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# Your digital transformation is likely to fail

The excitement generated by the phrase 'digital transformation' has waned for some time.

Industry-hardened executives are no longer willing to believe that by undertaking digital transformation their employees will automatically be able to create beautiful products, deliver them at hyper-speed, and generate double-digit revenue growth<sup>1</sup>.

And it's no surprise.

95% of digital transformations fail to exceed or achieve their targets<sup>2</sup>, and of the \$1.3tn spent on digital transformations in 2018, approximately \$900bn went to waste<sup>3</sup>.

The reasons for this differ significantly between organisations across industries, nevertheless, commonalities are evident: a lack of a clearly defined or communicated goal or objective; a lack of sufficient senior commitment, sponsorship, or funding; a misunderstanding in the breadth and scale of change; and, attempting wholesale transformation at once.

These are all failures of either vision or strategy, but we've seen as a root cause either a reactive C-suite or a lack of transformation expertise; in the worst cases, and all too often, the answer is a combination of both.

We believe such outcomes can be avoided. With the right guidance, digital transformation can bring incredible results, but there are numerous, complex changes that pervade an organisation that need to be managed effectively. These include: how a company thinks about the products, services, and customers its revenue is based upon; how its employees and teams operate and collaborate; the underlying technical architecture and practices that it employs; and the time and budget it dedicates to creating services and products that will allow it to thrive in the future. Better understanding of the four ingredients that make-up truly successful digital companies is a useful starting point in defining how to transform into a digital company, or, better still, evolve into one.

## The ingredients of successful digital businesses

Companies who are **design-led** outperform those who are not by 211%<sup>4</sup>.

Using **agile techniques** to deliver software development projects promises a 62% higher likelihood of success compared to conventional, sequential or waterfall delivery methods<sup>5</sup>.

However, it is the combination of these three key ingredients that creates digital products that your customers want, at a time they want them, which in turn helps companies achieve their key business objectives: it drives higher NPS, greater profitability, and increased revenue.

Leading strategy houses corroborate this thinking. In a recent McKinsey study, companies who shift to a customer-focused mindset (design-led) and make the equivalent operational and technology changes (agile orchestration and engineering excellence) can drive an NPS increase of 20-30% and a reduction in addressable operating costs of 20-50% in customer journeys<sup>7</sup>.

Companies who have the skills and techniques associated with engineering excellence (DevOps as standard, optimising system-wide flow etc.) are twice as likely to exceed cost reduction targets and twice as likely to exceed targets for the quantity and quality of products delivered than those who don't<sup>6</sup>.

Bain's focus is slightly different but in agreement: telecoms companies can see a relative NPS increase of 30%, a reduction in addressable OpEx of 20-30%, and an increase in annual revenue growth of 1-3% from simple, digital transformations (that have customer experience, advocacy, digitization of technology, and enterprise agility as the pillars)<sup>8</sup>.

Design-led thinking, engineering excellence, and enterprise agility are the cornerstones of success in the digital world, but to thrive, companies must also look to adjacent product and service areas in which they have the license and trust of customers to deliver.





# The importance of innovation: the fourth ingredient

Despite a lack of official data from Apple, the company was widely believed to have the largest revenue from watches of all companies worldwide and outsold the entire Swiss watch market from late 2017, three years after they launched their first watch<sup>9</sup>. They are a company who are designled, deliver in an agile manner, and have engineering excellence at their heart. But they also create new products and revenue streams in adjacent areas in which their customers believe they have license to act.



Traditionally, the development of strategies for new products, services, and revenue streams have come from broad strategic moves as part of medium to long-term shifts in company direction and require agreement at the highest levels. However, digital and agile paradigms have made the development of new services easier, quicker, and lower risk. The development of these new products, services, and revenue streams – in plain speak for the digital age – is innovation.

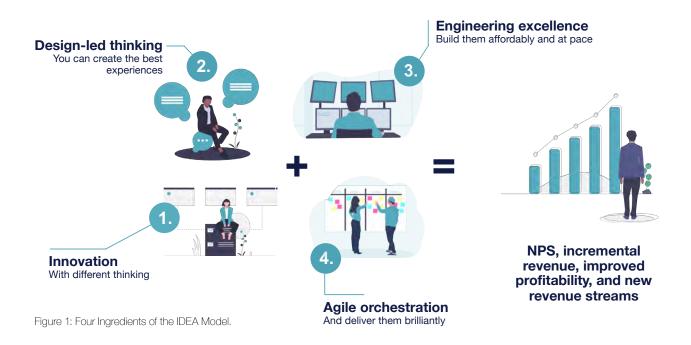
"According to The Boardroom Group, the second biggest internal concern for CEOs was creating new business models because of disruptive technologies<sup>10</sup>."

Innovation is critical to the survival of a company in the digital age and the prospect of not adapting is a sobering one when we remember that just 28 of the original FTSE 100 remain listed on the index (1984-2017)<sup>11</sup>.

Putting innovation at the front and centre of your digital transformation strategy will prepare you for an increasingly uncertain future. As tech-native disruptors – and the increased market and customer competition they bring – continue to thrive, diversifying product and service offerings is crucial to succeeding in a future of 5G, IoT, and the connected everything.

### Delivering digital success with NTT DATA's IDEA model

Our IDEA Model has been built and iterated based on our deep experience of guiding clients to success. That's how we know that the path to success and substantial business outcomes requires innovation at the core, with design-led thinking, engineering excellence, and agile orchestration forming a new paradigm for succeeding in the digital world.





#### I: innovation powering new revenue streams

The digitisation of the economy and increasing deregulation have brought unprecedented competition to traditional industries in the last 25 years. The breadth of and access to information and services available to consumers, and the exponential acceleration of customer expectations created by digitally native companies, has pushed long-standing leaders across industries to seek new ways of attracting and retaining customers.

Initially, this largely focused on value-add services and shifting customers to digital channels using available web and mobile capabilities - however, increasingly, businesses are realising that they need to create new services and revenue streams at speed to survive and thrive.

Our design-led innovation capability helps clients to ideate, develop, and deliver these new services in a collaborative, structured, and time-boxed manner, whilst limiting their exposure to risk and ensuring confidence through rapid and proven iterations of product/market fit.

For one Global Telco, the need for a new revenue stream came from extreme market disruption arising from a European challenger brand. Using our structured process (Figure 2) ensured collaboration with stakeholders and customers at all stages of product definition and in eight months, NTT DATA defined, designed, developed, and delivered a competing challenger brand and launched it in five channels, radically simplifying the ease of buying a SIM and the customer proposition.

This resulted in over one million customers in the first six months and a market-leading NPS of +65.

### "NTT DATA worked with us to build the business and a collaboration that is more like a partnership...Their approach was to focus on working together to deliver a quality customer experience..."

General Manager, Mobile Challenger Brand (Global Telco).

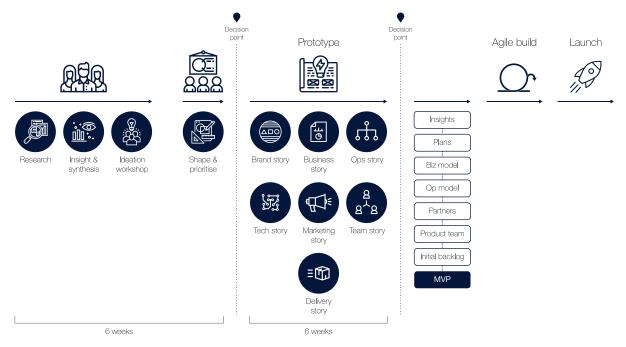


Figure 2: NTT DATA's Innovation Framework.

### D: design-led thinking prioritises experiences your customers want

Being design-led means defining features based on the experience that your customers want at an individual level across touchpoints.

This requires a culture that promotes diversity and equality of opinion and an environment where team members can challenge the orthodoxies of the business within the customer journey they own.

This presupposes a squad-based team structure that is customer-journey focused, autonomous, multifunctional, and dedicated. From our experience across sectors, this team structure best serves businesses delivering customer-focused change - for this, critical is ensuring that designers (UX, UI) and product owners are embedded in teams. To complement this, we cross-train traditionally

technical resources (from business analysts to developers) in understanding the value of customer-focused change.

A common misunderstanding about design-led thinking is that it relies on experience-savants who foresee trends and products beyond the ken of mere mortals, but of course this is not the case. Our teams draw extensively on qualitative and quantitative data to support and challenge their own experience expertise. This is underpinned by a number of key processes that structure our definition and design of customer experiences and digital services.

"At Vivo (Telefonica Brazil), we have reduced calls by 30% using omnichannel and inclusive design as standard and our cognitive contact platform, eVa."

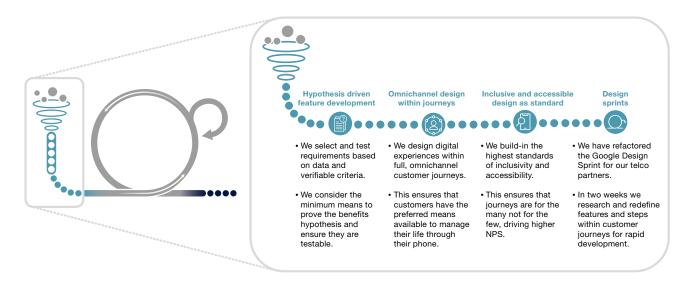


Figure 3: NTT DATA's Design-Led Approach.



Techniques such as Hypothesis Driven Design and Design Sprints empower teams to undertake this work and we equip and train our teams and clients to exploit these approaches. However, we also bring our own IP and platforms to super-charge their digital evolution. Platforms such as IVE and eVa broker and deliver the best Al-powered experiences across channels, maintaining context and ensuring that customers can self-serve in the simplest, easiest manner possible.

"With NTT DATA, I feel confident in our promise to continue to deliver a great experience and quality to our customers by leveraging innovation, automation and cost-effective solutions."

Former UK CIO. Global Telco.

### E: engineering excellence drives quality experiences and speed-to-market

A beautifully designed check-out journey that is simple and easy to use promises higher NPS, but that NPS – and the sales that the check-out journey aims to generate – will not materialise if pageload time is high or if outages on your front-end platform prevent users from completing their purchase.

In this example, engineering excellence is critical to the support of a consistent and reliable customer experience. However, engineering excellence also drives lower OpEx and higher speed-to-market in a more direct and tangible manner.

At NTT DATA, engineering excellence is about instilling a mind-set and set of processes and tools that allow our teams to bring robust, elegantly engineered software to customers at sustainable pace.

At the heart of this are three key components: having an enabling architecture (generally micro-service and modular API-based); having DevSecOps as standard; and, automating processes relentlessly. In combination, these three components drive down the overall cost of delivering software and increase pace by ensuring underlying services can be configured or built for specific purposes at speed, having a true CI/CD pipeline, and reducing development and test timelines and re-work.

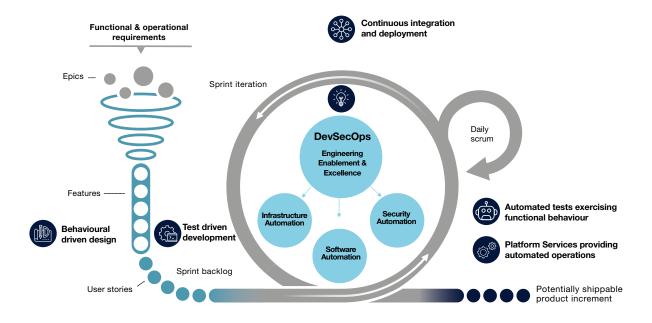


Figure 4: NTT DATA's Engineering Excellence Model.



To support these key processes and others further up the software-delivery lifecycle, such as Behavioural Driven Design and Test Driven Development, engineers and the wider team need the right tools and toolchain automation to succeed. At NTT DATA we are technology agnostic, but we will advise on the best-fitting tools for your digital ecosystem and bring our own IP to accelerate your path to excellence. This includes our proprietary (and now open source) BDD and test automation frameworks Donut and Cinnamon, and our SEE product that visualises key flow metrics from multiple tools (such as JIRA and Jenkins).

"We have a very high bar, we demand a different way of working, we demand excellence in our engineering skills and for me that's the biggest benefit of going with NTT DATA - they are prepared to adapt and flex to meet those demands."

Current CTO, NPS-leading UK Telco.

As with our customer-journey teams, our component and platform teams are organised as small, independent squads dedicated to specific journeys or platforms. Component teams focus on creating specialised, re-usable micro-services that support design-led feature teams - platform teams on the other hand create the enabling, DevOps architecture that allow all teams to deliver business outcomes at pace. These teams have brought our clients significant results, for example at a Global Telco we increased engineering productivity by 79%, reduced cost by 25%, increased speed-to-market by 12x, and reduced unplanned outages by 100%, all in the first year of our digital partnership.

### A: agile orchestration employed for unified, outcome-focused delivery

When companies start, it is common for team members to collaborate intensively and take on multiple roles to push a product or service into the hands of consumers as quickly as possible.

As companies grow, however, battle-lines (or areas of responsibility) are drawn that prioritise operational goverance, such as profit/loss and efficiency reporting. This theory has been widely praised, criticised, and adapted since the publication of "The Living Company" but for those unfamiliar, two major drawbacks are worth teasing out. The first is that companies who operate in this way lose the 'network-effect' – the quick and constant sharing of information common to a start-up. The second is that they lose sight of what their customers want (and expect) and look inwards at departmental or functional priorities.

Tools such as slack, trello, and basecamp can all provide the means by which employees can collaborate throughout a business but these do not in themselves address the fundamental challenge of breaking down functional silos. This requires an enterprise-wide view of the structures and processes that support (and hinder) an organisation and expertise in how to change these without causing unwanted disruption to business continuity.

At NTT DATA, the means to achieve and scale start-up behaviours across large enterprises is agile

orchestration. Within the agile family there are a number of scaling frameworks from Scrum at Scale to LeSS and the more commonly encountered SAFe framework. At NTT DATA we are pragmatic - we help companies find the most appropriate model for them and help them to apply it effectively throughout their organisation. For the majority of our clients, this means a lightweight, robust approach that ensures manageable business change.

There are, however, a number of key processes (Figure 5) that have immediate demonstrable value in our delivery and which we strongly recommend our clients adopt.

These processes, complemented by leading partnerships and accreditations with organisations such as Atlassian and SAFe, ensure that teams and departments organise themselves to focus on delivering business value consistently and at sustainable speed. This alignment to a shared goal, fostering of a generative culture, and empowerment at an individual level – without the hassle of onerous meetings and processes – creates a happier, more loyal workforce and the atmosphere required to deliver digital success.

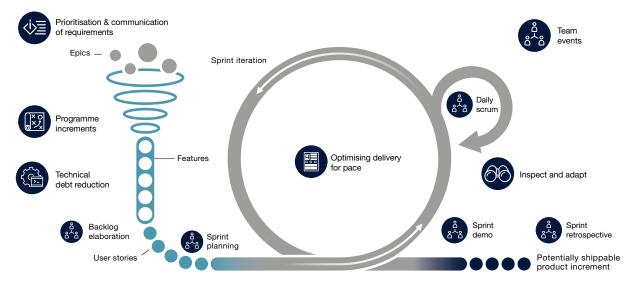


Figure 5: Key Elements of Agile Delivery.

# The IDEA model in practice: succeeding through digital evolution

For many of the global organisations with whom we work, taking on the challenge of transformation is a daunting task and one that senior leadership teams have all too often seen fail in their own businesses and those of their peers.

A practical means of starting digital evolution – that can demonstrate commercial success quickly and limit risk – is to identify a single area of your organisation that requires change and to bring in NTT DATA's expertise and IDEA model to help effect it at pace. Below is an indicative team structure that combines innovation, design-led feature teams, engineering excellence, and agile orchestration perfectly suited to a single area of change such as digital self-service or buy journeys.

With clear lines of responsibility, working together, NTT DATA can commit to delivering business outcomes across all areas and have implemented creative commercial agreements with our clients that share risk and reward and gain share based on our results. Indeed, to support true business evolution and commercial success, we bring robust commercial frameworks to our clients proactively so that they can be confident that we will deliver on our promises of commercial success and market differentiation.

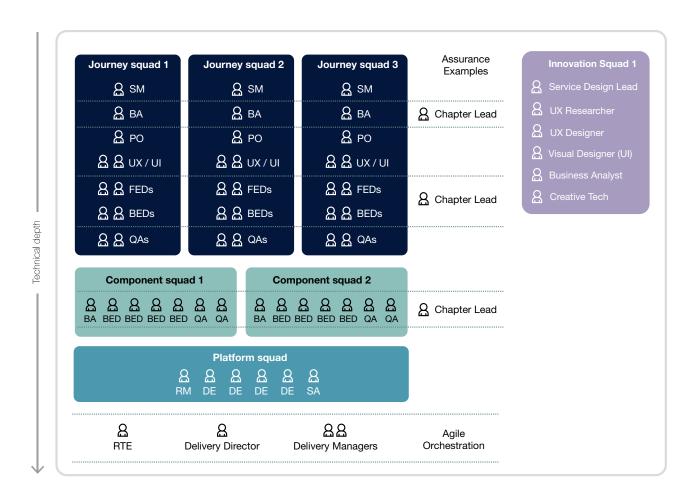


Figure 6: Example Team Structure - NTT DATA's IDEA Model.

Our IDEA model is the result of our own evolution and helps partners across industries to undertake proactive transformation, supporting them along the way with the expertise garnered across all industries and continents.

We are dedicated to our clients' success and it is that differentiates NTT DATA from our peers. Drawing on our Japanese heritage, we take the long-view of partnership - not just delivering digital success but guiding greatness.

"You know, the proof is in the pudding. The key thing about NTT DATA is the whole partnership piece. They really feel like a part of the team. . . they pulled it off perfectly."

Former Director of Digital Platforms and Experience, Global Telco.

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