4 WAYS IN WHICH DIGITAL TRANSFORMATION AND IOT IS CHANGING INDUSTRY

TAKING A GLOBAL DIMENSION TO DIGITAL BUSINESS TRANSFORMATION AND EXPANSION

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Today’s landscape demands that businesses embrace a strategic approach to Digital Transformation. Thankfully, technological developments are helping businesses to identify and adopt to transformation seamlessly. For evidence of one of these developments, we can look to the recent rise in interest around machine-to-machine communications and the Internet of Things.

There is a clear trend towards service automation, leveraging mobility services, Internet of Things and Big Data. Process management and cloud based applications are revolutionising logistics. The supply chain is being impacted by a range of activities, including entry of new competitors into the supply chain, increasing cross-sector competition and increasingly customer centric models.

In this eBook we highlight 4 key themes associated with digital transformation, enabled by the Internet of Things (IoT):

1. Sustainable cross-border business growth, regardless of geo-political boundaries
2. Realising gains in productivity and enhanced business efficiency
3. Using digital transformation and IoT to enhance customer and partner engagement
4. Methods for minimising exposure to business risk

DIGITAL TRANSFORMATION HAS BECOME A TOP PRIORITY FOR ORGANISATIONS WORLDWIDE:
BORDERLESS GROWTH

TAKING A GLOBAL DIMENSION TO DIGITAL BUSINESS TRANSFORMATION AND EXPANSION

To identify and achieve successful digital transformation, to help your business grow globally, requires the right strategy, combined with best-in-class global infrastructure and information tools. Only by combining business strategy with the right infrastructure can your organisation successfully expand into new markets and geographies. You innovate through a combination of new technology, competitive new services and appropriate business models to generate incremental revenue.

Global expansion requires the connectivity services that your business needs for its domestic business to be available on a global basis. To maintain things like consistent asset tracking, maintenance information and people efficiency management as your business expands internationally means potentially having to negotiate with hundreds of mobile network providers to provide mobile access for your IoT services in each country. This is a prohibitively complicated task, which is better managed through contracting with a single provider to negotiate all the access agreements and provide end-to-end mobile, cloud connectivity and data management services.

The global mobility challenge - How to deal with multiple mobile network operators and interfaces, while maintaining service continuity:
PRODUCTIVITY & EFFICIENCY

CONTINUOUS COLLABORATION, UBIQUITOUS DATA ACCESS

Boosting productivity - realising the efficiencies unlocked by digital transformation - means that organisations need to pave the way for seamless multi-platform collaboration. That collaboration means empowering employees, partners, and customers alike with ubiquitous access to data and applications.

Today there are c.15 billion connected devices in the world. It is anticipated that this number will be closer to 50 billion by 2020. The proliferation of embedded sensor technology and analytics throughout businesses will provide unprecedented visibility into operations. This insight will in turn transform how organisations make decisions. Moreover, as new technologies such as LP-WAN and NB-IoT become more prominent in the next 2 years further cost advantages will be realisable.

A connected device eco-system needs a more automation-intensive environment, leveraging Mobile connectivity, IoT, and Big Data:
CUSTOMER EXPERIENCE & ENGAGEMENT

PROVIDING AN OMNI-CHANNEL CUSTOMER EXPERIENCE

It might be thought that providing customers with a seamless experience is only the preserve of companies that deal with end consumers. This should not be the case, as all partners in the supply chain, whether business-to-business (B2B), or business-to-consumer (B2C) should reasonably expect an omni-channel customer experience. A Foreman of the Goods-In team at a busy factory, which has adopted lean manufacturing and ‘Just-in-Time’ delivery, could be enabled to access information about deliveries with an omni-channel experience. Such an approach ensures transparency in the delivery chain as well as enhancing customer engagement, awareness and loyalty.

Key impact areas associated with an integrated supply chain include:

• Providing a consistent experience across different channels and platforms
• Information silos, needs a connected communications system approach
• Difficulty in scaling solutions as demand fluctuates
• Increased infrastructure investments
• Potential security vulnerabilities
MINIMISING BUSINESS RISK
TRUSTWORTHY SECURITY, UNIVERSAL RELIABILITY

Managing business risk means that your organisation must not only secure its data and applications against external threats, but also ensure service continuity and near-zero business disruption in the event of a security breach. The adoption of new technology carries risk, but this should be balanced against the bigger risk of not responding to digital transformation and being left behind.

With regards to IoT device and Cloud connectivity, requirements range from the need to access IoT data over a secure private network, through to ensuring the effective online control of both assets and policies in near real-time.

The availability of robust security services to protect your business from a range of cyber threats can ensure that you are protected, but the added dimension of connectivity carried across a secure mobile connectivity environment provides double protection for your data.

Taking a holistic approach to protecting your data and applications:
MAKING IOT A WORLDWIDE REALITY

WITH TATA COMMUNICATIONS MOVE - IOT CONNECT

Keeping in-patients safe and secure whilst in hospital can be a real challenge for healthcare professionals. Insecure wards with public access may be susceptible to either unauthorised access or patients leaving without the consent of doctors.

Connected wristbands can help hospitals remotely monitor the location and health of their high risk patients. Typical applications include the tracking of newborn babies in maternity wards and geriatric patients around hospitals. By integrating patient location information with building access and control systems unauthorised movements can be immediately detected and staff directed to a patient’s location, even if they leave the hospital grounds.

Key service features include:

GLOBAL IOT CONNECTIVITY

- Incorporating Global Mobile Connectivity – as well as device management.
- Technology and network agnostic - connect via different network providers and technologies including GSM, Wi-Fi, LoRa and NB-IoT.
- Go global or stay local - deploy services globally or on a single local network.
- Online management portal - offering total control over the installed base of connected devices via ordering, lifecycle, diagnostics and usage reports.
- Optional branded, self-service portal for end-user settings and services - sales and dealer portals are also available.

“Any product can now have global connectivity - we remove the barriers to enable worldwide data exchange.”

- Anthony Bartolo
  President, Business Collaboration, Mobility & IoT Solutions
  Tata Communications

Key features

- Global coverage, using 900+ partner networks
- Cost effective for domestic or cross-border solutions
- Quick set-up and provisioning
- Single contract for international fleets based across multiple countries
- Independent solution design, customised to your requirements
GLOBAL IOT CONNECTIVITY

**Global Mobile Connectivity** - as well as access to applications in the Cloud and platform management.

**Technology and network agnostic** - connect via different network providers and technologies including GSM, Wi-Fi, LoRa and NB-IoT.

**Go global or stay local** - deploy services globally or in a single country

**Online management portal** - offering control of all the connected devices in your business via ordering, lifecycle management, diagnostics and usage reports.

**Integration of connections** made via another provider - a one of a kind feature that is easy to facilitate.

IOT DEVICE MANAGEMENT

**Seamless on-boarding and auto-discovery** - builds your IoT service in minutes. Save on remote checks and reduce costs with online control via the management portal.

**Easy data storage and deletion** - via fully configurable dashboard widgets across any grouping of your devices and/or assets.
FOCUS FOR SUCCESS IN DIGITAL TRANSFORMATION AND GLOBAL IOT

To achieve successful and sustainable cross-border business growth, requires access to a global network infrastructure, with global connectivity options. This is a significant challenge that requires a single partner to provide access to global mobile network access and connectivity agreements. Connectivity alone is of little value without a full platform management approach, including SIM provisioning, APIs, device management, security, cloud access, data analytics.

Deploying IoT as part of a global digital transformation initiative can help to realise significant gains in terms of productivity, enhanced business efficiency and overall industry competitiveness.

Digital transformation used in conjunction with IoT can enhance your partners and customers overall experience and attitude in the way they interact with your business. Enhancing the customer experience also contributes towards broader goals associated with overall business efficiency and reputation.

While increasing reliance on digital processes inevitably exposes your business to risk, the greater risk is not engaging with digital transformation. The real issue is how to enhance digital processes, while reducing exposure to business risk and having a cost effective way to protect your business.

We hope this eBook has been useful for you. If you would like to learn more about Tata Communications range of mobile connectivity services, including: Tata Communications MOVE - IoT Connect, mobile customer engagement, cloud access and security services please contact us.
About Tata Communications

Tata Communications Limited (CIN no: L64200MH1986PLC039266) along with its subsidiaries (Tata Communications) is a leading global provider of A New World of Communications™. With a leadership position in emerging markets, Tata Communications leverages its advanced solutions capabilities and domain expertise across its global and pan-India network to deliver managed solutions to multi-national enterprises, service providers and Indian consumers.

Tata Communications’ depth and breadth of reach in emerging markets includes leadership in Indian enterprise data services and leadership in global international voice.

Tata Communications Limited is listed on the Bombay Stock Exchange and the National Stock Exchange of India.

The Tata Communications global network includes one of the most advanced and largest submarine cable networks and a Tier-1 IP network, as well as nearly 1.5 million square feet of data centre and collocation space worldwide.