IDC FutureScape

IDC FutureScape: Latin America IT Industry 2016 Predictions – Leading Digital Transformation to Scale

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FIGURE 1

IDC FutureScape: Latin America IT Industry 2016 Top 10 Predictions

Note: The size of the bubble indicates complexity/cost to address.

Source: IDC, 2015
Figure 1 presents IDC’s IT industry top 10 predictions in terms of their likely impact across the enterprise and the time it will take for the predictions to reach mainstream. By mainstream, IDC means the broad middle of the bell curve of adoption (i.e., the 40-60% of enterprises that are neither the first movers and early adopters nor the last to act). Each bubble’s size provides a rough indicator of the complexity and/or cost an enterprise will incur in acting on the prediction.

IDC OPINION

Since 2007, IDC has predicted – and we have all witnessed – the emergence of the IT industry’s 3rd Platform for innovation and growth (see Figure 2) and the very beginning of its impact on every industry through the digital transformation (DX) it enables. DX can be simply thought of as enterprises’ use of 3rd Platform technologies to create value and competitive advantage through new offerings, new business models, and new relationships.

FIGURE 2

The IT Industry’s 3rd Platform: Supporting and Driving Digital Transformation

Source: IDC, 2015
In *IDC Predictions 2015: Accelerating Innovation – and Growth – on the 3rd Platform* (IDC #252700, December 2014), we noted that the 3rd Platform was beginning to shift more quickly toward the developer-centric "Innovation Stage," with millions of coders sparking an explosion of digital innovation and transformation on top of the 3rd Platform's foundation.

So what's next? In 2016, and over the next three to five years, we will witness this drama's next stage, as enterprises "flip the switch," committing to a **massive new scale** of DX and 3rd Platform adoption, to stake out leadership positions in the "DX economy."

Globally, IDC has identified **Scale** as the critical new ingredient in the evolving formula for digital market success. *For details on IDC's global predictions for 2016, read IDC FutureScape: Worldwide IT Industry 2016 Predictions – Leading Digital Transformation to Scale* (IDC #259850, November 2015). As a summary the most strategic areas of "scale up" in 2016 will be:

- **DX-centered business strategy:** Within the next two years, two-thirds of Global 2000 enterprises' CEOs will have digital transformation at the center of their corporate strategy; over the next three to five years, the percentage of enterprises with advanced DX strategies and implementations will more than double. This scale-up of digital business strategies will drive everything that matters in enterprises' IT investments.

- **3rd Platform IT:** Within the next 24 months, 3rd Platform technologies and solutions — the IT raw material for digital transformation — will account for over half of enterprises' IT expenditures, rising to well over 60% by 2020. Mastery of 3rd Platform technologies will be table stakes for successfully executing DX business initiatives.

- **Cloud core:** By 2018, over half of enterprises' IT infrastructure and software investments will be cloud based, reaching 60-70% by 2020. Pursuing DX initiatives without a cloud IT foundation will be utterly impossible.

- **Innovation capacity:** By 2018, enterprises pursuing DX initiatives will more than double the size of their software development teams, focusing almost entirely on DX initiatives. Code will be an essential — and the fastest-moving — vehicle for delivering competitive advantage in every industry.

- **Data pipelines in and out:** By 2018, enterprises with strategic DX initiatives will expand the number of external "data pipelines" feeding intelligence into their organization by at least 3- to 5-fold and will expand the delivery of their own monetarized data to the marketplace by 100-fold or more. Enterprises' ability to innovate will grow (or shrink) in proportion to their data supply.

- **Extending the intelligent edge:** By 2018, the number of Internet of Things (IoT) devices will more than double, sparking the development of over 200,000 new apps and solutions that take advantage of them. By 2020, devices will triple and apps will exceed 250,000. Enterprises lacking an IoT strategy and infrastructure will be like individuals functioning without most of their five senses.

- **Real-time insights everywhere:** By 2018, over half of developer teams will embed cognitive services into their apps. Delivering real-time cognitive insights will be a standard part of many solutions, driving tens of billions of dollars of productivity gains.

- **Digital supply and distribution networks:** By 2018, the number of industry cloud platforms — the strategic hubs for massively scaling up digital supply chains and distribution networks within, and across, industries — will grow five-fold. Over 50% of large enterprises will plug in, and leaders will use these platforms to scale supply and distribution networks by 100- to 1,000-fold. Without these digitally scalable community connections, enterprises will be isolated from a growing portion of their markets.
Customer relationships: By 2018, sizable majorities of B2B (60%) and B2C (80%) enterprises will fundamentally re-architect customer engagement systems to support 1,000 to 10,000 times as many customers and customer touch points. Lack of customer scale will limit growth in the DX economy by orders of magnitude.

Supplier viability: As the 3rd Platform and DX scale dramatically over the next several years, we'll see that for many suppliers, "scale wins" - and for some suppliers, "scale kills". By 2020, 30% of today's IT suppliers will cease to exist as we know them today (by being acquired, merged, downsized, or significantly repositioned), requiring enterprises to fundamentally reassess and realign their IT supplier relationships. Aligning with the wrong suppliers and partners today will cripple enterprises' ability to compete in the DX economy for years to come.

IN THIS STUDY

This study provides IDC's top 10 predictions for Latin America for the next three years. These predictions focus on 10 areas that will shape organizations using IT to build competitive advantage over the next three years. These predictions provide the strategic context to enable CIOs, line-of-business executives, and IT industry leaders to position their organizations for success in the DX economy.

This document replaces IDC Predictions documents, shifting to the IDC FutureScape format and methodology. While IDC Predictions documents were targeted primarily to IT suppliers, IDC FutureScapes directly address enterprise business and IT leaders and their teams.

However, IT suppliers should find this IDC FutureScape document doubly relevant. Importantly, it highlights the strategic imperatives for their customers in 2016 – essential insight for IT suppliers' market planning. But, also, the guidance this document offers to IT suppliers' customers can, and should, be applied to IT suppliers' own organizations.

SITUATION OVERVIEW

Latin America will be no exception to the global trends identified above. During 2015, a mix of factors led to an economic and IT spending slowdown that had not seen for a decade by humbled Latin American nations. By IDC year-end estimations, in 2015 IT spending declined over 5% in current dollars as the region saw real GDP shrink 0.6% according to Consensus Economics' November forecast. Although this number is heavily influenced by the recession in Brazil as most countries with the exception of Venezuela are still showing growth, it is nonetheless the first time in over a decade that the regional real GDP has been negative. This has been related to and also coupled with the currencies losing value sharply since the start of the year: 42% in Brazil, 33% in Colombia, and Chile and Mexico with close to 15%, for example.

2016 will be another challenging year, with a forecasted regional GDP of only 0.6% due to continued macroeconomic uncertainty with the region’s powerhouse Brazil.

IT and business executives should not waver. It is clear there is still much to do to. Innovation is not just a description of product or service strategy, but is THE strategy. The strategy to remain relevant in an ever-evolving competitive landscape. The strategy to find the path to economic growth again. The strategy to position a company for success in the digitally transformed future of every industry – the DX economy.
The predictions below describe IDC’s blueprint for the top 10 trends that will shape the beginning of this journey to Digital Transformation in Latin America and the expected timeframe in months until they are able to reach mainstream commercial adoption.

**IDC FutureScape Predictions**

**Prediction 1:** By the End of 2017, one in three CEOs of the Top 3,000 Companies in Latin America will have Digital Transformation at the center of their corporate strategy.

With the advent of the 3rd Platform, we're entering an era where the technologies and processes that businesses deploy are so tightly linked to their customers and markets that the boundary between the internal operations of the enterprise and its external ecosystem (e.g., customers, markets, competitors, partners, regulators) is rapidly disappearing. Business leaders are challenged to move their enterprises to the next level, that of digital business transformation, employing digital technologies coupled with organizational, operational, and business model innovation to create new ways of operating and growing businesses. Digital transformation (DX) is enabled by Third Platform technologies: Social, Mobile, Big-Data/Analytics and Cloud. For most of the Latin American organizations, DX will represent the chance to redefine the sales and customer support processes, as well as the production processes and talent employment.

Today, DX hype has already gained center stage, but in reality Latin American companies are only just beginning their DX journey. According to IDC Latin America’s research, 26% of large company CIOs say they are beginning their ‘digital journey’ in 2016, moving from inconsistent use of digital experiences and products to repeatable, managed, and ultimately disruptive use of digital technologies and business models. We believe that for the CEO, even this affirmation is optimistic. However, the attention global examples and first Latin American experiences are getting is such that quickly, CEOs that do not put DX at the core of their business strategy will become a minority.

The development of the Digital Transformation will focus first in a Customer Centric strategy. In Latin America IDC believes Finance, Retail, Media & Communications, and B2C Services industries will undergo a faster integration of a DX Strategy into their traditional business structure.

We expect that by 2016, DX initiatives will drive $4.5 Billion USD in new IT investment, growing at a Compound Annual Growth Rate (CAGR) of close to 50% over the five year period (2014-2019).

DX sits on the principle that businesses will become information-based businesses, where organizational focus turns to relationships, people, and intangible capital to lower cost of transactions and change the customer experiences. During 2016, companies will focus on lower transactional costs as economic deceleration pushes them to re-think efficiency. As the economic uncertainty recedes, companies will also realize their very survival is beyond just operational efficiency and really fundaments on their ability to address their customers with new digitally rich experiences. Thereby, the omni-channel platform focus will become a main investment area by Latin American organizations. IDC estimates that the investment in new generation e-commerce platforms within B2C will grow 20% in 2016, and mobile commerce in Latin America will grow at a compound 40% between 2016 and 2019.

*IT and Business Impact*

- DX initiatives will rest on 3rd Platform Pillars, of which mobility and Cloud are the first two to be prioritized.
- The average time of mobile applications development is 9 months. The incorporated instructions in these mobile applications are 130 on average. The number of instructions and features of the
mobile applications will grow in the future, but the time to develop and implement them will be reduced by at least 50%. The larger complexity and less development time around mobile platforms will set a challenge to Latin American organizations.

- The new mission critical applications that will make the digital transformation strategies real will be developed mostly in a Cloud environment. Hence, the services providers in Latin America will continue to increase their investment to expand their Cloud datacenter and network infrastructure to enable Cloud services in the region, reaching a market value of $4.6 Billion USD in 2017.

- Digital transformation involves organizational (i.e., people) and/or business process/model change, or both, and thus is risky. Corporate leadership will need to define an organizational approach to drive change. Most DX oriented strategies will require the creation of an executive DX position driving the change and reporting to the CEO.

Guidance

- For IT suppliers, the obvious imperative continues to be to accelerate the shift of their offerings from the 2nd Platform to the 3rd Platform, mapping them to a wider variety of DX initiatives.

- CIOs/CTOs must have a plan to transform their role from technology expert and project execution to a DX enabler. In some cases, IT might lead the digital transformation, but it should not be an aspiration unless the specific organizational circumstances support that approach.

- Integration and management of hybrid and multi-cloud environments with the legacy systems will be a fundamental requirement for operating and executing the digital transformation strategy.

Prediction 2: 3rd Platform Workload First will be the initial IT infrastructure decision point in the DX era and involve more than 40% of IT infrastructure investments by 2018

Latin America’s companies are entering in a fast catch up mode in terms of a broader and deeper Cloud adoption level. In the last 3 years infrastructure virtualization and consolidation have been a top priority for Latin America’s organizations so most of them are already prepared to embrace the 3rd Platform as the organizational mantra for IT infrastructure and business in general. Investments in IT Infrastructure for the 3rd Platform are growing much faster than those for traditional architectures, showing double-digit increases within a declining enterprise hardware market.

One key trend emerging from this is considering the new mission critical business application workload as a starting point of the architecture and then drawing the infrastructure needs from there, almost from scratch. Legacy infrastructure is secondary to this new infrastructure driver. This technological approach is at the core of a digital transformation-aware infrastructure.

Latin American hardware distributors and resellers have re-arranged their product, integration and services portfolios around this infrastructure for Cloud, Big Data, and Mobility.

By 2017, the majority of large companies in Latin America will have implemented a hybrid IT environment, leveraging both in-house and third party off-premise datacenters.

Software and hardware layers will be harder to differentiate, as infrastructure convergence has quickly followed virtualization and workload-defined management.
**IT and Business Impact**

- The transition to diversified/hybrid IT environments requires more flexible networking capabilities at all layers — datacenter LANs, enterprise WANs, and access points of presence at the edge.
- Multi-cloud orchestration will need to address network transport, storage, and security at scale and in motion.
- Network latency will be addressed by further use of flash storage and converged and hyper converged infrastructure, with this becoming the foundation of locally hosted data centers supporting the infrastructure residing in large service providers.
- Software defined infrastructure becomes the standard for managing the unstoppable demand of more storage, more bandwidth, more processing power at scale with flexibility, automation and orchestration at speed. SDx related investment will continue to grow at 50% in 2016.
- IT staff will need to find ways to reduce costs of managing legacy infrastructure without massive migration. IT infrastructure operation budgets will be reduced by at least 10 to 15% in 2016.

**Guidance**

- Beyond cloud and/or 3rd platform strategy, organizations must become "App first" ones. Business applications should be the necessary starting point of any project and the way of choosing or not any particular cloud deployment will depend and rely on that first critical observation.
- IT organizations should evaluate software-defined and open source elements in infrastructure implementation decisions in order to get infrastructure at higher scale and greater cost efficiency than ever.
- Skills development will remain a great challenge. Organizations that want to thrive in the transformation path will need to selectively and carefully pick the technology considering the skills available in the market. Building-in capabilities will require more time to mature and produce results.

**Prediction 3: By 2018, at least 40% of enterprise IT spending will be cloud based, reaching more than half of all IT Infrastructure, software, services, and technology spending by 2020**

Cloud services are now part of most ICT vendors' portfolio and the reason is simple: it has become the platform of choice for any new IT deployment, and the long-term direction of most legacy evolutions. When it comes to the digital transformation journey, Cloud is a key enabler and in most cases a sine-qua-non condition. Cloud solutions have become essential due to needs for greater cost efficiencies, spurred by economic regional uncertainty leading to changes in the entire operational model transformation.

Cloud was ranked the 3rd IT priority in 2015, and will remain in the list of the top 3 initiatives for the majority of Latin American IT departments in 2016. It will also remain as one of the top items on the Latin America CEO strategic agenda, intensified by the close relationship cloud can have with cost management, e-commerce, and efficiency, in a year of challenging macroeconomic conditions.

Smaller companies in Latin America are ever more conscious of how imperative the ICT transformation is and of the role Cloud plays in innovation and expansion scalability. Cloud is ranked the 1st IT priority for small companies which will represent at least 20% of the total cloud services market by 2016.
By 2016, investment in public cloud services and in hosted private clouds will grow 40% reaching $3.6 billion. Direct investment in infrastructure hardware and software for Cloud build-ups will be will represent an even higher order of magnitude. Implementation and integration services, network equipment, software and professional services will be even more. IDC expects the collective direct and indirect investment in cloud based solutions will reach 40% of all IT spending in Latin America in 2018.

CRM, ERM, collaboration, and analytics applications will represent a third of the total software market spending in 2016. From these at least 25% will be cloud based, reaching a total public cloud services market of $700 million. Customer centricity will play an important role for most cloud based vendors expecting to transform the IT adoption model, as customers will be more familiar and satisfied with those pure on demand IT consumption offerings where they can have flexibility to increase or reduce IT capacity in real time.

**IT and Business Impact**

- Faster business transformation is probably the major business outcome companies investing in cloud will be expecting, as cloud based solutions enable business applications adoption in very short times (hours) against traditional models where the implementation process could even take months for basic workloads or business applications.
- Multiplying cloud offerings have led to pricing wars among competitors, benefiting customers and accelerating adoption (and also complexity). Most cloud vendors are looking to re-position value, strengthening support and managed services offerings. Navigating the increasingly crowded space of cloud offerings is becoming ever more challenging.
- Industry cloud platforms where industry players such as banks, manufacturing or services companies make their information, processes, or services available as cloud services to other businesses will transform many Latin American enterprises into cloud service providers.
- As cloud penetrates small, medium and large companies, a hybrid ecosystem will persist and will be the rule. Total cloud services will grow over 40% for the next 12 months, but hybrid will grow over 50%.
- IaaS will maintain a strong growth of 37% in 2016, while PaaS and SaaS will grow at 31%.

**Guidance**

- CIOs must integrate a "cloud first" vision into their IT top initiatives for 2016 and beyond that help them to guide innovation and digital transformation.
- Workload analysis is crucial to adopt cloud as a corporate platform, and many companies should incorporate IT workload dashboards to their operational management and business process balanced scorecards.
- Competencies in cloud (build, operate, use, sell, secure, integrate) will be adopted as key corporate differentiators by many industries across functions (marketing, sales, operations, HR, etc.) and driven by corporate leadership.

**Prediction 4: By 2016, 45% of Latin American Companies will align IT and LOB efforts towards a definitive Mobile Strategy**

There is no doubt that mobility is revolutionizing the market. Wherever you look, the impact is already significant in the region.

- In 2014, mobile subscriptions in Latin America exceeded 689 million (111% of the population). From those, 52% were smartphones
By 2019, IDC expects 66% of revenues from telecommunications services in Latin America to be originated in mobile services. Among them, about 39% will be data.

The usage of mobile devices to work in the region will continue to grow rapidly. The number of mobile workers reached 110 million by 2014. In four more years, IDC expects the number of mobile workers to exceed 138 million, reaching 50% of total employment in the region.

More than 1 of 3 companies in Latin America will invest heavily in mobility in 2016.

According to IDC’s surveys, mobility ranks among the top three IT initiatives of organizations in Latin America. The most basic and communications related applications like email and instant messaging have exceeded 80% penetration among Latin American organizations. In contrast, business related applications (CRM, ERP, Automation Sales Force or Working, etc.) have grown in adoption over the past few years, but do not exceed 35% penetration.

Another indicator of maturity in terms of mobility is how organizations distribute those applications to their devices. In Latin America, nearly half of the organizations do so by sending a link by email, which means that there are not adequate mechanisms to ensure that they are actually installed and up to date. Only 6% of organizations distribute their applications through an Enterprise Mobility / Devices Management platform (EMM / MDM), which currently represents the current maximum level of control and security.

The focus of mobility until now was the person and devices. Organizations placed at their employees’ disposal the network infrastructure, the devices (or the ability to bring their own), communication applications and in some cases a mobile devices management (MDM) platform.

The next step will be to take advantage of the progress made so far, expanding enterprise mobility to a greater number of organizational processes (Marketing, Customer service, field service, etc.) and the ecosystem surrounding them (customers, suppliers, partners, regulators, etc.). By 2016, more than 45% of organizations in Latin America will implement a definitive mobile strategy, including mobile applications to enhance business operations, security or customer experience.

The challenges are significant to create a reasonable and seamless customer experience across the different type of contact methods between Latin America’s organizations and their customers. Customers now clamor for the same experience across devices. If they are not satisfied, they will look for other options. Increasingly, employees will follow the same trend.

**IT and Business Impact**

- As mobility becomes a strategic organizational aspect, stakeholders change. The lines of business (LOB) acquire a leading role in defining the success metrics of the implementation.

- There is an increasing need to adapt new applications to the existing infrastructure, integrating organizational systems with new communication channels. For this to become a reality, the API becomes a critical part of the platforms that allows this adaptation.

- Business application development will need to incorporate wider cycles of prototyping, as both employees and customers increasingly require the same user experience across all devices used for personal and business related applications.

- A number of tools should be considered for mobile application development, integrating them with existing systems and at the same time adapting them to the device that the customer uses. Such is the case of MADP (Mobile Application Development Platform), which enables application development for different mobile operating systems at the same time. Another
example is MBaaS (Mobile Backend as a Service), which allows one to adapt the mobile developments to organizations' internal systems, among other benefits.

**Guidance**

- The IT area is undergoing a strong migration from a "technological support" focus towards assuming an increasingly prominent role in the organization. That path leads them to definitely sit at the strategic decisions table. For that to be possible, it is necessary that IT priorities align with the ever-changing needs of the business. This also include the metrics by which IT and ultimately the whole business are measured.

- A critical aspect to quickly develop mobility (and technology in general) without resigning quality is the selection of one or more technology partners that can ensure a smooth transition onto this path. It will be critical to require them to facilitate the integration of new technologies with existing ones as well as provide the necessary tools to grant access to business processes, from any device that internal and external users are willing to use. The concept of Fast Design or Agile Design will become a condition for quick and iterative prototyping.

- Tools such as MADP or MBaaS will allow organizations to deal with OS fragmentation and to integrate better their apps to their backend with a minimum of development resources. In the end this will simplify the process of keeping up with new devices without the need to adjust their mobile applications. Ultimately this will positively impact on a seamless experience without the pain of having to re-write mobile apps when new devices or OSs are launched in the market.

**Prediction 5: Disruptive computing form factors will change how workers create, access and interact with data for their companies with over 14 million ‘hybrid’ devices shipped in Latin America in 2016**

For most of the past three decades, employees in Latin America have been creating and accessing data from their companies primarily in a ‘second platform’ framework of the desktop personal computer and, in the past decade, via primarily notebook PCs. Besides specific verticals such as banking or government where the security risks of a notebook leaving the workplace are too great, most companies have clearly selected the notebook as the preferred computing device. With the explosion of different and innovative form factors that have been launched in Latin America, the usage and replacement rates of the computing devices will alter the device landscape for years to come and will greatly impact the way companies expect their employees to interact with their companies.

The Bring Your Own Device (BYOD) phenomenon is already well established in the region with over 50% of the companies allowing it. In 2016 over 14 million hybrid devices (phablets, 2-in-1s, convertible PCs) will be shipped in Latin America, and due to BYOD will be making their way into the enterprise environment.

The detachable or “2-in-1” tablets are those tablets designed to function as a standalone slate/tablet, as well as a clamshell device comparable to a notebook PC through the addition of a physical keyboard component made specifically for the device. Although the numbers of these devices in Latin America have so far been very small relative to the overall portable PC/tablet market at 2% of units, the impact on other products that companies purchase will be impacted greatly. In a recent IDC survey of 120 IT managers in Brazilian companies, nearly 15% believe that 2-in-1s should eventually replace some of their company’s notebooks, while another 12% believe it will replace nearly all of the company’s notebooks. In 2016, IDC forecasts over 700,000 tablets with detachable keyboards/2-in-1s will be shipped into the region.
Another product that will greatly impact the future computing landscape is the phablet, those smartphones that have screens between 5.5" and 6.9" and have that moniker due to the combination of the words phone and tablet. These oversized phone screens will allow employees to access and even manipulate company data in a much easier fashion than in the past with the smaller screen sizes. In a recent IDC study of nearly 400 consumers across key global smartphone markets, we see that of all the major countries, the Brazilians at 27% were the most likely to say that as a result of purchasing a phablet: they no longer see the need to purchase a tablet. Another 32% said that as a result of purchasing a phablet, they expect their tablet purchase to be of a larger screen size (greater than 9").

Although the ‘wearables’ market top of mind is largely skewed towards the consumer side of Apple watches or solutions from others like Garmin or Fitbit, the enterprise side potential for always connected employees is the true gem in this new category. Although the total number of wearables is not expected to exceed 1.6 millions of units by the end of 2016, the future implications in the commercial categories will be transformational. Integrated closely with IoT solutions that are beginning to be implemented across Latin America, the ability to have sensors integrated into bands, clothing, helmets, etc., will help employees become more efficient, safe and productive.

**IT and Business Impact**

- As employees will increasingly have smaller and lighter computing products compared to traditional PCs and in the case of phablets will be connected 100% of the time they are away from the traditional office work environment, LOB managers will find ways to turn these devices into enablers of greater revenues for the companies. The new computing devices will make it easier for the IT department to ‘prove their worth’ to the LOB managers.
- Business applications that are built to take advantage of the benefits of smaller and always connected devices will have a profound impact on how internal processes are completed within a company, how employees can interact with their customer base, and how those interactions can lead to faster and more effective sales support.
- Hybrid devices will find their way into order entry, supply chain, and customer relationship management, among many other things.

**Guidance**

- Although a new wave of ‘Microsoft Surface-like’ devices are coming to the market from different OEM partners, the prices for most of the 2-in-1 products up until now have been too expensive for most individuals and companies to switch to. Using country specific ROI examples lead by initiatives from the key hardware, software, and component players that are in the 2-in-1 space will be critical for convincing the LOB and IT departments why this new category of devices will ultimately lead them to greater profits.
- Business managers should analyze all their internal and external processes to determine how a workforce that is always connected with appropriate screen sizes and functionality of not only data consumption and manipulation, but also data creation capabilities, can reinvent itself to be faster, nimbler and more responsive to their customers and also stakeholders.
- Companies adopting the new form factors should ensure that the applications they run make proper use of the functionality of these devices: touch or stylus interphase, compatible USB C or HDMI 2.0 ports, last generation security or operating system platforms, etc. The rise of Windows 10, iOS 9 and, more broadly, unified application development that tailors to multiple device form factors with a single app will have an impact on productivity and on knowledge workers' expectations of how an application should behave.
Prediction 6: In 2016, 30% of Latin American consumer goods and retail businesses will invest in 3rd Platform IT to exploit the ecommerce explosion happening beneath the economic slowdown surface

For many years the barriers to ecommerce in Latin America have been well known (lack of a massive mobile device installed base, limited consumer Internet connectivity, low credit card penetration). However, the moment is now ripe for companies to take advantage of the huge strides Latin America has made over the past few years and adapt their business models to an ecommerce and digitally focused shopping model. Over $68 billion will be spent online by consumers in 2016 in the top six relevant countries, quickly growing to over $100 billion within 3 years. While this still represents a small portion of all commerce, it represents a growing area of investment in all industries, in particular those that cater to consumer transactions.

According to figures from the World Bank, over the past decade the number of individuals in the middle-class in Latin America has grown more than 50%, adding an additional 50 million potential consumers. This growth in families leaving a basic subsistence lifestyle to one with disposable income combined with the explosive growth in connectivity are potential detonators for the coming wave. In fact, by the end of 2016 IDC forecasts that over 55% of the Latin American population will be online, connecting from a host of devices including PCs, tablets, but primarily smartphones. 2016 will be the first time Latin American consumers and businesses will have purchased over 200 million computing devices in just one year, helping to seed the region with potential ecommerce and online shoppers for years to come.

While having the consumer willing and able to purchase goods online is ok, without businesses on the other end willing and prepared to sell products to the public or companies makes the ecommerce discussion a moot point. Although the opening of Amazon.com’s online operations in Mexico in the second half of 2015 means increased competition for many of the existing ecommerce sites in Latin America such as Mercado Libre, Linio or Submarino.com, it is also a validation that Latin America is at a crossroads where companies will either need to begin offering their customers items online or risk losing those customers to other competitors. In fact, although the percentages are still relatively small, in a recent survey of nearly 1,800 higher income consumers from across Latin America, between 8 and 14% (depending on the country) reported seeing an item first in the store and then purchasing it online, the retailers’ dreaded "showrooming" customer.

In addition to increasing the number of potential customers by a near exponential number due to the nature of an online business and not being tied to a physical location, the ability to improve customer intimacy and grow at scale will also see a corresponding explosion. By focusing on these customer relations and seeing how to more efficiently connect with customers at any time and at any place, this will lead to greater customer loyalty and ultimately a more profitable business.

IT and Business Impact

- Retailers that have believed that having a more fluid and efficient ecommerce platform was a way to differentiate themselves from the competition will see it is no longer enough. The customer will no longer accept that a website is confusing or slow. They will simply buy the product from another company. This transformation in a company’s thinking that an online platform is a 'nice-to-have' to a 'must-have' will have far reaching implications for the companies themselves but also the entire ecosystem of software vendors, developers, and the entire supply chain that is needed to effectively sell to customers online.
Having the front- and back-end operations able to sell something online is now a prerequisite for staying in business. But if there is a poor payment mechanism in place, it will all be for naught. Companies are going to be investing in adaptable, scalable and secure online payment methods in 2016 in Latin America to take advantage of the current and upcoming ecommerce explosion the region is currently experiencing.

Every organization that desires customer loyalty must consider a seamless omni-channel experience, where multiple levels and channels have an integrated brand and buying process, and where customer data flows swiftly and securely onto the decision engine.

**Guidance**

- Realizing that customers in Latin America expect transparency and competitiveness in prices for something online is a reality that companies will need to adapt to. Optimizing the supply chain, establishing policies for returned goods and managing the careful balance between product availability and pricing for similar products in brick and mortar stores compared to the online offering will be critical to keep consumers returning to the online, physical or both marketplaces.

- Consumers expect the same shopping experience across different devices and platforms. Whether shopping from a 5.5" screen Android-based phablet to an 11" Microsoft Surface or a 4" iPhone, the ability to browse, search and purchase something should not be hindered by the device. Companies will need to invest time and resources in order to optimize their user experience regardless of the device being used to access the data if they hope to close the sale and not be left with the ‘abandoned cart’.

**Prediction 7: By the end of 2016, nearly half of Latin American companies will be implementing a Next Generation Security strategy by investing in specialized security consulting, services and technologies.**

Next Generation Security (NGS) solutions are defined as sets of solutions better designed to keep up with the massive scale and expanding scope of the Third Platform. NGS will continue to evolve in Latin America during 2016. However, its evolution will create gaps between effective investment and implementation initiatives of NGS strategies. Even though 7 of 10 companies are in the process of deploying some level of NGS, 1 out of those 7 will fail due to lack of necessary in-house skills to address such implementation.

The continuous migration of workloads to cloud environments and the demand for robust applications to be used on mobile spaces are generating the need for a seamless security strategy that seeks to mitigate the risk a company is exposed to, due to integrating cloud and mobility investments into their business processes.

Likewise, LOB initiatives to encourage the usage of technology and the access to the information from mobile devices to capitalize business opportunities, particularly for sales departments, are increasing the risk level when such initiatives are not in line with the companies’ security policies.

IoT will add even more complexity and create challenges as it impacts both the volume of data traversing the network and widening the risk surface, and the nature of traffic, as much of it happens between sensors, gateways, and software applications without human intervention. Network security management teams among service providers and enterprise users will need to up their skills to address this.
**IT and Business Impact**

- The scale factor inherent to the Third Platform (Cloud, Mobility, Big Data Analytics and Social) drives concerns for CxOs and LOB executives in terms of security and privacy, and the impact a breach can have on the overall business. IDC estimates, on a worldwide basis, that by 2018, fully 75% of CSOs/CISOs will report directly to the CEO as interest in information security rises at the board of directors and senior executive level.

- Implementing an NGS strategy demands not only stronger and smarter security solutions, but also specialized security services such as threat intelligence, professional and consulting services that can address new threats, which couldn’t be properly remediated with conventional security solutions. This is in line with the complexity level companies are now facing with the evolution of cybercrime, the demand from customers and partners for secure environments and the constant quest for cost efficiency. Despite this reality, in 2016 2 out 3 companies in Latin America will face challenges for underutilization of consulting security services.

- Cloud and Mobility exacerbate the need for a security program that addresses the risk of data in motion between networks, improving response to breaches and preventing attack cycles.

- NGS seeks to increase the visibility and usage of analytics capabilities to allow a better response from the security management teams, considering the increasing level of good information but also of "noise", alerts that do not pose a real threat. Users should reach out to Managed Security Service Providers (MSSP) offering both visibility and context for security analytics with solutions on a cloud platform. Spending in security solutions market offered from a cloud platform will grow 53% by 2016 in Latin America.

**Guidance**

- Companies need to develop an Incident Response (IR) strategy, which could mean setting up an IR team or outsource it with a MSSP. This would mean taking advantage of vendors’ and MSSP’s threat intelligence platforms.

- Consider investing with a MSSP on an end-to-end breach management program to identify weaknesses and potential vulnerabilities within the company’s business cycle.

- Increase visibility and add context for appropriate security analytics to strengthen or consolidate an NGS strategy, thus getting ready for DX initiatives.

- Consider a Network Segmentation strategy either to improve the responsiveness to events within a company’s environments or to address IoT challenges across Service Providers.

- LOB’s cloud initiatives need to be in line with the corporate security strategy, this means that the IT team needs to get involved in such initiatives, in order to avoid widening the risk exposure.

**Prediction 8: During 2016, more than two-thirds of IT project initiatives will require demonstration of cost savings, forcing ‘open sourced’ 3rd Platform into the spotlight**

2015 demonstrated to be both challenging and transformational for top regional companies. As devaluation trends expanded and economic conditions rapidly worsened many important companies faced a considerable IT budget constrain. This tough situation contributed to many of them looking for more cost efficient, flexible and scalable technologies and helped boost open source hype.

With open source and cloud technologies expanding within platforms and applications, companies’ cost savings will result benefited as open source and IT subscription models has proven to meet their needs associated with cost savings, and time to market, two major business priorities. IDC predictions related to open source and cloud’s increasing adoption include facts such as:
• Open source providers in operating systems and business productivity platforms reported an increasing penetration within small and medium companies in Latin America, reaching double-digit annual growth in 2015 and a positive expectation in 2016 of over 30% growth.

• Government, particularly at the state level, recognizes open source as a valuable option when it includes local support from some system integrators or software vendors. Among Latin America countries, government has promoted use of open source and cloud platforms as a key for reducing costs and creating new development communities.

• 3rd platform pillar ecosystems on Big Data and Cloud have quickly incorporated open source elements such as Hadoop, NoSQL, Mongo databases and OpenStack standards. IDC estimates more than half of big data implemented projects during the last 12 months included Hadoop as a main database platform, while OpenStack is becoming essential in almost all private cloud projects in the region.

In 2015 at least one in every two CIOs confirmed their IT budgets would focus on operating expenses. This proportion is expected to increase during 2016 as macro-economic challenges motivate companies to minimize capital expenditures.

Over the next two years, an increasing number of CIOs and CXOs within SMB, and medium and large companies will evaluate Open Source standards in all 3rd Platform implementations, transforming the way they adopt business solutions and measure the impact on business.

**IT and Business Impact**

• By 2015 more than 30% of CIOs recognized open source and born in the cloud vendors as best qualified to support on-demand projects.

• Open Source, in combination with PaaS services, is reducing the business applications modernization costs for organizations in a pure Cloud environment, and can use the computing resources to modernize their applications, from development tools, to virtual machines, storage, and testing tools.

• Open source technologies such as OpenStack, Docker, and KVM are gaining broad industry support, making Latin America companies more confident in investing in open source technologies.

• LOB managers will request consideration of open source elements in half of the Cloud investments in 2016. A close look needs to be taken at the interpretation of the value proposition of open source by LOB.

**Guidance**

• Competency in evaluation, implementation, integration and support will both be a factor of adoption and an inhibitor of it when not available. Cost vs. ease of implementation and governance will define decisions. Companies driving IT initiatives related to open source will select those vendors with better local support and SLAs to ensure a healthy operation and impact on business.

• CIOs should consider the long-term business impact and savings for open source in the same manner Cloud adoption has implications in projected operational expenses over time. Maintenance and support are not always cheaper for open source and scarcity of qualified personnel can be higher in many cases.

• Open Source Services need to possess robust capabilities. Providers must bolster and expand their talent with strategic visioning, operational support, technical capabilities, and security and system integration skills. Industry expertise as well as user interface capabilities are also important.
Prediction 9: As IoT crosses the chasm, ten use cases in manufacturing, transportation, consumer, government, and utilities will become mainstream in LA and represent 80% of IoT spending in 2016

IDC predicts the worldwide Internet of Things (IoT) market will grow from $656 billion in 2014 to $1.7 trillion in 2020 with a compound annual growth rate (CAGR) of 16.9%. The installed base of IoT endpoints will grow from 10.3 billion in 2014 to more than 29.5 billion in 2020 with a CAGR of 19.2%.

In Latin America, this market is expected to grow from $7.7 billion in 2014 to $15.6 billion in 2020. The installed base of endpoints will triple in the region over the same period, growing from 294.6 million in 2014 to 827.2 million by 2020.

Today, 59% of organizations in Latin America are already actively exploring IoT initiatives for 2016. IDC predicts that, over the next four years, business and IT leaders will shift from "exploring IoT" to "exploiting IoT," creating disruptive new services and products and redefining competitive advantage in virtually every industry.

IDC has identified 25 use cases for IoT across 9 key vertical markets. In Latin America, as indicated in Table 1, the top 10 use cases are concentrated in five vertical markets: Manufacturing, Transportation, Consumer, Government and Utilities. These 10 cases will account for over 80% of IoT spending in the region.

TABLE 1
<table>
<thead>
<tr>
<th>Rank #</th>
<th>Use Case</th>
<th>Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing Operations</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>2</td>
<td>Freight Monitoring</td>
<td>Transportation</td>
</tr>
<tr>
<td>3</td>
<td>Asset/Fleet Management</td>
<td>Transportation</td>
</tr>
<tr>
<td>4</td>
<td>Home Security/Home Monitoring</td>
<td>Consumer</td>
</tr>
<tr>
<td>5</td>
<td>Smart Buildings</td>
<td>Cross Industry</td>
</tr>
<tr>
<td>6</td>
<td>Production Asset Management</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>7</td>
<td>Public Safety and Emergency Response</td>
<td>Government</td>
</tr>
<tr>
<td>8</td>
<td>Smart Grid</td>
<td>Utilities</td>
</tr>
</tbody>
</table>
TABLE 1

Latin America Main IoT Use Cases

<table>
<thead>
<tr>
<th>Rank #</th>
<th>Use Case</th>
<th>Vertical</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Connected Vehicles</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>10</td>
<td>Environmental Monitoring Detection</td>
<td>Government</td>
</tr>
</tbody>
</table>

Source: IDC, 2015

When we look at the patterns drawn by similar characteristics among these cases we can see that IoT spending concentrates on large and complex projects, which require an agile coordination between the actors in the IoT ecosystem. As local and regional players focus more and more in specific verticals and use cases, specific ecosystems will evolve to provide solutions that will focus in both the Information Technology (IT) and the Operation Technology (OT) sides of the business.

As stated in IDC’s Worldwide IT Industry 2016 Predictions (IDC #259850) the expansion of the 3rd Platform’s intelligent edge will inspire thousands of developers over the next three years to create a competitive advantage by building hundreds of thousands of new killer apps and services that connect to these devices. During 2016, Latin America will also see the birth of hundreds of companies developing solutions with IoT technologies. These will become thousands by 2020.

**IT and Business Impact**

- The rapid growth of the IoT market in the world and the region brings with it the challenge of proper management of a large flow of data generated by the exponential growth of connected devices. The network becomes an essential asset to ensure the necessary quality in the transport of the data. Analytics tools are of fundamental importance when it comes to getting the most out of the data, discard what is not relevant and contribute real time to decision making, which ultimately affects business outcomes.

- In manufacturing, the use of the Internet of Things and big data analytics to generate large, new revenue streams from digital services and “smart” products will be the most relevant example of technology used to drive business outcomes. Manufacturing accounted for almost 19% of the Latin America IoT Market in 2015 and it is expected to grow 11% in 2016,

- Transportation will be key not only to move people but also assets and products. Efficiency is a key factor and IoT will be deployed in more and more use cases to control and increase efficiency in manufacturing, public transportation and commerce. This industry accounted for 16% of 2015 total IoT revenue in the region and it is expected to grow 13% in 2016.

- As opposed to other emerging regions like Asia and Middle East-Africa, the population in Latin America has concentrated in large cities for five decades. Government IoT projects dubbed Smart City projects have to address the intricate legacy of old physical infrastructure and integrate diverging silos and standards to new IoT technologies for public safety, transportation, connectivity/communication, environmental monitoring and other citizen services. The different domains of the cities generally operate completely independently from one another. From a technological perspective, this represents a challenge to integrate and take advantage of the
infrastructure in plans to be implemented since each domain operates with its own standards (when they exist), creating technology silos and processes that need to be revised.

**Guidance**

- As IoT requires the integration of many elements, from sensors to analytics, it is critical to continue working in four main areas to make the platform work: Interoperability, adaptability, scalability, and security. Organizations looking to use technology to impact their businesses will need to search for those four basic aspects in any IoT or technology related projects to avoid isolating their business from their partners, customers, regulators, etc.
- The entire IoT ecosystem (service providers, vendors, government, users) will need to continue working to develop an open and forward-looking IoT ecosystem. Industry forums, standardization and orchestration will greatly accelerate the development of an ecosystem.
- The focus on specific business outcomes is key to think of specific solutions. However, each industry and government domain needs to guarantee that solutions are open enough to allow interoperability, as shared infrastructure will be key to take advantage of most IoT investments.

**Prediction 10: By 2018, one third of companies pursuing DX will add cognitive and VR/XR design capabilities to their app design strategies**

During 2016, virtual/augmented reality and cognitive computing will become familiar words for enterprise solution design in Latin America. Although they are two distinct and very different types of technologies, this prediction touches on both, as they are both new terms in Latin America and will have a strong impact on digital transformation going forward. Bringing awareness of these two technologies will be a first but very important step in incorporating their value into strategy.

Cognitive software platforms are the tools upon which organizations and software vendors are beginning to build intelligent applications that provide advice, recommendations, and predictions. Cognitive software platforms work primarily with unstructured and semi structured information to build up curated information bases and knowledge graphs that can then be mined and analyzed by various artificial intelligence techniques and algorithms such as machine learning, neural networks, and deep learning. Recommendations, predictions, and advice based on this artificial intelligence provide users with answers to questions in natural language and assistance in a wide range of applications and use cases.

Examples of these cognitive software platforms and the companies that are building them for commercial use include IBM's Watson, Wipro's HOLMES, TCS' ignio, Saffron Technology, CognitiveScale, Digital Reasoning, Palantir, Cycorp, Nuance, and Expect Labs. Familiar consumer applications already provide various levels of expert assistance like Apple Siri, Google Now, and Microsoft Cortana.

In 2015, IBM announced the launch of Watson and Watson Analytics in the Cloud in Latin America, setting the stage for what will become the inaugural year of commercial implementations for Cognitive in our region. Early examples include:

- Kroton education is experimenting with cognitive systems to predict student churn and personalize student learning in Brazil.
- PLM, a Mexican publisher and tool developer in the health industry, is using cognitive systems to process medical language in Spanish.
- Rimac insurance is developing applications in the management of health services invoicing and other areas in Peru.
As interfaces in Spanish and Portuguese become available sometime in 2016, the possibilities for experimentation will dramatically expand, giving birth to a number of potential applications:

- Cognitively enabled process: risk management, marketing, research and development, customer service, etc.
- Cognitively enabled industry applications: Patient diagnostic, anti-money laundering, retail pricing, and telco churn, among others.
- Cognitively enabled consumer services: retail, travel, insurance, healthcare, smart home, driverless cars.
- Cognitively enabled B2B services/products: advertising, robotic systems, legal services, and others.

Virtual/augmented reality (VR/AR) is defined as a simulated environment using computer techniques to recreate reality and enhance user experience. The latest announcements in 3D design, VR and AR have spurred interest beyond the world of gaming and entertainment across the globe and also in Latin America, promising to dwindle interaction limits between the real and virtual worlds in corporate environments.

For 2016, IDC expects major global technology companies like Facebook, Samsung, Sony, HTC and Microsoft to officially launch big product bets for VR/AR. Among the most anticipated devices are the Oculus Rift, HoloLens, and Samsung’s GearVR.

In Latin America currently there are incipient initiatives around VR/AR, like virtual tours in museums such as Museo de Bellas Artes in Uruguay and Museo de Arte de Lima (Peru), or game design ecosystems like the Argentinean Planeta.Guru. Interest from the enterprise side has also given birth to early examples in the region:

- FENOMA is a Chilean company dedicated to provide services of virtual reality for the real estate segment. They apply the VR to simulate virtual visits of the projects.
- Virtual Reality Center of UMNG of Colombia, engaged in the practical application of VR research. Currently they are prototyping virtually controlled mechatronic systems.
- MUV in Mexico, a studio that includes virtual solutions that have developed applications for VR lenses for a movie premiere of FOX.

As devices become available in the market in 2016, the corporate world will start experimenting with VR/AR as a new way to innovate and create new value and experiences for their customers. The quality of the experience, naturally, will have a great influence on the nature of the value extracted from VR/AR. In 2017, frames per second, quality experience and partnerships for solution design and integration will become critical drivers for the adoption of VR/AR. Marketing & sales in retail and entertainment, health and education will be the first segments to drive VR/AR commercial applications.

Large enterprises will show interest, but more likely initiatives will be spurred among smaller companies and start-ups. Among the possible applications, these are likely suspects:

- Consumer experience/retail: augmented reality at the store and on mobile apps to help enhance the buying experience and interact with non-visible aspects of the product at the store on in promotional displays.
- Virtual collaboration and simulation: remote interaction in immersive scenarios for training, guided support, prototyping/design, and even product/service demonstration.
- Education: gaming and experimentation in real-life situations where AR/VR enhances the learning experience.
- Engineering and design: Prototype creation and visualization.

**IT and Business Impact**

Several challenges still need to be overcome for both cognitive and VR/AR platforms to become mainstream: availability of content (and devices for AR/VR), particularly in local language; platform ecosystem fragmentation; and good enough power in the hardware infrastructure and devices to guarantee a great experience (on the cloud and on the device). However, as the technology evolves during 2016, organizations should consider:

- These technologies promise a revolutionary change in the experience. Quick market entrants have the potential to disrupt business models.
- The applications will leverage 3rd Platform architecture: Cloud and mobile ecosystems, and the power of Big Data Analytics and social platforms. The marketplace will be quickly exposed to applications originating around the globe.
- Cognitive systems are dependent on the availability of curated content. Collection, sale, and use of third-party content, as well as integration with first-party data will require partnering and aggregation initiatives.

**Guidance**

- Early adopters must be educated on the maturity of the diverse platforms in advanced preparation for adoption.
- Vendors and application developers will have to consider the implications of multiple existing platforms on development, integration, and portability of content.
- Integration to legacy systems will take deep evaluation and assessment cycles, but innovation projects should run in parallel.

**Essential Guidance**

Enterprises in all industries will be greatly impacted by key events and shifts in the IT industry in 2016. Our predictions highlight 10 such IT (and IT-enabled business) shifts that IDC analysts identify as the most critical for IT and business leaders to recognize and respond to. Looked at holistically, the guidance we’ve shared, what each prediction means and what executives should do, also provides a clear blueprint for enterprises looking to thrive and lead in the DX economy.

This section provides our key calls to action for 2016.

At the highest level, executives must recenter their strategic focus:

- At the business level, around digital transformation initiatives
- At the IT skills and resources level, around the 3rd Platform portfolio of disruptive technologies

To execute both of these, enterprises must dramatically scale up their capabilities, and develop mastery, around:

- Delivering business and IT services on a cloud services foundation
- Expanding innovation capacity by growing developer/digital innovator teams, and focusing them strictly on "code as competitive advantage"
"Fueling" digital innovation with high-value external data pipelines, and delivering data pipelines into the marketplace to maximize your data's value

Extending the edge of digital innovation out to the most relevant endpoints in the Internet of Things, building new solutions and services that connect to and deliver value through IoT

Bringing real-time, "competitive advantage" insights to all employees, partners, and customers by weaving cognitive services into all data-intensive services and apps

Building and connecting to industry platforms and communities to massively scale up the ability to drive innovations into the marketplace and to source valuable innovations from others (Industry platforms and communities are the innovation epicenters for industries and the new digital supply chain and distribution hubs.)

Re-architecting marketing, sales, service, and delivery capabilities to support thousands of times as many customers and partners as you do today – or more – and to, paradoxically, do so with even greater customer intimacy

Re-aligning supplier and partner networks, picking players that are leaders in the 3rd Platform and DX at scale marketplace, rising even as new entrants disrupt, traditional players consolidate, and critical capabilities shift

**KEY DRIVERS**

Many external factors have a direct or an indirect impact on the future of the IT industry. They come from business, social, economic, technological, environmental, legal, and political realms. IDC has identified 10 affecting the future of the IT industry and the organizations that use IT for competitive advantage and have described them in *Critical External Drivers Shaping Global IT and Business Planning: IDC FutureScape, 2016* (IDC #258644, September 2015).

For the predictions discussed in the sections above, we identified 4 of the 12 drivers that form the most significant environmental backdrop. They are summarized as follows and are described more completely in *Critical External Drivers Shaping Global IT and Business Planning: IDC FutureScape, 2016* (IDC #258644, September 2015):

- **DX: Accelerating business disruption from digital transformation.** DX experimentation for businesses goes mainstream and creates new business models with a seamless global reach. DX becomes a competitive requirement and the source of a massive wave of new investments in digitalizing business operations, communications, and services.

- **Cloud life: The merging of real life with digital identity.** All forms of personal data become available in the cloud, including financial, work, health, location, and family, and are increasingly managed as a single digital entity that people routinely interact with, update, share, and manage as part of everyday life. Business systems use their knowledge about an individual's personal habits and preferences to customize experiences and replace other people as trusted advisors.

- **Cy-Q: An interconnected, informed, interactive, intrusive, intelligent, and cognitive ecosystem.** Cognitive advances, combined with robotics, IoT, artificial intelligence, augmented reality/virtual reality, and massive data sets, increase the ability of systems to mimic and surpass human intelligence.

- **Talent quest: High demand for next-generation business/IT skills, but scarce supply.** The ability to acquire 3rd Platform competency is constrained by a talent pool that is growing too slowly to meet business demand and too concentrated geographically to access for many enterprises.
Related Research

- **Critical External Drivers Shaping Global IT and Business Planning: IDC FutureScape, 2016** (IDC #258644, September 2015)
- **IDC Predictions 2015: Accelerating Innovation — and Growth — on the 3rd Platform** (IDC #252700, December 2014)
- **IDC Latin America Security Appliances 1H2015**
- **IDC Latin America Security Software 1H2015**
- **IDC Latin America Public Cloud Services 1H2015**
- **IDC Latin America Investment Trends**
- **IDC MaturityScape: Digital Transformation**
- **IDC Enabling Digital Transformation (this one I’ve only used it as reference but it might be catchy for customers)**
- **IDC Sluggish Incident Response: Next-Generation Security Problems and Solutions**
- **IDC IT Security: Security of Public Cloud Services**

Synopsis

This IDC study offers IDC’s broadest outlook for the year ahead in the IT industry. Since 2007, IDC has predicted — and we have all witnessed - the emergence of the IT industry’s 3rd Platform for innovation and growth and the impact on every industry through the digital transformation (DX) it enables. In 2016, and over the next three to five years, we will see enterprises “flip the switch,” committing to a massive new scale of DX and 3rd Platform adoption, to stake out leadership positions in the "DX economy."

According to IDC Chief Analyst Frank Gens, "We'll see massive upshifts in commitment to DX initiatives, 3rd Platform IT, the cloud, coders, data pipelines, the Internet of Things, cognitive services, industry cloud platforms, and customer numbers and connections. Looked at holistically, the guidance we’ve shared provides a clear blueprint for enterprises looking to thrive and lead in the DX economy."
About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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