**File name:** innovate\_uk\_&\_invest\_ni\_\_innovate\_local\_-\_northern\_ireland\_event\_-\_chapter\_1 (240p).mp4

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, and a very warm welcome to Lisburn this November morning. My name is Kezia Williamson and I am Head of Place at Innovate UK KTN and I am your host today. Innovate K is the UK's innovation agency and Innovate UK KTN is part of the system that connects and convenes that all together. So my role is more focused on working with regional partners to codevelop and co-deliver our portfolio of Place activities across the UK for the benefit of those places, and that's why we're delighted to be partnering with Invest Northern Ireland today, to bring you this event, and it should become clear to you over the course of the morning that we work very closely together to ensure that businesses in Northern Ireland can innovate and grow to meet your ambitions. So as you can see, we've got a full agenda this morning so I'm not going to spend much time talking now, but don't worry, you'll have plenty of chance to see me.

So before we jump into our first session, I'm just going to cover a few bits of housekeeping. There's no fire alarms planned, so if you do hear a fire alarm just assume that it's real-, would please leave the hall using the nearest fire exits, so there's two at-, I feel like an air-steward, two at the back, oh, and one on my left, and there are safe assembly points two and three in the main and restaurant car parks and I'm assuming there will be staff that will appear and help herd us. Toilets are located between the main reception desk where we came in and the ground floor bar and all of the catering will be back served in the foyer where we had our coffee and delicious scones this morning. So we welcome you taking photos and posting your insights from the event on social media. We've got a hashtag, oh, where is it? Innovate Local, so please use that. If you could however make sure your phones are on silent or do not disturb, that would be greatly appreciated. If you do need to pop out to make a call you can head back to the foyer to do this. Okay, so that's practicalities out of the way, so let's get started, and it's my great pleasure to invite Dr Steve Welsh, our Director for Place Skill and Knowledge Transfer, to the stage to say a few words about what innovation means to us. Thank you Steve.

M: Thank you, Kezia, and thank you for having me here today. I'm often, surprisingly often, asked, 'Why is innovation important? Why does it matter?' As if it's an option, and I've got to tell you, it isn't. If all of our businesses weren't constantly under threat or presented with new opportunities, we'll talk a bit more positively in a minute, but if we weren't always under threat of having other people come and take our businesses away, there'd be a lot more 100-year-old companies around than there are. So, that's a pretty negative spin, isn't it? Innovate to survive. We've got a better way forwards here, which we think of

innovate to thrive. It feels like a cliché to say that innovation is more needed than it has been before, that the world is changing faster than ever before. I feel like I'm saying something very obvious, but it is more true now than it has been before. We're facing practical challenges in terms of energy costs, increasing pressure on access to materials, the global political situation is maybe pushing back against some of what we've been used to in terms of easy international supply chains and cheap transport. All of these are challenges but they're also magnificent opportunities, so innovation is needed to do what we've been doing already. So we need to innovate, almost just to stand still, looking at the environment we're in, but that's going to happen. So, in fact, innovation is going to happen, and there are going to be companies coming up doing things, why not us, why not the people in this room getting in there and making that progress.

I'm from Innovate UK, and we're working richly in partnership with Invest Northern Ireland and part of why I'm here today is to really emphasise that commitment that we've got to helping you be effective and pull out the value in innovation. What does that mean? We, of course-, funding is helpful, and we know that probably, innovation means you're going to be working with people you haven't worked with before, trying to do something new, and the funding part of that is helpful and valuable because of course it helps de-risk, somewhat, this idea of doing something new, exciting, that maybe hasn't been done before. So this is why the funding is helpful, but we're also aware that it can be difficult to understand how funding schemes work and what the different options are. But, I'd add it's also not only about funding. Sometimes it's about knowing the right people to talk to or maybe being given an introduction to somebody who has access to a different market than you have, or has information that might help you in making a business case, or understanding what you want to do. All of these things still seem to value greatly, that human touch, and that's why, we've got a number of advisors in this locality, both from Innovate UK and also Invest Northern Ireland, actual humans, that you can talk to, some of them you'll see later in the session, but actual humans you can talk to, to explore your ideas, to look for those contacts, seek advice on funding. I would urge you to take advantage of them because we are committing to simplifying how to work with resources to help you.

We want to join these things up so that you've got a clearer path through the things that are out there to help you. It's taken a while to do that and you can, if you've worked with innovation support before you'll understand that it can be complicated. We're committing to improving that and simplifying it and joining it up, but the main thing to work with is the people, and that could be the people in this room that you meet today in your networking, but also the advisors that we provide to help you get started. We absolutely recognise that innovation happens in a place. We also very much recognise that there's a lot of very creative and ambitious SMEs in Northern Ireland that we want to work with to help. So this is part of our commitment to being here and working with you, in Northern Ireland, and connecting you, within the system of course, but also helping surface what you've got going on here as part of the national picture of what we've got in the UK. I hope you have a nice event today. I'll be around during the day if anybody wants to talk to me and I'll be participating in the surgery sessions later, but otherwise that's it for my opening remarks, and my call to action to get excited about what help there is out there, to help you do something exciting.

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Moderator: Thanks Steve. Now let's here from Dr Vicky Kell, Director for Innovation, Research and Development at Invest Northern Ireland.

F: Morning. It's really great to see a room full of people. We certainly have missed that over the past few years and I certainly think you'll all agree that the buzz that there was out in the foyer whenever you came in, it's, it's something that we need to get back. We need to have these face to face engagements. We need to take the time out to run these sorts of events and you'll hear a few messages coming through from all the speakers relating to innovation. The importance of innovation, the need for innovation, the fact that innovation is essential for your business to actually thrive as Steve said. So I would like to add my welcome to that that has already been given by Kezia and also by Steve, and just say, I hope that you find the sessions here today really useful, and it does excite you, and it does get you to think about your business, the help that is available to your business, to innovate within your business.

Invest NI put innovation at the centre of what we do with companies. We realised the importance of it. We realised the need for innovation to develop new processes, new technologies, new products, to allow companies to survive and thrive in global markets. It's also a way in which you can improve your productivity within your business, increase your bottom line. Invest NI also works to attract inward investment and brings those companies into Northern Ireland that then become part of our ecosystem, and we also support the whole concept of entrepreneurship, in terms of starting new businesses up, and getting those businesses to grow and become global players. Many of you will have heard of the 10x strategy that the Department for the Economy has published, and it's no-, it's no surprise that innovation is the key to that strategy, and it talks about, it's a decade of innovation, and that has then come into our focus and the business plans that we put together.

But innovation, is much wider than a lot of people think. Whenever you mention innovation, people immediately think it's lab coats, it's laboratories, it's research and development, there's test tubes, but innovation can be applied to any part of your business to give you a commercial return. It is problem solving. It is creativity. So it's much more than technology, it's much more than science. It's not just creating those new products, those new services. It can be your business model. It can be how you engage with your customers. You need to think about process innovation as well as looking at new products and new services. You also need to think about the process you follow to actually embed innovation within your business, because it's not a blackout. A lot of people think it's a black out. It's not. There's a process you can follow that will improve the success of your innovation activities and all businesses need to innovate.

Northern Ireland has a history of innovation, from the Massey tractor to the first street car that was developed, the pneumatic tyre. We've got the oldest distillery in the world. The portable defibrillator, invented here. Milk of Magnesia, invented here. Chocolate, invented here. Also the ejector seat, invented

here. So Northern Ireland has a lot to offer in relation to innovation, inventions, and bringing new technologies, new services, new formats, to the world. Problem solving is in our DNA. We have a history of it, we're good at it, and those examples that I went through, that's not the end of the story. We've continued to be world leaders in a lot of different areas. 40% of the mobile crushing and screening (ph 12.31) equipment is made here in County Tyrone, and exported all round the world. 30% of airline seats, made here. One in four computers in the world have a part made here. We feed 10 million people in the world, and one in ten home diagnostic kits, made here. So we are good at innovation. We can succeed. We have a good track record, and we need to get more businesses to innovate. We've got a wide wealth of expertise and global recognition in a number of different areas, from precision medicine, to renewable energy and heating, to cyber security, data analytics. There is a room, there's a place for all those sectors in the global market place where Northern Ireland companies can be world leaders.

In terms of Invest NI, we offer a wide range of support for companies to help you skill up your people, to help you access those global markets, to make those introductions to the right people for you, and also in relation to provision of innovation support, and that can be through advice, it can also be through financial support. Steve mentioned about, you've got a unique opportunity here. We've got people round the room, advisors round the room who want to help you, so please, please, make the most of the sessions today and take time to talk to people. Try and find out the right help for you. Because, we have a wide range of help. In relation to innovation we have what we call the Innovation Escalator, where we get people on the first rung of innovation, to actually understand what innovation is, give them advice. Many people will know things like the innovation voucher, which is often the first step people take on that Innovation Escalator. But, we can help you mature in your innovation approach. Mature in terms of how you approach and where you actually focus innovation within your business. We also work with partners. It's been mentioned about how we work closely with Innovate UK and that's extremely important to us, because we are not the only show in town. We want to make sure that you get the right help for your business at the right time and we will help signpost you to that right help. We're not going to immediately say, 'Oh yeah, we can solve it.' We may not be the right people to do it, but we will certainly help you find the right people to do it.

I mentioned about innovation being a process, and I just want to draw attention to the bottom of that slide where we talk about Innovate NI. It provides a roadmap to the innovation process. It talks about four stages, about ideation, about selecting the right solution, implementing that solution, and then getting commercial return. There's this way in which you can improve the success of innovation activities within your business, so please, take the step today, talk to the people in the room, 'cause it is a unique opportunity to do that, and as I say, if we are not the right people to help you, we will certainly point you to the right person to help you. So I hope you really enjoy the sessions today. I hope you have a rewarding experience and also I find-, hope that you find it useful to your business. Thank you.

Moderator: Thank you Vicky. It's fantastic to have this overview of the Innovation Escalator as you framed it and the paths that you can, particularly in which Invest NI and Innovate UK, can support businesses. As Vicky said, part of today is about getting to meet those right people, so you'll get

chance to meet the amazing teams behind a lot of these programmes in our surgery session later on this morning. Okay. Now I'm going to hand over to Paul Malcomson who's Innovate UK's Northern Ireland Manager and he's going to give us an overview of what's available from across the Innovate UK System. I understand it's going to be a whistle-stop tour, 'cause there's a lot, but again you'll get a chance to talk to us more about this in the surgery session, and we'll also share the slides with you so don't feel that you have to be scribbling everything down. Although Paul did have a good tip that maybe you could-, you do some-, do some photos. Paul, over to you.

M: Thank you very much Kezia, and I would just like to reiterate Vicky's words with regards to, it's great to see so many people in the room this morning and the interest in innovation. Now, I am part of Innovate UK's Place and Levelling Up team, and Place is a strategic priority for Innovate UK. You can see from this slide, Innovate UK has a significant presence, regional presence, spread right across the UK. As Steve mentioned in his introduction, we have a lot of Innovate UK staff in the room today. Please engage with them this morning. Use the opportunity to find out more about their roles and find out what they can do to assist you on your innovation journey. Why innovate? You will hear this time and time again this morning. Fundamentally, it's about growth and prosperity. As Lucy Mason stated in a recent LinkedIn article, 'Ideas is easy. Developing and implementing them is challenging.' But perhaps she should have included another line in there, is, 'Who cares?' I think that's a fundamental step in your innovation journey. Who is going to buy your innovation? If you can answer that question today, this event will really help you on that journey by demystifying and encouraging and clarifying the innovation process for you.

Now, Innovate UK can support you in two ways, grants and loans, and making connections. Now this is a busy slide and thankfully even if you did have your cameras out, you mightn't be able to pick up all the detail, but it's good that these slides will be supplied to everybody here who's registered. But it's a good illustration of our comprehensive suite of products and services. Any business in the UK can apply for Innovate UK support, and our funding opportunities are normally their competitions. At the minute we, as in Innovate UK, we run over 200 competitions per annum, and that can be a but overwhelming as to, where do you find out what competitions are allowed? Is it suitable for me? Etc. But we have several tools that you can utilise i.e. there's signing up for Innovate UK's newsletters, social media such as Linked In, but also we have the Knowlege Transfer Network's funding page and Innovation Funding service, where you will see all the live competitions. In addition, we have the Innovation Hub, and that's a great resource to search for current and mech-, support mechanisms that best suit your business and ultimately, your need. Just for completeness, I'd just like to mention that Innovate UK manages programmes on behalf of other UK partners.

It would be remiss of me if I did not flag the current Northern Ireland Launchpad, which was cocreated between Innovate UK and our Northern Ireland partners. The focus of this Launchpad is the Northern Ireland Life and Health Science cluster. The first round of funding opportunities is now open until the 13th of December, and more details can be found on our Innovation Funding service. I will briefly highlight some, and I have to emphasise, some, of our interventions. Smart is our main nuance (ph 21.19)

but sector specific programme, calls are open throughout the year. We have more domain sector specific opportunities, such as our Catalyst and other calls. The Small Business Research Initiative brings together government challenges and ideas from business, to create innovative solution. Knowledge Transfer Partnerships brings together business and academia. Northern Ireland has been particularly successful with KTPs. Investor Partnerships are a good example of (mw 21.55) grant support and ICURe is a programme that supports university's spin-out companies. Again, Northern Ireland is a leading region in the UK with regards to the establishment of spin-out companies from our two universities. Future Leadership Fellowships is support for the development of innovation and research leaders, and we have several international initiatives to help you access international opportunities and partners.

We have various supporting mechanisms and they've already been touched upon earlier on, but in Northern Ireland we have the Innovate UK EDGE team focusing on accelerating business growth. You will hear more from them later but there's mostly sitting down in the bottom, where I'm standing, right hand corner of the room. You will also hear from Innovate UK's Knowledge Transfer Network on how they connect innovators with new partners and opportunities. Briefly, our Catapult Network, these are not for profit technology and innovation centres. They are designed to connect businesses with the UK's research and academic communities with the aim of turning innovative ideas into commercial products. We have a representative, Sue, I'm just trying to pick you out, where you're sitting, there, again, down in the bottom right hand corner. She's representing the Digital Catapult in Northern Ireland and she has specifically asked me to flag that they have a ten fold net-zero accelerator fund which is funded by (mw 23.44), and that is open for applications at this moment in time, so that's your plug Sue, Sue for this morning.

Now, as I say, this was a brief overview of Innovate UK and some of its programmes. It'll hopefully gives you a flavour of the assistance we can provide, alongside the likes of Invest Northern Ireland and the others that are manning the stands around the room. You know, not only for the surgery sessions, but the pop-ups. Use the surgery session. It will provide you a great opportunity to engage with the wider innovation ecosystem, but now, start thinking about those questions you need to ask and please engage with as many tables as possible. Thank you.

Moderator: Thanks Paul, you get the bonus point for managing to get through all of that in your allotted time, that was impressive. Our next speaker has one of the coolest job titles that I've come across, of Futurist. It always makes me slightly disappointed that he's not dressed in some kind of cool space suit, but we'll let him off. Jonathan Mitchener spent much of his career focusing on the future, and his current job helps him form strategy internally across Innovate UK and across government by looking some decades ahead at future technologies. So I'm presuming that doesn't include, sort of, lottery numbers or anything, like immediately, awesome. Jonathan, over to you. What does the future hold and what part does innovation have to play in it?

M: Well now, good morning, great to see so many people here and great to be here as part of this event.

Do you remember when you had to sit at a computer to use it? Maybe you remember when computers needed their own air-conditioned room, I think we had air-conditioning for machines way before we had them for people in the UK. Do you remember when work was a place for everybody? Now for increasing numbers of people, work is an activity, not a place. Do you remember when you needed to read maps to find out where you were going to go to get somewhere? When you had to remember phone numbers to contact people? Talking about phones, I remember when a phone was just a phone, it made phone calls. In those days, the cellular provider was the arbiter of whether you could connect to another network like Wi-Fi,, or whether you could add something, some feature to your phone, and fairly basic features as well. Now the business model has changed, hasn't it? It's changed so that the phone manufacturers are now-, the tech companies are now the people who have the relationship with you, the customer, and they create the environment in which you can make those choices yourself. You can choose what networks to connect to. You can choose which applications you use. And this demonstrates that innovation, just as Vicky said, is not just about technology, but also about business process. It changes the way that businesses interact and who's in charge and who owns the customer.

I remember when cash was always needed. You always had to have some cash in your pocket, at least for small value transactions. It's not true anymore, and soon it won't be necessary at all. It won't exist. I already pay with my watch, more than I pay with any other means. This demonstrates how even pillars of society can be changed by innovation. Cash was a fundamental of society. Just like with some other innovations, some people will feel left behind or worried about these changes. What about those who say these things will never happen? I remember well, at the start of the World Wide Web, I remember people saying, 'Oh you'll never do banking online because of security concerns.' I remember just as well, people said, 'You'll never have your health records online, because of privacy concerns.' As a futurist, I learned very quickly, never to say never. I remember when TV was a box in the corner and it was in the corner of the room and the broadcasters decided what you were going to watch, in what sequence, when, and at what time. Time based content will soon be dead. This demonstrates not only the change in how we deliver media, and who decided what and when, but it also shows how even social routine is changed by innovation, how we spend our time, how we organise ourselves is not different because of innovation in that area. Social routine has been radically changed for many by social media of course, and the mobile device more generally. It's another example of how our communication habits have changed as a result of innovation and it's also an example of how people trust technology, sometimes too much in my opinion.

Do you remember the time before the internet and the World Wide Web? I was very fortunate in those days to be working on stuff that meant I met Tim Berners-Lee, for a short time, and I always remember two things that he said. One, that people, even then, were so familiar with doing stuff online so quickly, that they assumed it was more mature than it actually was. He kept saying, 'Oh it's more like a baby in nappies,' in those days. I think it's still a teenager today, but nevertheless, because it's so familiar to us and we use it for everything, it's like it's always been there and it's still really a teenager. We don't really understand the impact that it has on wider society and stuff by doing all these things online, but we will. The second thing he said was, if he'd realised people were going to quote URLs to each other over the phone he'd never have designed the format the way he did. But if you recall that time, before the internet and the World Wide Web, you also recall the time before cyber-security was a thing. This demonstrates

how the greatest innovations can also spawn undesirable side effects, but that those effects, then spawn new sectors and new businesses and new industries. And I, you know, just highlight the-, in this area, in Belfast, the excellent cyber security innovation and knowledge centre. Now, I just want to say something about the major shifts I see happening in the future. We've looked back already. Let's tackle AI first. You'd expect me to say something about that as a future technologist. People talk about AI as if it's one big monolithic lump of stuff, where in fact, one needs to be rather more specific I think. The generative AI that we hear so much about and that's exploded recently, will assist and change many of the things that we do every day, because it will become embedded in the tools that we use every day such as Office and other creative things.

And if you make something easy for people, they'll do it generally. And that's what's going to happen with that I think. We're going to embed it in so many day-to-day tools that we'll just use it because it's so easy. We will have to be careful as well. But it offers much more than that and particularly in combinations with other technologies. The one thing I always remind people as a futurist is that the biggest, most impactful change in the future, as in the past, comes from when you combine technologies together. When things happen at the right time. When you combine something from one area with another, that you didn't necessarily think went together. And, I think think the, the biggest thing for AI will be this combination with super computing, alright? We already had very fast super computers in the world, but we're going to have, not just this traditional type of computing, but quantum computing, photonic computing and even biological computing where cells switch on and off. They will give us orders of magnitude more powerful with computing than we have today, and when you combine the AI with that, you get very interesting things potentially happening.

Combined with AI, that means that the computers can write the code for the programmes that work out what comes next. It means they can test the code, they can look at the results, they can analyse the results and it can iterate that far more times than a human could. So, by going that, those systems will allow us to start addressing the really big problems in the world that we don't yet understand. This will include understanding better how the brain works and indeed, how to interface it to our computing technology. It will include enabling us the understand the complex microbiome that goes on in the gut and within the body to better effect. And it will include helping us understand how the world works so that in the natural world, new materials can have amazing properties inspired by nature. It will enable us to do more from space for the benefit of those of us on-, on, on, here on Earth and it will eventually transform us into a species that inhabits more than one planet.

I also look forward to the day when it helps us realise that room temperature super conductors, so that we can get this energy that we generate, particularly from natural sources and the renewables, from where there is sun, where there is waves, where there are-, where there is wind, to where it needs to be used. And I think it will definitely help us design and finally achieve abundant clean energy sources that are practical and efficient such as nuclear fusion. Now, drug discovery is commonly trumpeted as an application for AI and that's already true today, but I think when we combine it with synthetic biology, it

will open up far more new pathways to diagnostics and treatments. Completely new ways to engineer biological systems for all sorts of purposes, and we will augment human beings as well, in all sorts of new ways, both physically and mentally. And I think, you know, both initially to correct defects, but eventually just to enhance our, our capabilities. And this will lead to a debate about what is right, what is acceptable, what people think is, is, is, is okay and also about how we differentiate between augmented people and non-augmented people so that we don't discriminate.

AI combined with robotics will define experiments, select the materials that's needed, analyse the results and iterate, as I said before, the most promising avenues and robotics has a huge potential. How many robots do you have at home? I have three currently. People say that's unusual, but it won't be unusual in the future. I had an integrated smart home way back in the early 90s and that's quite common these days, but robots will increasingly have a part to play in transportation, in medicine, in companionship, as well as in the, sort of, industrial applications that we already see. Returning to the theme of combinations, I believe that when we-, when AI is embraced by the education system, then we will finally move from the one to many old-style education processes to truly personalised education and that will finally recognise that different people, need different ways to learn the same material. And that can have a real impact on skills, the skills uplift of our people, enabling more and more people to take part in the work that will be available in that time and that helps our future competitiveness and can be huge for the country.

Now, AI prompting can already lead to generate-, instant generation of text, pictures and video. In fact, I allowed it to assist me with the preparation and review of my talk this morning. In manufacturing, we'll eventually see that AI prompting leads directly to a new specification or a design for the thing that's been built. And that means that the organisation of bits will drive the organisation of atoms, far more closely that does already. And digital twins will be built before the physical instantiation, not retrospectively. Even with just those examples, I hope you can see-, imagine the situation where the world of atoms moves as fast as the world of bits. Many years ago, I spent some time at MIT in Boston and even back in those decades, all those decades ago, they had a lab that was called The Centre for Bits and Atoms and I think that was very forward looking in those days. We're now getting to the situation where we need to look at both of those at the same time.

Simple artificial general intelligence, should develop in the next decade and truly advanced AGI after that. By that time, we will need to have worked out what is acceptable or appropriate for those systems and how to ensure the safety and norms for them. Now some people are describing how the edge becomes the centre, so that means how technologies that were-, seemed irrelevant are now central to what you do. And competitors to your business that seemed irrelevant but now become the greatest threats to your business. We're already seeing this where the traditional car companies are starting to look at what Apple and Google and people like that are doing, not traditional automotive sector at all. Because after the post-industrial combustion engine era, really a vehicle is just a-, essentially a computer controlled box on wheels which carries goods or people. And those tech companies already have most of the technologies and things that they need to compete. You know, they have power management, security, navigation,

sensing, user interface tech, and business relationships.

Powerful brands that people trust already and big service and product ecosystems that people already bought into. So is this an example of how, you know, somebody moves from one sector and takes somebody else's lunch away? Imagine a world of not just self-driving cars, but personalised transport pods, which take you and your friends and family wherever you want to go in a shared, comfortable and efficient way. I think this will start with, sort of, site-based, fleet-based local systems first, but will certainly expand. And aside from AI, and new powerful computing, we'll exist in the real world and the immersive virtual world at the same time. People will be wearing headsets out in public as commonly as you see them wearing earbuds and smart watches today. We will have moved on from the device that you have to hold in your hand to be online, to technology that means you can be real and present at the same time in online spaces and places that you can't actually be. And increasingly, we'll have trusted twins of ourselves that we can trust to act on our behalf in those spaces.

This effectively allows people to be in more than one place at one time and that's a real game changer. I think that shift will change how we really-, you know, legally regard people as being present and able to action things and it will cause the legal system to have to catch up in the same analogous way that it did when we had the music revolution and the music industry changed with copyright laws and so forth. I see that happening again. So, I hope that with all these example from the past, together with the, sort of, brief stimulus of where the future can go in decades ahead, we can now all appreciate that the burning platform we're standing on, is not a threat, but it's an opportunity as other people said to innovate. From the Industrial Revolution to the Digital Age, those who adapted to change not only survived, but thrived as, as Steve said. So, the innovation imperative, is not merely a suggestion, I would say it's, it's a survival strategy and I hope I've illustrated that, you know, innovation, just like Vicky said, is not just about technical change, but also business models, process and even cultural change.

You may be surprised when I say, it's not even just about creating new products and services. From 2016 until recently, I combined my futurist role at Innovate UK with running one of the innovation programmes, and it was radically different, a different type of programme, because it only gave grants to companies to improve productivity and competitiveness by solving problems with their existing products and services. It was called Analysis for Innovators. It was on the slide that Paul used a couple of times just now. Around twelve is opening I think just now, and even though it's no longer my baby, having invented it, I'd recommend it and I can talk to people later if you're interested about exactly how it works. So, the world around us is evolving as we all know at a huge pace and we have to harness the power of creative thinking, technological development and strategic foresight. Today's burning platform demands that we not only adapt to change but try and lead it.

Innovation isn't a luxury, I think it's a lifeline. I do this job because I think it's really worthwhile. We've

seen in the past how it advanced technology in the great wars of the past and more recently, allowed us to deal with a pandemic and such as situation. This wasn't only true of vaccine development, but also contact tracing, vulnerability assessments, even working practices that allowed us all to get on with life, both work and otherwise at a distance. And so, innovation will drive success in the future. Looking ahead, the transformative change on the horizon is absolutely staggering even for me, you know, I spend my life worrying about these things and it's, it's huge. Artificial Intelligence, Sustainable practices, global connectivity, all of these things will redefine industries and create new ones. The businesses that flourish are those that embrace with shifts that I've talked about and incorporate innovation into their own DNA.

M: Thank you. Chris Jordan (ph 44.37) from Clarendon Fund Managers. I'm just curious if you could give us some examples of how SMEs can integrate AI with their existing products and services, and also whether you think they'll need to develop their own AI capability, or whether it'll utilise third-party AI from, you know, the, the big technology vendors?

M: Yeah, great question. As I said in my talk, I think we have to break AI down into different parts because it's, it's a different beast depending on which bit you look at. I think there are areas where SMEs can actually to the, the initial innovation in AI, so there are, you know, there are SMEs that look at how to get robots to, to walk and stand up and go upstairs and things like this, and plan what they're going to do. I think that sort of AI algorithmic, development-type stuff is right for SMEs to get involved with and certainly, that's the sort of thing that I think the innovation that our robotics programmes would support. We've done a lot in the area of robotics in hazardous situations, because the initial theory is, I think slightly short-sightedly, that we should use robots first where humans don't want to do with work. I think it's just as important to get robots to do the work that humans do. But anyway, on, on the generative AI side, which I think is also what you're alluding to, I think it is a case of using what's available and building on top of it.

So, yes, the big tech companies are all working on the generative AI piece. People like Open AI are trying to open out. In fact, you saw the, the board logistics recently over the weekend of people being employed and then not employed and then re-employed at the top of that company, because I think there was a debate about how open their open AI should be. But however-, whatever they decide, I think there will be opportunities for SMEs to use the platforms and the technologies of others in that specific space where we talk about this generative AI that, you know, I mean, we-, for example, it's already happening. I know a company that does-, that works in the film industry. Quite a small company but they use other-, you know, they bought into that generative AI platform from one of the big vendors so that they can offer their customers the ability to produce special effects, just-, you know, just by typing in a prompt. So, you type fire in the desert and you've got a video in three minutes of fire in the desert, you know, which is quite hard to generate normally. So, so I think, yeah, I think it's a mixture and I think it depends which part of AI we're talking about. Sorry, a long answer to a short question.

M: Northern Ireland has now a climate change act that requires rapid reductions in carbon emissions, but we've now begun to, because of the Ukraine war, we've begun to import liquefied natural gas to the good

of three times the emissions of previous supplies. I'm just wondering, is there any innovations available to make better use of local wind energy?

M: Wow. I don't know. I think it's always best to say if you don't know, say I don't know. But I think yes, there, you know, I never say never as I said about innovation. There's always an answer to something that somebody comes up with. I think there is so much activity at the moment. If you look-, I saw a graph yesterday of-, even with Innovate UK, their programmes. What we're spending on digital and what we're spending on in terms of the sizes of the programmes for the past year, what we're spending in the different domains on digital and on health and on things. And the Net Zero piece was bigger than any of the others. And that gives me great encouragement that, that, you know, because we don't come up with these ideas, but when other people come up with the ideas that we can support them. So, yes, I think it's-, I think it's a real problem getting-, as I mentioned in my talk actually, you know, getting these renewable sources of energy to the right places and the right time, without losing half the energy on the way. We do need progress with super conductors, but I think that will take a little bit more time. But yes. Anything else? Probably time.

F: Is there anything that we can do-, if some of these things were at a meeting, bring some together as well as, it's not just about technology, but also how we're doing it? Is there anything you've learned or could draw out from the history that you were talking about there that makes a difference to that?

M: Yes. I mean, the question for those that didn't have the mic is, is about are there things you can do to, from my experience of these things to, to allow it to happen better? I think the biggest thing for me is to get people who you don't expect to work together, together, right? The convening power of what Innovate UK does, I always say when I ran a briefing for, for my Analysis for Innovators programme, more innovation happened as a result of people coming to that with some sort of commonality of interest and talking over the coffee break and talking over the lunch break, than it did from listening to the briefing, right? Because only so many people can apply to the competition, right, for the briefing, but lots of people can go away and do stuff that we never then hear about because they met at that briefing. And, so I think in terms of the longer term stuff that I'm talking about, you have to start to talk to people that you don't believe you have anything in common with, because you'll soon find that you do and that's where the big radical changes come. You don't get them from incremental single technologies. You get them from combining things that you thought, well, that's nothing to do with what I do, but I'll have a chat with them over coffee in case or I'll talk to her about, you know, what, what happens. And you, you do see things that spark ideas that then get the juices going and I think, as, as other speakers already said today, once those sparks arise, it's important to grab hold of the opportunity and talk to the right people who can help and catalyse that into some action as, as Steve said, you know. So, a bit of a wishy washy answer I know, but in, in the essence of time, I think it is-, it is all about the convening fact and don't be afraid to talk to people that you don't think you've got anything in common with because I think you'll find that you do. Thank you very much.

Moderator: I think we can take that as a fantastic call for action actually for today. So, you've got, everyone's got a target now. The networking break and at lunchtime, make sure you speak to

somebody that you don't know, that you maybe wouldn't have put-, gone up to and spoken to previously, because you never know, you might just come up with the thing that's going to actually revolutionise how we live.

**File name:** innovate\_uk\_&\_invest\_ni\_\_innovate\_local\_-\_northern\_ireland\_event\_-\_chapter\_2 (240p).mp4

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: So, next up we're going to hear from some real businesses that are really innovating, and are on this journey already. So I'm going to invite Ian Topping, commercial director at Allsop, Trevor Graham, founder and CEO of Ampliphae, and Naomi McGregor, founder and CEO of Movetru to the comfy area of the stage please. While they make their way over I'm going to play you a video. This is something that we've put together in advance of today to showcase some of our amazing businesses in Northern Ireland, and the innovation that they're-, that they're doing, and also a blatant plug to how we've supported them. So, Ian and Naomi you'll recognise in the video, and we're also delighted that, that Trevor's here joining us today.

M: Allsop is an innovative software company delivering value to our customers by automating their processes. Innovate UK was something that we introduced to us by Invest NI. It was perfect timing for us, as we moved into a more standard product offering, and we needed to understand our target market, and we needed to build a proper marketing strategy. So Innovate UK came along with a programme run through Queens, the output of which was to give us a really strong value proposition, alongside a really strong strategy, built off the business model canvas.

F: Movetru is a wearable device for injury mitigation and performance improvement across athletes. Through Invest Northern Ireland we were able to receive an innovation voucher, which allowed us to allocate £5,000 of funding to Ulster University textile department, and this actually allowed us to create our first ever textile prototype. So, by being able to use the innovation voucher, we had a deeper understanding of a specific area within our business, and also took that real time pressure off us to innovate in our area. So I think the innovation voucher just really enhanced our ability to grow as a business in a shorter period of time.

M: Leckey are a provider for paediatric equipment for children with additional needs. The knowle dge transfer programme was found out through our work with Invest NI. Specifically we're looking some technological advancements in one of our main walking products. What the knowle dge transfer programme allowed us to do was we were able to measure how the pedal walker was allowing the user to develop their walking skills, and a way to link that up to an app service. We had a vision of what we wanted to achieve, but probably didn't have the skills or the competencies within our team to be able to leverage that. We probably wouldn't have been able to achieve the end goal that we did without the support of the knowle dge transfer programme. We're lucky to have this type of support within the Northern Ireland industry, so I would highly recommend that every other business, if they've got a goal,

or they've got a project that they believe they can avail of the support of Invest NI to really seek that path.

M: Invest NI support has been quite broad. Fundamentally, it's supported our innovation, so it's allowed us to continually develop our product, and continue to offer more value to our customers. The innovation growth specialist that we were engaged with was able to listen to what we do on a daily basis, and was able to translate that into a formal strategy. The greatest benefit of that was us able to communicate internally with the team, why we do what we do, and the value that our, our target market is, is getting from what we do.

F: We were first introduced to Innovate UK Edge during our Innovate UK women in innovation award. From this, we were able to receive support and guidance across a variety of areas within the business. We decided to apply for the Innovate UK smart grant, because on paper it just looked exactly like what we needed, and our Innovate UK smart grant allowed us to start our sports innovation laboratory in Belfast city centre, to conduct athlete trials, specifically in ACL research. It allowed us to grow from a team of two people to a team of seven people, and the Innovate UK smart grant allowed us to do this. For any business that feels like they have a gap in terms of their area for pitch decks, or financial support, I would really recommend them checking out Innovate UK Edge, because their monitoring can really accelerate that area within the business.

Moderator: Trevor, I'm going to start with you, 'cause you didn't get a shiny video. Sorry about that.

M: I didn't get (talking over each other 05.02).

Moderator: Yeah, can you start by just telling us a bit about your business, and what, what, and your innovation journey, I guess?

M: Sure. Thanks, (mw 05.12). So, so, Ampliphae is a cyber security software company. Our products help organisations to deal with that transition that's, you know, well underway way now, moving from onpremise business applications to cloud hosted business applications. We help keep customer data, and corporate data safe, as it transitions across the network, and when it resides up in the, the global cloud platforms, wherever it is in the world. Our innovation journey, we've, we've made use of and benefited from a couple of programmes that were mentioned in the video, because when we-, when we started, we were, you know, you know, I think somebody referred to us bear horse (ph 05.50) start-up, but we, basically, we had nothing. We, we were starting from, from zero, and we made use of investment from private investors and from some VCs to get started, but we-, Invest NI helped us with a, a get into R and D, and a grant for R and D, to start with. Folks like Melanie (ph 06.09), who's here in the room, nurtured us from, from the get go. That allowed us to get started, build some basic technology, and, and move on. Then, in order to bring some more skill into the business, we made use of the KTP programme,

that, that's been mentioned, and I think Steven's going to talk about that later on today. It's, it's a very good programme. It allows companies to get access to world leading researchers inside the university, and, and allows you to bring those, those skills into the business on a one year, or a two year project, to, to effectively, to, to move, move the business forward. Then, most recently, in the last year, we, we also applied for a smart grant, and we were successful in getting that. We've used the smart grant to move our, our business into a different market, and to build a collaboration with a US company, and an Italian company, that we just wouldn't have been able to do without the, the smart grant, to help us do that. We're building out a capability in London. We've build a private 5G, secure private 5G network in London. That's really targeted at governments, and manufacturing businesses, healthcare and hospitals, who want to have the benefit, excuse me, of a-, of a-, of a, a really solid cellular network, but with the full security behind it that they need to allow really sensitive data to transition across a, a wireless network. So, so our journey, we've basically gone, you know, through the full circle of, of innovation opportunities as we've built up the business, and that's been really beneficial to us.

Moderator: Thank you. Okay, Ian and Naomi, sorry for making you sit on the stage while the video was playing. You did very well. It's great to have you here. Can you tell us about why you consider innovation to be an important part of your business? I think it should just work.

M: Okay. Innovation, as, as the speakers before were saying, it's, it's not a choice. For us to be a valued partner to our customers, we must innovate. We must listen to the current problems they have, and then go up stream to find the cause of those problems, and nip it in the bud. We're doing that with the, the latest AI. We're looking at generative AI in order to build out. We're looking at voice, and other technologies, in order to help our customers automate those processes. But, if we always do what we've always done, so we're, we're looking to innovate on behalf of our customers to give them a better value proposition, and a better customer experience for their customers.

## **Moderator: And Naomi?**

F: For us, it started during my masters in engineering. So, the innovation piece was from the very beginning, and there really wasn't a foundation of a business to develop on. So, it, it, it naturally came that it had to be innovative, because it came from an idea that led into developing a business that hadn't been done before. So, for us, the innovation journey was a very natural step that, you know, we're starting from scratch, we're not starting from a traditional business, and I think that it was very immediate for us, especially coming from an engineering background, it led quite naturally. And, for us, every step of the way has been, how do you innovate, and also how do you validate your innovation, I think is a very big, important one, that we haven't really touched on today, that how do you actually make sure that the AI, or the machine learning, or the data, is actually good data to begin with? Because innovation, for the sake of innovation, isn't helping anybody. We actually need a product that gives people solutions to their current needs. So, how do you meet the need of the user, and actually do that to make their life easier, safer, more affordable, a better quality of life, and that's the real reason of innovation, not just for the sake of it.

Moderator: Yes, and I was thinking about that. So how do you-, and you mentioned as well about solving customer solutions, sorry, solving customer challenges, how do you understand what those challenges are in the first place, and know that you're solving the right bit of the challenge? You know, do your customers definitely know what their problems are, or are you, sort of, solving a problem that was created by something else? You know, it's, sort of like, solutions on top of solutions?

M: If I may?

Moderator: Yes, go for it.

M: I find that Invest NI is a valued partner in that validation process. You know, we're, we're a bunch of guys and girls, we're very proud of the fact we're 50, 50, male and female, in our tech sector. So we get, we get a broad spectrum from those guys, but we're talking with guys that are maybe from the age of 22 to 74 who know technology. When I go back to Invest NI with a new idea, and we're wildly excited about, then we get really good challenge coming back from our client exec, and from our, our R and D exec. They help us to validate the, the broader market opportunity, and not just a point solution. So, as, as Naomi quite rightly said, it's all about validating, that your idea, what you think is beautiful and fantastic, has a marketplace, and has a benefit to that marketplace, and invest it in a really good asset to me, and to Allsop, that role.

## Moderator: Naomi, do you want to add to that?

F: Well, for us, probably coming from a different area, my masters had twenty different people that we spoke to and interviewed, followed by, okay, if I'm gonna decline my grad job, we did 100 customer discovery interviews, and it seems like it takes time, but you actually get very different answers, but then the data comes out of them, because we made sure it was-, we have a psychologist on our team, so we made sure that the questions weren't provoking them to tell us what we wanted to hear. And then the whole way through we've been working with athletes, physiotherapists, and we've been working with people in industry, and getting their feedback. Yes, it is important to get people to challenge you. I actually love when someone challenges the business, because I feel like that's the time that you can actually see how much you know about your sector, instead of it being that it's a negative. You, you can listen to their advice, but you can also understand that you can be the subject matter expert and be challenged, and it's quite enjoyable actually.

## **Moderator: Duly noted. Trevor?**

M: Yes. So I, I'll give you two perspectives. I'll give you our perspective, and our customers' perspective. So, as a cyber security company, we're often in the, you know, somewhat negative position of trying to,

to, to explain to customers the bad things that might happen. So, we're leading-, we're, and it's a little bit unfortunate, but we're often leading customers saying, 'Look, are you aware of the risks that are involved here? Do you understand what your-, what, what the potential negative consequences to your business might be?' And, in that sense, we're, we're leading the customer towards a position where they understand the risks, and then we help them to, to resolve those. But, the perspective from our customers, because, we, we've, we've been involved with lots of customers who are in the process of innovating themselves through moving a lot of their operations to, to new platforms that are cloud based, and, and re-skilling their, their teams as they do that. And in those cases, my observation would be that a lot of-, a lot of companies, they, the imperative to do that is probably cost based in the first instance. You know, they, they've discovered that maybe a big-, a big chunk of case in their business is around the, the, the business software, and the ERP software, whatever they happen to be using, and they're, they're driven to find something new that's lower cost, and, and move towards that. But once they get started, they rapidly find the, the advantages of flexibility and speed of innovation that they can get from modern platforms, that are in the cloud, and that they can-, they can adopt flexibly. So, you know, once it starts, they, they go looking for more and more innovations. We've got some companies that we work with that are, you know, entirely cloud based in their infrastructure now, they've moved everything long. Whereas, they previously would have had a lot of software and applications, you know, on desktops, and in broom cupboards, and, and all around the company. So, watching that innovation journey, I think that, that's the sort of thing where, once you make the first step on the journey, then it starts to grow, and, and they can-, they can achieve real benefits from it.

Moderator: Okay. So, how do you get started with all of this then? So you, sort of, said you've had various bits of innovation funding and support, how do you get started with it, and what's the-, what was the, kind of, catalyst for all of that? Trevor?

M: Well, yeah, I'll go again. So, as I said, we're, we're a software company, so innovation was, kind of, the purpose of our company to begin with, and, and I recognise that. But, as I've said, we've seen with, with, with customers who are from probably from more traditional businesses, that it can sometimes be difficult to make that decision, to say, 'Look, I'm going to go-, I'm going to go innovate.' You need a-, you sometimes-, you need a-, you need a will to do it, and sometimes that comes from a trigger, sometimes from competition, sometimes it's from, as I say, you know, a, a, sort of, a cost reduction imperative. But, once you make that decision to get started, I, I would say you, you need to build a realistic plan about what the thing is that you want to achieve. What do you-, what do you want to innovate around, because, thinking about all the good support programmes that are available, and you'll hear more about them the rest of today, we've heard a lot already, I think being prepared, and understanding what you want to achieve, before those programmes get started is, is the-, is, is one of things that, that you need to do. Because funding, if you treat the innovation funding as a-, as an end in itself, then you probably won't succeed. If you treat the innovation as a way to accelerate what you're already trying to do, or to build a, you know, build, build a, build your business in a better way, and fit that funding into the context of your existing business, you will be much more likely to be successful, and that, that would be my advice, is get, get, get started early with understanding how it fits in your business, and then-, and then go looking for opportunity to how to make that happen with funding, and people, and whatever else you need.

Moderator: Yeah, I can see, with so many different options that we've already shown, it can get a bit, like, 'Oh, which one shall we go for next?' Rather than-, so actually just thinking about your own business, what do I need, and then let the programmes fit to you?

M: Programmes fit to you, and, and pick the programme that fits the, the stage of your journey. I talked a little bit earlier about us going from, from zero through to, you know, our, our current situation, where we're collaborating globally, and the programmes don't all fit every stage. You need to pick a programme that fits. If you're at a very early stage, pick a programme that, that fits for more R than D on the research side, and, and, and then, you know, later on in your-, in your journey, choose, choose appropriately.

M: I think, from our perspective, we have significant growth plans. We have significant export objectives. We are three guys that own the business, we're three local lads, we don't have any brilliant ideas, per se, but we, we know where we want to, to develop the business. The best thing you can do is pick the phone up to Invest NI. I now have quarterly Teams calls with my client exec, and at each call I'll explain what out quarterly plan is, and they'll dovetail in with whatever support they can provide, or they'll signpost other opportunities to, to look for. So everybody in the room knows where they want to take their business. Everybody has a dream, and an aspiration of what they want to do. Pick the phone up, ask someone what their experience is, and what they've done, and that will start to lead into a one page plan. We're not great 30 page business planners, but a one page plan will say what you want to do, and you'll have your measures on that, you'll have your vision, your aspirations, and then speak to someone who will then introduce you to someone else. I think Steve said, you know, reach out, speak to other people, and ask them what's going on. You know, the other speakers pointed out some of the leading lights (ph 18.11) we have in Ireland, or Northern Ireland, that are exporting, and reach out and speak to those people. But it's all, all about asking questions, and getting a bit of help and direction.

F: I think our journey, again, it started from five years of university to start of business, so there was no pot of cash anywhere. There was-, there was a need to find a way to cover me going into this for twelve months, so that's what I said was my first way is I have to find twelve months to cover me. That first came from Invest Northern Ireland. I then found a next, like, increased in size pot of money from the Royal Academy of Engineering, and then we went to the Women in Innovation. Each time the money naturally increased, because we went from that, to then growing to have two of us full time, and now, with our smart grant, it's allowed us to have seven people, to grow into an office space in Belfast. So it's partially the timing of the business as to, well, what makes sense for now, because if I started off Movetru and applied for a smart grant, we, we just would have wasted time. We wouldn't have had a £500,000 project given out of an idea. So it's finding the, the right time for that piece of funding, and then, with that, it's making sure that you don't waste time with funding that doesn't suit your business. Because a lot of, like, our, I think the longest point for us is after we read it, we decide does it actually make sense to spend time applying, because it's taking out of your day, but also the application actually then has added the-, for our smart grant, we sent it to about four different investors then they closed with us, because they read it, they saw that we had a full business plan as such, from the smart grant, and invested that way. So I think that there's, there's an advantage to applying, but just making sure that it matches your time commitments.

Moderator: Have you ever got side tracked going down a, 'Oh, this funding looks good,' and then-,?

F: Oh yes, there was one last year, that we completely did a completely curve ball. Because we thought £50,000, there's something we, kind of, want to do, has nothing to do with this, and one of our team members did it. Then afterwards we got rejected and we were, like, 'Yes, that made no sense anyway.' We were, like, 'Okay, that's keeping us humble.' So I think it's really important to actually just take that step back and be, like, that wasn't why we're doing it. Stick to our passion area. Because even when you reread it, you can-, you can see if you're not in passionate about area, so focus on the innovation that you care about.

M: I think that's a very valid point. We, we get distracted with an Innovate competition. We had no knowledge of Innovate. I spent many, many hours writing the application. We were declined. It was during Covid. We got a notice back saying we wouldn't get any feedback, because there wasn't the ability to do it during Covid. My frustration, I spoke to my client exec, who then introduced me to Innovate locally. I spoke to Tom Kinney, lovely, lovely man, and he went through the-, very gently, went through my application with me, and pointed out why it wasn't successful, which was a humbling experience. But, from there, we then learned with Innovate, and we went through the Edge programme, and then we've, we've learnt of other opportunities, but we've also learnt that you should spend time identified something that fits your innovation. If I'm being honest, the application I made fitted my commercial hat, but didn't fit our innovation hat. So if you always keep, you know, your single most important goal of continually improving at the fore for that grant application, then it's important. But if I had of picked the phone up and spoken to Invest NI about the grant, then I wouldn't have wasted a lot of time putting forward the application.

Moderator: Have you got anything to add there, or?

M: No, I completely agree. As I said earlier, I think fitting, fitting the funding to the stage of the innovation is, is key, you know. I think the, the stories that we've had here-.

Moderator: Have you got distracted with one, or are you-,? It's a safe space. You can share-, you can share with us.

M: Yes, no. It is-, it is always distracting. We've been very lucky in that we've, we've, we've been successful in the applications that we've actually made, but I guess we probably spent, you know, quite, more time than we should have done thinking about, you know, which competitions we should go-, we should apply to, and, and how they would fit to, to, to the business. We probably rejected more than we-, more than we applied for, in fact. So, but yes, I think you're, yes.

Moderator: That maybe sounds like, from the others, hindsight maybe. It's not a case of, 'We shouldn't have spent so much time doing that,' and maybe that's actually saved you the time, because you only went for-, went for the things that were really relevant?

M: Yes.

Moderator: And you, you were then successful with them. I wondered, you know, if that's presumably shown?

M: Yes. Well obviously, again, I'll, I'll go back to what I said earlier that the, the process doesn't start the day that the competition gets launched, or that you see the application for the first time. If it-, if it is then you probably aren't gonna be successful. You really need to have done-, we had done the thinking beforehand. There were things we wanted to do, and we, we knew that we wanted to achieve. I think Ian said the same thing. Things we wanted to achieve with, with our product and with the company, and then we found the funding opportunity and went, 'Oh, right, that, that looks, looks like we could use that funding to do what we want to do,' as opposed to the other way around. So, you know, forms take-, the forms do take a long time. There's no doubt-, no doubt about it there. I mean, there, there's a lot of work goes into a, an application form, an Innovate UK application form, but if you've done the thinking about your business beforehand, then you, you're not starting from a blank page on the day the form lands on your desk, and that means you can turn it around faster, and it's-, and it's probably going to be more in the context of your business, because the form, I think we said this is more-, it's more like a mini business plan. You have to put the innovation in the context of your business. You have to explain to who, to the people who are going to be reading the form, you know, that, that you understand the market that you're in, how the innovation that, that you're proposing is going to make you more competitive, and how you can market it to that sector, and achieve some-, you know, achieve some commercial success, and that you then have a, a realistic plan to actually make the innovation, you know. Do you have the right people? Do you have the resources? Do you really understand, if it's technical, do you understand the technology? And, and that, sort of, rounded holistic viewpoint on the thing that you're trying to innovate, is what takes the time to build that out. But if it fits inside a business plan you already have, it's actually not that much work.

Moderator: What does take the most amount of time, with applying for the funding? Is it writing the form? Is it doing that prep work? I know we talked before about, sort of, finding the collaboration partners-,

M: Yes. So, so, for me, it's the-, it's the prep work, honestly, but then it's hard to-, it's hard to distinguish the two, because what the form is asking you to articulate is the prep work, it's the things you should have done beforehand. Working out your customers, your market, your product, how you're-, how you're going to apply into that. You're quite right about the collaboration. Every time you add a collaborative partner it slows the process down, simply because, when you, when you're-, when you're writing the form that's

going to be submitted by a collaboration, everybody has to agree. You all move forward together. So, whilst you can-, you can split various things up and say, 'Well look, you, you do these couple of questions, and we'll start over here,' there's no getting away from the fact that you have to pull it all back together, and everybody has to agree. Just that-, just that process of iterating takes time. If you-, if you don't already have collaboration partners before, before the, before you start filling in the form, you just won't have time in the, sort of, time scales that most of the competitions work to. You wouldn't have time to go out and find a new partner, and build the relationship, and start to do that. So yes, I think a, a bit for, for anyone looking to do a collaborative approach is build your relationships ahead of time, and wait for an appropriate competition to come along, because what are you getting? Five, six weeks from a-, from a-, from a call, to, to, to complete the, the application, and get it in. It's, it's, it's a-, you can't-, you can't find a new partner and run that right through in that time.

M: I think it's very much a frame of mind, you know. You'll, you'll hear people talking about, 'I'm going to apply for this application. I'm going to put this application in for funding.' Then it's, like, 'Ah,' and you look at it negatively. If you think to yourself there's a-, there's a company I'm targeting, and I, I want to win business with them, and you think about all the effort you put into winning that business, you get that business and, let's say, say it's £100,000 revenue, and you're making 30% off that. Think of the effort you've put in to getting that piece of business. Now look at the other side, and look at your application for a grant, or a fund of some nature, and maybe that net money that's gonna come from that, and you think you can just fill a form in, you'll do it over an evening, or a weekend, and it's done and dusted. But if you put the right frame of mind to it and think what is the business gonna gain from the process of filling in this, that's the greatest value. That's the greatest win. If you-, if you take the, the, sort of, history of Allsop, who, who are five or six people, whenever we first engage with Invest, we're not over 30 people. We have a defined business. We have a defined hierarchy, or structure, sorry, within the company and the key people that are in those roles are all supported by Invest as we grew. So we looked at our journey, what our plan was gonna be, for those five years, what our aspirational goals, with regards to turnover, people, structure, etc., and then we went to Invest to get the support. And then every time, our frame of mind now is every time we look at some sort of support, it's, 'Does that help us develop the structure and growth of our business?' Not, 'How much is that gonna give us?' Get the money out of the way and think, 'Does this meet the direction my business wants to go in, and is that support gonna help me going through?' If you talk regularly with your Invest NI people, then you'll get that correct direction, and it's not a frame of mind of, 'How long is this application gonna take,' or, 'Wow, this is so bureaucratic.' This is helping you develop everything as you go.

F: I also think it's really important to get it done early, forget about it, and then re-read it a week later, 'cause then you'll completely disagree with yourself. So, it's better to just get it done, and don't, like, leaving it to the last minute is the worst area, 'cause you don't have time to get other people to read it. Like, we've had monitoring officers, Edge specialists, our advisors, our team, we've had various different people read applications, and somebody with a background in AI, versus business, versus hardware, all have different opinions. It doesn't mean you have to listen to them all, but it's still really important that if they don't get the message of what you're saying, or if they read it and are confused, then the person assessing it is confused. So you can't have any confusion within the application, and that's why I think it's really important that if you've-, if you've done it all, left it a week, and then you read it and are confused, then it's definitely not gonna pass. So it has to be exactly so black and white, because you can't answer

questions in most applications. In most applications, you, you send it off, and there's no-, there's no speaking time. So sometimes one little small thing could, could jeopardise the whole area of your innovation. So I think it's just being very, very clear with what you want from that project.

Moderator: Yes, so you pass it round people within your team. Do you get anybody, sort of, external to look at it?

F: Yes. So, externally, we've had Innovate UK monitoring officers, an Edge specialist, and then we also have a voluntary advisory board, who have been fantastic for us, with very different backgrounds, that they would disagree with each other, which is great, because then they aren't in it every day as well. So it's important that, if you're in something every day, it's very obvious. Well, that massive piece of innovation seems quite small, but somebody else will highlight how important and how fantastic it is. So I think it's really important to get other people that aren't in it every day, 24/7, that, that don't get to see it for periods of time. They're the ones that will highlight if there's a lack of clarity.

Moderator: And the language too?

F: Yes.

Moderator: Everyone gets into their own little world of acronyms and things that they think, 'Oh, of course this means this.' I love what you were saying as well about the fact that you used your application form to then go and leverage private investment too. That's so smart, like, using-, yes, that's such a double win.

F: Well, we went back, because we'd got asked for a business plan, and I said, 'No, you can have this.'

Moderator: This is my business plan.

F: I was, like, we've, we've done it, we've spent the time, we've been successful. Your 30% is gonna get 70% funded, we don't need to do an extra business plan, because if we go to do that, we're not working on the tech. So, and anybody that gets innovation also gets that if you've already done an application that's been that successful, you don't need to waste time to write another business plan, and, and be moving your brain from business side to the technology. So, that was-, it's great that we have the right investors that also have came from a background of innovation, that understand that it's not about ticking boxes, in terms of innovation. It's actually innovating for the right reasons, having the validation. Innovate UK validation is a big validation, to have had specialists assess it, and, and then to have people from private to then put their money in as well, has been big strength for us.

Moderator: Yes, I was gonna say, do, do, do you think that having the smart funding give the, sort of, credibility, as well as having a, sort of, pre made business plan?

F: Oh, absolutely. We know the success rates for both of our Innovate UK funds are very low.

Moderator: Yes.

F: And, because of that, the investors that we got from within the UK, they knew that as well. So, if we, we were, for them, that was a part of the due diligence that they got extra funding to invest in us, they got the understanding of the technical was asserted by them, and commercial, and then, for, for a lot of them, they then came on with outside investors. So half of our investment is actually not from the UK, it's from the US. So, with that, it's allowed us to have UK investors also advocate for us to say, 'This is actually a low success rate, and you're gonna get more money with it,' 'cause it's not common within the US system. So I think that's a massive strength that we need to actually advocate for in the UK, is how much funding, non dilutive, that we can get, instead of having to go for a lot of dilutive funding, which is more so the US system.

Moderator: Yes. So your, your grant gave you the credibility with the UK investors, and then the UK investors helped with the US investors. So you can see, like, each thing was giving you, like-,

F: Oh yes.

Moderator: A little bit more momentum along the way. Okay. I want to switch it over a little bit now, thinking about we've got a lot of, you know, we've got people from Innovate UK here, on the funding side, we've got some Invest NI people, from the support eco system covered. What, what, what advice, or what, what would you tell us, what would make your lives easier? What would make these programmes better for you? You've got a captive audience, so. Yeah.

M: I'll, I'll say a couple of words, yes. Firstly, I think both Invest NI and Innovate UK do a really, really good job of providing assistance, you know. They're, they're, I, I think everybody from the monitoring officers through to the local team here, the, the Edge people, everybody's done a really good job. Invest NI, as, as Ian said, are really good at signposting the way to, to, to lots of funding opportunities. I think, if I was to pick one thing that I would say that would help from, very narrowly thinking about innovation funding, it's what I mentioned earlier about the time scales. It's, it's often the case, particularly for themed competitions, which really don't come around all, all that often, you know. A theme tends to get funded once, and maybe not funded again for a long time. A little bit more advance information that those are coming would probably be helpful because, as I said, you really need to do the thinking before the form hits your desk, otherwise you just won't, won't make it, especially if you need to go out and find

collaboration, in a university, or from another organisation. So, getting some, some more advanced notice, maybe a, sort of, roadmap to where funding is going to be applied in, in the-, in the future, would be useful. Although I understand that's, that's a, that's quite a difficult ask as well.

Moderator: We're just taking notes, right Steve? We can't promise anything, but we're taking notes. Ian?

M: I, I think if I look at the challenges facing Allsop today, we, my, my role is commercial director within the business, so I'm very keen on the growth of the business. The, innovatively, we're leading the way in the technology that we're delivering. We're delivering autonomous planning in a supply chain, so we, we go right back to the source and we generate what we know is gonna be needed before someone asks. So we're, we're getting the tech right, we're getting really good support from Invest on the tech side of things. The challenge we're facing is how we break into the export markets, and how we grow within the markets, the, the outside world of, of UK and Ireland. So if there was something that could be, that could help us with those challenges. The other challenge we find is we're dealing with mid to large businesses, and they tend to have a crutch, for want of a term, of where they're, when they're going to make a decision, they go back to their auditors, or they go back to one of the big consulting, global consulting firms. And those consulting firms don't know of little Allsop in Northern Ireland. So I, I give you one, one incidence. We were tendering for a piece of work in the US, we were competing with McKinsey, and we were competing with Bain. We beat them on technology, beat them both on technology. When it came to the next step of that risk assessment, one smart comment was that the company concerned spent more on their Christmas than we-, than we turnover. At that point we had to step out of that process, and McKinsey and Bain then went on to fight, fight out that, that global project. So it was very, from a vanity perspective, we were-, we were flattered that our technology was winning, but disappointed that we couldn't go any further. So maybe there's an opportunity for partnering, maybe there's an opportunity for getting us in with those consulting firms. That would be a personal challenge that we're facing at the minute. Outside of that, Edge, as you mentioned, and Invest, support us with structuring our business, key people, training our people, supporting our R and D. It's all fabulous stuff that's growing our business, and it's taking us to where we are. Our ambition now, over the next five years, is, is to be the largest supplier of autonomous request management. To do that, we need to start getting into the, the headlines, with people like McKinsey and Bain as well.

Moderator: Okay, great. Naomi?

F: I think there's, there's two areas. One thing that was fantastic for us this year is we were part of an Innovate UK GBIP programme, and you were able to go out, connect with other people in-, so we had UK companies all out to Las Vegas and San Francisco, and that was great to connect with other innovators that were across different sectors, but that starts that discussion. And, instead of it being a-, there is a big different with being in person, instead of an online call. In comparison, our women innovation programme, it was during Covid so it was obviously virtual, but we didn't get the same connections with our cohort of incredible innovators. So having, like, six, seven days, as a really curated group, all of us in health tech, had really big outcomes. So I think there's a massive power of more in-

person curated networking events, because the GBIP was so successful for us. And then, as well as that, I think there's the ability to, to have smaller pots of money quicker, or quicker decisions, because sometimes within start-ups a decision can happen, or an opportunity can happen very, very quickly, and you potentially need to change funding. So there's sometimes the, the need for small pots of money for a last minute opportunity, such as if somebody's asked to speak on a panel at a certain conference, it would be good if they can be supported quickly, with less paperwork, to allow that opportunity, to also highlight the UK. As you said, for, for a lot of places, whenever we go to speak, we're asked where we're from, like, ten times. Like, they don't really understand, if you were to say that you're a company from Northern Ireland, they're not sure, are you, where are you from? So, we, we change it every time. So, it's, I think there's the need to actually shout about the innovation that's happening here, instead of right now being associated as only in London, and I think that is a big difference, because it's deemed as if you're based in London, there's great innovation, but we need to actually show the innovation that's happening here. So we need people from here on a global stage, talking about it, instead of having to be in the back corner.

## Moderator: Yes. Totally on with that.

M: If I could maybe-, I think one thing that Northern Ireland is really great at is networking. We're, we're really good at working with each other. One of-, one of the asks I would have maybe of Invest is that, that we create network groups of, of, like, alumni, if that's the right term. So, we, we have a young guy at the minute on the (mw 41.01) export, and I'm saying to him, 'Build your network. Build your network with your current peers.' And then what about the cohort that went before, and before that, and before that, and what about the cohorts that are coming, and all, all the new people that are coming. How do you create a network of those people that have all been through that course, they've all had that experience? Years ago, I think Invest had a, a business improvement agent programme, and I remember ringing Invest and saying, 'Do me a favour, give me the name of all those BIA guys, 'cause they're the guys that are gonna buy from me.' And of course Invest were going, 'Catch yourself on. You can't have a list of names, and numbers, and emails, and you can't market to those guys directly.' I'm going, 'But this is improvement, guys. They're the people I need to speak to.' So I, I appreciate there's all that sensitivity around data, and sensitivity in GDPR etc., but even if there were those networking groups run, and you held those people together, and then sell booths to promote products at those events, to, to help fund those events. But I'm a-, I'm a really keen networker, local link, but that doesn't help my export business. But if, if for the younger people coming through, if they could network, and grow those networks, and if Invest were to facilitate that, I think that would be a very valuable, valuable thing.

Moderator: Yeah, I think it raises that, the benefit of, of doing that, the networking, but also of identifying where is it that your, the people that you want to speak to, where are they? Are they already in a group? How can you access that group? Maybe not by trying to persuade Invest NI to give you a list of names and email addresses, but, you know, are they having a meet up, you know, is there a networking event, and can you get involved in, in that?

M: Just, just for clarity, they didn't give me the list.

Moderator: Yes. Well done. I'm glad we haven't just revealed a GDPR breach.

M: Yeah, so I'll, I'll just pick on what Ian was saying there. I know Steve talked earlier about innovation, the place based innovation, and what that, I think, allows you to do is create that cluster with it, by, by being a matchmaker, and bringing companies that maybe share something in common, whether it's they share a market, whether they share a technology space, whether, you know, they just share a, you know, a desire to, to go out and export. Bringing them together into a cluster, and then that might allow the likes of Invest or Innovate UK to promote that cluster more effectively, you know. The, the sort of thing, that, that we're thinking about might be, you know, a trade mission type, type of deal, or even bring and meet the buyer, where you bring the buyer to us. Those, those kind of things, because you're quite right, access to, to market. When I worked in Silicone Valley for a while, and it was-, it was much easier, you could jump in the car, and go up-, go up the road and speak to VM, or speak to Splunk, or speak to whoever was, you, you needed to, because they were all there in the place. We don't really have that yet in Northern Ireland. You do a bit in London, but not here. So, having some support to take groups to the buyer, or bring the buyer to us, is, is a, you know, is a potential way to help us create more, create, create more business. Doing it as a group, I suppose, doing it as an individual company, give you a, where you can theme it, and you can, you know, maybe make it more attractive to the-, to the buyers on the other side.

Moderator: Yeah, and we're, we're doing, we are doing more of that and, you know, Paul mentioned that we've got this new launch-, this new launchpad programme, that's at the moment we're supporting this cluster in, in health, in the health and life sciences industry cluster in, in Northern Ireland. Part of that, so Paul was mentioning about the funding for businesses that, that's, that's part of that, but the other part, that we didn't talk about, is that there's, there's money for a cluster management role essentially for that cluster, and we've got a whole load of other things that we're gonna wrap around that, exactly to that point, how can we get that critical mass, from working with a cluster of similar businesses, or businesses operating in the same, sort of, sector, and how can we really use that to create that, yes, create that critical mass, and really then leverage in the investment, the trade opportunities, all those other things. So, we're still at the start of that journey, but that's definitely what we wanna do more of.

M: Yes. No, that's good. So, a, a pitch for the NI side, we cluster, we've got a very active cyber security cluster here in NI, and it's, we're trying to do a lot of those kind of things. So, some support for those clusters, I think, would be brilliant, yes. A good step.

Captions by Verbit Go

**File name:** innovate\_uk\_&\_invest\_ni\_\_innovate\_local\_-\_northern\_ireland\_event\_-\_chapter\_3 (240p).mp4

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: So our next speaker is Stephen McComb, who's one of our knowledge transfer advisors, who supports consortia for our Knowledge Transfer Partnerships programme, the KTPs that you've already heard a little snippets of this morning, hopefully planting some seeds. So, believe me that Stephen knows a thing or two, or many, about what it takes to put together a really good funding application, and he's here to share his wisdom with us, so over to you, Stephen.

Stephen McComb: How are you? As, as mentioned, my name's Stephen McComb and I'm based locally, and I work across a number of companies who've already been speaking today. Trevor was one of the KTPs that I was involved with. Nicky (ph 01.02) that was on the screen is also another area I was involved with. And, and beyond KTPs in Northern Ireland, I-, I've also had some fingers in the pies of future leaders and SBRIs, Women in Innovation at one stage, and some of the Young Innovator programmes. So the reason I am here to speak really today is to bring a bit of that, sort of, experience of what does it actually look like when I submit an application? I'm gonna address a couple of different, or a few different, sort of, areas but it's really, sort of, coming from this ethos of can I apply for this? Second question, really, should I apply for it? And then how do I shine within that? And, and then the last part, which is a selfish perspective, which is how, how should I avoid annoying the assessors or, or please don't make my, my life worse was-, you know, you'll see as we go through the slide, we're trying to give you that little bit of under the cover insight as to applying for a, a grant or, or funding. The reason I'm picking on that, 'Can I apply, should I apply,' and, and it goes back to a conversation I had with one of the funding agencies, and some of-, a company was, was applying and, and they were talking about should I-, can, can, they apply? They said, well, technically they can apply. They don't breach any of the rules, they had enough employees, they had enough turnover, etc.

I said, 'Well, they've no chances of success.' They says, 'No but we can't exclude them,' so we, sort of, had this issue where I can technically apply but should I apply for it? Am I likely to get success? And that's what I want to pick on a little bit today is the-, helping you to understand should I be applying for this or should I put my time elsewhere? Now, 'cause we appreciate you're, you're busy in other things. So it is a grant writing masterclass, so this, this has been evolved over quite a number of years. It has many people's fingerprints on it and the point is not the slides, it's more the conversation and thought around it, so even if you have been through it before, do you know (ph 03.04), bear with me before the conversation changes a little bit as we go. The three parts that we're talking about, really, is about telling a good story, first of all, next about the assessor's view of the world and then last some tips and summaries, so they're not out textbooks. These are out of real life experience. The feedback, the kickbacks, the complaints that

1/7

you get, as well as just the this is what it looks like. And we, sort of, phrase that, sort of, area around, sort of, 'Oh Lord, send me a good one.' And what we mean by that is, as an assessor, you want to actually see a good application. You don't want to see a poor application, so how can we work together to get that? So, moving through that first section, a lot of people have filled us in-, sorry, fill an application in as if it was an exam, okay? How many words have I got? I've got 300 words.

Okay, well, let's get 299. Oh no, no, it's 301, we'll need to bring it back, so they focus so obsessively around this idea of being in an exam but you have to look at the other side of this to actually say, 'Well, I'm trying to convince somebody,' so it's not about just putting all of the technical jargon in or sufficient financial information to meet the, the statement or to meet the word count. But actually I need to convince somebody through a story, okay? Because the person who's assessing has a very short time window. You have to bring to the story to this as well, so, any, any from, sort of, a literary background, etc, this is your opportunity to shine in, in the organisation and, and bring that, sort of, storytelling to it. We'd also, sort of, emphasise that the high scores in all the questions-, I've dealt with a lot of companies who perhaps are fantastic at their project plan, they're fantastic about explaining the technology but actually they were rubbish at writing about the project, project planning or the risks and therefore they went down in their scores. But guess what? They didn't score highly, so being a, a, a high scorer across everything. The convincing element we've talked about. A golden thread running through everything is something which we in KTP land is obsessed with, is just does it link together? Do we need this skill for-, linked to this project plan, linked to this funding? Here's the convincing parts of it. Consistent, cohesive, do you know, it just all comes together in a way that makes sense and then we're gonna avoid the red flags, which we'll talk about in a second.

The next part just to be careful on and, again, I'll not go through all the words in this slide but just alignment to competition scope. All of us are experienced of somebody who's trying to squeeze into a pair of trousers that just doesn't really work for them. Yes, they might be able to get in there and might be able to get the button on, but actually it's not the right thing for them. It's similar in these competitions. You need to look at the scope, you need to understand is this part of what my business is actually about? Make sure you're not just chasing the funding because of the funding's sake and I think that was mentioned earlier on. No, your commercial side is chasing the money but actually you need to be asking the, the serious questions about where your business wants to go. So do not fit into the uncomfortable trousers. Make sure it's the right fit for you and then move from there. First impressions, again, as an assessor, I'm going to have be reading, dunno, five, ten, fifteen, twenty of these, these bids, okay? You've caught me perhaps in the first few seconds, as all things. Well that's-, if you've caught me in the first few seconds, I'm gonna keep trying to build on that. If you've put me off in the first few seconds of, of reading through stuff, again, I lose the thread, I'm starting to struggle with it and etc, so just be, be aware of the people behind this. What's the wow in it? Why am I excited about it? How does fit in the, sort of, narrative of what an assessor's hoping for, etc?

Very simple tips in there about the, the style of how you write. If you've got big, long, long, long

sentences of, of three lines with no punctuation in it, I'm, I'm gonna struggle to get it quickly, so is there something about an editorial style of-, and it mentions the nine-words sentences. But this, sort of, active tense, getting it across quickly, understanding it, being clear and concise right the way through, thinking about that concept of an elevator pitch. You're convincing, you're bringing the person with you as you go. So then thinking through some of the typical questions and, as I say, I, I have a tendency to focus on KTPs in general as my workload. However, this is applicable across quite a number of the application-type ideas, is there's usually a question in there which is something around about the need or the challenge. So, why is this important? How are you gonna bring something new to the market? So you're trying to, sort of, argue this case for why your technology comes in there and I'd be careful here because quite a number of the really bad applications push the technology first. I have a widget, this widget is of this size, it's gonna create this, it's gonna do this.' Well, actually, why do I need the widget? What was the problem in the first place? Why can't I do-, why can't I-, your customers do what they were doing beforehand, before you arrived? So being able to articulate that, what's driving it, is it about regulatory change, is it a change in the state of, of the technology being used? Is it because of drivers to do with some procurement law coming through?

Is it about net-zero and the customers are all asking for it? Those are the sort of things to say, 'Well, actually, we've got some sort of a need or a challenge, an unmet need, a, a problem that companies aren't dealing with, and we can come into that.' Your idea about the approach and innovation, so how does this technology change whatever it is? Is it actually gonna make a difference? Okay, what scale of a difference? Is it worth putting it in? So, again, you're trying to convince this idea of something is gonna change the current state of the art. Your product has to be in that space. 'We did it this way before, with our new technology we're gonna have a 20% reduction in hospital waits.' Your technology come in, all of a sudden you're gonna be able to solve all of the regulatory burdens of manufacturing companies. Your technology comes in, we're gonna change the, the way that we drive our cars. So there has to be something about how your idea is gonna be brought into marketplace and how it's gonna be worth the effort of that change. Anybody involved in change realises there's always a risk that it might work so therefore it has to be a big enough change to be worth that risk, okay? So be careful about that. You need to convince us that it's worth that risk. The team, resources, delivery. In, in my earlier days, I dealt with a lot of, sort of, early start-up companies and they were obsessed about who owns the company, how many shares I have and what equity states, etc, is.

And they would therefore not write people into their team because there were scared that actually it would reduce their equity or something. That's not what the question's about. The questions around this is, well, you're gonna deliver some sort of project you just told me about. Who have you brought together that actually can do that? Okay? Are there advisors in there, or is there medical expert? Is there some sort of environmental expert? Is there somebody that understands more about regulations? Do you pay them for five days during the whole project? Is it actually they part of the actual team? You're trying to build this, sort of, justification of you know all of the people together who can actually make this happen. Some of them are gonna be technical, some of them may be scientific, some of them might grow in your business, scaling it into the north-east of America, scaling it into Asia. Whatever it is, you're trying to bring that, sort of, sense of a team which comes together and delivers and, and therefore you're trying to put some

sort of a plan behind that, okay? And a really important, sort of, part, quite badly done because sometimes people just start with, well, 'Who's around me? Well, there's John beside me and Siobhan's over there, there's the team.' They haven't thought through, 'What am I trying to deliver and who am I missing and what are the gaps?' Market awareness, worst-case scenario is somebody comes in and says, 'We are unique,' okay? 'We are the only one who's ever done this and we are the only AI company in Northern Ireland,' and that's not true. You know it's not true. And even if it was true, you're, you're still gonna be competing with something, okay?

The computer might be competing with a pencil because both can scribe down what it is that has happened, so be careful about this one here because if you state something to say, 'We are unique,' etc, because you didn't want to expose that perhaps there's other people in the market, you've missed the point. If you bring in and say, 'I've got five or seven other competitors that we're paying attention to. We're, we're gonna be better than Company A because we're cheaper, we're gonna be better then Company B because our technology is more advanced, we are gonna be better than Company C because they don't address certain markets,' you're immediately making the assessor be reassured you understand where this fits, where you're gonna make the difference, how you're gonna sell yourself, how you're gonna differentiate in that customer pitch, and it's that, sort of, sense of awareness. Not just the-, about your particular technology but also what else is happening around you, okay? And be careful. Just because your approach is one particular scientific approach, is there alternative scientific approaches? So the market is the driver, not which technology you're using, okay? That's quite a, a-, I'd say an area which is quite often missed and failed on. The outcomes and the route to market is often buried in the questions there. Again, comes in various formats but essentially it's gonna say, 'Right, you're gonna build your widget, you're gonna build your technology. What next? How are you gonna get it out there?

Is there a prototype followed by an alpha phase, followed by a beta phase, followed by the, the, the English market, which then follows on with the European market, then in Americas?' I don't know what it is but you need to convince the assessors that you have some sort of sense of a plan. Like all plans, the near-term future should be slightly more detailed and medium-term slightly less detailed and that, sort of, sense of, 'Here's where we're going with this. Here's zero to one, we're gonna be focussed here. Year one to three, we're focussed here. Three to five, we're focussed somewhere else.' Inside of that might be a little bit of an understanding as to perhaps, 'I need to do some sort of ethical approvals or some, something like that.' So have you considered that? We know that we won't get that ethical approval for six months, we won't get that medical regulation for two years, so be, be understanding that the assessor may have some understanding of some of this area, therefore your route to market has to consider those things. And if it means that you've got the first two years with nothing, that's maybe the appropriate statement and answer, okay? So be careful to know-, you're trying to convince that you know what you're talking about. The right kind of risk, again, some organisations have this tendency to hide all risk, okay? 'No, no, there's no risks. We know everything.'

Well, nobody has a full sense of that. What if things change? And, and, again, the assessors are looking

for that sort of sense of actually, 'I've weighed up some of the key risks, not the aliens landing in Craigavon but actually the supplier might go bust, the company that we're focussed on may change their minds, the regulations may change.' So it's that sort of sense of somebody who understands this and says, 'I, I get what I'm trying to do. I've looked at a few things and there's a number of mitigations in around that,' so it's that right sense of risk. I would also emphasise, in some of this applications, the purpose is that they want to fund something which is a little bit beyond what will be commercially risky, so-, and what I mean by that is if an investor or a funder can put money into everything, why bring in the government? So you're probably trying to look for that little ledge and say, 'This is a bit of a step change, it requires a little bit of government funding because other funders are probably not quite ready for it, but it would get me to the point where they are ready for it.' So be careful to not underplay your risk, be careful to not overplay your risk. You're trying to get the right level of risk for this to be a, a reality. You're also trying to bring your expertise to say, 'I've assessed that risk, I've brought some sort of a mitigation against it.'

Costs, additionality and value for money, again, this will apply in everything. Take in behind the-, this here, this is government money. Government likes to justify why it puts its money into places. It likes to be clear that you've thought about this properly. So if you're throwing in some sort of cost for some sort of advisor at £3,000 a day, (inaudible 16.03) are going, 'Are you sure about that?' Now, it may be that £3,000 a day was the right number because you've looked at all the other implications, you've looked at other advisors, you've looked at different decisions and you came to the decision that, 'Actually, that is the way that we need to move forward.' But what you're not doing there is actually just throwing in some random number because, 'Well, it's just government money. I don't worry about it.' So you're trying to justify it and say, 'I've made some sort of sensible predictions and I've made some sensible estimates. I've compared it to other alternatives and we've decided that this is the right cost for this project.' Okay? So that's where that sort of sense of justification comes in, is just getting that I, I need to provide some sort of evidence that it's a balanced investment. Also, sort of, look out for a couple of comments at the bottom around impact outside of the project. You'll see this increasingly common through, it might be about diversity, it might be about net-zero, it might be about other impacts on the community. Again, companies in Northern Ireland (mw 17.05) are not particularly good at actually writing up stuff that they do, so sometimes there is a, a good investment case to say, 'Well, actually, this is impacting on jobs in this particular area. It's impacting on a, a mixed, diverse group of people. It's impacting on, on reducing, sort of, the, the carbon productions,' etc, so just be careful.

There may be things you're already doing and you're pretty darn good at, and you forgot to put them in the application and they could've give you a bit of kudos, so my experience is companies are not putting in stuff that they're already doing that will give them something extra. So, switching across to the grumpy side a little bit as an assessor and apologies about that, it's just the way it is. This, this chart was, was taken from a, a number of different, sort of, criteria that assessors are looking at, so assume that it's not exactly accurate because we needed to protect the innocent, etc, and we, sort of, tried to morph it from a number of different places but the point and behind this was if you listened to some of our speakers earlier on about the smart grants and the women in innovation, I know behind the scenes that they might be sitting around 4-6% success rate. 4-6% in those ones. If we go into the KTPs, it might be 80% or so

but some of those competitions, they are really having to fight their corner and I was given compliments to Naomi (ph 18.35) earlier on that she had managed to get a smart grand and a women in innovation, so two really hard, hard applications. But for her to be in that, sort of, 4-6%, she needed to demonstrate that she was fantastic, okay? Not just a good application, sorry, I know (ph 18.53), but not just a good application, not even just a strong application but she needed to be really compelling, okay? So if you're gonna bid for this thing, you've got to be looking for the words in that top piece.

So these are the words and, I say, they will not be right for every competition, for every application, but you need to have an application which is compelling and motivating about the need. Compelling. Most of us ride on the basis of, 'Yeah, it's roughly described okay.' It can't be okay for you to apply. It needs to be up into that compelling. What about the approach? Significant innovation step change, that's the definition for a smart grant. It's step change. So have you convinced us that you've given a step change? The project looks realistic, the market is-, you've understood all the drivers, etc. The outcomes are, are very good for this market, they understood the route to market. You've carefully considered all of the risks and the impact is significant. Now think about this. If I'm gonna put in £100,000 of government funding into your bid, or £500,000, for the impact to be significant, what are you-, what are you gonna like at? Half a million pound investment here was gonna have to give me back £5 million or £10 million or £100 million, okay? Because there has to be a significant and compelling outcome. So if you're putting in an application for £100,000 and you're coming back at £101,000, it's not looking so good. So have you thought big enough? Have you convinced well enough? Have you really got this, sort of, concept of moving from good to great? And that's where the application has to be compelling, great, outstanding, big outcomes and, as I say, that, that is quite often missed because we have a tendency to pull together a few people, put in an application, 'It looks okay, we're comfortable with it.' Comfortable is not the place to be. Needs to be beyond that. Red flags that I warned about earlier on and, and what I mean by this is, sort of, you've wasted your time putting an application in for something which you're never gonna get, never.

So you could've been doing something else. You could've been chatting to customers, finding out something else. Is, is it out of scope? So have you read through the scope and actually determined that this particular type of particular gas is (ph 21.23) is not eligible for this competition? Those sort of things are in there because there was a competition about that last Thursday, so therefore this particular one doesn't include those. So be careful. There are very specific things that say, 'You're out of scope if you're this type of technology, or this type of area.' The partner eligibility, you may have defined a couple of companies or something and they're, they're, they're based in, in France and this particular competition says, 'Well, actually, we don't allow partners in that area.' So I'm making stuff up but you get what I'm saying is there's something about trying to go through this. Over-technical, difficult language. If you're going for a, a, general technology application such as a smart grant, the assessor may not have all of the details, nuances of neuroscience, okay? So you're trying to convince at a level where somebody who's reasonably smart but not a specialist in your area can be convinced about it, so don't go down this-, sort of, lots of acronyms, etc, will just lose them. A poorly articulated offer where you know-, that's my red flag there, you know, 'Get off the stage, Stephen.' Poorly articulated offer, you know, we all understand that. Unclear innovation, so why is this a step change?

Lacks commercial focus is, is something which we see where a very technical person has written it but actually didn't understand the route to market and then conflicting statements, so where you have four people who are all contributing to the application but they didn't talk to each other and the application wasn't written together. So I think those are things you'll be familiar with and you will get. Top tips, this'll be available for you in your presentation afterwards but just trying to get this idea of fit with the competition and getting the route to market. So, I'll jump this but on the way out there will be a link as well to an older application guide, which could be useful to you, and this is the slide I was, sort of, aiming for. So, top ten tips, just as a summary, fit the scope, talked about. Agreeing the key points about-, with your partners so as it's clear, clear and concise. Consistent right the way through so it all makes sense, technology, leading the market, leading to taking over the world and a few billion dollars in your revenue. Convincing, bit part of it. You're telling a story, you're not writing an exam question. Remembering the risk and the innovation, justifying your costs, essentially, against it and getting that, sort of, sense of a review (ph 23.59) and, like, an assessor. I think one of the guys earlier on mentioned about using independent people and friends and connections, etc, to read it because you get so ingrained in actually writing the thing, you forget, do you know, what-, you've missed some of the, the trees in the wood, etc. And then the, the last point within that, just around allowing enough time. That's quite often the case where somebody starts it and they've left (ph 24.20) (mw 24.20) and, and you've no chance. It's, it's too late. Okay, I'm gonna stop there. Oh, sorry.

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**File name:** innovate\_uk\_&\_invest\_ni\_\_innovate\_local\_-\_northern\_ireland\_event\_-\_chapter\_4 (240p).mp4

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: We are now going to move into our surgery session, and Stephen is hosting a table on that so you'll have the opportunity to ask him all your questions then. So, we've got nine table for you to choose from and we've got time, so don't think you only have to choose one, pick the ones that you think are most interesting and we'll try and make sure you can move around and get to speak to everybody you want to speak to. So, each table is going to give you their 30 second elevator pitch, so the tables have turned, we're having to pitch to you. And I think what we're going to do is go around the room, so you can see we've got these little poseur tables around the room, so we're gonna go round with a mic and get-, so, people who are gonna be hosting a table, can you please go to your table? That would be great, and we'll start moving round. So, we've already heard from Stephen, who is table one, so we're gonna start with table two, which is Paul O'Callaghan from Innovate NI. Paul, are you there?

M: I sure am. So, Innovate NI is a department for the economy shift (ph 01.24) delivered by Invest NI, and what the scheme was set up to do was, basically, encourage more businesses to get involved in innovation but, more importantly, to help businesses overcome the many blockers to innovation and success. And we do that by supporting businesses from that first idea all the way through to commercialisation and implementation. And we work with a lot of partners across Northern Ireland to help businesses get the right support at the right time on their journey. Sold?

Moderator: Brilliant, thank you, Paul. Next up we've got Emma McKenna from Innovate KTN.

F: Oh hello, good morning everyone, I'm Emma McKenna, I'm the Head of Net Zero and also based here locally in NI. Innovate UK and Innovate KTN, as we've heard this morning, is the innovation agency and innovation network, we can support organisations and companies really driving innovation for positive change in three key ways within KTN. So, one is through powerful connections, we've heard this morning innovation doesn't really happen in isolation and collaboration is really, really key, so we've got a really diverse network, not just across NI, but across the UK and the globe and reaching lots of different sectors and industries, so we can help you connect to other organisations within your industry or across different ones, and not just industry but academics and researchers as well. The second aspect of what we do is around future shaping, we've heard this morning we're not the people with the great ideas, you guys are and you are, kind of, shaping the future for what the world we're gonna live and work in is gonna look like, and whether that's next year or ten, twenty years' time. So, we develop and build programmes that helps allow your voice to heard and to help, kind of, drive that, kind of, future, yeah, vision that we need

to have around innovation. And we do that through innovation networks and being able to, kind of, drive forward emerging and new technologies. And the third and final piece is deep expertise, so I cover sustainability but we've got quite a number of experts across the organisation that cover a number of different sectors, specifically the ones that were mentioned this morning by Vicky, around precision medicine and composites, but we've got lots of others around energy, and fashion and materials, so quite a broad mix. So, we can help work with you and provide that deep expertise in those specific sectors and help you drive forward, whether that's an innovation you've got for that sector or whether, perhaps, you're an organisation with specific challenges. So, do please come talk to me. I'm gonna hand you on to Claire, who's also from Innovate UK but she's gonna talk about something quite specific.

F: Thank you, Emma. I'm Claire Griffin, I'm a national contact point and global innovation lead within innovation UK. My role sits in the bubble of the end of Vicky's innovation escalator, my role is to advise entities that are applying for Horizon Europe. So, really happy to chat to any of you today, thank you very much.

Moderator: Great. And then Alayne, Innovate UK Edge.

F: Good morning, everyone, although it might just be good afternoon. I'm Alayne Kinver, I'm the Project Manager for innovate UK Edge in Northern Ireland, Innovate UK Edge is the on the ground business growth support for Innovate UK. Innovate UK works with ambitious businesses to help them grow, and scale and innovate more rapidly, and we do this through working with the businesses on business strategy, on innovation management, on entering new markets, we do a lot of work around investment readiness, funding and finance, and scaling.

Moderator: Thank you so much. Alright, then moving across to Table 5, we've got Joanne Coyle.

F: Hello, my name's Joanne Coyle and I'm an R&D Manager within Invest NI and I want to speak to you today if you have any projects that you're looking to be funded through R&D or any of the innovation supports that we have. I'm here with my colleague, Lee McGaryn (ph 05.19), as well but I've also got a lot of technology executives here today, I'm going to ask them just to quickly stand up because if there's a big queue of people you can go and talk to any of these guys and they can tell you about our grant for R&D support, they can tell you about our support to help plan an R&D project. And that support to plan an R&D project doesn't just apply to applications to invest NI, it applies to applications to Innovate UK, so we truly do partner with them. And, as Vicky said earlier, we're about directing you to the right support for you at the right time, and sometimes that can be Invest NI and sometimes it could be Innovate UK or other funds. So, please talk to us, start the conversation and we can help you.

Moderator: Thank you, Joanne. So, Barry's gonna have to jog to the next table. So, we've now got Joel Wilkinson (ph 06.08) who is going to cover knowledge transfer partnerships.

M: Yes. Hi, everyone, my name is Joel Ferguson, I work for Innovate UK/KTN and I'm one of a team of three people based here, we support the Innovate UK knowledge transfer partnerships, or KTP, scheme. KTP's a scheme where a business partners with an academic team, usually in a university or a college, or catapult (ph 06.29). And they work on a project that typically lasts two to three years to deliver an, an innovation but we're accessing academic knowledge is the key to delivering the innovation. You recruit a graduate who's based in the company for that time and they bring a lot of focus to the project, you mentor them and obviously you drive the project, but the academic team will meet with you, typically half a day a week, to mentor and, you know, support the graduate in delivering the project. And the overall aim is, obviously, deliver the innovation during the project, but there's a-, also an objective there to embed that capability or new capability into the business during the project so that there's a lasting, kinda, legacy and for that new knowledge that's placed and, and embedded in the business during the project. Thank you.

Moderator: Thank you, Joel. And then Table 7, we've got Ian Wilkinson, with Innovation Vouchers and the Technical Advisory unit.

M: Good afternoon, ladies and gentlemen, Ian Wilkinson. Yes, I manage the Technical Advisory Unit. I've brought a couple of humans along today, it's important, Paula Faulkner (ph 07.32), I'll firstly introduce. Paula is Programme Manager of Innovation Vouchers. I know there are a number of recipients, successful recipients of the vouchers in the-, in the audience, and some of the speakers mentioned them. For those of you who don't know it, they offer £5,000 to work within a university or a college, or institute of technology too in the Republic of Ireland, so across the island of Ireland, on innovation projects. There's a call opening on 22nd January, so we'd welcome applications to that. It's, it's open to all SMEs in Northern Ireland, so come and talk to Paula on that. Another colleague of mine, Collin Graham, is a Technical Advisor within the Technical Advisory Unit. Colin, myself, other colleagues, would offer advice and financial support on a very broad range of technical issues, things like product development, new business model development, process development, IT platforms, things like that. We, we'd also get involved with intellectual property, Colin does. A lot of work in, in that area, particularly in the area of trademarks, International trademarks. We had the UK IPO over in the summertime, we'd, we'd hosted that bit there's support there from them as well as directly from our-, from Invest NI. And also things like global technical compliance, CE marking, very important for any machinery manufacturers, electrical equipment manufacturers. So, the Machinery Directive, the Low Voltage Directive, EMC, and then also for companies that are-, anybody looking at exporting, we've done quite a lot of work with the companies getting into the US market under regulated laboratory (ph 09.45) approvals, things like that. And kinda the last but not least, we work with a lot of companies on integrated management systems, ISO 9011, 14001, the, the likes of information security, ISO 27001, so come and talk to us about anything of a technical nature. Thank you.

Moderator: Thanks, Ian. Alright, Table 8, we've got Ronan Trainor with ambition to Grow.

M: Hi folks, I manage the Ambition to Grow programme for Invest NI. Ambition to Grow provides businesses that aren't accessing Invest NI support, that have turnover under £1 million or sales outside

Northern Ireland of under £300,000 a way of accessing growth support of up to £45,000. The support is provided towards new employment within the business as well as activities related to developing new markets, new products or new skills within the business. The process for applying is online, it's a, a straightforward eligibility checker which then gives access to an application form. And the aim of Ambition to Grow is really to make invest NI support more accessible to businesses, to try and get more businesses through the door. And over the last year we've supported just under 100 companies, 98 in total (ph 11.06), and it's good to see a few in attendance here today. We've offered over (ph 11.11) £3.3 million of support to those businesses, and as the numbers grow the aim is to create a network or a community of businesses that are all roughly at the same stage of development, that can learn from each other and also from support,wraparound support networks, information sessions that we provide them. So, if you're interested in hearing more or you're, maybe, a, a consultant that's working with businesses I'll be here to, to have a chat about Ambition to Grow.

Moderator: Brilliant. Thank you, Ronan. And last but very much no means least, Robin Humphreys with the City & Growth Deals.

M: Thanks, Kezia (ph 11.44). Yes, as you've said, they saved the best to last. My name's Robin Humphreys and I'm here today from Invest NI's City & Growth Deals team, I'm joined by my colleagues Orla and Conor, and we'd be delighted to talk you through all things City Deals. For those of you that don't know, City Deals is a 1.3 billion investment opportunity for Northern Ireland, to be delivered over the next ten to fifteen years. So, if you wanna find out more about the structures of it and some of the existing projects that are under development, come and talk to us. We're also very excited to announce the launch of one of the City Deals linked projects, it's called Digital Transformation Flexible Fund, and it has launched in the last couple of weeks. It's a fund that's aimed at helping small and micro businesses engage with digital technologies, so if you're under 49 employees and you're looking at a project that involves a digital asset, come and talk to us because you may be able to apply for it. Thank you.

Moderator: Brilliant. Alright, thanks, everyone. So, the aim of this is really to give you that friendly face that you can go and speak to. So, as Ian was saying earlier, he's got a question, he phones up his Invest NI client (ph 12.57) executive and he can talk to them about it. So, this is your chance to meet those people, those friendly faces that can help you along the way. We've got lots of different programmes here, so speak to as many of them as you can but also don't worry if you don't get round everybody because, also, we know each other, right? So, we can-, we can cross-reference you, you can have more conversations after today. So, we've got time now, then at half past there, there will be lunch served and then we've got another hour as well, so keep the conversations going and, yes, feel free to then follow up with them after this. We'll try and-, there's quite a few of us that are not hosting a table, so if you need a reminder of where you want to go or, you know, you wanna be signposted around, we'll-, we're here to help too. I think I'm just gonna do my final remarks rather than interrupt you again once you're in full flow, because I suspect the discussions are gonna be going, so that's kinda the end of our formal content. Like I say, we've got lunch but please stay, continue discussions, network with each other as well as with, with the staff here. Before you embark on that I just want to take the opportunity to thank the team for putting this together today. We've had a-, you know, it's been really fantastic programme, I hope you agree, so thanks

to, to Barry and the Eventful (ph 14.17) team for helping to organise the event, the centre for hosting us. Thank you to the speakers and, yes, your generosity with sharing your insights and lessons with us is greatly appreciated. Thank you to the Invest NI team, you've been amazing partners, always love working with you. So-, and finally thank you to you all for coming along today, for your attention. I know we've thrown a lot of information at you this morning, so well done for sticking with it and for, for looking so bright-eyed still. We hope you've found today valuable and this is one step further forwards on your innovation journey, towards that thriving business that we really want you to have. And we look forward to meeting with you again soon, thank you so much.

**Captions by Verbit Go**