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Our Roundtable Team

The Deloitte Collaborative Content Series contains points of view created through deliberate and facilitated conversations between our domain experts and selected industry leaders. We believe this to be an ideal mechanism to distil locally relevant and informed perspectives – combining world-class intellectual property with practical, hands-on experience.
In an increasingly competitive digital world where consumers demand instant gratification, high performance transport and logistics systems are key for both company and country competitiveness. Achieving excellence in logistics is a Herculean task that requires huge funds, political consent, planning capacity, and subject-matter expertise.

It takes collaboration between government and the private sector. Some countries have natural geographical advantages that, when combined with high logistics performance, can see them become gateways for neighbouring, often landlocked countries.

Despite the fact that most freight on the continent gets transported via road, the majority (roads) are either unpaved or in poor condition. Quality tends to deteriorate significantly once you leave international trunk roads. Capital expenditures simply are not keeping up with the need for preventive maintenance.

Unfortunately, rail networks in Africa are generally in even worse shape than roads. In many countries, most rail lines are still left over from the colonial period and are in poor repair and out of date despite. Fortunately, there are some notable bright spots. Between 2006 and 2011, South Africa invested more than $5 billion in railways.

The Internet of Things (IoT), Crowdsourcing and other related and rapidly maturing technologies are present both significant opportunities and disruptions to a sector where barriers to entry remain low and where differentiation comes in the form of reliable, predictable and transparent service delivery.

The Deloitte Transport and Logistics CIO Roundtable focuses on the challenges, opportunities, and broader environmental constraints facing CIOs in the transport and logistics industry today.

We hope that you enjoy this point of view, crafted around the key priorities, challenges, and responses of the CIO in the ever-changing and challenging world of Transport and Logistics.

Regards

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Head, Skynet  
Abdul has worked in IT for most of his career and was appointed as the IT Head for Sky net Worldwide Express in January 2015 where he owns the relationship between IT and business. He is responsible for driving business IT value in the enablement to achieve profitability and efficiency.

Prior to his current role, Abdul was the Group IT executive for the Santam Group responsible for overall IT service delivery for the specialist businesses as well as emerging markets which include Africa, SE Asia and India. Abdul also worked for SAP where he was involved in the first implementation of the SAP core banking platform in Africa. Abdul also has extensive experience in Enterprise IT Architecture where he held various technical technology management roles in one of the largest bank in Africa.

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Mmutle Lentle  
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Mmutle enjoyed a successful career in the consulting sector working his way up from a consultant level to Senior Manager at a prestigious consulting firm in South Africa. Following this meteoric rise in his career, he was appointed as the CIO of Transnet National Port Authority in 2005 and has been instrumental since then in shaping the information management journey of the organisation.

Kevin Govender  
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Kevin’s key responsibilities include IT strategy, enterprise architecture, research, and innovation. The objective of strategy and enterprise architecture is to translate the Transnet vision and strategy into effective business capabilities, services, and provide strategic direction and leadership to guide strategic initiatives.

Kevin’s experience is attributed to the various roles he has played in the other organisations prior to joining Transnet, namely Ernst & Young, Discovery, Accenture, Nedcor, and Unilever. He has extensive experience in strategy, business intelligence, business advisory, management consulting, portfolio and programme management, SAP assurance and implementation, and implementing turnaround and transformational programmes.

Craig Ramsami  
IT Executive,  
Imperial Holdings  
Craig Ramsami is the IT Executive for Imperial Retail Logistics. He has over 15 years of SAP experience and has spent the majority of his career managing cross-functional integration projects in both the FMCG and Logistics industries.

Trevor Whiting  
CIO, Imperial Holdings  
Trevor has more than 15 years of excitement working in logistics. His initial exposure to this field started when I moved from BMG Records Africa to Flexitainer / TNT Container Logistics SA back in the 90’s. He then was offered a position at TFD Networks Africa where he was to gain a far greater depth a breadth of knowledge within the 3PL space. Most of his experience has been within the financial discipline but with a strong focus on IT and how it can best be used to improve and support business processes. This focus on IT has allowed him to take on the role of IT Executive for Imperial Logistics with an initial mandate of consolidating the disparate IT landscapes.
Challenges Facing the Transport and Logistics Industry

Changing customer expectations

• With customers becoming data-enabled, they expect service providers to keep them informed throughout the process.

• The growing amount of information available also means that customers want to deal with one person that understands their business, their expectations, and provide feedback in as close to real-time as possible on the status of their shipment.

• Thoughts therefore need to turn to providing the best value possible to the customer. There is a clear need to understand all components in the transport and logistics process and let client see where the delays are happening.

Evolving technology requirements

• Many transport and logistics organisations are still struggling with a silo service approach especially when it comes to their IT systems.

• Many are jumping on the digital bandwagon without fixing their traditional problems first. Traditionalists are holding on to old technology and the way things have been done in the past instead of integrating modern solutions into their processes.

• The challenge for the CIO is getting into a right speed IT approach or face the challenge of two sets of deployments happening at the organisation as in Bimodal IT.

Supply chain integration

• It has become critical to monitor global trade flows and geo-politics to understand the impact on supply and demand.

• But it is not only about shipping and meeting regulatory compliance, organisations also need to integrate with the entire supply chain.

• There has to be increased flexibility when it comes to shipping. In all of this, technology has become an enabler to assist administering some of the solutions to the challenges.

Digital transformation

• It has become one of the key investment areas within the sector.

• It is a new mindset for the business and looks at what can the data we are collecting, do for our business.

• Innovations in products and services is being seen as differentiator in an ever shrinking market.

Core Systems Rejuvenation

• With the amalgamation of businesses through acquisitions and mergers including organic growth, systems and applications have developed internally with disparate architectures.

• These systems are at the heart of the organisation and hence require specific attention.

• There is a requirement for re-investment and modernisation of these mission critical systems.
What role does the CIO play?

CIOs are more concerned about the speed at which technology is evolving than in 2015. Some transport and logistics organisations have struggled to keep up with developments in technology. However, with innovation and disruption being fundamental parts of the digital age, CIOs have no choice but to embark on this new path. Does this mean the role of the CIO needs to change (yet again) or does it merely require a more nuanced approach than what is expected? Maximising the value of digital investments requires a well thought-out plan, including defined measures of success.
Last year, the CIO was very much considered to be a chief integration officer. It was all about providing a link between old and new technology with integration required to legacy systems. Many feel that in 2016 the shift will be around the right speed of IT deployments.

In a way, this is an evolution of the integration theme. Legacy systems cannot be completely ripped and replaced due to their mission-critical nature. Instead, it is about managing how best to deploy modern systems with the older ones while still keeping the business competitive. However, in a sector where the majority of CIOs are running around trying to keep the lights on, how can they be expected to embrace the innovation thematic?

The reality is that many CIOs are not concerned about developments such as the Internet of Things. Instead, it is about ensuring what needs to be done to make the business run more efficiently. When under economic pressure, business tends to focus and transport and logistics is no different. So instead of implementing new solutions just for the sake of it, it becomes a case of scrutinising the tangible benefits around technology innovation before adopting new technologies.

So for the CIO in 2016, there needs to be a space that is created to talk about business value when it comes to IT solutions. So what should the CIO be doing differently? Different revenue streams need to be examined, opportunities around diversifying the business have to be identified, and agility needs to be embraced within the organisation as a starting point.

The CIO therefore needs to understand the business objectives very clearly and translate that to the IT specifications that is implemented. Despite all of this, the role of the CIO is not necessarily one that changes on an annual basis. Instead, it requires more informed decisions on doing different things inside the organisation. This entails taking out the complexity challenges around IT implementations. Realistically, though, more pressure is placed on the CIO as the technological landscape keeps shifting and priorities change due to a more digital environment.

Even though old legacy systems have become a challenge as it slows down the business, new systems only succeed in becoming dated themselves. So replacing all systems with new ones is not the panacea that many make it out to be. The CIO, and other C-suite executives, need to realise that the role cannot be everything to everybody. Clearly, the CIO has moved beyond fulfilling just a straightforward technological function inside the organisation. Today, the CIO is someone who has become a vital part of it.

In other words, the question now on the minds of executives is what technology can do to further improve business.

The transport and logistics sector is one that is experiencing incredible fragmentation due to the nature of what it does. A way to curb this fragmentation is for the CIO to start telling the business how to stay relevant. It comes back to the fundamentals of increasing revenues while reducing costs. For this to happen, the CIO needs to be close to where the opportunities are. Implementing technology does remain important especially when that can help transform the business.

Beyond that, the CIO has to continue managing technology implementations even in an environment where there is an expectation to be more business savvy. Accountability cannot be shifted. The CIO remains in charge of needing to accomplish what has to be achieved from a technological perspective.

Key Takeaway

Transport and logistics organisations are exploring new ways to compete. Mobile technologies used for engaging with customers, cyber security tools to protect systems, and data analytics are three of the most important areas of investment.

CEOs in this sector see improvements in operational efficiency, the ability to deliver a better customer experience, and a stronger grip on the data they collect as among the top ways digital technologies bring value to their organisation. This means that the CIO is essential to link technology to the rest of the organisation and enhancing the supply chain.

The new business landscape requires champions of digital technologies and a clear understanding of the competitive advantages they bring. CIOs in transport and logistics organisations provide this much-needed link. However, for them to succeed, they have to become more business savvy. It is no longer good enough for the CIO just to manage technological change. In the transport and logistics organisation of the present, they need to integrate into all operations and help drive the business forward.
How can T&L companies put Internet of Things to work?

The Deloitte Tech Trends report identified ambient computing as one of the key developments over the coming 12 to 18 months. There is real business benefits to be had by getting IoT to work for the organisation. This is especially the case in transport and logistics that rely on embedded sensors and devices for business-critical data. Combining those components with analytics, security, data, and integration platforms will see organisations being able to exploit once disparate parts into elements that can drive business growth.
The Internet of Things has long been expected to become a critical element of the new wave of IT technologies impacting businesses all around the world. While companies are certainly taking note of this push towards ambient computing, very few understand its full potential especially in the transport and logistics sector.

To realise that potential, organisations should look beyond physical “things” and the role of sensors, machines, and other devices as signals and actuators. Important developments, no doubt, but only part of the puzzle. Innovation comes from bringing together the parts to do something of value differently — seeing, understanding, and reacting to the world around them on their own or alongside their human counterparts.

Ambient computing is about embracing this backdrop of sensing and potential action taking with an ecosystem of things that can respond to what is actually happening in the business — not just static, pre-defined workflows, control scripts, and operating procedures.

The focus on the “things” side of the equation is natural. Manufacturing, materials, and computer sciences continuously drive better performance with smaller footprints and lower costs. Advances in sensors, computing, and connectivity allow intelligence to be embedded in almost everything around us. From jet engines to thermostats, ingestible pills to blast furnaces, electricity grids to self-driving freight trucks — very few technical constraints remain to connect the balance sheets of people’s businesses and their lives.

But this is not enough. There is a move from simply sensing things into doing something with it. IT has to provide value and decision-makers are under pressure to find the best way to do that. This creates a knock-on effect for ambient computing. It is no longer good enough to just track trucks and goods. Now there is a need to extract more agile business benefits from that data.

However, there is an element of trust required to integrate ambient computing solutions with the back-end systems of the organisation. But as can be seen by the successes of Uber and others, the concept of fleet ownership is also changing. There is a clear move from this ownership model to one of access. After all, you do not need to own something to enjoy the experience.

Adding to this is the shift happening to a more open model around ambient computing and data analysis. For transport and logistics, it is very much a case of focusing on availability and reliability of information. This impacts on the success of the business and the efficiency of its operations. But again, the temptation might be to focus too much on new things and forgetting the fundamentals.

In many cases, though, ambient computing is a sophisticated enabler of amplified intelligence in which applications or visualisations empower humans to act differently. The machine age may be upon us—decoupling our awareness of the world from mankind’s dependency on consciously observing and recording what is happening. But machine automation only sets the stage.

Real impact, business or civic, will come from combining data and relevant sensors, things, and people so lives can be lived better, work can be performed differently, and the rules of competition can be rewired.

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The GE example highlights the need for cooperation and communication among a wide range of devices, vendors, and players — from partners to competitors, from customers to adjacent parties (for example, telecommunication carriers, and mobile providers).
How is Big Data transforming the industry?

The supply chain is an integral component for transport and logistics organisations. Despite this, there is still significant fragmentation in the market negatively impacting efficiencies and costs. This results in the customer, whether he is a consumer or a business, getting frustrated by a perceived lack of service and a potential delay in receiving goods being transported. In recent years, much focus has been placed on Big Data and the potential it has for enterprises across industries. However, it is arguably in transport and logistics where the most significant benefits are to be had. But for this to work, decision-makers need to embrace a changing model requiring more real-time analysis of the data they have available than ever before.
Organisations have to evolve from beyond merely using data to inform intelligence. Instead, they need to leverage available data to provide intelligence. But for this to happen, the vision of the organisation has to be synchronised across all departments.

This makes it critical that data is available from a central location. The resultant analysis of data will see value being created throughout the organisation. Complicating this is the flow of data inside the organisation as a consequence of all the different channels available to employees.

One thing is clear. Transport and logistics providers have a vast amount of data.

Unfortunately, not all decision-makers know what to do with it. This creates a situation of being data rich but information poor. The reality is that sense needs to be made of the available data in order to gain that ever-elusive single view of the customer. In the months to come, this shift will be core to the transformation of the organisation.

Realistically, companies need to look at the different legacy solutions they have installed and see where they stand in terms of adapting their underlying architecture. In a competitive environment, this step cannot delay data analytics. What is therefore needed is to reinvent the core of the infrastructure. Sadly, the conceptual design of solutions, especially data analysis ones are left by the wayside.

In this world of ever-expanding data, it is clear that business is not sure what it wants. Given the sheer variety of options available, this should hardly come as a surprise. Whether it is the cloud, crowdsourcing, or a greater push towards data collaboration, careful investigation needs to take place for the right solution given the organisational requirements.

This puts additional pressure on skills development in the organisation. In fact, many transport and logistics companies, as with other industries, have been caught off-guard in terms of getting the necessary data skills in place. Inevitably, this has resulted in the outsourcing of IT skills. But those outsourced providers are just focused on delivering on specifications and nothing more.

Further complicating this journey is the evolution of core enterprise resource planning data that impacts on how companies view their cloud strategy. Given the importance of data, protecting it is becoming one of the biggest priorities inside the company.

Key Takeaway

Despite the complexity of integrating a Big Data-driven approach inside the organisation, the benefits for transport and logistics providers are too numerous to ignore.

On the one hand, there is the enhanced operational efficiency. Think of the benefits that Big Data analysis will have on route optimisation, strategic network planning, and operational capacity planning. Also consider the improved customer experience this will result in. Continued improvements in service will see renewed customer loyalty that will positively impact the financial bottom line.

By analysing and interpreting data in as close to real-time as possible will empower transport and logistics executives to make better decisions faster. It will also lead to improvements in the design of their logistics and supply chain. But for this to be done in the best possible way, the organisation has to be able to integrate a Big Data approach in everything it does. Big Data cannot work in a silo. It has to encompass the entire organisation and its value chain.
How more pro-active can cyber security become?

For all the advantages that the digital world is providing businesses and consumers, there are also certain risks involved. And while some of these revolve around processes and systems, the biggest concern revolves around cyber security. With more organisations transitioning into an ultra-connected landscape, so too are cybercriminals becoming more sophisticated and targeting companies of all sizes irrespective of geographic location. Even mainstream media have increased its reporting on cyberattacks as they become a more common occurrence. For transport and logistics organisations, the threat is very real. It is not a case of questioning of their systems will get attacked and compromised but instead when it will happen.
The executive at a transport and logistics company has to assume that the company will get hacked, if it has not happened already. Cyber security should therefore be a key concern for the organisational leadership. However, one of the biggest mistakes the organisation can make is to assume that the enemy is the one outside the company. The reality is that many cyber-attacks originate from internal sources, quite often disgruntled employees or those looking for significant financial gain.

And it is not only companies in the financial services sector that are at risk. The threat is a global one spanning all industries. Manufacturing, transport, and utilities have become significant targets for malicious users whether it is for financial gain or as act of cyber-terrorism.

Of course, none of this is particularly new. Organisations have had to deal with cyber threats for as long as they have been connected to a network. But what has changed is the threat landscape. Today, companies need more mature cyber security solutions if they are to stand any chance against the onslaught of attacks.

Sometimes, the entry point to these cyber hacks are relatively benign. For example, consumerisation of technology means more employees are using personal smartphones and tablets on the corporate network. If these devices have any link to back-end company data or can access the network, then they should be part of the security strategy. Increased collaboration has also resulted in the sharing of large volumes of sensitive data. What happens when the information gets into the wrong hands or a device is lost or stolen?

Given the move towards more mobile, cloud-friendly, and social computing, IT environment have become more difficult to defend.

But before any defensive measures are implemented, the organisation has to understand the cyber threats it faces. Identifying the level of risk being faced, whether those risks are known and understood or unknown with little understanding all become necessary steps to take.

Even though security measures are more mature, attackers have also evolved. They are significantly more persistent than in the past and can bypass all but the most secure systems. And as with anything technologically-driven, the more sophisticated the defensive measures, the costlier it becomes to implement in the organisation.

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The reality is that it is impossible to be completely secure. However, by developing a sound cyber risk management approach, transport and logistics companies can implement a number of risk treatment measures for prevention, detection, and response activities.

The ever-evolving landscape sees a desperate need to follow suit on cyber security policy. It is one thing for a transport and logistics company to embrace Big Data, the Internet of Things, and a more nuanced CIO role, but another thing entirely to bring its security systems along with it. But this journey has to be an integrated one. As can be seen by the expansiveness of Big Data in the organisation, IT security has to be rolled out in all spheres of the business.

Preparation, prevention, detection, and response are four parts of any cyber security implementation. Having a cyber-resilience to malicious users mean that organisations need to have the agility to prevent, detect, and respond quickly and effectively to not just incidents, but the consequences of those incidents as well.
What does value chain collaboration mean for the industry?

There is large scale fragmentation in the industry due to the low barriers of entry. Small players find it easy to setup a business with minimal costs and begin transacting. There are cases where multiple vendors will handle your clients’ cargo before it is sent to you and hence it is becoming increasingly important to collaboration across not just a service offering but the entire value chain of the logistics journey. In this way, the customer receives the best possible service and the ecosystem is once again in equilibrium.
Key Takeaway

To remain competitive in this industry sector with the current market constraints, value chain collaboration is an absolute requirement. Companies need to be able to adapt to changing strategies and approaches to customer service requirements quickly and efficiently. The concept of value chain collaboration only works in a practical implementation when it is real-time and all partners are committed and participating.

The process is underpinned by key technologies which exist in different forms and fashion at each partner implementation. These are infrastructure, software applications, cloud technologies and very importantly, the Internet of Things (IoT). These information components are important because they allow goods to be tracked via online portals by customers showing locations whether they are in warehouses, on the road, in the air or on a ship in the ocean.

There are also other reasons that these types of collaborative partnerships are formed such as sharing the costs of delivery into regions not supported by one of the partners, reducing risk by spreading it across the partnership landscape and also, being able to leverage off a partner’s capability which is not embedded in your own organisation. Coupled to this, is an expanded market being reached, due to the location and service area of partners in your collaborative network.

A critical reason behind this innovated thinking is that with incorrect scheduling, this results in wastage and shrinkage of customer goods which boils down to lowered revenue both for your customer and yourself. Out of this issue, the need for a collaborative planning, forecasting and replenishment thinking was born.

The implementation theory is simply to share operational planning information through to actual operational data between partners. Where possible, change from manual models to fully automated information exchanges of sales forecasting data and replenishment orders. This will lower the costs of inventory and have an inversely positive relationship with revenue. Ultimately customer satisfaction will increase.

The model is beautifully architected though the implementation is arduous. Different partners in the collaborative value chain model across the globe enjoy varying levels of information technology. Integrating these information backbones of organisations from a technical and globalisation perspective is a challenge not easily surmounted.

Having demand management tools that can easily change order forecasting values into shipment forecasts is essential and being able to manage the lifecycle of the delivery from start to finish is the ultimate outcome. Customers want to be able to track their goods from order to delivery and do not want to be concerned with who is the current logistics partner. Hence, the order fulfilment may be managed out of different vendors and information systems but this is completely transparent to the customer and the service is fast and efficient.

With the world being more easily accessible, globalisation is key to being competitive in this sector. Hence, the increased and carried costs of customs duties, value added tax and exchange rates need to be closely monitored and managed lest the cost outweighs the revenue received. These factors make a volatile market more fluid. It is very important to manage these costs downwards as they play a significant role in the pricing of the goods to the end customer and is thus a critical component of the customers supply chain strategy.

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Digital transformation, when is the right time?

Traditional transport and logistics systems are aimed at how we handle the logistics lifecycle from order to delivery in the shortest time period with the least cost. There was little attention paid to the customer or the customer’s experience with the service. In the current era, this is not acceptable as more customers are connected and switched on with increasing information requirements. They want real-time information on location and delivery times. Margin pressures are a very real challenge and financial and economic uncertainty necessitate new approaches to old problems.
Digital transformation is viewed in varying ways depending on the audience. These range from technologies that are adapted by an organisation such as social networks, cloud technologies, analytics and cyber-security. Adoption though, is not necessarily transformative and may not result in the value derived from a business transformation aimed at a digital make over. It is also prudent to note that these efforts are customer driven rather than self-initiated by the business. Customer centricity is a vital focus area and a key differentiator amongst competitor businesses.

Customers are expecting emails with order information and status updates. Digital copies of proof of deliveries and the ability to sign documents electronically are demanded by these digitally connected customers. Surprisingly, the transport and logistics market is increasing year on year and the number of packages shipped is more than 85 million per day worldwide. These are staggering numbers across the globe with each order generating supporting data that needs to be tracked and stored.

However, logistics has not adopted digital technologies as fast as other customer centred services and with this, comes the risk of service satisfaction ratings dropping and orders moving to more digitally orientated service providers.

Businesses that are able to leverage off the digital transformation will no longer be tied to the size of their own organisational capabilities but rather into a global network and will present a unique challenge even to the largest, more established logistics businesses. As the technologies evolve and mature, it will become a key determinant in market share and profitability.

Digital transformation will assist with demand and route planning, including sales forecasting efforts and thereby reducing costs spent on fuel and actual distances travelled. This has positive effects on revenue and maintenance costs whilst also reducing the overhead on the environment with lower road wear and tear and emissions.

The digital transformation efforts will result in the ability to collect data all through the value chain of the organisation. Organisations will need to ensure that they have big data capabilities to analyse this data whether collected internally or externally and to implement any changes required in the organisation. Hence the digital capabilities must be scalable and robust enough to accommodate rapid change implementation.

Planning a digital transformation must start in the now such as the Internet of Things (IoT) and cater for the future such as driverless vehicles and drone delivery. The logistics industry needs to be proactive in this environment to remain attractive to customers and deliver superior services.

Key Takeaway

A transformation project of any nature must be supported by the executive management of the organisation and digital is not any different. In the logistics sector, this is significantly more important due to the traditional models currently employed. This requires an internal focus on company culture to ensure that the adoption of digital platforms and service is more readily accepted and benefits maximised.

There is no one size fits all approach when dealing with digital transformation. Organisations will need to undergo metamorphosis in a few iterations before finding the ideal fit. There will be change and uncertainty and organisations need to prepare both themselves and their customers for these events and maintain a clear focus on the desired outcomes.

It is important to also ensure that partners in the value chain of the organisation are conducting similar transformation projects to align offerings and services as the transformation will only be as effective as the weakest link in the customer delivery experience.

The digital transformation process can last a few years considering the adoption model that the organisation might have decided on. Bearing this in mind, the process must have a clear strategy and plan in place to deal with any new customer demands or requirements and be able to adopt these without losing sight of the vision of the digital journey.
Should we be investing in our core systems?

Organisations have invested heavily in core transport and logistics systems across the decades. These systems function as the heart of the organisation and it is due to this, that a re-imagination is required to align these systems with the evolving digital demands from customer and partners. Disparate architecture and technical debt are inherent risks to this vision and need to be addressed.
Logistics companies typically operate a single enterprise application that handles demand management, sales forecasting, customer billing and payments. This makes rejuvenation an arduous task and one that requires a large amount of IT budget and resource investment.

The main reason behind this rejuvenation is that it brings together the benefit of improved efficiency and increased revenue with lowered cost. The rate of innovation and change in the technology space is outpacing the development and update of core systems and hence, this needs to be central to any technological vision of the business.

With digital transformations and Internet of Things (IoT), customers, employees and partners are interacting in multiple, data intensive ways with the business. Core systems need to be able to cater for this or the business risks losing interest amongst these parties. ERP vendors are also looking to move into the future and the business needs to have a technological landscape capable of handling this change.

In a similar approach to digital transformation, core systems rejuvenation, should be seen as a transformation journey. It is a perfect opportunity to not only modernise the application stack but also the business operating model and processes. The initiative does highlight key issues of technical debt built into the systems and also the skills scarcity that may present itself in the example of COBOL developed systems. There are essentially two main approaches to core system rejuvenation with the first being a big bang approach and the second more of an incremental, process by process approach. A usual area to begin is simply to upgrade the platform to the latest versions or using cloud technologies and in-memory processing.

It is also possible to simply add on new capabilities such as digital enhancements or analytical visualisations. Typically, the older systems did not have mature analytics built into the systems and this can now be exploited.

Another area that can be addressed is to replace old, deprecated parts of the system with new products and solutions that can be plugged into the system. This could instantiate the build versus buy discussion and contradict enterprise architecture standards but could bring about value with the least effort and cost.

The last and perhaps most controversial approach is to do nothing about it. It is essential to understand the repercussion so doing nothing and if the business is willing to assume this risk, then the focus should be placed on ensuring the customer satisfaction is not compromised.

Key Takeaway

It is vital to always build and care for the technological investment in the business that will service customer’s requirements. Ageing systems and workforce to support this landscape are key risks in an ever changing technology environment.

Systems play a critical element in delivering world class service across the globe. Where possible, even the delivery approach to rejuvenating the core, should be changed to an agile approach so that the benefits and change can be easily assimilated by the business.

Technology business impacting factors such as technical debt, scalability and investment costs should never be undervalued. If the business cannot adopt digital transformation projects, integrate with partners and have key competence around mission critical systems, it will not survive the digital and information age that is upon us.
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