digitization
threat or
opportunity?

worldline
e-payment services

" Of critical importance is the focus we have had on driving innovation and supporting future globalization and digitization of the company. **"**

Ralph Szygenda, *CIO, General Motors*

Embracing change

Today's consumers are accustomed to life in a digital world. The way they communicate, work, shop, watch television, listen to music and even enjoy the radio have been transformed through the superior quality, better services and greater reliability of digital technology— and they expect the same in every interaction with business and government. They don't want endless paper forms, bills and statements. They want to be able to manage their lives via desktop or mobile, wherever they are, 24 hours a day.

The same changes are transforming the efficiency and immediacy of the supply chain across businesses worldwide. Instant access to market intelligence, sales information and production data is enabling much more effective management of the manufacturing, distribution and retail environments. It's also revolutionizing the way services are supplied, providing much greater insight into consumer behavior and giving companies the ability to revolutionize the customer experience.

This move from paper to digital services offers greater efficiency, lower costs, fewer errors and better service. Electronic documentation and processes enable businesses and governments to engage more effectively with their customers and citizens — and of course many organizations are already some way along the road towards digitization. The question is how to embrace this opportunity and create a strategy for end-to-end transformation that will drive innovation, improve efficiency, reduce costs, enhance performance and better serve customers, at the same time remaining acutely aware of the need to retain security and trust whilst satisfying the new regulatory obligations that inevitably accompany change.

Challenge and opportunity

It would be easy to see digitization as something that a business simply has to do as part of normal development. A transformation that needs to be implemented as efficiently and cost-effectively as possible just to keep up with the competition. Of course it's clear that moving systems and services into a more agile, flexible digital infrastructure is an imperative for every organization. However, digitization offers much more than that.

Digitization is an opportunity to do everything better. To take existing processes and re-engineer them around a future model that is more dynamic, serving the needs of the business and its customers to give them simplicity, speed, convenience, access and security.

- Faster, more reliable transactions
- Reduced costs and improved efficiency
- Greater security and traceability
- Confidentiality, integrity and preservation of data
- Services that are simple and easy-to-use
- Opportunities to generate loyalty and trust
- The ability to innovate and grow new revenue streams

For companies looking to undertake a digitization project it's necessary to first define the objectives of the program. This will help determine those processes can be transformed within the existing infrastructure and those that may need to be implemented from scratch. This is critical as it will establish the framework for managing change within the business as well as providing the benchmark against which to measure success. Digitization requires solid foundations upon which to build. There's no value in simply rebuilding existing, outdated processes with new technology and hoping to see any significant benefit.

"Digitization is an opportunity to do everything better."

"Information and Communications Technologies (ICT) has become the backbone of our economic growth and is a critical resource which all economic sectors rely on."

Understanding the pitfalls

Taking any aspect of an organization and transforming it into a more accessible, digital solution inevitably creates concerns. How can the identity of those accessing the information be authenticated and how can the integrity and validity of the data be determined? Is it secure across all channels? How can the confidentiality of personal data be assured? This creates further questions around the preservation of the documents in electronic format. Will it be suitable for audit to a level that will satisfy legal and regulatory requirements? How robust will the storage of that data be in 12 months, a year, a decade?

Managing the processes that address these issues is a key part of achieving a successful migration to a digitized environment. It's unlikely that any business will undertake a complete replacement of its entire infrastructure as this would squander the value of previous investments. Thus any new systems should integrate seamlessly with existing ones as part of a gradual evolution, easing the path and reducing the impact of change across the organization.

At the same time the pace of change needs to be managed. Too fast and the risk of disruption can outweigh the benefits, alienating both customers and employees and hindering the roll-out. Too slow and the benefits will not materialize quickly enough and stakeholders may begin to question the value of the program. Finding this balance requires experience and understanding, along with a technology partner that has the scale and resources to support legacy systems, whilst implementing innovative new ones, without hindering the ongoing operation of the business.

Creating the new model

It's not necessary (perhaps not even advisable) to attempt an end-to-end redesign of the entire business process in one step. Instead it is better to create a roadmap that will take the business towards its end goal in stages that will maximize return and minimize risk. Thus it makes sense to look at aspects of the business that are either suffering greatest inefficiency or where the maximum value can be added and then apply change in that area.

To create this roadmap the business will need to assess the current level of digitization across every process, including: identification; documentation; business services (invoicing, payments etc.); customer services; channel delivery; data storage and archiving; security; and, of course, compliance. Every process encompasses each of these elements to some degree and gaining an understanding of the relationships between each one and how any change will affect another is key to building an effective implementation plan.

This requires a partner that can balance the level of risk with ease of use according to the requirements and nature of each process. For example, some transactions might be less sensitive so a higher level of openness is appropriate with a small increase in risk, whilst for others the compromise must be different to ensure absolute protection of sensitive data.

It's then a matter of exploring the options available, including the possibility of new revenue streams that comes with digitization. Is a bespoke, standalone solution appropriate or are there packaged options that can deliver the required functionality at lower cost? What level of customization is required and how scalable is the solution to grow as needs change? Is the technology proven and is it compliant with recognized industry standards? Critically, can it integrate with other, possibly legacy or proprietary systems?

"The availability of a technical infrastructure to ensure permanent access and availability to Data is necessary. This infrastructure should be conceived in a modular and flexible way (e.g. cloud computing), in order to allow public administrations with limited IT capabilities (e.g. small municipalities) to also make their information available."

The Digital Agenda Toolbox
© European Union, 2014

Building the service

Answering these questions also requires engagement across the business as well as with suppliers and customers to ensure that any solution delivers to their expectations. It would be easy to envisage a service built around a static end-state, but it's important to remember that digitization is an opportunity for innovation—to do and achieve things that have not been done before, giving the business a competitive edge in efficiency, insight or customer satisfaction. It's an approach that must be continually re-evaluated to ensure that systems remain fresh and in line with the business needs. It took nearly two centuries for checks to become virtually obsolete. The digital world moves a lot faster!

For example, consider the number of interactions between a citizen and the government. Taxes, licenses, passports, property transactions, benefits and even voting. By moving to eGovernment services it's possible to greatly simplify and accelerate processing whilst also saving money and making the government more approachable and easier to deal with. The argument for digitization is clearly very strong.

A further aspect of service definition is the balance of the model to be deployed. How many services will be retained in-house and how many outsourced? What will the support structure be? What SLAs will be in place and what will the recovery strategy be for critical processes. Is the organization able to maintain the services alone or will it need the ongoing support of a trusted partner? In this regard it's much like any technology implementation but with a greater emphasis on external factors as it's essential to ensure the trust and confidence of the many external parties the system will connect with: regulators, suppliers and customers.

Focus on the business

The decision of a delivery partner for an implementation is, in many ways, the first one that should be made, as they should be an integral part of the design process. The chosen partner should have the capability to provide consulting support and focus first on the business issues to ensure that any solution is flexible, secure and does not lock into any model that cannot rapidly evolve. Additionally, it's important to decide whether the services run on the organization's own premises or be outsourced in a private cloud.

PDCA (plan–do–check–act or plan–do–check–adjust) is an iterative four-step management method that can be used in digitization for the control and continuous improvement of processes. It is also known as the Deming wheel.

P Plan: Define objectives, priorities and communication

- Prioritize service digitization by expected benefits
- Communicate benefits to all the parties and incentivize them to gain support
- Gain sponsorship from the management board to mobilize each department

D Do: Build a step-by-step solution based on proven technical assets

- Opt for a progressive approach instead of a 'big-bang'
- Handle possible resistance to change
- Use qualified, trusted services to ensure compliance

C Check: Regularly report on digitization effectiveness

- Put in place Key Performance Indicators before and after paperless digitization
- Put in place dashboards to follow and measure the activity and performance
- Use regular third-party audits to confirm the compliance of the service

A Act: Continuously improve the process and innovate

- Adjust the process according to the results
- Take the first step as a model to create the next digitization services
- Innovate by creating new services

> " By creating a connected digital single market , we can generate up to €250 billion of additional growth. "

Jean-Claude Junker
European Commission's President - July 2014

Plan · **Do** · **Act** · **Check**
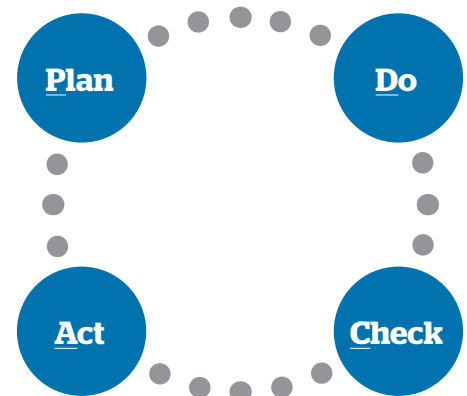
A broad reach

Digitization projects have been implemented in almost every sector around the world, showing how they can deliver results across a variety of services.

In the public sector

Many countries have already implemented a level of eGovernment services of different complexity, from online portals for information gathering to the delivery of secure biometric passports or driving licenses, income tax returns or the payment of fines.

According different studies, such as the United Nations e-Government Survey 2014 or the eGov Study by Security Identity Alliance 2013, the key principles essential to achieve successful implementations include:

- Citizen-focused, multi-channel services to meet the demand for anywhere, anytime, any device access
- Prioritization of service digitization by benefit, with promotion and incentives to encourage adoption
- Collaboration and partnership with a trusted service provider
- Legal and process innovation with services redesigned for digital deployment
- Awareness and mitigation of potential resistance within the administration as well as from the citizen

The health sector, which requires a high level of security and privacy of data, has some specific benefits which include:

- Medical records: more easily shared between professionals, reducing errors and improving care
- Prescription services: can be semi-automated, reducing administrative burden

Regulated bodies (court, notary, bailiff) have also entered into this process, where the security and confidentiality of personal data are extremely sensitive too. Here the legal aspects and certifications of the solutions around the authentication and the integrity and the preservation of digital documents are critical elements of any solution.

In the EC all Member States have approved a new regulation (eIDAS: electronic IDentification and Authentication Services) to promote and facilitate the interoperability of electronic transactions between citizens, business and public authorities. This regulation seeks to enhance trust by providing a common foundation and mutual recognition of key enablers across borders, such as electronic identification, documents, signatures and delivery services. This new regulation will also help the private sector to create digitization services and support their international roll-out.

In the private sector

In the private sector, cost reduction, operational efficiency and customer satisfaction benefits are accompanied by the growth of new revenue streams, providing competitive advantage through improved customer retention and new methods of customer acquisition.

The potential of digitization has been exploited for some time, starting with EDI (Electronic Data Interchange) exchanges in the B2B area and moving towards increasing implementation in the B2C market.

These are some typical digitization services for private organizations:

- B2B invoice with VAT: straight to accounts application for reduced errors and greater efficiency, followed by the electronic bill to consumers with payment features
- Salary slip: secure, private and direct to the employee including the long term preservation
- Electronic delivery of documents: reduce sending costs, no more paper nor stamp. Quicker delivery, bespoke document, smart services around it, to increase customer retention and generate new revenues. Even a legal effect could be applied using Electronic Registered Delivery Services as defined in the regulation eIDAS
- Cloud storage: secure storage of information available through any device, with possibilities of sharing, alerting, including data privacy
- Digital Identity: from Social Network to National Body authentication means to make transactional services online, like digital contract
- Digital contract: faster process, easier archiving and availability all around the clock to increase the transformation rate

> **"**eGovernment services will yield up to $50bn annual savings globally by 2020.**"**
>
> *Boston Consulting Group, 2013*

> **"**One key objective of the Digital Agenda for Europe and also the eGovernment Action Plan 2011-2015 is that by 2015, 50% of EU citizens will have used eGovernment services. The use by enterprises is increasing and the latest survey indicates that 84% of enterprises use online public services.**"**
>
> *The Digital Agenda Toolbox*
> *European Union, 2014*

> **"**As a global innovation leader, Shell wants to be at the forefront of digitization services for its customers' fuel card invoices. Electronic invoicing is regulated by a complex web of legal requirements, calling upon a wide array of IT solutions; Shell's strategy was to procure e-invoicing as a service, from experts in the field, thereby ensuring compliance with the various national regulations.**"**
>
> **Rob French** *General Manager*
> *Cards Services, Shell*

> **“We’ve decided that the actual digitization is not our core competency. What we want to invest all our efforts in is adding value.”**
>
> **Danielle Tiedt**, *CMO, YouTube*

Conclusion

Without doubt digitization offers great opportunities for public and private organizations. However, no change should be undertaken without careful consideration and a clear view of the end goal. Hence it is advisable to engage an experienced organization with a proven track record and begin a consultation process that defines objectives, sets expectations and determines an end-to-end implementation and ongoing development plan.

About Worldline

Worldline [Euronext: WLN] is the European leader in the payments and transactional services industry. Worldline delivers new-generation services, enabling its customers to offer smooth and innovative solutions to the end consumer. Key actor for B2B2C industries, with 40 years of experience, Worldline supports and contributes to the success of all businesses and administrative services in a perpetually evolving market. Worldline offers a unique and flexible business model built around a global and growing portfolio, thus enabling end-to-end support. Worldline activities are organized around three axes: Merchant Services & Terminals, Mobility & e-Transactional Services, Financial Processing Services & Software Licensing. Worldline employs more than 7,300 people worldwide and generated 1.15 billion euros revenues in 2014. Worldline is an Atos company.

Mobility & eTransactional Services

The digital revolution is reinventing current B2C processes offering unprecedented opportunities to do more and better with less – however the associated innovation and technological challenges are huge. Our customers expect an end-to-end partner to support them in the creation of innovative digital products, leveraging similar experiences cross sectors, committing on joint business cases while managing smoothly the associated change management. We provide fully end-to-end processing services to digitalize business processes including new, contextual digital products for business innovation and operational efficiency, such as seamless journey management, connected living or digitization services while leveraging if needed our strong payments capabilities.

For further information
infoWL@worldline.com

FSC
www.fsc.org

The mark of responsible forestry