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**Moderator questions in Bold**, Respondents in Regular text.

**KEY: Unable to decipher** = (inaudible + timecode), **Phonetic spelling** (ph) + timecode), **Missed word** = (mw + timecode), **Talking over each other** = (talking over each other + timecode).

**Moderator: Good morning everyone, thanks for joining us and welcome to this webinar on supply chain fundamentals. I'm Jimmy Moore and today I'll be joined by my colleague Ian Taylor. We're both a part of the supply chain solutions team of Invest Northern Ireland. This webinar is one of a series of webinars on supply chain topics and if you want, and if you're interested, you can go and access all of them on the Invest Northern Ireland websites. The, the focus of today is to try and help you to build an understanding of what the different elements, the high level elements are, of supply chain management, and more importantly, how they might help you improve your business. So, if you've any questions throughout the, the webinar, please put them in the chat box and we'll try to get as many as we can at the end of the webinar. But besides that, thank you very much for your attendance and we will now start the webinar.**

**Welcome to today's webinar on supply chain management fundamentals. By the end of this session you, you should've gained a better understanding of what supply chain management is and an appreciation of how it can have a positive effect on your business and results. Supply chain support from Invest Northern Ireland is provided by the Supply Chain Resilience and Development Solutions team, or SCRDS for short. We are a team of supply chain professionals, seconded from business, and have experience in implementing supply chain improvement in a wide range of industries. Our role is to work with businesses to analyse what they do, advise where development is possible, provide mentoring and support through projects to deliver tangible value and cost savings. We can also provide financial support for a supply chain role in your company to deliver supply chain improvement if the-, if the resource or skills do not exist at present. We engage with our clients in three different ways. Primarily through direct engagements, helping clients to improve how they manage their supply chain. By developing capability within our clients' organisations, through workshops and masterclasses. And finally, by providing a body of knowledge through webinars like this and online tutorials. The objective of this webinar is to help you understand what supply chain management is and its main components. It's a very high-level view but hopefully it will be enough to trigger some questions around how you make your changes in your processes which will in turn build resilience, reduce costs and improve performance.**

**So, what is supply chain management? There are many definitions from industry and academia but a food way to paraphrase them is that supply chain management is the group of processes for**

acquiring, moving and storing the materials and information needed to fulfil your customer needs. As with all business processes, there are tools that can be used to improve performance and we will induce many of these tools during the webinar today. Supply chain management dates back to the shipyards in Japan in the 1950s, where there was a drive to remove waste and reduce product cycle times. The car manufacturing industry was the first to adapt it, as an arm of their strategy towards just in time materials management. Due to the success of this approach, other industries soon began to tailor the process to their own needs. The extent that by the early 2000s, supply chain excellence was a prerequisite of being considered world class. More recent supply chain developments have been around driving data and interconnectivity to remove waste and increase responsiveness. To help you get on the development path, we've categorised the main elements of supply chain management. We've provided the explanation of how these can improve your business. This should make it easier for you to understand where is best to start your improvement journey. Supply chain-, supply chain management is probably best understood by describing the components or inputs that make it up. These are risk, analysis and control, sourcing and negotiation, purchasing strategy and processes, supplier relationship management, MRP and digitisation, demand, supply and inventory management, warehousing and logistics and how you manage your sustainable supply chain.

The performance of each of these elements has then a direct impact on key business results, such as revenue, cost of materials, cash flow and customer satisfaction. Enhanced performance can be achieved through identifying your major pain points. Delivering projects it improve your processes and user (mw 04.31). This slide shows the, some of the many approaches and tools that can be used and we will talk to some of these through the webinar. First elements we will address is risk management, so I'll now hand you over to my colleague Ian.

Ian Taylor: So, the first element we're gonna look at today is risk management. This is where we would suggest you start as implementing some form of risk management is necessary to improve the resilience of your supply base and it's best to develop on a stable foundation. To give supply chain risk management some context, in a similar approach to other audit based systems you probably have, such as health and safety management or financial management. As complexity of supply chains increase by remoteness or by the number of links in the chain, then so does the risk of price changes and delivery failure, which in turn will impact your business results when disruption occurs. A good way of identifying this is looking at how vulnerable a supplier is to unexpected events. And the greater the vulnerability, bigger the risk. There are some well-established tools that help identify and predict supply chain risk. One such tool is the Kraljic Model. It categorises your suppliers according to potential impact of supply failure for your business. Once a supplier is categorised, the model has built in suggested actions for mitigations. It is a data driven model, but once set up, it's easy to maintain. And finally, the key is to ensure any identified risks are followed up with then actions. How and when you collect your data can be tailored to your circumstances, but once those risks are identified, you need to work with your supply base to mitigate them. It takes time, but it's important that it remains visible, reviewed regularly through your management system, either daily or weekly meetings. Once implemented, your resilience will improve and this will help avoid negative impacts of supply chain disruption, both to your product availability and to the material costs.

The next element to consider is how you source and purchase your materials. Most companies are already working on improvements in this area, as it's the most visible element of supply chain management to other parts of the business. However, past cost increases of container transport (mw 07.11) has saved the dynamics of sourcing for a lot of materials. So, moving the source supply closer to home is now a strategic challenge for local businesses. Our team here at Invest NI can help provide support in this area through modelling tools, such as a total cost model and supplier profile. As well as advice on where to source. We're also keen to look at potential re-sort opportunities with other (mw 07.38) businesses where the conditions suit. Supplier selection. Remember, when selecting a supplier consider factors such as reliability, quality, cost and communications. Conduct thorough evaluations and weigh the pros and cons of each option to make an informed decision. Establish criteria for evaluation. Screen those suppliers, evaluate and select suppliers. Audit supplier sites. If you can't audit on-site, then perhaps you can do a desktop audit or hire a third party. Finalise the supplier agreement and the relationship management. Negotiation process. Preparation. Understand your needs. Set your goals. Research market conditions. At the opening meeting, initiate the negotiation, have clear communication and establish a positive rapport. Exploration. Discuss needs and priorities only, seek mutual understanding, offer and counter-offer, propose and counter-propose. If the price, term or quantities, close the deal, if you reach an acceptable agreement with your supplier. Implementation. Ensure smooth execution of the negotiated terms. Maintaining a good relationship for future collaboration.

Why are we talking about strategy? Basically, strategy is about navigating an organisation forward and adopting the change and there are a number of ways to think about that. Why is strategic sourcing important to your supply chain? Well, strategic sourcing is an approach to supply chain management formalised in a way information is gathered and used. It lets an organisation consolidate its purchasing power, finding the best possible values in the marketplace and aligning its purchasing strategy to its business goals. Remember, (TC 00:10:00) if your business is changing, then you need your supply chain to move along with you. Supply chain strategy. A supply chain strategy is like a roadmap that helps companies get their products to customers with as little friction as possible. This planning ensures that every phase of a supply chain is optimised, including the sourcing of materials, the manufacturing of components, the delivery and the logistics of all of that. If one of your company values is ethical trading, then you will want to be confident your products and services have been made at the expense of workers in global supply chains enjoying their rights. The supply chain strategy doesn't stop at where to source parts, but what sort of supplier do you need and how do you manage them? Companies often take this approach at a commodity level. Understand your business goals. Clearly comprehend your overall business objectives with your long-term vision. Collaborate with stakeholders, align procurement goals with broader business strategies. Identify potential risks. Align a procurement strategy to mitigate them effectively. Cost management, align procurement efforts with cost saving initiatives, contributing to your overall financial goals. Supplier relationship management. Fostering strong relationships with your suppliers, enhancing collaboration will achieve shared objectives. Innovation integration. Align procurement strategies to support innovation within the business, fostering that competitive edge. Ensure procurement strategies are both flexible and adaptable to changing business conditions or market dynamics. And continuous improvement. Implement feedback loops and regularly evaluate procurement processes to align with ever evolving business needs.

So, why have a supply chain strategy? Most SMEs see supply chain management as a transactional function. With the task to get materials delivered to a factory warehouse are identified and allocated to one or many people in the organisation, (mw 12.24) is by exception. Where do you get involved if things don't happen as planned? Without a strategy that reacts to change, you're left with ineffectiveness and vulnerability. At the economic strategy level, that response to change is crucial if you're to adapt to evolving market conditions, customer demands and unforeseen challenges. As businesses grow, they see the benefits of managing the different supply chain elements using data, measuring performance to help improve delivery results to customers, stakeholders. And then through many development cycles, the supply chain function becomes embedded in a company's strategy, delivering results to other areas of the business, even influencing customers' purchase decisions. The benefits of having a supply chain strategy. Well defined supply chain strategy can enhance efficiency, reduce costs, improve customer satisfaction, and provide that competitive edge by optimising processes, managing risks and fostering innovation. However, probably the most important result of taking a strategic approach is that the company and the supply chain will be far more adaptable to change. Segmenting suppliers. The Kraljic matrix was developed as a way to analysing the portfolio of a company, determining the optimal sourcing strategies for each product or service. The matrix divides the purchasing portfolio into four quadrants, based on two criteria. Supply risk and profit impact. In simple terms, this Kraljic matrix is actually used to manage and analyse a company's purchasing activities. So, routine, low profit impact, low supply risk. Example, office supplies. Leverage, high profit impact, low supply risk. Example, bulk commodities. Then looking at bottleneck, strategic, forces you to think strategically about suppliers instead of focusing on deals. Focusing your efforts where profits are most significant.

Category management. A category management approach can also be taken when defining your supply chain processes. It involves segmenting spend according to market sectors or value strains from manufacturing and is very effective in linking your strategy for sourcing and purchasing materials with the requirements of the end user. A common category management tool for supply chain is tail spend analysis. Here we analyse spend by material and supplier, seeing where there are opportunities to increase leverage by reducing the number of low volume suppliers, by making the purchase process more efficient, by reducing the in purchase order processing. Again, revenue gross margin overhead efficiency and customer service can be improved with this approach. Supplier relationship management. The fourth element is supplier relationship management. It is probably the hardest supply chain element to qualify in terms of business results but it is one that is most important to ensure successful delivery of all the other elements. Supplier management is about moving to a collaborative approach to dealing with our suppliers. Treat them as partners rather than transactional vendors. This means that when problems occur, or delivery and cost challenges need to be met, a strong trust-based relationship already exists, so issues can be worked through as both parties are invested in a longer term goal. As with all business relationships, there needs to be a clear understanding on both sides of what is required. This could be achieved through the use of score cards and supplier reviews. A score card is a data-based approach. This provides clear visibility of what standards are expected and how both sides are performing. Then, through regular reviews, a good working relationship can be developed. Challenges can be discussed and a shared solution met. When implemented, a supplier relationship management approach can contribute to cost reduction and improved material delivery and quality.

Score cards by nature are data driven, but what you include should be what's important to your business. This will ensure the conversation with your suppliers remain focused on what is important to both parties. Now, I'm going to hand you over to my colleague Jimmy, who will continue on with the next elements.

**Moderator: Thank you Ian. The next element we will look at is supply chain digitisation. This is a hot topic at the minute, with the general consensus that digitisation is at least part of the solution of many of our supply chain roles. While this will probably true in the not too distant future, it needs to be recognised that many advances in solutions are still in development and even the simpler packages can be expensive. This slide shows the typical progression through this-, through to supply chain digitisation. Many businesses have adapted steps one and two through things like MRP and data analytics. Though steps three to five are not as prevalent. Mainly due to cost and the need for tailored solutions. One approach that can help most businesses is the use of materials requirements plan, or MRP. This is a software package that automates the process of calculating which materials need to be ordered, cancelled or expedited by comparing demand imagery and future supply. There are many options on the market and they basically all do the same thing, with the cost differential determined by brand or additional capabilities. Simple versions can be built in-house using standard spreadsheets such as Excel and Google Sheets, resourced for the off-, off, resourced for the off the shelf packages is not available. As with all software, this can be very powerful when used well, but can be a drain on resources if poorly designed or if data-, or if data accuracy is not obtained from very high level. An extension of some MRP systems is a built-in inventory management system. Where MRP uses static trigger points and constant assumptions of future demand, these systems analyse historical trends and use more complex forecasting methods to calculate optimum inventory levels. These systems are very powerful but also prohibitively expensive for most SMEs. What they do can, however, be taken off line using business analytics packages, but a high level of skill is needed to do this.**

Warehouse automation is often the area where many SMEs jump into their digitisation journey. As warehouse efficiency and accuracy stagnates, it makes sense to investigate how software and physical digitisation solutions can help. However, there is a wide range of solutions so it can be difficult to figure out where to start. To aid your decision-making, it is helpful to categorise the different solutions. Basic warehouse automation refers to simple technology that assists people with tasks that would otherwise require (TC 00:20:00) manual labour. For example, conveyor, a conveyor or a carousel moving inventory from point A to point B. Warehouse management systems use software and data analytics to automate tasks and procedures. For example, a warehouse management system can batch all the orders that need to be filled in a tight period and sequence the pick lists, so pickers don't traverse the warehouse back and forth multiple times. Mechanised warehouse automation is kind of warehouse automation that uses robotic equipment and systems to assist you with warehouse tasks. An example is an autonomous mobile, mobile shelf-loading robots that lift racks of products and deliver them to human pickers. And finally, there is advanced warehouse automation which provides mechanised warehouse robotics and automation systems with the focus of replacing labour intensive human workloads. Examples are robotic forklifts that

use advanced AI cameras, cameras and sensors to navigate the warehouse to the picker to deliver parts. Or what's referred to as dark palette warehouses where a large volume of palettes are put away and picked without any human interaction. Whichever solution approach you take, some important things to consider are first, that automation must be cost justifiable. So, decide on a budget early on and know what returns you expect. And second, that you should be clear on which problem you're trying to solve before you embark on the automation or digitisation journey. It is common to find yourself in the situation of having the technology and having to look for some problems to fix it.

The next element is inventory management and how you approach demand and supply impacts how much you hold. Looking at supply and inventory, we need to ask first why do we hold it? Simple process map for a typical manufacturing company shows that there are many valid reasons to hold inventory levels well above what we need. Indeed, many companies or customer service departments feel that high inventory levels are a very acceptable cost of customer service. However, how much does this cost? This is not widely understood and a range of studies have show this to be at least 50% of the value of the inventory parameter. High levels of inventory can be caused by overly simplistic re-order systems and policies applied in a complex environment. Inventory management strategy can be broken into two approaches. Those where you plan to hold stock and those where you work towards not holding stock or minimising it. As explained in the previous section, much of this is now managed through software, so the following slides will cover the theory behind the solution. By far the most prolific approach to managing how much you hold is using a re-order point safety stock and a re-order (mw 22.38). These are usually the methods built into off the shelf MRP systems and while effective, it is important to understand that unless rules are updated regularly, using recent demand and lead time data, it can still lead to too much or too little stock. Re-order points are set using an average demand rate multiplied by the product's lead time, with the safety stock added. How much is to be ordered is usually set in line within economic ordering figures. The safety stock, as the name suggests, is calculated cover for exceptions to the average demand. The simplest version is to use the maximum recent demand by the lead time, minus the average, to cover for what is the worst case. Mild forecasting is seen by many businesses as a dark art, little understood and avoided if possible. In reality, it is easy to implement, as it is based on data, though some knowledge of statistical methods is beneficial and these can be learned.

There are effective stand-alone complex systems available to carry out forecasting if your product base is very large, but for most SMEs, the best approach is to keep it at a simple level, using Excel or Google Sheets refreshed regularly to pick up changes and deal with exceptions. This can be complemented by using statistical tools to analyse demand data and set a more precise confidence level, rather than using the simplistic worst case safety stock. If your business adopts a strategy to minimise the stock holding, this is normally done by deploying just-in-time. This is prevalent in the automotive industry and when executed, can lead to massive inventory reductions. It has to be company-wide though, and your processes need to be very, very stable before it will work. So, it's not something that can be introduced quickly. Part of just-in-time that can be employed in any SME and that will reduce inventory holding is what's called a '2 bin Kanban system'. Where parts

are only replenished when needed by refilling an empty bin of two at regular intervals. This is normally used for high volume, lower value parts and its management is often outsourced to vendors, which again adds further efficiency to your operations. The next element for selection management was warehousing logistics. This is often seen as a necessary cost but these costs can be minimised whilst still retaining excellent service levels. Good warehouse processes can have a significant contribution to business success. As well as contributing to customer service levels, they impact cash flow, overheads and direct costs. How the warehouse is set up and managed can also have a positive impact on your company's sustainability. Some things you should consider to ensure successful warehouse management are how your warehouse is organised to ensure efficient receiving, picking and shipping. How do you carry out your kitting to ensure the downstream functions are most efficient? What management matrix you, you, you use and how you improve. How do you ensure accuracy through systems automation cycle counts and what do you do with your slow-moving and obsolete stock?

A final element is supply chain sustainability. Like digitisation, this is an area where consensus is that we need to introduce sustainable processes and supply chains must be decarbonised, but it is far from clear how this will be achieved. This slide show shows a possible approach to introduce sustainability. What is clear from this is that it will take a lot of time and substantial resource. COP agreements recently are driving governments to engage with de-carbonisations and while the initial push is to reduce the emissions through green energy production, it will soon be a lot more focus on scope three emissions that come from a trail source from manufacturing and construction. This means that as well as focusing on how your company uses energy, you're expected to reduce supply from high carbon industries and countries and reduce transport emissions by sourcing closer to home. This will take the form of legislation or taxation, which may differ depending where you sell your products or where you source your products. So, what are the next steps? If you feel there were areas discussed today where you need help, a good starting point is to fill our-, fill out our supply chain checklist. It covers many of the areas discussed today, provides a framework for an initial conversation with one of our team. Then, if you would like some support from our team of supply chain experts, please feel free to contact us by going to our supply chain support solutions web page, click on the supply chain solutions online enquiry form at the bottom, and somebody will get in touch shortly. Thank you for your attendance today.

Okay, so, myself and Ian are now going to go through and answer some questions on this. One of the questions is around, well there's a number of questions here around risk and resilience, just to summarise them is-, can you-, could you describe what risk or resilience are and how do you approach managing them?

Ian Taylor: Yes, good morning, sorry Jimmy, I'm having trouble here with the cam. Hopefully you can hear me?

**Moderator: Yeah, we can hear you okay.**

Ian Taylor: Okay. So, what is resilience in supply chain? Well, as we all know, changes are gonna happen in our supply chain, daily, weekly, and it's about how well we're set up to deal with those changes. You know, to what extent a company can adapt to unplanned changes to its supply base, you know. How, how well are you equipped to deal with unplanned changes regarding rising costs, reduced availability of materials, or, for example, extended lead times? So, as I say, changes are, are going to occur in many aspects of our supply chain and it's about how you manage your risk. You know, do you have a system? Do you have a process that manages that risk? You know, have you analysed your suppliers? Have you looked into your supply base? Have you identified any risks, for example, you know, suppliers who are not in the country, suppliers who are further afield, is there, you know, a risk there of, for example, extended transportation increasing transportation times, so it's gonna affect your lead times? You know, and how do you go about mitigating those? So, understanding supply base and, you know, what good would suppliers, what materials are most, excuse me, are most risky in terms of cost, on-time delivery? As we've shown here in our presentation, there are models that we have, there are models out there that you can use to identify the risks and mitigate those risks, you know.

**Moderator: What, what models would you suggest, Ian?**

Ian Taylor: I mean, one of the ones I, I would-, I would certainly start off with, the one I favour the first would be a supplier spend analysis, which, you know, it breaks (TC 00:30:00) down all of your suppliers, what commodities your, your, they're supplying you with, how much you're spending on them, how long it takes to come in, you know. You could also use the Kraljic Model, which was shown on, on screen there. And again, you know, if there's anybody online here today that are facing some of these challenges, you know, we're more than willing to, you know, join up with them, come out and visit them, and, and discuss these and see can we find some solutions.

**Moderator: Okay, that's great, thank you Ian. There's another couple of questions here which, I suppose, to summarise them, it's really how you reduce-, how, how, how does supply chain management reduce your costs? Which is, is very important. So, again, this is one where we've got another webinar, if you go on our website you can-, we, we go into a lot of detail for our-, the, the clients that work with us, we've done a, a very good workshop where we go through this type of detail. But just to summarise it, a, we very much take the approach of start off with looking at what the materials costs are and, and work with your suppliers and again, there's a number of approaches you can take to reduce those. Basically what you want to do is you want to increase your buying power, and you can do that in a number of ways. First of all, like with the, the strategy and strategic process that we had in the presentation. Categorise your suppliers and work out which ones would you're gonna have to basically work with and partner with to see, 'Okay, well, how much profit are you making, how much profit are we making?' And see what ways you can actually reduce it. Another is where there are alternate suppliers or there are a lot of suppliers where you can basically commoditise it, so, so we're gonna just give our, our business to the, the one or two lowest bidders, but we want the best product that we can get out however we want. And**



**there are others where there, there are problem suppliers where really what you need to do is you need to go out and do a bit of sourcing to try and reduce (inaudible 32.10) for that. Second main area is to do with your labour costs and your direct costs.**

**This is more to do with making sure that your supply chain's stable so that your downstream processes, whether it's just warehousing or whether it's manufacturing, that you're, you're supporting (inaudible 32.30) that's the efficiency of those organisations within your business are as tight as possible because you are making, basically, making sure your supply is, as, as, as predictable as possible. And the last one really is down to inventory and cash, so like, cash is expensive at the minute, so it's a matter of just making sure that you are minimising or you're optimising the amount of inventory that you have and then you have sustainable levels. Only a foreign or basically, (mw 33.03) cash indeed that you need and the other side of that then is with your payment terms with your suppliers. If you're paying-, if you've got very regular payment terms with your suppliers, it's your cash or might be an idea to go and take other plans. So, those, those are the areas of, of cost that I would say take a look at. There's only another couple of questions here, so one of them is around the organisation, how would you set up a-, well, how does a supply chain-, what does it look like within an SME organisation? So, Ian, maybe you wanna take that? Ian?**

Ian Taylor: Yes, so, where, where would you start? Well, it depends obviously on where the company is in its-, in its growth path. Most small businesses I see, I think, it's recognised that there's a tactical necessary function, you know, as, as, as companies grow, you know, the supply chain function, you know, it needs to move into the senior management team. You know, sometimes a lot of companies just see supply chain as a necessity and it just looks after itself. Well, and, we all know that that's not the case. So, it needs to be structured inside the company. Senior management need to be involved, you know, because it's important. It should be recognised that the supply chain, you know, is fundamental in delivering your company's results. You know, it facilitates downstream functions. It changes focus, you know, to relationships based with your suppliers. You know, I might be an advocate of getting to know your supplier, tell them about your company, tell them about your growth path, getting them on board. And, and making it more-, rather than just a supplier and customer basis, you know, get to know them better. Explain to them where your company is at today, where you're going tomorrow, where you're gonna be in five years. You know, so and all that needs all brought-, all brought together, you know. And consider (inaudible 35.21) you know, your operations, your production and supply chain, you know, especially for manufacturing companies. You know separate them, so they become the supply chain operating and supply chain and production stays in this line in production. And sure, like, you know, last week we had a masterclass where we spoke about, you know, strategy. Supply chain needs to have a seat at that table for strategy discussions and, and decisions, you know. So, it follows that the right level of person is owning that function.

You know, having a supply chain strategy, you know, will get you efficiency cost reduction and improve customer satisfaction. As I said, you know, if you optimised your processes it's gonna make your

company, you know, more competitive. You're gonna manage your risks, foster, foster innovation with inside the company, and that means that your supply chain also, you know, and, and make yourselves far more adaptable to change. And it does require some, some work but I think, you know, I don't think, I know that supply chain is an important part of a, a company's business.

**Moderator: Okay, perfect, that's great Ian, thank you very much. A couple of more specific questions have come through to here. It says, one of them, can you suggest a rebate programme to propose to suppliers? My response to that would be it, kinda, depends what-, the ones that certainly I've dealt with in the past have been based on volume or payment terms. So, payment terms, it's simpler if you pay on time if you get some-, a rebate because the supplier you're dealing with, cash is very important to them. And with the one you see the most is based on volume and really, you have to sit down with your supplier or give it an (mw 37.29) yourself as to how much will that extra volume business you're going to give them, what extra profit are they gonna make or what cost savings they're gonna make. And then have the discussion then as to what is fair as to who's gonna share in that saving. But certainly if you're increasing volume it's definitely, it, it's, it is a way of either fixed prices or through rebates, it's a good way of getting them, yes, your suppliers to agree with that. The other one is on, very specific, on tariffs and that's one where I'll say we really, we've got the details of the people who ask the questions here, so we, we'll contact you directly on that then, because it's a bit too specific for us to give an answer anyway. So, fantastic, that's for the questions and there are-, and that's us wrapped up. So, all I can just say is we've had that further support screen up through the questions and answers so if you do need any kind of support, or if you'd like to make contact with us, go on that web page and give us a shout and, and one of us will be in touch just to-, even if you want to have a chat about what the problems that you have or, or the support that you need, there is-, that's no problem, no problem, give me a call and have that type of chat. And that's normally when the, the, the, the projects develop. (inaudible 38.41) contacts it has then developed into a project of some sort. So, again, thank you very much for your time today, I hope you enjoyed it.**

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