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SMART MOVES FOR

DIGITAL TRANSFORMATION SUCCESS



> In today's fast-changing business world, the pursuit of digital transformation and technological innovation stands as both a challenge and an opportunity for leaders like us.

While the potential rewards are immense, it's essential to recognise that not all organisations achieve success on their transformation journey. In fact, McKinsey's research revealed that a staggering 70% of digital transformations fail due to unclear goals and misalignment to business-wide strategies.

I would like to welcome you to this exclusive event where we hear from those who have successfully led business transformation projects. This gathering will also provide a unique opportunity to network with peers and engage in discussions with industry experts.



Sincerely,



Michel Robert
Group CEO,
EPSILON TELECOMMUNICATIONS

Meet the speakers

You get the opportunity to ask the questions that matter the most and engage with the thought leaders and change makers on the day

Like-minded networking

Network and exchange ideas with CEOs, CIOs, and business leaders facing similar challenges within digital transformation

Ignite Growth

Stay up-to-date with the latest developments and rethink what can be effective for the enterprise moving forward

CIO 2023: **Tech, Transformation And Succeeding In Executive Alignment**

Digital transformation in today's business landscape can never truly happen without successful executive alignment. The whole executive team need to be aligned with the vision behind any proposed digital transformation roadmap, otherwise the chances of long-term measurable success are limited. This can be difficult when team members have differing, or even conflicting, views on the organisation's path forward on its digital journey.

A recent Leadership IQ study found that only 29% of employees believe their leader's vision for the future is always aligned with the organisation's.

Mid-market CTOs are continually faced with the challenge of gaining full Board acceptance or approval for technology investments, which can slow down the entire digital transformation process for enterprises globally. Whether it is investing in new networking models like Network as a Service (NaaS) or migrating more applications to the cloud or embarking on new technologies such as AI, it all requires buy-in from the leadership team to get started and deliver results.

For CTOs, succeeding at executive alignment can be the difference between accelerating organisational change or delivering more of the same. From a technology point of view, it is important to assess existing challenges and potential opportunities to pave a clear path towards successful transformation.

This comprehensive view of the organisation and its processes must be relayed to the entire executive team. They need to not only understand, but also believe in the success that the proposed transformation projects can deliver.

The Risk of Inaction

For some CTOs, aligning the technology, varying views of their leadership team, and the organisation's core mission and vision, is a task with too many barriers and challenges to undertake. The risk is a fragmented digital transformation roadmap and that an organisation continues to operate with the same legacy technologies and processes, because it is just too difficult to change.

However, these companies that remain 'stuck in their ways' are at an even greater risk than those that take the leap to improve operations with up-and-coming technologies. Legacy processes can be slow, fragmented and inefficient, ultimately leading to both monetary and productivity losses. For example, global financial institutions, according to IDC Financial Insights, are projected to spend a staggering $57 billion on outdated payment systems by 2028, with costs rising at a significant rate of 7.8% annually. Whether it is the financial services industry, telecommunications, manufacturing or retail, no sector is exempt from the losses that can occur due to legacy technologies.

It might feel easier to avoid the challenges of executive alignment and operate your business the same way as you always have done, but this puts you at a higher risk of getting left behind your competitors. The time to transform is now.

Aligning Your Executives

Succeeding at executive alignment means being a business and technology expert with the ability to translate between the two.

The best way of doing this from a personal development perspective is to spend time working in, or at least developing a good understanding of, the different parts of the business. This will enable you to gain an awareness of how things work and how they tick along together (or how they don't).

There are five key stages to think about when planning a successful digital transformation strategy:

1. Create a Foundation for Transformation

When developing your roadmap for digital transformation, a clear vision and strategy are vital. This transformation will affect everyone across the company, across various levels and departments. In order to create a solid vision and strategy, you must consider the company as a whole and get the executive team on the same page.

Collaboration is critical at this stage to create a foundation for success. You must get key process owners together for an in-person or virtual meeting to discuss ideas, or host these meetings in subgroups for larger companies, to ensure the entire team feels listened to.

"What processes need to change?", "What area is most difficult or inefficient?", "If you could change or improve one thing, what is it?", "If x process was improved, what would be the benefit to customers and internally?", "how can we allocate funds and resources towards this initiative?" – There are a number of questions that must be discussed to ensure a smooth transition to transformation. The key is getting agreement on what areas have the greatest opportunity for improvement and potential impact, then you can work together to create a short term and longer-term strategy for digital transformation.

Drafting a clear vision statement for the improvement can also be useful at this stage, so that everyone across the company can be aligned on the high-level objective of the transformation.

Some other questions to ask the team at this stage might be:

Does the Team believe that by making this change, there will be a significant and positive impact on the business?

Does everyone share the vision for the change and believe it is achievable?

Does everyone agree with the changes required to achieve the vision?

Which executives are prepared to be a leader for the initiative?

Are the executives prepared to be responsible for success or failure?

Does everyone agree that this project aligns with our company's vision?

2. Be Close to Customers

Transformation is only a success when it creates value within an organisation and for customers. Step two in this digital transformation strategy is to re-assess the vision and roadmap developed in step one, and align it with the needs of your customers.

You need to drill down on customer pain points, and see how improvements to process and potentially technology can enhance customer outcomes and experiences. You can get more information on these pain points by exploring their business challenges and opportunities. This might include conducting customer and employee surveys and interviews, measuring your average procurement times, and/or measuring customer service wait times, to name a few.

Once you have feedback from a wide variety of customers and employees, you will have a broad view of your audience and the necessary steps to overcome their challenges.

Some questions at this stage could be:

Does everyone agree on the customer pain points and the steps we need to take?



If these pain points are addressed, what will the impact be?

3. Identifying Areas of Improvement

It is important to identify which areas in the business need to be improved, and then drill down into how to do this. For example, some areas may require improvement in terms of technology, whereas others may require improvement in terms of team size, structure and management.

Whether it is rejigging the team, updating your company's technology platform, or overhauling the entire network, you must prioritise the areas that will improve both customer experiences and internal processes.

Some questions to cover with the group might be:

Which teams are working well currently? Are there any which could be improved?

What technologies could we implement to improve processes internally and externally?

Have we outlined all the necessary steps to implement these changes company-wide?

Is everyone in agreement about the required budgets and ROI?

Does anyone have any other ideas they would like to put forward to improve processes before we move forward with this plan?

4. Defining Success with KPIs

To get an idea of progress and measuring the success of your transformation roadmap, you should review existing KPI metrics that highlight where the issues lie. If these

KPIs don't exist, then they need to be established to provide a benchmark to measure progress. The right KPIs will act as a guide along the journey with different targets to hit at different stages, ensuring everyone involved is up-to-date and on track.

Make sure to gather the relevant teams in the review and / or development of these metrics to ensure they are achievable and understood by everyone.

Some questions to ask the team at this stage could be:

What KPIs are we currently hitting? Which ones are we not?

What other metrics could be helpful for measuring the success of this project?

How are we going to track our progress, and what actions do we need to take if we notice we're falling behind?

5. Policies, Processes and Frameworks

Governance doesn't need to be complicated when it is done right. While outlining specific policies, procedures and guidelines around a new initiative might seem daunting, it can actually speed up the process by helping everything to run smoothly.

This stage can be simplified by getting the right team behind it. You need to assign a team of people, including strong project management, who can confidently evaluate the impact of digital transformation on the various departments within your organisation, but also on external stakeholders.

By seeing the bigger picture and utilising an appropriate governance framework throughout the entire roadmap, you can save yourself from potential headaches further down the line.

A couple of key questions for the executives at this stage could be:

Does everyone understand the vision, strategy, benefits and guidelines for this project?

Are there any uncertainties or questions about the governance of this transformation strategy? Anything anyone would like to add at this stage?

How will progress be tracked and reported to the various stakeholders in the business?

Building a Successful Outcome

Using our own industry as an example, a solid network forms the foundation for other digital transformation projects. Modern networking models such as NaaS can allow CTOs and CIOs to innovate, by allowing them to respond quickly to the needs of their business.

The network is a logical starting point and something that CTOs should focus on when getting buy-in for transformation projects, given that without a good network, it will be difficult to adopt other technologies that are cloud-based such as SaaS applications.

Over the years, Epsilon has put a lot of time and resources into upgrading our NaaS platform Infiny into our central customer engagement platform. This was not always smooth sailing, and just like any other team implementing a digital transformation roadmap, challenges were faced along the way.

When Epsilon first set its sights on NaaS, there were not many other players operating in this space. Epsilon has been a first mover in terms of NaaS. This has had its advantages, however it also posed challenges due to the somewhat unknown nature of the technology. This made it more difficult to get the entire team on board, when none of them had seen first-hand what differences this up-and-coming approach to delivering services could have on the business. The product team and engineers put a great deal of time and resources into testing and trialling various NaaS ideas to bring more confidence to the leadership team and maximise buy-in.

Once the executive team were convinced on the positive impact that NaaS could have on both our own and our customers' businesses, the next step was ensuring the wider company were also in complete understanding. From product, sales, marketing and customer service teams to name a few, the NaaS project team made sure to get different departments together to explain the proposed plan and impacts on the company. These discussions also helped to gather ideas from various departments about how to align this project with our customers' requirements.

From these discussions, the NaaS team created a separate group to conduct interviews and surveys with customers about how we could better meet their needs. These insights really helped to shape the customer-centric nature of Infiny.

The solutions available on Infiny, such as Cloud Connect, are helping all kinds of businesses to grow on a global scale. Tokopedia, an Indonesian technology company specialising in e-commerce, is a great example of this. Cloud Connect provides a scalable and flexible solution for Tokopedia to grow its bandwidth according to rising e-commerce demands in Indonesia, and deliver a secure marketplace platform for its 10+ million merchants and 100+ million monthly active users.

Success stories like these would not have been possible had we not prioritised alignment in our digital transformation roadmap for Infiny.

The Path to Transformation

The benefit that next-generation technologies in helping business improve can bring to all kinds of businesses is clear, but the real success comes from building a vision, strategy and roadmap that the executives and wider team can all get behind.

Reporting on the performance of technology in business terms is an essential element of winning at executive alignment. Boards want to see that performance is optimal, the required results are delivered in a measurable way, and that incidents are managed in a highly proactive manner.

Digital transformation is only as strong as the plan to improve and the leaders behind it, and executive alignment holds the key to long-term business success.

Michel Robert | *Group CEO*
EPSILON TELECOMMUNICATIONS

CXO 2023: From Digital Transformation To Digital Operations

Doing Digital Transformation well is tough. Realising the potential value that it can add to an organisation in practice requires engagement at a technology, process, and cultural level.

One of the challenges with Digital Transformation is the term itself.

It can mean anything from automating some processes for short-term tactical wins, up to fully equipping a business to operate digitally. In this article, we are looking at the latter – transformation that integrates digital technology into all aspects of an enterprise, fundamentally changing how it operates and delivers value to its customers.

To be effective, this form of Digital Transformation needs to involve reimagining business processes, strategies, commercial models, value propositions, and the way people work. Only by taking this approach can organisations leverage the capabilities of digital technologies, and meet the evolving needs of increasingly competitive markets and more discerning customers.



Scenario planning is critical to successful Digital Transformation. An organisation needs a strong understanding of the impact that transformation will have, and be ready to access its value. The Six Sigma methodology for business process improvement is a powerful tool that can help the successful transition from Digital Transformation to Digital Operations.

Bringing Digital into the Day-to-Day

"Digital Operations" refers to the day-to-day use of digital technologies, data-driven processes, and new practices that come together to make a business more productive, competitive, and attractive to its customers.

They focus on improving efficiency, agility, and accuracy through the integration of various technologies such as automation, analytics, artificial intelligence, cloud computing, and the Internet of Things (IoT).

One of the reasons that Digital Transformation falls over when it becomes operational is that something has been overlooked. It might be a downstream process, or a team that is impacted in unexpected ways. These hiccoughs can compromise Digital Transformation success and the value that an organisation can gain from it. A holistic approach is essential.

Six Sigma's structured approach of defining, measuring, analysing, improving, and controlling the design and implementation of Digital Transformation can help to reduce errors, as well as facilitate engagement across an entire business. The key six sigma principles are as follows:

- **Customer focus**
- **Use data**
- **Improve continuously**
- **Involve people**
- **Be thorough**

These can be applied to either the Six Sigma DMAIC or Six Sigma DMADV improvement methodologies. DMAIC (define, measure, analyze, improve, control) is used to correct a process that already exists, whereas DMADV (define, measure, analyse, design, validate) is used to create a new process.

As well as the Six Sigma methodology, there are some other key areas that can help digital transformation morph successfully into digital operations:

Strategy and Vision

Digital Transformation needs a clear vision and strategy for how technology will be integrated across an enterprise. This includes setting goals for improved operational efficiency, customer experience, and innovation.

Process Redesign

It is important to assess existing processes and workflows to identify areas where digital technologies can deliver improvements. This might involve automating manual tasks, optimising supply chains, or enhancing collaboration.

Technology Adoption

Successful adoption means bringing people with you. It is easy to become so focused on the technologies that need to be adopted and integrated, that the impact of change on the workforce is overlooked. All Digital Transformation and Digital Operations initiatives need a cultural and people workstream for change to be adopted.

Data Strategies and Data Use

Clean and relevant data is the fuel for effective digital operations. Today's technologies make data gathering easy.



The core issue is that dirty data costs money, efficiency, and business agility. Every Digital Transformation programme needs a robust data strategy that informs effective data usage once the transformation has become operational.

Automation

Process automation is broadly straight forward. The trap to avoid is automating sub-optimal processes. Always determine how a process can be improved before automating it. Otherwise, inefficiencies will be systemised and scaled. When this happens, it can be very hard to reverse.

Customer-Centricity

Improved customer centricity is one of the most important benefits of Digital Transformation. This is why it is essential to design the customer experience your organisation wants to deliver first, and then source the technologies to enable it. Just thinking about how automated call queues can frustrate customers illustrates the impact of putting technology first and experience second.

Continuous Improvement

Some wise words from one of my early mentors in business – "you get what you measure, so measure what you want".

Deciding how to measure and improve the value of Digital Transformation and subsequent operations is a board-level issue. It is crucial that everyone involved in leading the organisation understands how they benefit, and what they need to do to keep those benefits coming.

Security and Compliance

More digitalisation and data will lead to more exposure to cyber threats and compliance risks. Cyber criminals have become so sophisticated that it is worth considering how an enterprise can work with expert cybersecurity service providers to mitigate risk. I call this 'dynamic risk management'. It means having a strategy and operational plan that defines which risks need to be managed and mitigated in-house, and which will benefit from outsourcing to a supplier with a robust service level agreement. This can decrease your company's risk exposure and help with insurance too.

The Road to Success

Digital Transformation is not easy, but it doesn't need to cause headaches.

By taking the time to put together a plan of action, with an expert methodology behind it, you can set yourself up for the road ahead

However, the true key to Digital Transformation success comes from thinking about the transformation as a whole, beyond just technology, and beyond the short-term goal.

The best transformation success stories come from the companies that see transformation as a continual process, with the agility to pivot and adapt at the pace of today's changing business environment.

Dr Lucy Green | *CEO*
LARATO

CXO 2023: **Digital Transformation: Incremental Change For Long-Term Success**

I don't think companies should have a digital strategy.

That's not to say that a digital strategy is a bad thing – it often just doesn't end up being executed on as it's expected to.

Putting together an in-depth digital transformation roadmap or strategy might work great in one organisation, but not in another.

The main emphasis should be directed toward the broader business strategy. Then, you can look at how to execute on it, potentially involving digital tools or platforms. It's crucial to understand that pursuing digital transformation without aligning it with the overarching business goals, will likely not lead to a successful outcome.

This is because the "digital" part of digital transformation is not actually the most important part. Yes, the tech plays a huge role in the success of any transformation, but the real test for success is the people behind it.

It's no wonder that 70% of complex, large-scale change programmes fail, with the most common reasons being a lack of employee engagement, inadequate management support, poor or non-existent cross-functional collaboration, and a lack of accountability, according to McKinsey & Company.

The key to successful digital transformation is adapting the organisational culture, which can then steer towards using technology for the better. The focus must be on the wider business strategy and how digital capability can drive and enable that strategy, rather than going head-first with the technology itself.

Barriers to Transformation

Digital transformation can mean many different things for many different companies, depending on where they are on their digital journey.

It is a term so widely used, that the core meaning behind it can sometimes get lost.

Digital transformation does not need to refer to a complete overhaul of a business' digital operations in favour of the latest up-and-coming technologies. This might be true for some businesses, but it can also be something as simple as training staff to move from Excel to a more advanced programme, or changing the company's billing system to improve efficiency.

One of the most common mistakes when it comes to digital transformation is failing to think about the bigger picture.

For CTOs and CIOs, technology is at the forefront of their world, but that is not the case for the wider executive team. The majority of the C-suite are most invested in hitting the KPIs that directly align with the wider business strategy. They often simply do not have the time to fully immerse themselves into the technology side of the business, since that requires a lot of time and effort to ensure full understanding.

Change is often feared due to the unknown, and unless CTOs and CIOs can convince the C-suite that their digital transformation ideas fully align with the company's vision and mission, they are setting themselves up for failure.

For digital transformation to succeed, it must align with this bigger picture, ensuring everyone can hit their targets and that success goes beyond just operational processes.

Small Changes, Big Differences

Another issue with a lot of digital transformation strategies is that they exist on paper, but don't materialise.

This might be due to some of the challenges mentioned above, such as disagreements within the executive team, or the failure to convince the C-suite to allocate the time and resources required to make it a success.

While I have developed digital roadmaps in the past, I have come to believe that maintaining a separate digital strategy may no longer provide the same value. Instead, the focus should be on changing things "little and often".

It's much easier for CTOs and CIOs to gain approval for small technological changes within the business which can improve efficiency and productivity, rather than going to the C-suite with an overwhelming plan for future change.



Small changes can make big differences, and bit by bit, a company could be undergoing a full digital transformation without even realising it. Companies that see transformation as an ongoing process are much more likely to be successful, in comparison to companies that change too many things too quickly.

By approaching transformation incrementally, it also makes it easier to gradually build the right team culture to

get behind the initiatives. For example, we could begin with a select group of supporters. Having one accountant who firmly believes in the change can motivate the entire accounting team. Next, select a specific business process where you can implement a change quickly. Scrum is a popular choice due to its ability to yield tangible results in a relatively short period.

In the end, we need to know that digital transformation is as much about the people as it is about the technology itself. The tech can only be successful if the team know how to use it to its full potential, and have the mindset and drive to want to do so.

It's All About the People

It's important to consider each and every member of the team that will be affected by the transformation, and ensure they feel supported along the way. It's easy to tell the team that everyone needs to improve their digital skills for the company to transform its operations, but this might be much easier for one team member than another.

The crucial thing is making sure that everyone is improving, no matter what level they are at in a digital sense. There are many initiatives that can help the whole team get behind this idea, such as virtual training sessions, demos of new platforms or programmes, or even team away days to bring an element of fun into the training with a change of environment.

Another great way to ensure everyone feels supported during the change process is by allocating the right leadership positions across departments. It's important to have people that can be involved with the digital transformation plans at a higher level, lead their respective teams through these changes, and monitor success. Employees usually respond better to change when they are supported by a familiar manager within their current team.

This is great for team morale across levels. Junior members of staff can get the support they need from a familiar face, without being worried to voice concerns or ask questions compared to if the management was coming from the very top level. At the same time, mid-level employees can gain further experience and responsibility for their own personal development, all while freeing up some time from senior executives who can focus on other aspects of the business instead.

Not everyone needs to progress or improve their digital skillset at the same pace, but everyone needs to improve little by little. That is when the real change will start to happen.



The evolution of the global business landscape never ends, and the same needs to be true for digital transformation in order to keep up in today's fast-paced market. The organisations that view transformation as an ongoing journey, rather than a short-term goal, will be the ones that can truly transform their company culture and digital operations in the long-term.

Aidan Hancock | *CIO*
JOHNSON MATTHEY

CXO 2023: **Maximising Network Potential: What Value Are Internet Exchanges Bringing To The Enterprise Market?**

As cloud adoption and digital strategies take off, more enterprises are looking to take control of their connectivity. Their ICT ecosystems are increasingly complex and they're exploring new models for connecting their SaaS platforms or cloud-based applications efficiently and reliably.

Although no two enterprises are the same, they're seeing networking models that once served the needs of the legacy on-premises world no longer match the needs or expectations of digitally-enabled and cloud-centric systems and operations.

Gartner forecasts worldwide end-user spending on public cloud services to grow 20.7% to total $591.8 billion in 2023, up from $490.3 billion in 2022. Within this total, SaaS is predicted to reach $195.2 billion in the same year.

This level of cloud and SaaS adoption is driving enterprises to be increasingly networking savvy as agility, security, resilience and reliability in networking becomes crucial for supporting operations and meeting business objectives. They are becoming more aware of their changing connectivity needs and the growing role of networking in enabling digital strategies.



There are also more enterprises than ever before operating on a global scale beyond their traditional borders, with staff operating with "work from anywhere" models. Enterprises have to take control of how services are accessed and the network performance that they can deliver.

There is an opportunity for enterprises to add interconnection services to their networking strategies and directly connect with key networks, cloud service providers, and a range of players in a single ecosystem. Internet Exchanges (IXs) play a crucial role in enabling enterprises to deliver new levels of performance and adapt to changing demand, especially as digital strategies ramp up and digital transformation becomes a priority.

Networking Hurdles

When applications and services are no longer hosted on-premises, networking becomes even more critical.

The network infrastructure is the enabler of cloud and SaaS applications, so if the underlying network is underperforming, the applications will be too. This has a direct impact on user experiences, which in turn, can directly impact business operations, productivity, brand trust, and even sales if long periods of downtime are experienced. These risks are too large for enterprises in today's diverse IT ecosystem to overlook.

However, another wave of challenges arise when trying to minimise these risks. Many enterprises don't have the technical know-how to upgrade their existing legacy networks, and even for those that do, infrastructure expansion can come with a hefty price tag.

These rigid legacy networks make it challenging for enterprises to scale globally and adapt to fast-moving market demands.

Enterprises need a new way to connect across the globe to stay competitive and enhance online experiences for both their internal and external stakeholders.

Empowering Enterprises with Peering

IXs are often believed to be locations where only telecommunications companies interconnect and exchange data, however this is no longer the case. We're seeing an increasing number of enterprises across multiple industries peering at IXs to take their connectivity to the next level as they adopt more cloud and SaaS solutions.

Early adopters include companies from the financial services sector like banks, for example, who naturally had a higher degree of networking maturity due to data stringency and the need to keep everything in-house. This meant their internal teams had a better idea about interconnectivity, and the difference that joining an IX could make.

We're now seeing this across many other enterprise verticals, particularly large multinationals across sectors looking for a simple way to scale globally. However, it's more about where the enterprise is on its digital journey, rather than the size.

Enterprises don't need to be tech experts to join IXs – it's much more straightforward than most think, and can unlock a wide range of benefits to improve performance, control and costs:

One Connection, Multiple Solutions – At an IX, enterprises can benefit from multiple interconnection services and opportunities such as cloud access, peering with access networks, and more.
Global Reach – Peering at an IX enables enterprises to interconnect globally, without the need for a physical presence at the exchange point. This makes it easy to scale to new markets and gain a truly global footprint, without needing to set up physical infrastructure.
Cost Effective – Joining an IX can be more cost-effective than growing an enterprise's physical infrastructure across the globe.

Network Resilience – IXs provide enterprises with the opportunity to re-route traffic in the event of a network interruption or failure, helping to maintain acceptable service levels.

High Performance – Peering provides the most direct route between networks, which reduces the distance that the data travels. This results in a superior user experience thanks to keeping the traffic closer to the end user, and having less hops along the way.

Gain Control – Enterprises can improve network control and performance by deciding what route their traffic should take.
Secure and Redundant – Enterprises can monitor their data's journey end-to-end and minimise the risk of security threats along the way. Network redundancy can also be improved by selecting optimal routes and being present at multiple IXs.

A Future of Opportunity

The relationship between enterprises and IXs has really developed in recent years, and there's a huge opportunity there for enterprises who are willing to take it.

Enterprises need to get themselves out there and talk to IXs to better understand how to get started and learn more about interconnectivity. They are increasingly wanting to help enterprises remove the barriers from growth and experience digital transformation.

They can work together to support enterprises on their digital journey, which goes beyond just the pure technical aspects, but also involves education, training, and a deeper understanding of how IXs can help them flourish.

A key takeaway is that IXs are not limited to telecoms businesses – any enterprise across any sector can benefit from peering and the wider ecosystem of partners and solutions than comes with it.

There is a huge opportunity in exploring how these partnerships can support new digital strategies as cloud-based applications and services continue to grow globally.

Give it a go. There's so much value that can be added to enterprise networks by peering and partnering with experts across the globe. Enterprises just need to take the plunge and explore what the world has to offer.

Kurtis Lindqvist | *CEO*
THE LONDON INTERNET EXCHANGE (LINX)

CTO 2023: **Driving Successful Digital Transformation**



Almost all businesses, whether corner shop or global enterprise, has had to embark on some kind of digital journey, but the question many organisations have is, 'where do we go from here?' Enterprises have seen successes and failures in digital transformation, and they want to move to the next stage of their digital development.

Digital Transformation in 2023 is about prioritisation and avoiding transformation paralysis.

This next step isn't about moving payments to the cloud or even rolling out a multi-national ERP system. It is about creating a foundation for continual transformation and driving organisational re-alignment. The time is right for enterprises to look at where they are on their digital journey and explore how they can accelerate and expedite continual digital adoption and evolution.

The concept of "Digital Transformation" is just over a decade old. If you look at Google's Ngram Viewer, you'll see that the term only really begins to gain traction in 2013. Over the last 10 years, digital transformation has gone from a nascent trend to mission-critical and a competitive advantage.

This is only going to accelerate as automation and artificial intelligence (AI) ramp up within vertical industries. Agile digital adopters are going to move with greater speed to deploy new solutions that immediately give them an advantage in their given segment. Organisations that automate processes and use AI have greater resources to invest back into their businesses, while making precise decisions at scale.

PwC estimates that AI will make a $15.7 trillion possible contribution to the global economy by 2030. It has the potential to deliver a 26% boost in GDP for local economies over the same timeframe. The enterprises that are going to take advantage of this revolution in ICT, and whatever comes next, are the ones that are making moves within their organisations now. The enterprises that are hesitating or don't have a clear digital strategy or foundation are either going to be continually playing catch-up or potentially face irrelevancy.



Aligning Business Success with Transformation Goals

The risk for mid-sized enterprises is that they invest in the wrong technologies at the wrong time. Before making any investments in digital transformation, mid-size enterprises have to look at what they want to achieve with their digital strategy. CTOs can play a pivotal role in leading an organisation's growth by bringing the executive team together, assessing new opportunities and demonstrating value in the near and long-term.

Technology is not separate from business plans or strategic execution. It is now central to it. The CTO has to be involved and have an aligned business strategy with digital adoption. Rather than being viewed as a cost centre, technology is an enabler for productivity, agility, and profitability. It should align with the organisation's overarching goals.

This shift in mindset also affects how tech investments are made. Digital solutions should be purchased, deployed and measured holistically across the organisation. Failure to do this creates silos of decision making and treats digital

transformation like it is only for the IT department, when benefits cascade across the entire organisation.

Investments in new technology should be evaluated from a broader perspective and their value has to be measured with a much wider lens than has happened previously.

When digital transformation fails, it fails because multiple projects are launched in isolation with the support of multiple providers. From planning to deployment through to optimisation and expansion, there has to be collaboration, continuity, and connectivity bringing the digital strategy into alignment. As organisations deploy a range of applications across multiple clouds, networking has become critical for transformation success. How you connect and manage applications in an increasingly complex environment has a direct impact on how users experience their services.

Network as a Service (NaaS) platforms enable organisations to simplify how they connect applications and services and provide a foundation for growing digital adoption. They give an IT organisation a holistic and transparent view of their networking environment while enabling them to manage multi-cloud seamlessly. In an enterprise environment that is increasingly complex, NaaS can be the central enabler for digital adoption and transformation success.

You Cannot Allow Your Business to be Disrupted into Digital Transformation

What is critical is the mid-sized enterprise recognising this opportunity and building a foundation with NaaS now. They have to be prepared to change to capture the opportunities of the future. Inaction or transformation paralysis, where an organisation takes a 'wait and see' approach, will lead to greater challenges in the long-term. Although transforming an organisation is never easy, it delivers exponential rewards over time.

We've seen this on Epsilon's own digital journey. Our heritage is in global networking, which used to mean physically plugging in network hardware and deploying services across a global footprint. The sales team would send pricing to a customer in an excel spreadsheet, and when an agreement was reached, an engineer on the ground in a customer's data centre would cross-connect networks.

All processes were manual, offline, and complicated to manage. Nevertheless, we grew our business based on customer support, being as agile as we could within these systems, and going the extra mile for customers.

It was a good business, and we were proud of our work, but we knew we had to change. We realised we had to transform our processes to capture the next generation of opportunities. Epsilon couldn't be a challenger brand, and compete with the largest network service providers in the world, without challenging ourselves to push our business further and refocus on our digital strategy.

Instead of delivering more of the same, we set out to be a software-centric business, utilising the digital experience to better serve our customers whilst delivering internal efficiencies and speed of service delivery. Many service providers at the time were still focused on network footprint and 'landing and expanding' in more markets than competitors. Whilst we of course continued to evolve our service coverage, we had to be more agile, innovative and offer new digital experiences. We needed to go beyond the basics and accelerate change in order to give users greater control over their network services.

Your Network Shapes the Experiences You Can Deliver

Our digital transformation started from the top down. The Epsilon leadership team understood the opportunity in digitalising our processes and what it would mean to the future of our business. Fundamentally, we've always believed that there are bigger risks in inaction than there are in making bold moves.

Our leadership team refined our business organisation, looked at talent and resourcing as a driver for change, and invested in process analysis and software development. Rather than sinking investment into networks, we looked at how we could be more fluid, flexible and agile by prioritising of platforms, partners, and APIs.

This freed us to develop new services and processes with greater agility. We can move faster to integrate partners into our platform, add new networks to our offering and connect more cloud service providers, while expanding our capabilities.

We removed the friction caused by legacy processes by understanding where data resides and where it needs to interact, then we built the toolsets to manage the data and interfaces to interwork the data. This then cascaded across our organisation and the performance improvement was then reflected in our customers' digital experiences. We've reduced the barriers between our services and our users via APIs and a web-based portal. The days of sending an excel spreadsheet to customers are over.

Users have control over their services with transparency and visibility into usage. They have an interface that is easy to use, with a model that is still rooted in Epsilon's heritage of customer service excellence.

Building the Foundation for Continual Transformation

Our own digital transformation wasn't easy, but today we're ready to adapt, change and continually transform our business. The result of our transformation and digital strategy is a NaaS platform that gives users a single pane of glass for

procuring, managing, and optimising global connectivity. It offers a single platform for connecting applications and services around the world and into the cloud on-demand and at the click-of-a-button. NaaS gives users the freedom to roll out new solutions, scale-up in new markets and move faster to capture emerging growth opportunities.

NaaS is the foundation for maximising the value of Software as a Service (SaaS), Platform as a Service (PaaS) and Anything as a Service (XaaS). The attributes of an enterprise's network cascade across the value chain and enable agility, flexibility and adaptability across other applications and services. In this way, it prepares an organisation to develop and deploy new solutions no matter how the business evolves. NaaS is the cornerstone of continual transformation as enterprises evolve to meet the needs of today's market, then evolve again as market conditions change.

The market is being reimagined by AI in 2023, but next year some new disruptive forces will emerge. The key is that an organisation understands the value of networking and takes action now to prepare for an uncertain future that is full of both opportunity and challenges.

So where do we go from here?

Look for leadership in digital transformation from the top down and execution from your modern digital network up. By understanding your business application and service environment, and the data it produces, you can design a business architecture where everything that is built on the network will share its characteristics. If the network and associated technologies are ready to adapt and enable transformation, then the enterprise will be ready to adapt and transform on a continual basis for the long-term.

Mark Daley | *Director of Digital Strategy and Business Development*
EPSILON TELECOMMUNICATIONS



CXO 2023: **The One Factor That Enterprises Often Miss Out In Digital Transformation**

The term Digital Transformation has become a familiar one to businesses over the last few years. And reasons why it's been such a hot topic is because it promises to deliver innovation, efficiencies and enable adaptation.

But if you are considering adopting a digital strategy approach to your business, one factor that enterprises often don't consider enough as a starting point is asking themselves the question, "what are we trying to achieve?"

It may seem like an obvious question to ask before transforming various business operations, however far too many enterprises go all in with digital transformation, without fully understanding the reasoning behind it. This can lead to bumps in the road, and sometimes even wasted investment into a strategy without purpose.

There's a lot more to digital strategies than meets the eye, which can be complex for enterprises without advanced tech teams in-house. You need to really think about what your challenges are, and what you are trying to deliver.

Defining the Objective

There are a number of business challenges that digital transformation can overcome. But surprisingly to some, defining your starting point isn't about digital technologies, it's about understanding what you want to achieve.

Do you need to convert your infrastructure into a digital environment or a hosted environment? Have you thought about your data, and how you create, manage, store, access and protect it? These are all good initial questions to ask, I like to call them my layer 2 questions. But again, they are not the starting point.

Your Layer 1 questions are your primary objectives and are usually specific to your own business. What outcomes are you looking for, what are the business objectives that you are going to report to the board, or senior leadership? Addressing new markets, achieving faster deployment of services and book to cash or is the main focus on boosting operational efficiencies for higher business success?

Achieving these objectives through a digital transformation are the show me the money results.

Setting these objectives can be based on problematic analysis. What is a problem that you, and/or the wider team are facing on a regular basis, or what is slowing you down? Once you have those defined, that starts to set out the rule book on what you need to consider, from a resources, systems and software point of view.

It is crucial that you define what you are actually trying to overcome first, so that you can then tailor your strategy and technologies accordingly. Otherwise, you run the risk of adopting technologies that are not the best fit for your unique challenges.

Defining and Delivering Transformation

Once you have defined your objectives, there are various considerations to putting together your plan. Quite often though, one of the least recognised elements of a digital transformation strategy is the core network. Many enterprises put their primary focus on their data, services and applications, which are all important aspects, however the network is the link that ties everything together – the enabler for their success.

The three cornerstones of functional performance in a digital world are networking, housing and software. For digital transformation to be a success, each aspect must be considered. One cannot successfully exist without the others.

C-level executives must clearly define the objective of the transformation, and then decide on the digital environment that is going to enable that transformation. They need to think about how to achieve high-level objectives in terms of the network environment, housing and software surrounding their business.

Another key point is security. Enterprise IT ecosystems are getting bigger, with a wider attack surface and more cloud-based applications and services than ever before. When undergoing digital transformation, security must also be at the forefront to secure the network from potential hacks and breaches.



As soon as you start thinking about reengineering your application environment, data environment, customer interactions and partner interactions digitally, you have to first redesign your network to facilitate that.



If an enterprise needs to migrate data from one environment to another using the public Internet for data at volume, it is both slow and often unsecure. For example, one of our customers needed to migrate large repositories of data out of Europe and back to the United States. To migrate that data via the Internet, it was going to take anywhere between one to three months, so they needed to consider different options. By instead putting a dedicated connection between their sites, we were able to significantly reduce that migration time to just seven days.

Having an expert service provider by your side when developing and implementing a new digital strategy can make a world of difference. Many enterprises experience digital skills gaps within their organisation, and by choosing to work with an expert partner, can gain a multitude of new insights and connectivity options to fit their needs.

Another example is a Spanish company that sold transportation tickets. It needed to move from selling tickets from ticket machines at train stations, to being able to sell the tickets online. It needed to migrate into a network environment that could present tickets on-demand online and in apps. The first thing to be considered was to think about how to link the digital and physical eco-system together from an application perspective to make it work. As an example, payment gateways as an application and how they interacted with the ordering platform needed to be considered, since selling tickets online would be different to its previous payment gateways at the train station machines.

The next consideration was to think about where the customer's application environment would be hosted and interact a software stack from the cloud to a payment gateway. It was also important to identify whether these interdependencies were mission-critical. In this instance, if an interface failed, that would result in lost sales. So, the customer needed to ensure its network was capable of mission-critical connectivity to avoid revenue losses and customer dissatisfaction. An expert networking partner can provide different levels of service or reliability according to priorities within the network.

Enterprises need to find a network service provider that has both the agility and flexibility to design a bespoke solution according to varying demands. The right partner will have the in-depth knowledge to assess what connectivity options are required for mission-critical data and services, as well as providing more cost-efficient options like the public Internet for lower priority traffic. It's all about designing a solution that fits the specific requirements of the enterprise, with the expert consultancy and advice alongside that.

Networking Expertise and Consultancy

When enterprises are implementing their digital strategy with an expert partner, it's vital that they choose a provider that can also offer them full visibility and control over their network and solutions.

The right partner will present the network and its various components in a visible format with a user-friendly portal, without the enterprise needing to lose control over its network. This makes it more straightforward to monitor and resolve any potential issues before they happen.

There are so many vertical and horizontal layers of networking available in today's digital landscape, that it really is a mix and match, solution-orientated world for enterprises. They need to find a true networking partner that can craft a bespoke networking solution according to their needs, and optimise user experiences no matter the location.

Technology alone cannot solve all enterprise challenges – there still needs to be an expert human team behind it with the experience and insights to make digital transformation a success.

Mark Daley | *Director of Digital Strategy and Business Development*
EPSILON TELECOMMUNICATIONS

Securing Transformation: **Zero-Trust Strategies For Rapidly Evolving Enterprise Environments**

Enterprises of all sizes are under pressure to maximise the value of their digital transformation initiatives while managing growing cybersecurity threats. It is a perfect storm of rapid operational change and new business risk. The challenge is to support growing cloud adoption and other transformation projects while evolving an enterprise's security posture.

During the first quarter of 2023, more than six million data records were exposed worldwide through data breaches, according to Statista. Cyber Ventures predicts that ransomware alone will cost its victims around $265 billion annually by 2031, with a new attack taking place every two seconds.

At the same time, 51% of IT spending on application software, infrastructure software, business process services and system infrastructure will have shifted from traditional solutions to the public cloud by 2025, according to Gartner. Almost two-thirds of spending on application software will be directed toward cloud technologies over the same time period.

The pace of change within the enterprise and the scale of the risks that are involved put CIOs and IT teams in a difficult position. They need to deliver digital strategies that support business growth and operational efficiency while protecting their organisations from cyber-attack.

Navigating a Shifting World

The nature of business and work has changed –The growing adoption of cloud services, remote working, and the distributed nature of modern enterprises not only increases attack surfaces but also emphasises the critical role of network infrastructure. With more endpoints being connected from more places than ever before, robust networking solutions have become essential for safeguarding business operations.

Conventional security tools have not kept pace – Security tools built for traditional on-premises applications and service no longer match the needs of today's enterprises. They cannot deliver the reach, flexibility, or visibility that a cloud-centric environment demands.
Costs of breaches and regulations are increasing – Regulations around data privacy and the growing costs of data breaches put enterprises at financial risk if they do not have robust security solutions in place. The global average cost of a data breach amounted to $4.45 million in 2023, increasing from $4.35 million in the previous year, according to Statista.

Rethinking Network Security

Solving these challenges is an immense task but it starts with the foundation. The journey towards modernising security starts with networking. Networking touches every element of the digital ecosystem and is the common factor across almost all digital transformation projects. No matter what stage of transformation an enterprise is at, the network remains fundamental for defining the user experiences, application performance and security posture.

Networking is the sensible place to start. The changes we are seeing in enterprise operations have to be reflected in enterprise networking and especially their approach to security. It is no longer an option to have an isolated network setting or only rely on a security perimeter like in the on-prem days, where the basic approach was to restrict access to a corporate network and add policy and controls where required.

It is more efficient, effective, and manageable to take an end-to-end zero-trust approach that assumes a breach has occurred. The entire ecosystem of identities, endpoints, data, applications, network, and other infrastructure components are defined by policies that align with the principals of a zero-trust strategy. In this context, networking is far broader than just how an enterprise connects.

Zero Trust in Principle and in Action

Verify explicitly – Always authenticate and authorise based on all available data points.

Use least privilege access – Limit user access with Just-In-Time and Just-Enough-Access (JIT/JEA), risk-based adaptive policies, and data protection.

Assume breach – Minimise blast radius and segment access. Verify end-to-end encryption and use analytics to get visibility, drive threat detection, and improve defences. Zero-Trust strategies provide a holistic approach to security that supports cloud adoption and multiple layers of defence against attacks. Microsoft Azure's network security offers cloud native services designed to stop attacks at the network edge. Outer rings of defence start with a web



application firewall (Azure Front Door or Web Application Gateway), DDOS protection tuned to an enterprise's application traffic patterns and virtual network isolation. This can be followed by Azure Firewall, which provides advanced network and application threat protection for Azure Cloud Infrastructure.

An additional inner ring of security can be enabled with network security groups. Network security groups offer distributed inbound and outbound network (Layer 3- Layer 4) traffic filtering on virtual machine, container or subnet. In addition to this, enterprises can restrict access to Azure service resources (PaaS) to only their networks using VNET Injection, Private Link and Service Endpoints.

Securing Hybrid Environments

The outcome is a complex set of solutions delivered within a single ecosystem that mitigate threats to enterprises and enables them to move more workloads to the cloud. Each ring of defence offers one more chance for a threat to be identified and access limited. In the case of an organisation that is still operating with on-prem infrastructure, there opportunities to deploy secure hybrid solutions. They combine the agility and flexibility with the security of on-prem hosting.

There are opportunities to provide a secure connection between on-premise networks and the cloud. For instance, businesses can collaborate with Azure ExpressRoute partners, all without exposing their services to the public internet. ExpressRoute minimises security risks while providing greater reliability, increased speeds, and consistent latencies than users would experience using the public internet. This provides a bridge between on-prem and the cloud without limiting performance or security.

Ultimately, it is about ensuring enterprises are able to securely adopt new solutions, migrate to the cloud and transform their operations with a flexible foundation. Zero-Trust strategies in networking enable transformation to happen faster and more organisations to benefit from the cloud. This becomes even more important as we see the rise of Artificial Intelligences (AI) and vast amounts of data being shared across networks and the risks of data breaches growing.

The era of AI that we're entering will demonstrate the scalability, flexibility and security in the cloud and show that the players with robust networking strategies will gain competitive advantages. Networking remains fundamental for enabling innovation if it can be delivered securely.

Nicola Gallacher | *Cloud Solution Architect*
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