Hello, I'm Bradley Howard and welcome to the next episode of Tech Reimagined. Today, I'll be discussing digital necessity with Jana Brendel, a CTO of payment company Nets, and Richard Dodd, Director of Digital at Macmillan Cancer Support. Digital necessity’s a relatively new concept that was recently defined by Endava’s CIO as the next evolution of digital transformation. It's the idea of moving away from big transformational projects and instead focusing on fixing the backend systems that can break the digital experience on the frontend and doing so at speed. I'll come on to this in a bit. Firstly, Jana, welcome to the show. And how does that resonate with you, being a CTO yourself?

Thanks, Bradley. It resonates quite well. I mean, we're talking usually about digital transformation. So, talking the next phase of digital necessity is, yes, sticking with the basics of reimagining the business for the digital age. We're talking about massive computer capacity available and Moore's Law yet being in place and working. So, get ready for massive computer power and enable your business for that era. This is what we're talking about, right?

Definitely. And Richard, as someone who worked for digitally mature organisations in the past, do you agree with that?

I think one of the fundamentals to a rich digital experience is it's never just the frontend. And in order to achieve true digital transformation, you've got to get under the backend systems in the integration. Typically, organisations don't get into that. And so, sooner or later, you've got to pay that technical debt to deliver great user experiences and great digital experiences, which people are going to come back to and convert on. If I reflect on my experience, it's as you're doing digital transformation, as you're doing the project you run into the architectural or platform or integration problem that you probably should have identified upfront. So, proper integration planning and proper architectural roadmap visioning in order to deliver a digital transformation is absolutely right. I like the term digital necessity. I interpret that as just being agile. And as you hit a problem, getting into the challenges, sometimes these problems that you run into typically could stall a big transformation programme. So, I think it’s quite interesting a concept.

You know, I found a nice picture recently that all was going about going from silo spaghetti, so the traditional way of managing operational efficiency, product-driven complex landscape and then getting into that, how do you say, transformed way of operational efficiency and customer experience. And I think this is about customer experience improving that, but also going into modular and agile, and yeah, being both innovative and low cost so it goes through the whole platform and through the whole enterprise.

Absolutely. And alongside digital necessity is the concept of digital breakage. And one example of digital breakage that I personally experienced quite recently was trying to open two new savings accounts for my kids. And several traditional banks couldn't complete the process without me being physically present to sign off some forms or to actually open the accounts in the
branch. So, as a result, we couldn't open those accounts during the lockdown at the moment. So, we ended up going to some other banks that were able to go through the entire process completely online. And that's what we call digital breakage. So, Jana, you work in the finance industry. Do you think that these companies understand digital breakages?

JB: Yeah, I think there's a big change. We've seen it in the last five years. So, the traditional banks fighting hard the private banks, but also the corporate banks to get beyond that and the ones who did it were successful during COVID crisis now we've seen in the last three months. Because if you have to finish it in the branch, the branches were closed during lockdown, as many other restaurants and so on. So, I think we have seen massive changes there, but this is what the virus did. It discovered for sure the processes that were not yet ready and not yet really digital. So, I've just heard in a podcast about American unemployment forms, this is massive human intervention yet, and it takes time until the people get the money. And this is a real pity because this is normal people who really need it, just to pick an example from the US.

BH: And Richard, in your organisation, how do you see digital transformation, digital necessity, and how do you understand where the digital breakages are?

RD: If I can start with the last one first, digital breakage is, for me, I interpret that as organisations shouldn't try and control and protect how customers want to interact with them. We've seen numerous examples like Uber and Netflix where being consumer first helps you with your new product development actually deliver digital products and services that people want. I think there's, even more so within a pandemic, social necessity or necessity to be digital or die is also driving at high speed the way that organisations have to deliver. And I would argue that if you don't have a digital proposition in parallel with a physical one, then what is your business? If I relate that back to Macmillan, we have expedited our digital transformation in terms of our digital offer in the absence of a physical one because of the pandemic, and we've had to be more agile in the way that we deliver new products and new services using our investment in the stack that we've got, but also looking at ways to do things where traditionally we may have built in-house, but potentially now we're looking to build, buy, or partner to get the advantage that we need. I'd say it's definitely taken on at a service design level the way that the charity thinks about itself, we were most certainly more commercial because of the gap that we have with income left by the pandemic and how we'd raise funds. And it's probably made us think more like a start-up mentality and less treacle-based decision making, because we just simply don't have the time or the budgets to go through elongated, traditional kind of charity thinking. So, in many respects, it's a tragedy about what's happening. But at a transformational level, quite exciting time to be in digital in the charity sector.

BH: And when you're looking to partner with other companies, how do you try and investigate where their digital breakage might be? Because you don't want to partner with another company that if you hit some level of scale like what Jana was describing before, that you're going to have a bottleneck there.

RD: It's a great question. I think at the end of day, organisations need to think about solutions, and they need to think about contracting and they need to think about strategic partnership management. And perhaps that's a function now which moves outside of the traditional corporate
finance directorates and divisions and needs to be more digitally minded. There are safer bets in terms of the way that infrastructure and cloud-based services have scaled, and we know that we've got the trillion-dollar companies that are delivering that well, and so, they're less risk. It becomes more risky when it's more niche. When you go through an RFP for engagements like that, you are taking it – to a certain extent if you're dealing with a start-up, depending on your risk profile – you have to be more diligent. I guess it depends on the size of the proposition, the size of the engagement as to the level of due diligence that you've got to do. But ultimately, it starts with a business need or an organisational need and a problem which you're seeking to address, and you go and find solutions for. So, if I summarise that, people who understand solutions understand the business problem a lot more around RFP procurement and the kind of hoops that you make organisations dance through to get your business and then contracting after that in the way the contracting is managed.

[00:08:49]
BH: Jana, if we look at the bigger picture, what ways has digital changed in the payments industry in the past 10 years or so?

[00:08:59]
JB: So, what I've seen in the last, yeah, five to 10 years is that IT being the cost factor in big companies and being a potential outsource candidate is moving back in the heart of the business, being now the one who is driving innovation and productivity and also creation of unique selling points and customer experience. So, this is a big change from being always cost-driven managed, especially in traditional retail banking where the margins are shrinking. Also, as we've seen here in Nets, risk to big payment companies in mature markets more now moving into value-add services and in the core, in the heart of the company. So, this is, I think, one big change. The second one I've observed is the speed of change. You know, we are talking about exponential times. So, we are seeing massive computer power. We are seeing massive connection power and massive storage. And all those curves are exponential, and they are happening in parallel. So, this gives much more power and that together with the change in customer expectations. If you said, Bradley, like five years ago – this was also the same for Deutsche Bank – if you come in the branch and you would like to open an account, they would say like, “Oh, it's half an hour until the branch closes. Sorry, we need to have you in tomorrow morning because we can't finish it”. And yeah, this for sure, we have changed so you can open accounts now – also under the pressure of the new entrants to fintechs and revolutional banks, you know – you can open accounts now in below 10 minutes. And the same I have seen in the payment industry. Like for merchants, they want to be fast, and in Corona we have seen also the adoption rate increase, and companies like Shopify doubling their revenues in the first quarter of the year. Because, you know, all the merchants need to adapt into digital now and they need for sure also payment for that. So also, there. Opening processes that come with the same experience like you have as a consumer, an Amazon. So, you open the account, all the know your customer, and anti-money laundry processes are all done in 30 minutes. The video ident is done, everything is done. And then you get your terminal next day, your card terminal for your branch, hopefully open again. You know, that kind of experience is yet new in the market and companies competing there need to offer those services. Otherwise they are out of business. So, the two things: IT from a cost factor outsourcing candidate back in the heart of the company and the speed of change and adapting of new technologies. This is the biggest changes I have seen.

[00:12:20]
BH: And I appreciate that it's almost impossible to see six months into the future at the moment, but longer term, how do you think the industry might change in the next, say, five to 10 years?
JB: Oh, I think it's a fun time for an engineer and a technic optimist like I am. Because I think it's great times. We'll see new technologies arise and hopefully make the lives of all of us easier and more fun. So, I think it’s a good time to innovate and a good time to create new solutions, because I'm convinced that technology that will change our lives most the next whatever, 10 years maybe, is not yet there. It's not yet, how do you say, adapted, applied on a problem we really want to solve. So, I'm really optimistic. And even the Germans made it today. So, we have the Corona warming app out, and it's fully data protection all our values in there. The source code is on GitHub. So, I'm really optimistic also for Europe in that competition with Asia and the US, we can make a difference.

BH: It's amazing to think that had we prepared an app for detecting Corona, how long that would have taken just a couple of years ago. We probably wouldn't have released it yet if it was just a couple of years ago, but how quickly we've managed to get it out there.

JB: Yeah, I agree. This is really good to see. And this is big companies. This is Deutsche Telekom and SAP involved there. So, even those companies nowadays able to deliver that kind of service in a short timeframe. And this was so funny, our governmental sponsor, he said the only mistake he made was giving the go for the app 10 days too late. And what we all know being in that business is if you start 10 days later, it's hard to be out 10 days earlier than in the end. Right?

BH: Yes, definitely. And Richard, over to you. How has the charity sector changed in the last five to 10 years in terms of digital?

RD: Fundamentally, I think charities are commercial entities and need a digital proposition. And I think there's a significant shift from a physical mindset to a digital mindset, and think digitally, because systems are multiple audience needs from, you know, receiving information for the core values of a charity to actually donations and how income comes in. So, you know, you've got quite competing audience needs there. So, the full spectrum of audience needs delivered digitally. You know, my observation, having been at Macmillan for the time that I've been and not being from a non-for-profit sector previously, I think, you know, they've seen transformation like they have never seen before born out of necessity and born out of a challenging marketplace in terms of opportunity and a decreasing income that's brought in from the same pool of people so that, you know, charities’ income is down, government support is down. So, you know, charities are having to be much more mindful about their investment of which digital is a fundamental part of it. The other key thing for me is, you know, what space are organisations in? Are we there to build massive platforms and maintain them, or what is the core thing that we're there to do? Back to that build by a partner, and back to Jana's point about, you know, there's some things which are just utility, which consumers expect to be in digital experiences. If they're there, if they're baked into an app or they're baked in and there's people doing payment gateways or whatever, why not leverage that right there rather than trying to redo it in-house? So, I think typically the size of digital technology organisations potentially in the past would – it's always growing and contracting – but, you know, what is the size of the digital and technology organisation that you need within your business relevant to what you're trying to actually deliver? So, that's a few observations there, which I hope are useful.
BH: Thank you. And what do you think the future looks like for charities and other commercial organisations five to 10 years into the future?

RD: I think for charities, I think there’ll be a wash through that happens as a consequence of this pandemic, and I think it's broader than just charities. There'll be organisations that are no longer, there'll be ones that rise from, phoenix from the ashes. I think what's important is the charity sector is there for a reason. It's not just a vanity thing. It's there to plug a gap where maybe government and social has stopped and there is a natural space for charities. I think there'll be less charities. I think they'll be leaner. I think they'll be smaller. I think they'll be more commercially minded. And I think they'll be a lot clearer and tighter on the proposition and what they're there to do. That's kind of an organisation principle. I mean, I think the thing for me is -- Jana touched on it -- is within our working lives, you know, we can talk about these big technology moments, these big digital moments -- you know, the first time we saw the iPhone. I haven't been wowed like that in a long time. So, I'm waiting for the next big thing. And I think we talk about kind of digital breakages and digital necessity, the one reason that things are happening at the pace is because there's a -- not a corporate desire to change -- albeit that's there. There is a human, social, psychological, community need to deliver faster digital solutions and products. So, I'm excited about what the human driver will actually get us on the table to look at: more toys to play with alongside the big corporate drivers that we see.

JB: Richard made a great point. I think the same is the case for financial services. We're talking about leaner, smaller, and commercial focus -- more commercial-focused also in financial services. I mean, the basis of financial services is trust, right? But beyond that, it's all commodity. Account as commodity, deposits as commodity, payments as commodity. So, big banks have the challenge, and also big payment companies, if the basis of your services is commodity, the majority is average. You're not making a real difference. Customers would just turn to other services. And what we see with the younger consumers, they're really fast in adapting new services. So, what I think will happen is in financial service, company will focus really on the core of their business, what they're really doing best. So, what the financial service institutions do best and create value around that. There will be no money in the time of low interest rates to really go beyond. And one thing we touched earlier about the big legacy mainframe basis where all those frontend layers are above, I mean, the answer is simple. Either you create that service new or you will be out of business, because what we will see is more real-time 24/7 anyhow. And all those simulations to cover the mainframe, who's yet got the batches during the night, this will not be good enough. And customers will experience that. And sooner or later, it will have begun. So, banks really need to renovate, as said, away from silo spaghetti into future ready, right?

RD: I like this notion. I like the fact that there's many organisations hiding their spaghetti, hiding their dinner behind a good frontend and a good user experience, which actually, when you look under the covers, you recognise that most organisations have got similar issues to solve about integration and backend systems and integrations into financial systems and payments. You know, it’s masking – it's masking the technical debt. So, the bigger bang comes quicker, I reckon. I'm totally with you on that about the need to be -- you can't be agile with those legacy systems. You've got to have to get into it at some point. Otherwise, you're going to be exposed. And this is where the new challenger organisations and, you know, that start-up mentality and that has your based kind of DevOps model about being able to spin things up without these legacy debts. That's where the headroom will be in the marketplace. And hopefully that's where the innovation will drive as well.
Well, thank you very much for those thoughts. Now we're going to turn to a quickfire round. I'm going to ask you a question and I'm looking for very short answers to each of those questions. I'll take it in turns. So, I'm going to ask five questions. Question number one is, Jana, what's your favourite podcast?

My favourite is The WIRED Podcast. Latest news stories from tech, science, and business. Every week. Fun to listen.

And Richard?

This is going to sound as though we've teed this up, right? I've got The WIRED UK – obviously, for the UK version. But seeing as Jana's already said it, there's another one called Binge Mode, which is all about Star Wars, but maybe that's not what you wanted. [LAUGHTER]

There's a lot of big Star Wars fans at Endava, so maybe we could have a Star Wars themed podcast on May the 4th next year. Jana, do you wear a smartwatch or an analogue watch?

Analogue. I don't want to be bothered by my watch.

And Richard?

I'm typically old school. Analogue.

Jana, what is the biggest digital change that you've seen from your childhood to now?

This is a nice one. So, I had a technology time warp back in February 1991 when I was moving from East Germany after the war broke down roughly a year later and started my first job in Frankfurt. So, this was really 20 years' time warp. Never experienced that one again.

Wow. And Richard?

I remember a time when people used to sit in social spaces and interact with each other. So, I'll say the mobile phone for the fact that that has taken over that space and people's ability to have good conversation and learn and interact with each other. And the whole debate around that.

And Richard, what's your favourite phone app? Which one do you use the most?
RD: It's got to be WhatsApp. Not because it's the best, but just because it works, and it's a great example of an app that is successful because it just works. It's not sexy. It's not whatever. It just works. On a worked one, and dare I say it, the devil that is Microsoft-owned LinkedIn just purely because I think is an overall kind of content aggregation, networking, sourcing tool. You know, it's quite interesting still, even though it's been bought by Microsoft.

BH: And Jana?

JB: My favourite is Komoot. I don't know if this is available beyond Germany. It's – you can plan hiking, biking trips there and also see what other people did. And you'll find the most beautiful spots even in the environment you think you know best.

BH: I've got Komoot as well.

JB: Ah, good. So, it's in England also. Well, good. And I was surprised looking at what I use most. It's actually the calendar. So, it's about organising myself, closely followed by WhatsApp.

BH: And Richard, this is the last question. What's the most noteworthy businessperson that you've met?

RD: I'm going to sound terribly cliché, but I got the opportunity to meet Mr. Jobs while I was at EMI Music many years ago. He came to our offices and we saw a gig by The Good, the Bad, & the Queen, which is Damon Albarn, Paul Simonon of The Clash. They played a gig and we were into digital rights distribution. That's code for EMI trying to do what Apple Music got right many years ago. So, yeah, there was an opportunity to meet the man. But I realise it's cliché and it's probably bit of a hero fulfilment on a tech level.

BH: No, it's fantastic. And Jana?

JB: Wow. Yeah, my latest one that impressed me most was Janina Kugel, the lady who runs HR on the board level with Siemens until January this year. I met her in January. And yeah, she's one of the rare women who made it to board level in Germany. Remember, there are more Stefans and Thomas on board level than women, I think, until last year. So, she was fostering diversity and also making Siemens more leaner and introducing new way of working. So, she did it really well.

BH: Well, thank you both, Jana and Richard, for joining me for such an interesting discussion around digital necessity. In part two, we'll be hearing how Jana and Richard both started their career and how they got to their current positions. Please remember to like this podcast and hit the subscribe button.