote, the tip of the iceberg because once we start to deploy these applications, we will learn more and more from customer feedback. Based on that we will build additional applications of value for our customers.

Asset tracking answers the question, where is my asset, where is my pallet, what condition is it in, where all has it flowed, what is the pattern with respect to the flow? A host of different KPIs. For goods visibility it's used by our customers to understand the transit time of their products on the pallets, the environmental factors such as temperature, impact, and so on, also to understand how the supply chain behaviour is looking like. Transport orchestration, Mike and Carmelo already touched upon that, but essentially what we are doing is basically take the vast amount of transportation data that we have and doing prioritised matches that our business can take and work on collaboration opportunities with our customers, or orchestration opportunities with our customers.

To summarise with BRIX, the more we deploy BRIX in the field with pilots, and then going to scale, as we go to the pool, the stronger it becomes. Think about the Google analogy, Google became stronger over time because the search results, and the feedback with respect to the data, were fed back into the algorithm, and it became richer and richer and richer. That's the same approach that we are following with what we doing with the BRIX technology.

What makes us really unique? First of all, from a physical and digital point of view, we offer seamless physical and digital. What that means is that we know with respect to the device where to place it, how to replace it, how to fix it, how to get the data out of it. From a customer point of view, they just get a pallet, they just get a smart pallet. They don't have to do - we don't have to change anything with respect to the customer issue process.

The second thing is, our pallets transcend boundaries and travels across the network from [gross] or manufacturers, to distributors, to retailers. It is ubiquitous across the supply chain. Like we have a standard pallet, we have standard solutions with respect to asset tracking, goods visibility, that we can offer to our customers irrespective of the kind of platform the product moves on, RPCs, pallets, containers. Again, the concept of one system, multiple use cases, across platforms. All of this is built on the BRIX technology that we have developed.

You can think about BRIX like bringing the brains and the experience of Brambles, of decades of years of experience in supply chain of Brambles, and the data that we have collected with some of the newer technologies, the track and trace data that we are collecting as part of our smart pallets within the supply chain. Bringing those things together, it's something which

only uniquely we as Brambles can offer.

Sometime back one of the larger beverage manufacturers in Europe visited us in Silicon Valley. It was part of their Silicon Valley tour, where they visited the who's who in Silicon Valley. Finally, they came to us, and they didn't know about us, what we are doing, but as a result of some connections, they decided to pay us a visit. The CSO, the Chief Strategy Officer, and the CIO of the company, at the end of our presentation said, what you guys are doing is the most practical example of Internet of Things that he has seen that day. What he said was, using the data that we are getting from track and trace, combining that with data that the beverage company has within their IT systems, they get insights into movement data at a granular level.

With that you can imagine the kinds of opportunities that the customer can start to look at with respect to either sales and operations planning, supply chain planning, or any other kind of planning, because you get to a much more granular realistic data, rather than at an aggregated level.

With that I want to make what I've been talking about with respect to the technology and capabilities even more and more practical. What I'm going to do is basically welcome Laura and then subsequently Mike on stage. Laura is going to be talking about a couple of the pilots that her business is doing with BXB Digital, and also what is basically the strategic implications of the pilots and the findings from those pilots.

Laura Nador: Thank you, Prasad. I'm going to be talking about two sets of types of pilots or trials that in practice we are running to uncover the value potential of the new emerging capabilities that BXB brings. The first set of pilots is related to generating financial benefits for CHEP around greater asset efficiencies and potentially some transformation to a model that I'm going to talk to in a moment. The second set is about identifying areas where we can provide additional value by real time monitoring of the position and condition of the product traveling on a pallet from end to end in the supply chain.

If I talk first about the first set of pilots. We decided to concentrate our effort first where the visibility that we had currently in that piece of the supply chain was the least, and therefore a potential cost to serve those areas, those channels, could be the highest. Essentially because cycle times may increase, or risk of losses could be higher if we don't have that visibility.

We selected a very specific contained geographic area in the southeast of the United States, in the Carolinas, and define a group of distributors that are currently not participating in the CHEP program, so you may have - hear us talk about non-participating distributors in the past. This is what we concentrated on, very specific geographic area and very specific set of distributors. We placed a limited number of tagged pallets, with the ultra devices that Prasad was talking about, at the back dock of the distributor. Why the back dock, is because at that point of the trip, in theory, is the end of the trip for that pallet. It's gone through the manufacturers, gone to the retailer, it's been emptied, and at that point it should be returning, it should be returning to us directly if we happen to collect at that location, or it could happen that it's collected by some other party, like a recycler sweeping that dock, and then eventually coming back to us.

We wanted to see what was happening at that point, and that's why we did it that way to avoid any interference or changes in viability introduced upstream from what manufacturers or other players may be doing. We monitor that. We monitor that for a couple of months, since we put the pallets in, two to three months. We would have expected about 80% of those pallets being back to us. We made a number of assumptions, obviously knowing what we know about that supply chain, of what kind of flows could happen, what would be compliant flows, versus others.

We found out some very interesting insights, some surprises as well, that indicated that actually there were some unforeseen flows happening, some movements that were happening with our assets at that point in the supply chain that were not anticipated. That was quite insightful. What that tells me is that there are desired uses of our assets in the supply chain that we may not be seeing right now, maybe happening right now, and they are the reason why for example cycle time maybe extended once they get to that channel.

Having the visibility that we didn't have before, but we can have it now with BXB, we could potentially enhance our offerings, and provide services in this part of the supply chain generating the right compensation for those services. We could monetise additional revenue streams eventually in the future.

It also gave us a number of insights that are actionable right now, so short term. Some of the things that we observed was that the recyclers that actually participate in our ARP program, our asset recovery program, they actually behaved really well, they were very compliant. Every time they touched a pallet, it came back to us, and it came back to us speedy, in a speedy way, within the timeframe that we would expect. That means that actually that strategy that we put in place, we need to continue with that, and we need to, if anything, continue expanding it because it works.

On the other hand, it did tell us that actually we need to speed up, and we're actually doing it, our efforts to increase frequency of collections and direct collections from some of these locations, some of these distributors, to avoid the instance of pallets leaking to other places in the supply chain. Clearly very, very insightful type of exercise.

The second one is where we are trying to identify how to commercialise different solutions, different offerings, based on these new capabilities. We engaged with a number of customers. The first one, I'm going to give you a couple of examples, a very, very large food manufacturing company, leader in a number of categories, they were concerned about the cost of transport, clearly, particularly around a few SKUs that they have that actually do not need refrigeration. But actually they are making travel in refrigerated trucks, because they are not comfortable enough that the range of temperature throughout the trip from end to end is maintained within the tolerable range, because they don't have visibility.

You may ask if you could monitor the temperature in the truck, so you could do that. The problem is the products have multiple handovers in the supply chain, so you move, you load, off load, leave pallets in a certain place, then put in another truck, move it again, until it gets to final destination there are multiple handovers. The handovers are weak links in the supply chain where nobody can give them the answer, but the pallet can. The only other way that you could do it is putting the sensor in the box, in the unit itself, in the package, which would be a lot more expensive.

That's why these companies are interested in exploring this, because it will give them the answer, it could give them the real time monitoring and triggering of alerts, which is what we did with this particular customer telling them, if this is the range, I don't need to tell you every minute where the temperature is, but I can tell you between this minute and this minute it was off, it was off the range. This is what they need to act upon. That is one of the cases.

Another one is a very large beverage company, a leading beverage company. They do in the juice lines, they believe that they can extend the shelf life of their products by as much as a week, a full week, if they have this monitoring, constant monitoring of temperature range for their products. It's big money here.

We're also doing another trial with another leading company, also in the juice lines, where they do multi-modal transportation. They do track, rail, track again, and in this case again it's the handovers that really make a difference here.

There is in an environment where food safety and regulation is every time more and more important, and customers are so keen to ensure that they keep compliance to regulations, and protect the quality of their products, there is an opportunity here that customers are telling us is there. We are at the moment first testing the viability, so we are testing through the pilots that the technology works, that we can do this. Then thinking about what the offering could look in practice, how we're going to commercialise this, how is this going to be productised, and sold so that we can create new revenue streams as a result.

In summary I think very quickly, we believe that there are opportunities here with the digitisation of our asset base, in the area of track and trace, but we believe that we can extract financial benefits by improving our asset efficiency through this enhanced visibility. We do believe, as I said this morning, that there's something in creating a much simpler offering for our customers. If we can get to a point of eliminating transactional activity, and administration, that's a plus. We do believe that there's an opportunity to create new revenue streams, and modify how we address the market with new offerings, and

transform our model. We believe that there's potential, although this is a more preliminary, more early stage of development, to commercialise new offerings for customers.

It's exciting times. I think I will pass it on now to Mike to look at the European cases.

Mike Pooley: Thank you, Laura. Good afternoon again. In the EMEA business, we've also been working closely with BXB Digital on a couple of projects. The first one is similar to what Laura has already described, on illuminating the supply chain, so that we'll be able to see things that previously we had no visibility of. The second one is a bit more transformative.

Looking at the two examples that we've been working on, the first one is in our Southern European business, particularly in Spain, we lose more pallets that we would like. We do know where the channels are that we lose more pallets, but we've never really been able to identify exactly where those pallets have gone, or been able to pinpoint the leakage there. What we have done is we've tagged a few hundred pallets, and we put them through the beverage supply chain in full cooperation with one of our largest beverage customers, and we've purposely sent them to locations that we consider to be non-cooperative. These are locations that historically have a poor performance in terms of giving us our assets back.

We've used the track and trace capability that BXB Digital have created in order to find out exactly where those pallets have gone. We've had quite a few interesting results. For a start we found a number of pallet dealers that we weren't previously aware of, and we've been able to address those, and go and talk to them and make sure that they're now giving us our assets back. But more interestingly we've also found quite a lot of the pallets after they've been shipped to these locations, were then being exported outside of Spain going to all sorts of countries. You can see - if you've got good eyesight you can see we were seeing pallets leaving Spain and then heading into Germany, and Central Eastern Europe as well. That's fine, we're very happy for our assets to be reused in that way, but obviously we need to know about it, and we need to be paid for that extra usage of our assets.

It has given us that visibility to be able to go and deal with those issues, and now we have that pinpoint accuracy of exactly where our assets have gone.

The second example is really more transformative. I mentioned earlier, and I showed you that short video about how we're looking to orchestrate transport with our customers, particularly for those customers who use less than full truck load utilization of their transport assets.

With the help of the BXB team, we've been able to really improve the way in which we do that. Up until now we've been limited in how far we can scale that program, because it takes a long time for our logistics experts to sift through all of the flow data that we have. In Europe we serve about 1.3 million different lanes, and therefore in order to find those collaboration opportunities, you really literally have to look at all the permutations between them.

Now if you quickly do the math, that's 1.7 billion combinations that you've got to look at. It takes people a very, very long time to be able to sift through that, eliminate all of the opportunities that are not going to work, and then hone down on the most likely opportunities for logistics collaboration.

To do one pilot previously took our team three months. Once we introduced the BXB Digital software, and gave them that tool, that timeline came down to four hours. That's just by using these machine learning algorithms that can really hunt through vast amounts of data extremely quickly, and use artificial intelligence effectively to go and look for the opportunities. It's really transformed the way in which we can do this, and it will allow us now to go and scale this opportunity right across Europe. Quite exciting.

In terms of the strategic benefits to us, yes, it certainly improves - it will improve our asset efficiency, which is the core of our business, and something that we really need to continue to drive. We will now scale that pilot. The first pilot we did in Spain, we're going to continue to drive that, and we'll increase the number of pallets that we continue to feed into specific channels

where we know that we have potential loss issues.

It's also giving us the opportunity to grow our market share, because many of our biggest customers are asking us to be in this space. Some of our biggest FMCG manufacturing customers are now saying to us, what are you doing and how can you help us to illuminate our supply chain. We're now in much more of a position where we can start to have those conversations and start to run pilots with those customers.

It is going to allow us to scale our business, as I said earlier. We were very limited by how much we could do in the collaboration and orchestration area because of the sheer quantity of data. We can scale that up very quickly, but what's really exciting about the BXB Digital platform, BRIX, is that we can not only use our own data, but we can add in our customers' data and overlay that within the BRIX software, which then gives us even more opportunity to look for those opportunities, those collaboration opportunities.

Of course, that enhances the value that we can bring to our customers. It should significantly help us in terms of solving some of the challenges that our customers are now having with the supply chain. With that I'm going to hand back to Prasad.

Prasad Srinivasamurthy: Thank you Laura, thank you Mike. To bring this together, over the last couple of years by building the team and the core technology, we have built a strong foundation. That strong foundation has allowed us to codify the knowledge that we have within Brambles, and also that asset tracking technology into what we call as BRIX.

With that we have now been able to build repeatable solutions of asset tracking, goods visibility, or transport orchestration, that we can pretty much pilot anywhere. Right now, our focus has been on North America and Europe, but if you look at the capabilities that we have built, it is one system, one engine, that can be deployed in any region. For some of the capabilities like the transport orchestration, it is all based on existing data, so it's basically looking at all the movement data, running the algorithms, giving the kind of matches. If you want to take the capabilities in Europe and then replicate in another region, it is a matter of a switch.

While all of this sounds really cool in terms of the capabilities that we have built, and the opportunities in front of us, I still want to have some words of caution, and talk a little bit about the challenges and the pitfalls that we could face along this journey.

First of all, digital is not just about technology, it's about how you make use of the technology and the data and the insights that it provides, and how do you action those insights? How do you take it to the next level in terms of putting a much more broader pattern on the insights that you are getting? Finally, how does it apply then to your business model? Do you need to adjust your business model, do you need to change your business model, and so on and so forth? It is not just about doing these things, but it's also about ensuring that we have the right people and the capabilities, not just from a technology point of view, but also from a business and an operations point of view to consume what BXB Digital is offering.

The second thing is technology, like I alluded in my first slide, it is moving at breakneck speed. Every single day there is a new piece of technology that is coming in, people are touting a piece of device, and saying this is the next big thing. There are technologies that are mature, there are technologies that are evolving. There are technologies that are hype, and there are technologies that are real. We really have to look at which subset of those technologies that we should use within our domain, and for the kinds of problems that Laura and Mike were talking about.

The other thing is our principle is fail fast, fail early. What I mean by that is it's not just about spending a lot of time building these capabilities, and a few years down the road testing it out. Rather it's about once you have the minimum viable capability, pilot it, see what works, see what doesn't work, then course correct, or pivot accordingly. Because that's like a guided missile, it hones towards its destination, but it learns along the way.

The other aspect with respect to having a perspective on the longer-term horizon, one of the questions that comes up is what

is the cost of the device? My answer to that is what is the value that you are trying to create, what is the problem that you're trying to solve? To look at it from that angle and see what technology you need, and how much you need. The example that Mike Pooley talked about in the pilot in Europe, or for that matter what Laura talked about in terms of illuminating the leakage points in North America, the first pilot was just a few hundred smart pallets. It really did not need a whole pool, or thousands of smart pallets to get you those insights.

Last but not least, we are collecting vast amounts of data, while more data is better than less data clearly, but there's a lot of refinement of that particular data that is needed to provide the context and the quality that is needed for the kinds of use cases that we are solving. There is work to be done, it is not just about data collection, it's basically how you process that data, and how you make use of it.

Ladies and gentlemen, I just want to bring all of this together. On our core pooling business, we are building the digital and data fabric around it with smart pallets. We are combining the data that we are getting from our smart pallets, with all the business data and supply chain data that we already have, via software engine and algorithms, and giving the business and our customers supply chain visibility. As we start to do more and more deployments and as we start to scale this up further, that is the beginning of a digital supply chain.

We are well on our way, it's very exciting times. As Brambles we can of course stand on the sidelines and see the future unfold, but we have chosen to build the future by illuminating, re-imagining, and transforming supply chains through data driven solutions. Thank you for your time, and I'm open for questions.

Simon Mitchell: (UBS, Analyst) Simon Mitchell. We all like numbers here, can you talk about the cost of these tags? You've given us a bit of context in terms of a few hundred pallets for one of those pilots, but would just be interested to know how many you've got at the moment. I know it's very hard to project how fast this gets rolled out, but can you give us some scenarios around a couple of years ago.

Prasad Srinivasamurthy: Sure. Maybe let me talk about the cost of the device. Something like this, it's single digit dollars, give or take \$5. This is public information, it is available, and at scale the cost of this device becomes cheaper. The cost is not just of the tag, but also of the readers that you would have to install within your service centres, or within customer locations. You'll need many of those readers, a few per location. The cost of those again is probably about a couple of hundred dollars per reader, but again the cost of those come down over time.

The cost of the ultra device, and let me talk to you a little bit about the drivers of the cost. The biggest drivers of the cost for such an ultra device on the real time tracking device is the cellular, so it's basically the SIM. It's not so much the sensors but it's the connectivity. The sensors overall have - are basically cents, or even \$1, \$2, depending upon the type of sensors that you want to have, temperature sensors, impact sensors, and so on and so forth. But the biggest cost is in the data transmission, that's basically the cellular SIM that you need to have.

Cost today is basically in double digit, but what companies, what the network providers are doing is they understand the needs of IoT, so the companies like AT&T, Vodafone, Verizon, they are laying out new capabilities in their existing networks, some of you were talking to me about that yesterday, like Cat-M, mBloT, and so on and so forth. These networks are targeted to service IoT needs, that is low data transmission needs, and the cost of data transmission significantly comes down almost by 300% in terms of the data transmission itself. It is quite a bit of the savings that you can incur.

However, the overall network with respect to the Cat-M or the mBloT, it's just laid out, and we are in discussions in terms of starting to build devices that can take advantage of that network. My belief is in the next couple of years the network will be ubiquitous, the cost of the devices will come down, and even from an ROI model, you will see that even for real time tracking, it's a very attractive option.

Simon Mitchell: (UBS, Analyst) In terms of how many out there now, and potential ramp up profile?

Prasad Srinivasamurthy: Right now, we have thousands of instrumented pallets that we are already piloting with, with both basically the ultra device, as well as the basic device in our pilots. We are of course capturing all of that information and give you the insights. In terms of the step two, and the step three in terms of the scale, we will see based on the outcome of these pilots which - how many more pilots we really need to run.

I would divide it into three areas of actionability, one is data that we have already gathered as part of the first pilot, the information which Laura and Mike were talking about. There are recyclers that you can - you already know, and then you can potentially sign them up, a pallet deal with recyclers. There are leakage spots within the supply chain that you can already plug, based on the information that you have got. Already our business is already taking action on those.

The second thing is, after you have taken the most immediate actions, the second aspect is how many more potential pilots, and which other dark spots would you need to run those pilots in to illuminate maybe a region. That is something which overall we'll make a decision based on the outcomes of the first pilot.

The third part is then how do you scale that even further. For scale I would say probably something like a basic device once you have illuminated the darker spots of the supply chain, you would use something like a basic device in your pilot to be able to capture the data at your service centre, and in cooperation with our customers, capture the data at their location. What Laura was talking about, reduce the declarations, the audits, and so on and so forth, which is a big pain point for our customers, that something that a device like this would be able to do. The other thing is also of course we are validating, to Laura's point about some of the business models within our network, and for those we are using these kind of devices and readers.

Anthony Moulder: (CLSA, Analyst) Anthony Moulder from CLSA. I just wanted to get a sense as to how you see the evolution. You've illuminated customer supply chains, conceivable they would want that illumination to continue, they would want to continue to see that dataset coming through. Is that the challenge to then try and repurpose those pallets to another part of the network, while customers increasingly want more data coming through from your supply chain?

Prasad Srinivasamurthy: Yes, it's a two or three step process. One is more often MRI type of data, where you want to see what has happened in your supply chain to address something which is much more immediate, which is like for example reducing the cost of transportation. If you don't need to refrigerate, you don't need to refrigerate, and those are things where you can take action on. That is a one-time type of application of that. You could repeat that in multiple use cases, multiple product lines within the customers.

Once you move away from fixing those most immediate things, and you want to get to more of a continuous stream of data to get visibility into the supply chain, then it will be more of a steady stream of smart pallets into our customers, and them using that on an ongoing basis. The data collection happening on an ongoing basis. But it's a layered step by step process.

Anthony Moulder: (CLSA, Analyst) How big do you think the network needs to get, or the pallet pool needs to get with that technology over time?

Prasad Srinivasamurthy: We are looking at around 1% to 2% is what we feel overall from a pallet pool point of view. From my point of view, it would be a combination of ultra device and basic device, so it would not be just ultra in 1% to 2%, but a combination of this, because what data is transmitted from such a basic device, can be captured by an ultra device. You could use - look at a hub and spoke model so to speak, where you have a bunch of basic pallets beaconing, and then ultra pallet listening and transmitting that information.

Anthony Moulder: (CLSA, Analyst) Last question is how do you think about the value that you get, or the customers get from this technology, how do you monetise that, or is it about the stickiness of the customer more so than generating a strong return from the investment you're making?

Prasad Srinivasamurthy: In terms of more of the assets productivity for our own business, we are already taking action, and we are ready, quote unquote, monetising that, by taking those actions so to speak, in terms of cost savings. As it pertains to customer and how we can commercialise with customers, we are still in the early stages, so we are still right now piloting. Over time we will determine what can be commercialised, what cannot, what we may offer, quote unquote, for lower price, or free, versus what things we would want to commercialise on.

Scott Ryall: (Rimor, Analyst) Prasad, Scott Ryall from Rimor. I wonder if you can talk, you talked about the team, your rocket scientists and all of that, how do you retain them please?

Prasad Srinivasamurthy: First of all by talking about what we are doing, number one. Because IoT in supply chain, Internet of Things in supply chain is the Holy Grail. If you look at the technology industry, and when people talk about IoT, they talk mainly about asset monitoring and predictive maintenance of fixed assets. The problem statement that we have with pallets is not about fixed assets, let alone control of those assets by us.

It is a big intellectual problem, and an opportunity for talent, and this is a real cool area for people to work in. That is something first of all by talking about the kind of opportunity for the people, that attracts people. The second thing is overall from - being competitive overall in the tech market, together with support from Graham and the broader team, we have been competitive overall in Silicon Valley and other technology hotspots, to be able to get the kind of talent and retain the talent.

We have not encountered any immediate challenges so to speak. These are the two things I would say.

Scott Ryall: (Rimor, Analyst) Brambles is a cool place to work, that's the summary. All right. Then could you tell me how often do you go and see customers please?

Prasad Srinivasamurthy: Going back to how we are building, we talk about desirability, feasibility, and viability. First, we have to establish desirability, and desirability is not established unless and until we talk to the customers. We are together with our business for the asset productivity side of the equation, so we have very deep business connections. Laura has somebody within her team who works very closely with our team to really identify the asset tracking and leakage kind of opportunities. We also bring in customers for the goods visibility type of use cases.

What we do is what we call is a design thinking workshop, and design thinking is a concept of how you build products, and it's been adopted by many companies. It was pioneered at Stanford, and we are really using that. With that we bring the right folks from within the supply chain, like VP of supply chain, we bring in the business, we bring in the folks from BXB Digital. We do a workshop, we identify the why and the what, and from that what kind of capabilities that we have to build.

We are extremely customer focused, and that means we don't build anything until we have talked to our customers internal or external.

Matt Ryan: (UBS, Analyst) Prasad, it's Matt Ryan from UBS. It's obviously very powerful data that you've got, I guess in a lot of ways your customers are trusting you with all that data. Can you talk through what you're doing in terms of protecting it from a security standpoint, and also can you just talk through the conversations that you've had with them about how they feel about you having all this information?

Prasad Srinivasamurthy: Yes. I'll address both aspects. First of all, in terms of the data that we collect, with respect to basic asset tracking. That's basically data that we are collecting with respect to our own assets in the field, so we want to track it, we have to track our own assets. We track our own assets, as they move into the field. As it pertains to things like goods visibility where we are tracking customer product data and movement within the supply chain, we do that in conjunction with our customers. We don't track any data which is customer private data, which should not be collected. If we are going to collect that data, we do that in conjunction with our customers, that's number one.

Number two is from a security point of view we have the highest degrees of security overall from a systems point of view, right from the device to the software, to the applications. I won't go into all the technical details, but this is also where we are partnering closely with Rod and the IT team to essentially put the appropriate security layer on top of the data that we have, and that we collect.

Also what I was mentioning about earlier, this is why eating our own dog food is critical, because when we start to apply these capabilities within Brambles for our own purposes, working together with our supply chain team, with our IT teams, and other cross functional teams, we are building the core foundation, which we can then take to our customers, because our customers are going to ask the same questions. They're going to have the same teams that they're going to interact with, and we can basically give them a full package which includes the security answer.

Jake Cakarnis: (Citi, Analyst) Prasad, Jake Cakarnis, Citi over here. Just building on that question, on the data front, the customers that you're talking to at the moment, are they more focused on their own operations, or are they looking as well as things like benchmarking, how they're comparing to competitors maybe across different regions and in different markets?

Prasad Srinivasamurthy: I would say right now it is more about looking at their own operational efficiency with respect to how the products behave within the supply chain, so we are focused on those kind of use cases right now. We are not looking at any kind of benchmarking use cases. Who knows, these things are evolving over time, and once we start to run the customer pilots, our customers are going to come back with more and more interesting use cases that they would like to solve with this data.

Whatever we do with respect to the data and the insights that we give to our customers, we want to make sure that we are not getting into a situation where we are sharing any of that particular data with anybody else. Maybe for benchmarking purposes, that's a different matter. But any kind of data sharing that's a no-no for us.

Sean O'Sullivan: We're running up against time constraints, so I'm now going to thank Prasad, and ask Graham to come up and moderate the Q&A session. Thank you.

Graham Chipchase: Thanks, Prasad. Right, I know I'm conscious I'm the person standing between you and going to Tom's Kitchen, which to answer a couple of questions already, is not Mr Gorman's latest venture, just be clear.

We'll do Q&A, there's one actually that several people have asked me already, so I'll try and answer that one upfront, which is a bit of confusion around the progression on margins in the US. I think part of the confusion is we were comparing a half year with a full year, we're comparing reported numbers versus some management numbers. I'll try and explain directionally the shape, and then Nessa can add more if we need to.

I think what we're saying is that in the second half of 2018 we expect the margins to improve versus the first half of 2018, because of some of the initiatives we've got in place. The only caveat against that is if we see raging inflation for January, February, March, April, May, June, we're going to be in a bit more of a catch-up phase. That might put some stress on that, but fundamentally we expect to see margins second half better than first half 2018.

If you put the two halves together for 2018, we'd expect the margins for the full year to be slightly below 2017. That is your starting point. Then if you put all together all the automation initiatives that Laura and Carmelo talked about, and Nessa, and we were talking about 200 to 300 basis points improvement, that really if you're talking about the full year 2018, you could expect to be 200 basis points because we had such a bad first half 2018. If you just think about 200 basis points improvement on a full year 2018 number, that's about right, without wanting to get into too much profit expectation territory. If that's okay, any more than that maybe Nessa can answer, but you're pretty comfortable not to, I think. Yes.

Right, anyone else got anything else they want to ask me or the team? I can see, you've obviously had lots of opportunity.

Yes, come on then.

Scott Ryall: (Rimor, Analyst) I'll keep it short. It's Scott Ryall again. Graham, could you comment, we've heard a lot about innovation, technology, those sorts of things. Can you please comment about what you might need from a Board perspective, given there is not any technology or any of that sort of background on the Board at all?

Graham Chipchase: I think to say there's no technology on the Board is a little unfair. We've got some people who work in FMCG and have had good experience in FMCG, so I think the understanding of technology and innovation is there. We don't have, I agree, pure experts. Clearly, most of you will know, we've had a couple of non-executive directors retire, and there'll be some refreshment there, and we are looking to try and get people with slightly more digital and technology backgrounds onto the Board. I think we will answer that.

The Board I think understand what's going on. I was saying earlier on to some people that we did a presentation to the Board back in April of last year around what we were doing on BXB Digital, and to be frank I would say they were pretty evenly divided about whether we should carry on or stop. They didn't really understand it, and they weren't sure what the value was. We took them to Silicon Valley, Prasad presented again a slightly more detailed version of what you saw today, and we haven't given you the fully detailed version because, obviously some of the names of the customers and the distributors are a bit confidential. But really into the detail about just how much accuracy we can track the pallet, and they all got it. In that respect I think they are onboard, and they're now saying, can you go faster.

I think from that perspective we've got what we needed from the Board. I think the point will come when we have to think about maybe big scale conversion on digital, or big scale conversion into large scale plastic pallets, where what we need from them is understanding and the ability to say yes to the investment. Now that's within our own control somewhat, because Nessa and my view is we fund that investment pretty much through existing activities, either better asset utilization, or higher cash generation, or as a result of the proceeds of selling off non-core assets, or we have got a pretty strong balance sheet, we can probably afford to stretch the balance sheet a little bit if we had to. That's how we'd fund it. That's really where the Board would be important. Anthony.

Anthony Moulder: (CLSA, Analyst) Since you opened that can of worms, what are the non-core parts of the business, are you still looking at the portfolio that you currently have?

Graham Chipchase: Not a can of worms at all, very happy to talk about it. I think we've done some of the heavy lifting already both in the last couple of years, but also selling Recycled this year. We've been very public about the view that IFCO North America is on the watch list, because of the return profile, and because of some of the issues in terms of getting those returns to where we think they need to be. We said we'd give it two to three years, and that was a year and a half ago, so do the maths.

Then you also know we're in a joint venture with an oil and gas business, and if there was an elegant way of getting out of that we would. But we've got a joint venture partner, we've got a joint venture agreement, so we'd work our way through that in the right way. Those are the key things we're looking at. But I think a lot of the heavy lifting has been done actually.

Unidentified Participant: Brambles is clearly very focused on sustainability within its business. One of the things that's been interesting to hear is the acceleration in the automation with the business, and clearly that's going to have an impact on the workforce. Is there anything that you're doing to mitigate the impact, or to help the labour that's going to be displaced by machines?

Graham Chipchase: In the initial stages actually, a lot of it is about retraining them to operate the machines better. Yes, clearly there will be some reduction in labour, but actually there's a reskilling process that needs to go on as well. I think in the short term that's the key thing we've got to do is reskill people. I think that's a general comment in society generally, we've got to be able to reskill people to survive in the new world. I think there is a fundamental societal issue here, which is

over time as AI and machine learning increases, we will have more people not working, and then therefore there needs to be a redistribution of wealth and everything that goes with that. But that's beyond the Brambles remit to answer right now, but that is the issue we're facing for sure.

Anyone else? One more.

Jake Cakarnis: (Citi, Analyst) Graham, Jake Cakarnis again from Citi. Just building on that, how do you think that will go, the shift to automation particularly in the North American market where you've got quite strong rhetoric about American jobs, and repatriating labour back onshore. Do you think that there'd be any blow back or any regulatory burden that you take on as a result?

Graham Chipchase: I don't think so, because again we're not destroying a business, we are just bringing it up into the 21st century, and we're making it more efficient. I think the argument always is if we don't do this, we become uncompetitive, there will be no jobs. I think that's always the best argument, you've got to invest to maintain a business, and I think the US Government will be very happy with that, and we're bringing more technology into the country.

Paul Butler: (Credit Suisse, Analyst) Paul Butler here. Just going back to your targets for the mid-single digit revenue growth, and the mid-teens return on capital. Given the strong market position we've heard about, and all the good things that seem to be going on, how do you think about the achievability of those targets? Because it strikes me that there is potential for some pretty significant outperformance on those.

Graham Chipchase: I'm comfortable with the mid-single digit revenue growth, and I think we've heard today a lot about what underpins that. I'm very comfortable with our plans to improve cash generation, and asset efficiency. The thing that is the most challenging is the underlying profit leverage point. I'll say that, obviously today it's looking very difficult because of all the cost inflation, that is the thing we've got to crack. I think if we can do that, then I would be very comfortable. You then get to the next stage, which is if we have lots of things to invest in to make the business better, like innovation, like digital, like maybe investing in more emerging markets faster, that is going to be a drag on ROCE. But that's why we're still keeping that mid-single digit reference.

As I said in my opening, if we don't see those opportunities, we won't invest, and therefore you can expect the ROCE to go up because it will mathematically if we do all the other things. But I would put the caveat around the hardest thing to do will be to get the operating profit leverage, and we've not proven that we can do that this year, and I think it's going to be a couple of years before we can show that. But everything else is going pretty well actually, I'm very happy about the cash generation point in particular.

Seconds from Mr Moulder.

Anthony Moulder: (CLSA, Analyst) Thought I'd try.

Graham Chipchase: You've been very nice actually today. I wouldn't be so nice, if I had the microphone I can assure you.

Anthony Moulder: (CLSA, Analyst) It's a relative measure. A couple of things, obviously asset turns are an important part of how you drive efficiency in this business, is there any scope to give a guidance level or at least a metric as to where you're at today, or where that could potentially get to?

Graham Chipchase: Do you know what I'm going to do? I'm going to ask Nessa to answer that question, and she's probably going to say no.

Nessa O'Sullivan: I think we've been clear from the guidance we've given on capital where we see the efficiencies coming in, but we don't think it's helpful to give it at that granular level by business. It's something competitively we wouldn't want to

add there, but it is something internally that everybody is very focused on and very clear about what the metrics are by market. There are different markets, metrics by market, as you heard Phillip talking about a different metric. You heard Wolfgang talking about a different metric for his business. Also, Mike's business and Laura's business have got different targets based on the actual flows in the business.

I guess our communication would be we're very focused on it, we're setting a realistic pace view based on where our business is going, and we really believe it can deliver the outcomes that we've outlined in the slides we showed earlier.

Graham Chipchase: Thanks, Nessa. Yes.

Unidentified Participant: Can I just ask Nessa a follow up question on the margin points you made.

Graham Chipchase: Feel free.

Unidentified Participant: Graham was saying that FY18 margin in the Americas is expected to be slightly below 2017.

Nessa O'Sullivan: Correct.

Unidentified Participant: Okay. That's despite the first half being down 2.3 percentage points?

Nessa O'Sullivan: We're saying, yes, overall we'd expect the second half to be better than the first half, but we're saying given inflationary pressures, as you look at a full year, you should still expect the full year year-on-year to be down on prior year.

Unidentified Participant: But slightly down full year?

Nessa O'Sullivan: Down for full year. We're not going to give detailed granular guidance because we don't know exactly what inflation is going to do over the next X number of months until we get to the full year.

Graham Chipchase: Okay, we done? Right. Before we let you go, I've got a few thank yous to make first of all. I'd like to thank Louise, Raluca, Sean, and Kelly and all the Stagestruck team for making today go so smoothly, so thank you very much guys.

I'd also like to thank all the presenters, I think you've done a fabulous job. I'm really proud of the passion you show about the business, and the depth of knowledge. It's a fantastic job, and I'm also really, really proud to be a leader of such a great team, so thank you very much.

I just want to finish with a few closing remarks probably to emphasise hopefully what we've got across today. Brambles is a really strong business, underpinned by market leading positions, established network advantage. It's important to recognise that we're continuing to reinforce that network advantage both in our existing markets and new ones. We've got significant growth opportunities across our portfolio, and whilst we're in this time of accelerated change with our customers, we believe it gives us an opportunity to grow with them and to create new value for them.

When we look at our strategy priorities, you've heard a lot of references to it today, I hope you realise that we're all focused on the core drivers of values, and it's all about driving shareholder value.

I also want to make it very clear that we are listening, with the feedback we heard from investors over the last 12 months, or so, is around sensible, disciplined capital allocation, and focus on the cash flow. I hope you've got a very strong message back that we are focusing on that. What I find very good is it's going all the way through the organisation, which is the only way to get these things to change.

Our US business remains challenged, you heard that today, but as Laura said in her presentation, we have got plans to fix it, it will take some time, but I hope you've now seen a level of granularity about what we're going to do. The critical one is the accelerated automation project, I think one of the good things, we are really confident that we're going to mirror the success we've seen in Europe. It's the same technology, it's about now just having a focus on it, having the capital to implement, and having a flawless execution, which again I hope you got the feeling from Carmelo and Laura that we're very focused on that.

When we get that done it will give us a step change in operating performance. Also I think doing this automation in the US, as well as elsewhere, will help us offset some of the inflationary cost pressures we're seeing at the moment, which I feel are going to stay here for some time, because of the labour rate inflation across the world.

Another big area of focus, which I hope you got today, was about BXB Digital. I've said to a number of people, it's the reason I joined Brambles. I was excited when I heard what the Company was thinking about doing over 12 months, 18 months ago, I'm much more confident now 12 months later than I was 12 months ago about our ability to convert the technology into value. I hope you've seen just a starting point about what we're trying to do now to get value out of this investment.

Our approach remains to succeed or fail fast, picking up on some of the questions around how much are you going to spend, and what's it going to be. Yes, that's important, but it's more important that we go fast, we work out where the value is, and then we invest when we know where the value is. We will fail in some things, that's fine, as long as we don't spend a lot of money failing, as long as we fail fast it's good. But I do think that what we're doing, we've seen enough, and hopefully you've seen a bit of what we've seen, we've seen enough to know that digital and what we're doing around digital is going to be a game changer for Brambles and I think for the supply chain.

We've got this global platform already, adding the digital layer is going to really transform our business. Finally, I just want to remind you a little bit about what I said about purpose early on. Businesses are looking for people in the supply chain to come up with smart solutions for meeting the changes that they're facing. They're asking companies to do that and yet still take care of the planet's finite resources. We have got a really great story to tell about this. What we do is absolutely integral to how the world's essentials are delivered to consumers. Our scale, our logistics expertise, our sustainable share and reuse model, all these things allows us to help customers address the problems that society is facing today, and it's something that our employees are incredibly engaged and excited about, and it helps us recruit the younger generation who, even though some of us are getting close to retirement, we do need the younger generation coming in a company like this, and it's a competitive differentiator.

I think if we can put all together, we will make sure that this platform we've got is shaping a smarter and more sustainable supply chain. That's going to allow us to go into the future as a powerful company, unlocking great opportunities that are ahead for all of us. With that, thank you very much for your time and attention today. I look forward to seeing you in Tom's Kitchen, and we'll have a good evening this evening, thank you very much.

End of Transcript