



Communications and Digital Committee

Corrected oral evidence: Scaling up: AI and creative tech

Tuesday 26 November 2024

3.30 pm

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Members present: Baroness Stowell of Beeston (The Chair); Lord Dunlop; Lord Hall of Birkenhead; Baroness Healy of Primrose Hill; Lord Kamall; Lord Knight of Weymouth; The Lord Bishop of Leeds; Baroness Wheatcroft.

Evidence Session No. 5

Heard in Public

Questions 62 - 70

Witnesses

I: Paul Murphy, Partner, Lightspeed Venture Partners; Caroline Norbury OBE, Chief Executive Officer, Creative UK; Nick Poole, Chief Executive Officer, Ukie; David Glick, Founder and Chief Executive Officer, Edge Investments.

USE OF THE TRANSCRIPT

This is a corrected transcript of evidence taken in public and webcast on www.parliamentlive.tv.

Examination of witnesses

Paul Murphy, Caroline Norbury, Nick Poole and David Glick.

Q62 **The Chair:** We are now on to our second panel of witnesses this afternoon. If our last panel were at the coalface in terms of being founders and CEOs of businesses, we have before us in our next panel people who are, if you like, responsible for bits of the framework within which those businesses are operating. I will ask you, if I may, to introduce yourselves.

Paul Murphy: Thank you so much for having me. I am a former founder. I started a few companies, one of which my current firm invested in. The firm is called Lightspeed and we are a global venture capital fund. We are quite large, with \$30 billion under management and 12 offices around the world. I joined Lightspeed to set up our team for Europe, based in London.

Caroline Norbury: Hello. I am the chief executive of Creative UK. We do two things, really. We are a membership organisation and we convene members across the whole of the creative industry: everybody from TikTok, BBC, Ubisoft and Warner Bros., all the way through to lots of different cultural organisations. We work very closely with our members and gain insight from their experiences of what is going on in the market.

We also have another part of our business, where we work with 600 to 700 small businesses every year, all over the country. We have teams all over the country. We work very intensively with those small businesses and we invest in them. We have raised private investment, but we also manage some public funds that invest in those businesses. We do not really do grants. It is very much investment. We are a not-for-profit, but we are also a VC. Our expertise is very much at the early stage of a creative business's journey.

I also sit on the Creative Industries Council and I co-chair the growth group for the Creative Industries Council.

Nick Poole: Good afternoon. I am chief exec of Ukie. We are the UK interactive entertainment association. We are the trade body for video games and interactive entertainment in the UK. Our role, essentially, is to help create the conditions for games businesses to flourish in the UK. We have set ourselves the ambition to make this the most games-friendly Parliament in British history and I am really excited to be here for the session today.

David Glick: Good afternoon. Thank you for inviting me. It is a great privilege to be here. I am the founder and chief executive of Edge Investments, which is a specialist investor in the creative technology sector. I am actually on my third career. You can see a bit of grey hair there. My first career was as an entertainment and media lawyer representing film stars, rock stars and all the people who use them. I then became an entrepreneur and built and exited two reasonable

businesses of scale. Then, realising I have some talent for growing value in businesses, I set up Edge as a venture capital house to invest in creativity.

That was largely for two reasons. One is that I believe creativity improves the quality of all our lives in a pretty uncomplicated way. The other is that I am very passionate about social mobility and this sector happens to be one of the greatest drivers of social mobility in the UK and worldwide.

The Chair: Thank you all very much. We have four categories of questions that we will explore. It will be about the role of the creative industries in the industrial strategy and building growth; then we will talk about the role of the investment firms; then we will come on to government initiatives; and then we will talk at the end about access to talent, specialised facilities and things like that. Lord Dunlop will kick us off.

Q63 Lord Dunlop: Can I start by asking about the role of creative tech in powering creative industries more generally? As we know, the Government have identified creative industries as one of their eight high-growth sectors with huge growth potential. My question—to Caroline Norbury, in the first instance—is what role creative tech will play in realising this potential. Secondly, how successfully is creative tech being deployed?

Caroline Norbury: I am probably going to disappoint you with my answer, which is that technology is a tool, it is not a subsector. There are lots of different technologies in lots of different parts of the creative industries and they all do very different things. A worry I have is that we over-fetishise the technology bit of it. Technology is really important in the creative industries, as is it in lots of other sectors. However, it is not a silver bullet in its own right.

In terms of how we are shaping policy and the importance of what is happening with the industrial strategy, we need to recognise that there are huge parts of the creative industries where there is as much growth as there is in the tech bit. Technology is absolutely a massive driver of growth, particularly for businesses that are scaling and want to scale quickly, but that is not the only place where there is value.

If you look at perhaps one of the biggest brands in the world, Pokémon, it is a series of characters. Or look at Smiley. It is a logo, but it generates gazillions. Technology is a real accelerator and, in many ways, also a real leveller. There are so many free tools that allow new entrants into this industry, but it is not a silver bullet.

Lord Dunlop: You are saying that technology is important but should not be overemphasised.

Caroline Norbury: Yes, absolutely. Just from our own experience as an investor, of the something like 26 businesses we have invested in over the last few years—some in equity and a lot in debt—only a third were

what people term createch businesses. A third were agency businesses and a third were content businesses.

Lord Dunlop: Mr Murphy, do you have a view on this?

Paul Murphy: I do. I completely agree with Caroline. On one hand, we should not overthink it, but technology has an interesting role with creativity. A lot of the technologies that we now use came out of the creative industry: things such as 3D drones, and even AI and motion capture. There is a whole other set of technologies that came out of gaming, which would not have been possible if you did not have creatives practising their craft to produce this content and then realising, "We need a more efficient way or a different way to do something".

Out of that, you have these large industries that can be born. It is very important that you do not restrict the creative side or put any parameters or requirements around it but, on the other hand, be open minded because some really game-changing technology could emerge from the other side.

Lord Dunlop: Mr Poole, do you want to add anything?

Nick Poole: It is really valuable to look at what has made the UK such a creative powerhouse throughout its history. There are two things we have been fantastically good at. One is telling stories that are heard around the world, creating characters and building worlds. The other is sitting in sheds and creating innovations and inventions that go on to spawn entire industries.

In many ways, video games sit at the intersection of those two things, creativity and technology. Directly, video games are generating gross value added in excess of £6 billion into the UK economy. The market valuation of our industry is around £7.8 billion. Directly, we are a force multiplier for the creative industries, because there is not one pound of that that does not derive from creativity, innovation, ideas, storytelling, animation, film and so on.

The other aspect, though, is the immense spillover benefits of what we do as an industry. We already heard that a huge amount of TV and film production is now dependent on technology that was born in the video game industry. We are seeing spillover benefits into the wider tech sector. We are seeing innovations in AI that originated in games. For us, creative technology, yes, builds on that fundamental capability, but it accelerates the growth and the potential of how we reach all those people.

David Glick: When we talk about creative industries, we are bundling a whole series of very different subsectors together. In some ways, that is great, because it gives us a sector of some scale that we can talk about in forums such as this but, actually, a lot of those subsectors are very different. First, we need to look at which bit of the creative tech world we are looking at.

Secondly, the creative industries really break down for me into two different categories: microbusinesses, owner-managed businesses that will never scale and probably do not have the ambition to scale, and those businesses that really can scale. Often, there are some subsets of the creative industries that just will not ever scale, because the subsets themselves do not provide for it.

Answering your question about technology, it splits quite cleanly. Paul said, and I agree, that the creative industries have always been and continue to be the canary in the coalmine for lots of new technologies, again and again. They always will be. There are businesses that look to scale that are technology creators or technology developers, maybe taking other people's technologies but moving them forward, and then there are microbusinesses, which are really technology takers. They are using the technologies that have been created elsewhere.

Both are important, but the businesses that are technology takers are always going to be, by definition, smaller. The businesses that are technology creators have the opportunity to really bestride the world, as we have seen. Therefore, we should look at the question slightly differently and say, "Which sector of the creative tech world is going to drive the significant growth?" In some sectors, it is incredibly important. In others, it is a new set of technologies in the same way as Apple or Microsoft technologies have been adopted by everybody who uses a laptop or a tablet.

So there is a difference in this. Both are important, but the real drivers for the economy will be those businesses that are creating or developing new technologies.

Q64 Lord Dunlop: Can I just probe a little deeper on this intersection between creativity and technology? That seems to be really important here. I have seen the view expressed, and I was interested in what Mr Murphy had to say, that the adoption of creative tech seems to be driven more by what technologists are working on than the needs of the business. Is it shaping the creative businesses or is it something that is added on, virtual reality or whatever it may be? Is that a fair assessment? If so, why is that the case?

Nick Poole: In games, very often you set out with a creative vision and the technologies do not exist to deliver it, so you have to innovate along the way. It is less driven by what is available off the shelf and more by the art of the possible. That is why we have consistently innovated around platforms.

Caroline Norbury: I would agree. My background is as a filmmaker. I used to work on celluloid. Basically, we would say, "In this story, this needs to happen. Can somebody please come up with a way in which it does?" That is sort of still how it carries on. The poetry and the pipes are interchangeable. You need both of them at the same time and, quite often, it is the imagination that is going to generate, "We need this". It is that ingenuity that then comes up with the tech solution.

Your point is very well made. The creative industries are like a petri dish for innovation in lots of other sectors. Look at game engine technology and how that is being used in automotive and aerospace. It is also being used in town planning, to look at what happens in different scenarios, flooding and so on. It is quite often creating the ideas that are going to generate different types of solutions. Sometimes they are technological, although not always.

Q65 Lord Dunlop: Can we move on to what the Government are doing and how they are supporting the sector? Do you think the Government understand the importance of creative tech? Is that reflected in their policies, programmes and priorities?

The Chair: Just to add, we will come back specifically to these actual big programmes that we have talked about earlier. Do not feel you need to get into too much detail on specifics.

Lord Dunlop: Mr Murphy, do you want to kick off on that?

Paul Murphy: Sure. I have been in the UK for a long time, despite the accent. What I love in what I have seen with education in particular is the focus on STEM. That has produced some really amazing talent that we are now seeing emerge in AI, engineering and the sciences. A potential casualty of that focus has been on the creative side. I do not know that young people view a career in the creative world as aspirational, as maybe they did once before. That is a miss.

To the extent that there is an opportunity to add investment into this area and change some of that perception, there is a huge opportunity there. As David mentioned at the start, the creative sector rewards talent, not pedigree. It does not care where you went to school. It cares how good your output is and that is what gets rewarded. If we think about social mobility, to me there is no greater investment than investing in creativity and the creative arts within the education sector across the country.

Caroline Norbury: We are very early into a new Government. However, it is brilliant that they have identified the creative industries as one of their priority growth sectors. It feels as if there is already quite a lot of interdepartmental working. The direction of travel feels really positive. That builds on the work of the previous Government, which similarly prioritised the creative industries.

Where there is a real opportunity, though, is to be far more ambitious. It is partly a political perception, but it is also partly a public perception, that the creative industries are not proper, grown-up, serious places. There is a prejudice of some sort that government really needs to lean into and champion the creative industries. To your point, I would make the STEAM point rather than the STEM point. Making sure that creative subjects within education have parity of esteem is terribly important in doing that.

There is a real opportunity with the new industrial strategy to be ambitious. In the very challenging Budget we have just had, we did see some really big numbers for other priority economic sectors, but the creative industries did not get that money and never have done.

Lord Dunlop: Is that to do with the support for innovation? I was very struck by how support for innovation is not commensurate with the size of the sector, in relation to the economy.

Caroline Norbury: Yes, absolutely, and part of that is that we are still quite a young sector. We have been measuring it only since 1997. We do not have the same sort of publicly funded institutions, arm's-length bodies, et cetera, that many other sectors do. If you look at publicly funded R&D, the creative industries get a tiny amount, given that we are somewhere around—

Lord Dunlop: Is that a definitional problem? We heard earlier about that.

Caroline Norbury: No. There is a slightly different issue, which I am more than happy to come back to, around the definition of R&D tax credits. Within the bucket where public funding goes into early stage R&D, you have very established research councils. The one that represents the creative industries, the Arts and Humanities Research Council, is tiny and the smallest of them. There is investment in creative industry businesses through other research councils, but it is very difficult to get a number that is commensurate with that 6%. So the omens are good, but there is a real need to be ambitious and brave.

Lord Dunlop: Would anybody like to add anything?

Nick Poole: Do the Government understand the scale of the opportunity? Yes. Do they understand the scale and the imminence of the threat? I do not think, in all honesty, that they do. We live in an increasingly frictionless environment. Games businesses can pick up and do business anywhere in the world. There is one set of frictions the UK has that is to its advantage. There are two sets of frictions that are not.

The advantageous frictions are around a really sensible, mature and stable IP and regulatory environment. Businesses know what they are looking at. They understand. As we look ahead to AI, taking forward the same balanced and nuanced approach we have taken to IP into a world of AI is going to be critical. The good friction is around stability, a stable currency and so on.

The two frictions that are super-unhelpful are the money supply and the talent supply. We have already heard some of the frictions in money supply. The right money is not available at the right moment to enable UK games businesses to scale. We have heard in round tables we have been doing with investors in recent weeks that the UK is a fantastic place to start a games business, but one of the worst places in the G7 to scale a games business. That is because of those frictions in money supply.

That comes down, fundamentally, to risk. We need state intervention and public subsidy in order to interrupt that risk spiral that we seem to be in at the moment.

The other one around money supply is that we are taking talent supply chains that were engineered for a different age and trying to retrofit them to an incredibly agile environment. We need to do away with the concept of skills pipelines and talk about rapid prototyping of skills and partnership between industry and provision. Quite simply, by the time you have come through a syllabus-driven course, the industry is five years on from where you have been trained.

It is about the agility of teaching and learning, and the inefficacy of structures such as apprenticeships, which are simply not flexible enough for technology-based industries. Those frictions are meaning that it is much easier, at times, to do business elsewhere. That is what we need to overcome.

The Chair: I am just conscious of time. We will come back to skills and what have you, but was there anything in particular, Mr Glick, that you wanted to add at this point, in terms of government attitude?

David Glick: I think it will come out in the later questions, so I am happy to move on.

Q66 **The Lord Bishop of Leeds:** I want to focus on investment, but to segue into that from where we have just been. A couple of you spoke about the iterative nature of creativity, of the need to invent as you go along in order to enable the things that you want to happen to happen. Then, though, you are using language such as “ambitious” and “brave”. Is the scaling up to big business more ambitious than creating a lot of smaller businesses? Where is the difference in value?

Caroline Norbury: To Nick’s point about the money supply, we are creating businesses that are on the verge of scaling. If you look at the ONS statistics for the sector over the last 10 years, you see a doubling in revenues of small, medium-sized and microbusinesses, but you see an utter flatlining of businesses that employ over 250 people. We are absolutely creating those businesses but, at the point where they can grow, they are either selling out or, if they are being bought, they are not being bought by British businesses.

At all the round tables that we have—and we have many of them, including many with Ministers—everybody, regardless of whether they are from fashion, music, film or games, says that, first, they get most of their money from the States and, secondly, they are exhausted and worn out by trying to raise money in the UK. Investor exhaustion is a massive thing. Therefore, it is much easier to exit at that point than it is to keep going.

The Lord Bishop of Leeds: Why do you think, then, that there are fewer dedicated investment firms for the creative sector as a whole? Perhaps I could come to Mr Murphy first.

Paul Murphy: On the investor side, what I have noticed is that investment capital tends to be a lagging indicator of the underlying market. If the market is there, the capital finds its way. More capital is always welcome. That is great, but the right question that you are asking is around ambition level and why we are not seeing the outcomes that we want, which would maybe necessitate the kinds of capital that we provide or others could provide.

The answer is not as straightforward there. It ties into a lot of things that were discussed both in this session and, from what I heard, the previous one. There is plenty of capital. Just to give a sense of relative scale, we look at about 25,000 companies per year globally. We make about 75 investments. Most of the companies we look at are phenomenal businesses, but we are looking for stratospheric outcomes and, candidly, those are just harder to find.

David Glick: The last thing you said, “stratospheric outcomes”, is probably the most illuminating. There is a cultural and a systemic issue in the UK.

The cultural issue is that British entrepreneurs tend to get to a certain level and then get a nosebleed. They feel they are too high up on the ladder. I guess it was Gore Vidal who said, “Every time one of my friends succeeds, a little piece of me dies”. There is still, sadly, that kind of attitude in UK society. Comparatively, when I see American entrepreneurs, Indian entrepreneurs and those from other countries, it is always, “Come on, I’m going to help you climb up higher”. So there is a cultural issue there.

The systemic issue is that the scale of UK funds and the initiatives that help them scale mean that UK funds are always too small to follow the businesses that will be stratospheric on their journey. There is a big pressure on a fund manager. Look at Lightspeed, a terrific fund, or some of the American funds of the same size. Having been around for 20 or 30 years, and having delivered fantastic returns for their investors, they have earned the right to hold on to the money and keep investing for a very long time, whereas UK managers, earlier on in that process, have LPs saying, “You promised me this would be a 10-year fund and you’re investing in businesses in years 2, 3 and 4”. So you have about a five-year life in the funds and you cannot double down.

You get to a situation where, systemically, UK funds are almost forced to look for businesses that will not deliver stratospheric outcomes, but will deliver quicker, reasonably good outcomes. There is a need for interventions that are more ambitious, that allow the growth of bigger businesses here, for them to remain in the UK and continue to be funded by UK capital, private markets first and public markets later.

Otherwise, we will increasingly see businesses continue to grow to the scale-up point and then take capital from somewhere else, typically the US, and typically relocate to the US to be closer to the source of capital

and closer to their biggest market. We will continue to lose those businesses. The ones that do really scale will cease to be UK businesses.

The Lord Bishop of Leeds: There needs to be bravery and ambition in taking a longer-term perspective.

David Glick: Yes, and some way to help UK funds increase in scale, not necessarily to \$30 billion under management, which is one of the larger funds in the world. Certainly, the number of UK funds that are about \$1 billion is very small.

Nick Poole: From the perspective of games, I would agree with everything David said. There is no UK publisher of first resort. Over the last 20 or 30 years, if you want to scale, you go outside the UK for money. That means that the value of the IP then leaves the country. When you get very big IP properties, huge things that should be great British success stories, the money tends to exit and go overseas.

As a result, we are not roundtripping that money back in. We are not reinvesting into the grass roots of the industry, which means, essentially, we are becoming either an IP farm for other investing nations with a greater risk appetite or a work-for-hire hub on the outer fringes of Europe, where people go, "The UK's got some skills. We'll commission those skills from them". That is not the basis of long-term, healthy growth for a creative industry.

The Lord Bishop of Leeds: Is this inevitable, because of the difference in scale between the United States and the UK?

Nick Poole: No. There are other countries that want it harder and therefore are fighting harder. There are countries with more competitive tax reliefs. There are countries with more flexible fiscal stimulus. There are countries where there is very overt public, political support for their creative industries. We do not have that. If we are genuinely going to interrupt this cycle of offshoring the value of our creative industries, we need a visible, above the line display of that support.

Caroline Norbury: One thing that has worked quite well in Singapore is that, about 10 years ago, it brought in a way in which government underwrites 70% of IP generated and developed in Singapore. It did that with a very patient approach. To David's point, it hoped for and wanted the money back, but put it out over 10 years or longer. It is those sorts of interventions that could be more ambitious, so that we can encourage businesses not to sell out so quickly and to be retained for longer in the UK.

To the point everybody has made, those bigger pools of capital are not here yet. It is not quite the \$30 billion number but, if you look at what the UK has done in social enterprise funding, there is a template there, which I have talked about a bit before. I might even have mentioned it here. When the Government set up Big Society Capital, there was not a

market for investing in social enterprises. There were not dedicated fund managers who invested in social enterprises.

The government money was £400 million. The banks put in £200 million, totalling £600 million of capital to set up Big Society Capital. The social enterprise sector, 15 years later, is worth something like £9 billion. It has used that money to leverage in something like an additional £3 billion of cash. So there are ways in which government can create markets, by underwriting that first, early loss, and using government money to catalyse private investment.

Q67 The Lord Bishop of Leeds: I am going to lump two questions together and then I am done. Given what you have said, how can access to capital be improved, specifically for the creative tech sector? You have identified the problem, but what is the potential solution? Linked to that, what is your view on the role of the British Business Bank in addressing this?

Nick Poole: We had a really valuable round table with the British Business Bank just a couple of weeks ago to explore its role. It was like two indigenous tribes meeting in the forest for the first time, speaking entirely different languages with very different cultures. It is clear that there is a journey to go through, from the debt financing to which that it is accustomed, to the ways in which we need to be able to access support and money.

A lot of the funding instruments we have in the UK are created by somebody else for the creative industries. The first principle should be co-design. Sit down with those industries and co-design those instruments because, otherwise, we are inheriting models of innovation and growth that simply do not really apply or respond.

We would love to see a much longer-term appetite for investment, particularly in creative businesses. We have been speaking to some of the fund managers that sit beneath the pension funds and the super-consolidators, thinking about investors who have a 30 or 35-year horizon, rather than a three-year or six-month horizon. So there are ways in which we can work with government to improve how that money supply is engineered around the specific needs of these businesses.

The canonical thing is this: what is the asset that you are investing in? There is still a lack of understanding about the value of creative and intangible assets as an investment proposition.

Paul Murphy: I think my fellow panellists know more about this topic than I do, so I will defer to them.

David Glick: I am happy to talk about it. I have had the British Business Bank as a cornerstone investor in two of our funds. I found the organisation to be first rate and very supportive, as well as being very supportive of the sector. There are two creative industries funds, largely, within its portfolio.

The downside of the British Business Bank organisation is that it is siloed into two different sectors: the enterprise capital fund programme, the British Business Bank, and the British Patient Capital silo. There is no natural progression from one to the other. As a manager, as you are raising for earlier-stage businesses, and then looking to raise for scale-ups and go forward, there is no way to go from one to the other. They pride themselves on being separated and on the distinction.

On the one hand, without the British Business Bank, funds such as ours would not attract the scale we have done. It has been very good, but it is very hard, with the British Business Bank, to go from a modest size fund—we run £150 million, roughly, of funds under management—to a multiple of that, or very hard to know the path to do it. It is not a natural path. The problem really is silo. As an investor, the bank is very good.

The other piece about it, if I may speak for a minute more, is that the flagship programme, the Capital for Enterprise programme, was under state aid rules and is now under Subsidy Control Act rules, which are broadly similar. They are set by a set of people who do not understand the creative industries, in negotiation, I guess, with Europe.

For example, there are rules that apply to the EIS scheme as well. You cannot invest in a round of more than £5 million. The median round of early-stage businesses is £6.5 million. So you are already looking at a large series of businesses that should be invested in and look very good, but you are legally prohibited from investing in. There are lots of rules around subsidy control. I understand why they are there, but they are really quite damaging for fund managers looking to be commercial and grow the right businesses.

The Chair: If you wanted to follow up in writing to us on the rules around subsidy, as you have just mentioned, specific to the creative tech area, that would be helpful, rather than us getting into the technicalities now. I know I would not be able to follow it, anyway. Part of what we are trying to get to here is the specifics, rather than the general that any industry or sector might be facing in this area. That sounds like an area where there might be particular things.

David Glick: I would be very pleased to do that. The other area that I am happy to follow up on is that there ought to be tax reliefs for holding creative tech investments longer than a certain period. They are long-term investments and rather different from the shorter-term investments that the Government are looking to increase capital gains rates on. If the Government accepted that the length of time it takes for investors to realise these investments was systemically longer, that would encourage a lot more private capital into the sector.

The Chair: Thank you. I shall move on to Baroness Wheatcroft, who may be more equipped than me to ask a question about that.

Q68 **Baroness Wheatcroft:** If I can just go back to that last point, Mr Glick, why do you think it takes so much longer for companies in the creative

tech sector to reach a scale where that money does not need to be incentivised?

David Glick: There are a number of reasons. I am not sure I can comprehensively cover them quickly, but some of them come from the fact that you have to create intellectual property. Then you have to do something with that intellectual property, to disseminate it. Then you have to often build the technologies to take it a lot further. You have a double path there.

One of the things about intellectual property is that you do not always get it right the first time. Lots of game developers I am sure you meet here have a lot of flops before they have a hit. There is a lot of time taken to do it. The other thing is that we are a small market. We need to grow something domestically before it makes sense to take it internationally. Again, there are long timelines here.

There are a number of other reasons and I am happy to follow up with a bit more detail on them, but it is a factor of creative tech, a bit like deep tech, that it just takes quite a long time to get the big successes.

Baroness Wheatcroft: That is incredibly helpful and, if you would follow up, I would be really grateful. The purpose of this inquiry is to try to be specific about a sector we have already heard is not totally specific anyhow. We know British companies have problems in scaling up and we want to try to work out if there is anything specific.

On that point, you have talked quite a bit already about what the Government do. Is there anything that you think they could do, not particularly in those early stages, where there are lots of grants and it may be difficult to navigate, but to really grow the next stage, the scaling-up process?

Clusters, for instance, seem to have had quite a lot to contribute. Are there any thoughts on those clusters and their effectiveness? Should the next stage of clusters be to build on the existing ones or to start some new ones?

Nick Poole: It is a fantastic question. Clusters are really valuable under certain circumstances. In some senses, we have an oversupply of start-ups. What we lack is a sensible ladder for scaling. In essence, it is quite easy to start a business. It is quite easy to access the initial tools and the technology. It is absolutely the case that your smash hit IP will not come from your first game. It probably will not come from your second. It is quite likely to come from your third, by which time you finally understand the technology and the IP that you are working with.

Clusters can help, particularly for an industry such as ours, which is incredibly geographically distributed across the whole of the UK. Access to talent and creating the environment for people to share knowledge and ideas is fantastically helpful. The single thing that government could do that would be most impactful for our industry is increase the rate of tax

reliefs accessible under the video game expenditure credits system and then to make that system more flexible.

In essence, the industry will take care of growth, innovation and creativity but, at the moment, we are operating with one hand tied behind our back, particularly when it comes to the rate of reliefs available in other countries.

Baroness Wheatcroft: Is that true of the sector more widely?

Paul Murphy: Yes. One of my companies was a game studio. It is very hard to raise commercial capital in the early days for any creative company. When you step back, you think, "That makes sense; it's not a great sector to invest in"—until it is, and all of a sudden, you have this massive hit. There is this thing in venture capital we call the power law of returns. It is even more pronounced within the creative sector and specifically for gaming. So the more that can be done to allow more creatives to start building companies, the better, because that will ultimately produce those very large outcomes over time.

Baroness Wheatcroft: Assuming they have started the company, it is the scaling up that we want to get into. Is it tax relief that will do it?

Paul Murphy: If I could just slightly challenge the premise, I actually think that we need to start more companies. I slightly disagree on that. What is happening right now in the UK is that there is phenomenal talent, which has not yet come through the system to produce their IP. Great content can come from anywhere. We need to let more of those creatives try.

Once they try and, if they start to succeed, the capital finds those opportunities. If there is one reason that companies struggle to scale, it is talent. If there is one reason that a company is going to leave the UK, it is because of talent. So the more we can do to create more talent, so those companies can grow within the UK, the better.

Caroline Norbury: To your point around the creative clusters, it has worked phenomenally well. I cannot recall the exact initial investment, but they have raised nearly £300 million of matched funding in a very short period. I suppose I would be greedy and suggest that you might want to try to do both: build on the existing clusters, but also let more flowers bloom.

The first creative clusters programme was incredibly successful, but it only had visibility of funding for four years. As I said, we are still a youngish sector. We need longer, and we need predictability and reliability. We need to believe, and investors need to believe, that everybody is in it for the long haul. These arbitrary little bits and bobs of programmes do not really give people the confidence that that investment is going to continue.

Can I also just refer to the R&D tax credit issue? There are a number of other OECD countries—my colleague behind me told me there were 23,

just before we came in—that have arts and humanities within their definition of what constitutes R&D. If the R&D tax credit was broader in its definition, to your point, you would invite more and more people, and more and more businesses, to utilise those tax credits, which would, in turn, incentivise more innovation.

Q69 Baroness Wheatcroft: You were sounding really quite enthusiastic about the industrial strategy. Many of us are still trying to glean what the latest incarnation of the industrial strategy really means. What would you like to see in the industrial strategy that would actually help, rather than just saying, “We’re going to go after the creative industries”?

Caroline Norbury: I would like to see a broad approach to capital, in the way that I have outlined. I would like to see some sort of wholesale fund that could incentivise private sector investment, where government played more of an active role in underwriting that early-stage risk. I would like to see more join-up between the plethora of programmes and initiatives.

In your earlier panel, there were some conversations about the investment into capital and plant, rather than businesses. A lot of that is because they are not necessarily working with the right intermediaries. Money should be going to businesses. Whether a university is the best place to make a decision about what business to invest in is perhaps a different question. But there absolutely should be some more follow-on from those various initiatives. We do not have enough joining of the dots.

In my experience over the last 10 or 15 years, because our sponsor body is the DCMS, which is the smallest of all the government departments, the creative industries have had to go fishing for bits and bobs of money in other departments. There is a ragbag of stuff. One hopes that, with the industrial strategy, all those dots will be joined up, because there will be an ambitious vision overall of what good might look like.

Nick Poole: I absolutely agree with every word and will build on what Caroline has said. I would like to see more ambition. We are in the early days of a digital industrial revolution that is every bit as transformative as the last Industrial Revolution, and the UK is good at it. We are early adopters. If you cast yourself forward five or 10 years, AI is going to be writing your code base for you. AI is going to be managing your workflows for you.

The real skill will be in asking AI to create new and interesting ideas—the questions we want to answer. There is the throwaway line, “You’re not going to lose your job to AI. You’re going to lose it to the person who’s better than you at using AI”. We are positioned to be an early adopter in that revolution but, at the moment, we are applying 18th-century thinking to a 21st-century industrial model.

We need to really understand how money works, exactly as Caroline says. We need to create a pro-risk, pro-business environment, understanding our unique strengths as a creative powerhouse and taking

those out to the world. I would love to see an industrial strategy, and we have long needed one, that has that north star of a much greater ambition about our positioning in a global digital revolution.

David Glick: I am largely in agreement. I would just make a couple of slightly different points. There are lots of initiatives helping grass-roots microbusinesses. There is enough of that, although it would be great if there was more. There is not enough to help those that begin to emerge to go further. We should be giving larger amounts of money to a smaller number of businesses that are actually showing the ability to scale.

As venture investors, we always look for product-market fit. There is a reason it is slower in the UK. If you look at the US, the scale of the market is so big that you can see financial product-market fit. I have just come back from India, where I looked at a number of Indian VCs. They show product-market fit with huge numbers of users, even if the revenues do not get there. They say, "This number of people are using it so, when we get to a country where the society is wealthier, this'll translate to wealth".

The UK is small in both. We need to help those businesses bridge that chasm from early stage to a bit further. I would think the best way of doing it is through private markets. It is not about direct investment, because the Government are not very good at doing that. They are much better at putting the money into private hands. I would say the R&D tax credit definitely should be specific. Lots of our businesses do not get it. We see some that do and some that do not. It feels unfair when you look at the divide.

Some specific tax advantages are needed for investing into a sector that gives this country not just great wealth but great soft power. We should not lose sight of that. Lots of other countries actually snap up our businesses earlier, because they want to take the soft power. Let us not lose sight of that. One of the reasons our businesses go abroad is that people are prepared to pay more or value them more than the UK does, because they want some route to soft power. We should be accepting that that is a benefit for the UK.

We should be incentivising private individuals and, of course, we definitely should be helping the larger pension funds to access managers, whether they are of the scale over here or the scale over here. It does not really matter. There are lots of problems in doing that, which are obvious, but we should be finding ways to help that capital come into the sector. For me, it is about financial incentives that help individuals, businesses or pension funds invest in the professional organisations to do it at a slightly more advanced stage than we are doing at the moment.

Baroness Wheatcroft: Finally, if I can just come to you—

The Chair: Keep it brief, because we are almost running out of time, Baroness Wheatcroft.

Baroness Wheatcroft: You have been clear that there is not a shortage of capital. How can we keep those companies that raise the capital, wherever they raise it, based here?

Paul Murphy: It is about helping with the talent challenge. It is primarily a talent challenge.

The Chair: We are going to come on to talent right now, so that was a good segue.

Q70 **Lord Kamall:** That sets us up nicely, in fact. We have heard that access to talent, both from you and previously, and access to specialised facilities are issues faced by most UK tech scale-ups, whichever part of the industry they are in. What specific needs do creative tech businesses have that make these barriers more acute? I will start with the two trade associations, Caroline and then Nick, but I know, Paul, you clearly have some thoughts on this.

Caroline Norbury: This is not my specialist area, but it is about where we start training people. To Nick's point, we live in a digital age. The World Economic Forum has been talking about creativity as the number one skill for six or seven years of its last meetings. Everything that we learn today we will probably unlearn and learn something new tomorrow. We do not need to learn the things, perhaps, that we have always learned, when we can just access so much.

I know you want to concentrate very much on the talent for businesses, but, actually, thinking about what we need for UK businesses starts so much earlier in schools. Over the last decade we have seen a narrowing and narrowing of what young people are studying. The ability to imagine new things requires a variety of inputs and access to different sorts of skills, practices and disciplines that are not just English, maths and science, which is how most schools are measured.

The curriculum is being reviewed at the moment. We have all been putting in our submissions to that, but looking at how schools are measured, what good looks like in schools, is the first step—and taking that measurement away from the very narrow definitions by which we measure schools now.

The Chair: Can I just remind everybody that we want to concentrate on creative tech businesses and the specific talent and skills need in that area? What might be acute in that? If one of the other panellists feels more equipped to answer that, then please do not feel that you have to suffer this question on your own.

Caroline Norbury: It is not that. Lots of businesses talk about the fact that they are not getting talent that is fit for purpose and ready for employment. That is because we are not preparing children with those skills.

Lord Kamall: That is quite long term. What about immediately? If the Government said, "What can we do now?" what would any of you on the

panel say?

Nick Poole: I am going to endorse Caroline's point. The long term is really important. We are advocating for a digital creativity GCSE, because you need to start growing your future workforce today. At the moment, we have a just-in-case supply chain of skills. "Let's start training people just in case those skills are going to be useful in seven or eight years' time". We need a just-in-time supply chain of skills, which means speaking to industry.

The particular skills needed in video games, such as technical artists and people able to do multidisciplinary production design, are not being produced by HE and FE institutions. We have to roundtrip the skills needs of industry back into the supply of skills. That is extremely important. The answer is in the name, but we exist at the intersection of creativity, technology and community, so we need people who are digitally literate, empathetic and able to then bring those advanced technology skills.

The problem is that, fundamentally, the way in which academia is structured to deliver these skills into industry is not fit for purpose.

Lord Kamall: Quite often, when we hear about talent, we hear about two types of potential or actual talent. One is that there are lots of young people who cannot get jobs. They have done a degree, but they cannot get a job in any sector at the moment. The other thing we hear is that this is partly because of immigration. Are either of those factors ones that we should be looking at?

The Chair: We want to know why specifically for this part of the economy.

Nick Poole: If I may, just on the mobility of skills, post Brexit there are frictions around people moving talent. If I had a choice about moving a skilled development team to Leamington Spa or Lisbon, I am going to go to Lisbon, because there are fewer frictions to moving those people.

Lord Kamall: This is something we hear from various sectors. There seems to be a view that the world is white Europe. Is there not a world beyond Europe?

Nick Poole: Hugely, yes.

Lord Kamall: I want to hear more about global talent, rather than just white European talent, if I am frank about it.

Paul Murphy: If I could jump in, the honest answer is that, if you are looking to the US market for talent, you are going to move your company to the US. To me, this is not something that is that complicated. We do not have to invent these people. They exist but, when we left the EU, we lost 80% of the creative talent. Short of rejoining the EU, which I realise is not feasible—I have been told, as least—we should do everything within the Government's power to make it really simple for the best people to come into the country.

Lord Kamall: Is that from Europe only or from the rest of the world?

Paul Murphy: From anywhere. If there was one silver lining you could look at from Brexit, it would be that. You could make it the best place for talent all over the world to come to but, from what I hear from founders, this is the number one complaint. It is still way too difficult to bring the talent in.

Lord Kamall: What about the impact of AI? You have all said, "We can train the people, things change and then we need to train them on something else". We could take your advice today and say, "We've got to start thinking about training these people to be more creative", and then suddenly someone could say, "What about AI? That's going to wipe those guys out of jobs". Does AI have an impact on your answer or would you still give the same answer?

Caroline Norbury: With a lot of AI at the moment, it is not "wiping out", but the people at risk are usually at the more junior level in the creative industries. In music composition, for example, if you have a scale of "not so great" to "excellent", the first third can probably happen through AI. The challenge is the implications for training. In so many creative industries, you are learning on the job. Lots of different subsectors are really iterative. There are all sorts of implications in terms of future skills. That is where there is a potential threat.

We have lived with different technologies for decades. When I was first starting out, 30-odd years ago, I had more of a picture in my head of what the change from film to digital production was going to do. The challenge now is that everything is so new. We do not always necessarily have the picture in our head about what that new thing is yet, which is why there is so much fear. But we have all lived with it for decades and decades, and probably will continue to.

Lord Kamall: We also tend to find that younger people are more creative anyway, are they not? They do not have the inhibitions that we all have as we get older. Is that a fair point to make or not?

Paul Murphy: I think so. The reality, as it relates to AI, is that it is not good enough. The talent base, at least, that I am referring to is the best of the best. AI is nowhere near at that level today. I have invested in a number of AI companies. Maybe at some point it will be but, as Caroline mentioned, those models have a lot of learning to do before they get to that level.

David Glick: I have two points. One is that immigration is an issue. I agree with that, but a lot of our businesses do not really care where their people are based. If the talent is not available here, or not available as cheaply, they simply move operations to the places where the talent is available or where it is cheap.

Lord Kamall: Do they just move operations or could they still be here, but outsource?

David Glick: They may still be UK businesses, but they move more and more of their operations. Once you start moving part of your operation somewhere else, the things that service those bits of the operation tend to go there as well. There are two things. Caroline mentioned the music industry before. It is strange. There used to be one very large British music company, but it is gone. The three largest music companies in the world are all headquartered in the USA and are all run by British executives. Something could have kept those companies here. What stopped them going here were the people and the market. That is why they went there.

The other thing that we see in scale-up businesses is that the UK is at a disadvantage in hiring and firing, because the costs of hiring and firing are far more than they are in lots of other jurisdictions. In the US, there is the Silicon Valley idea: fail fast and cheap. "Let's hire a bunch of people. Let's have a go. If it doesn't work, let's get rid of them". That does not really work here.

So people say, "Let's hire in a jurisdiction where, if it doesn't work, we can get rid of those people quickly and cheaply", which damages the growth here. Why hire somebody here? If it works, that is great, but if it does not, the cost of hiring and firing is so significantly more. There maybe should be some initiatives around allowing companies enough time to find out whether their hiring initiatives are working, before they get caught up in some of this.

The Chair: On that final point, it sounds like what you might be suggesting is a specific carve-out type situation, even just where they are of a specific innovative type or they qualify for some other status. Sorry, I am just thinking out loud as I am listening to what you just said.

I am going to have to draw this to a close, because time is up. Mr Glick, if you are able to follow up with those specifics that we discussed earlier, that would be great. There was something else that somebody was going to follow up with; I cannot remember.

As I said a few moments ago, we are looking here at anything that relates specifically to the creative tech industry. If there is anything that we have asked for, if anything comes to mind as a reflection on this discussion that you think would be relevant, or if, once you have left here, you think, "Actually, there was something more specific", please do follow up in writing. Use the committee team as the route to send that in. That would be really helpful. I just get the impression that some of this may occur to you after you have had this discussion, because there were quite a lot of technical things to get through.

I am really grateful to all four of you for your time and for all of your answers today. It is hugely helpful and I know this is always a big ask, when people are prepared to come and give evidence to us. Thank you again.