Office of the Group Chief Technology Officer

2017 Business Technology Trends that **Matter Now**

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2016 was nothing short

of a year marked by the continued introduction of new technologies, further adoption and commercialization of existing ones, and broad experimentation with many more. These were to address what appears to be an ever-growing appetite for new solutions and capabilities in response to an endless array of business challenges and opportunities.

But 2016 was not just a story about technology. We witnessed digital transformation of the enterprise and global adoption of the “new”, and the risk implications of both becoming commonly discussed and put into motion. It seemed that all enterprise domains were in play: business and technology infrastructure; products, services, operations, and business processes; and the very core of stakeholder experiences and business models. Disruptive threats were exponentially broad in number and likewise in geographic source. Once stable industries with predictable performance were thrown into question quarter after quarter. The story has become all too common.

One could also make the argument that much of the market finally moved beyond social, mobile, analytics, and cloud (SMAC). Not in terms of leaving it behind, but rather a move to successive generations of innovation leveraging the capabilities of SMAC technologies and of maturity in their applications. SMAC went much more mainstream and provided the basis upon which its core elements provided legitimate and industrialized bases for business and more robust technology platforms. It also enabled the commercial viability of a variety of innovation accelerators and more advanced business technologies such as IoT, AI, machine learning, cognitive computing, and natural language processing, to name a few.

Yet, another dynamic also became more apparent once we looked beyond the buzz and witnessed up close how enterprises were positioning themselves for their new realities. Unfortunately in far too many cases, they remained in denial, took far too long, took too small steps, or sourced a bit of “digital lipstick” to appear more in the game than they actually were.

A set of guiding principles or requirements have already been layered on the “what” of digital to provide a way of transforming, mobilizing, and operating. And it is this design logic—Speed, Scale, Security, and Certainty—that is creating a new and more important paradigm for the enterprise to acknowledge, embrace, and become proficient at pursuing their digital future, lest it become another digital amateur hoping to thrive, or even survive, without addressing the most impactful and sustainable difference makers.

Introduction

With this context, we view 2017 from a slightly different vantage point.

- First, our focus is on business technology trends that really matter now as opposed to the more commonplace litany of new technology offerings or domains. Not that the latter is unimportant. But these lists abound and technologies will continue to emerge, at an even more accelerated pace. Therefore, we see two key observations. First, the technology alone is not the big story nor should it drive the enterprise transformation program. Technology-led transformations are twice as likely to fail per a recent finding by KPMG. Second, time horizons are critical. Few, if any, enterprises have the luxury of planning or realizing impact beyond a 36-month window, oftentimes as little as 24 months. This is precisely why our focus remains very short-term, especially in the timing of impacts, and veers away from more long-term, research-oriented prognostications.
- Second, we know from experience that the application, adoption, consumption, leverage, and sustainability of the technology to deliver meaningful business impacts are the only considerations that truly matter. Innovation under-delivers or fails not because of bad ideas or tenuous technologies. Rather, a lack of diligent, orchestrated, and properly governed discovery, contextualization, deployment, and sustainment of the innovation are the common root causes of this underperformance and under-realized impact. For example, most enterprises still devote over 90% and often closer to 100% of their focus, priorities, investments, competency pools, and operations to their current business model and technology platforms—simply protecting and perhaps modernizing their core business. Considerably little on the other hand is directed at what comes next, i.e., creating the new and changing the game. Similarly, we have seen decades of reporting that suggest typically 80% or more of IT spending is addressing maintenance requirements, with little left for new projects let alone innovation. At the same time, this spend is usually in the very low single digits when expressed as a percent of the enterprise's revenue. Yet, estimates now suggest that 20% of revenue is being spent or planned to be spent on operations technology and cyber physical systems. The world of extreme business opportunity and disruption from digital has nonetheless arrived. Are we paying attention to this? Are we ready for this? Clearly, this is not a conventional or traditional technology issue.
- Third, in our 2016 Trends we included Basics Matter to underscore the importance of culture, organization, leadership, governance, conditioning, behaviors, change management, etc. What became demonstrably more apparent is that referring to this as a trend left the door open to considering this as an option, debatable, or something that could be considered, but not necessarily required. For example, the lack of vision and mindset on the part of leadership are routinely cited as among the top barriers or impediments to successful digital enterprise initiatives. This includes academic-led and practitioner-led observations and commentary on digital transformation. Regardless of industry, size of company, digital maturity, or geography, the elements of enterprise change and the seriousness and proficiency with which they are embraced and practiced is a universal requirement for any enterprise's digital journey. More to the point, it is a fool's errand to pursue digital transformation regardless of the ambition, the business technology trend to be addressed, or the relative urgency without making the elements of enterprise change a must.

- And last, 2016 reinforced the concept and intention of Business Technology trends. These are not intended nor should they be relegated to the IT organization and its practitioners. These are business topics with material business implications, impacts, and challenges. They are topics that should be presented, discussed, and debated across the enterprise, in the C-suite, and in the boardroom. What should motivate the enterprise to take note and to act are the questions of "when" and "how" associated with these topics, not the question of "if". Be assured that others in the same industry, in adjacent industries, in more remote industries, or in start-ups are embracing these trends and evaluating how existing enterprise structures and practices, value chains, and business models can be re-imagined. It is both an imperative and a responsibility of the enterprise at the highest levels, to take note, to take charge, and to act now. While more business technology trends are certainly relevant and others will continue to emerge, much of our current 24-36 month business horizon will be shaped by how we address, apply, and exploit these 2017 Business Technology Trends that Matter Now.

Our 2017 Trends are presented in six categories. It is important to note that the trends are not mutually exclusive. This reflects the convergence and interdependencies among many business technology dynamics in the market today, as well as the continuum and interoperability across today's technologies and digital innovations. In a variety of cases, there are dependencies and enablements between trends and these will become apparent as one considers each of them. Also, in some cases, the lines of demarcation may be perceived as subjective, which reflects again the close relationship among the specific applications and market impacts of these business technology trends.

We are also pleased to reference Technovision 2017 (TV'17), Capgemini's thought leadership on technology futures. TV'17 provides a deeper and broader examination of emerging technology developments in an easy-to-consume format. We encourage our 2017 Business Technology Trends readers to engage with our TV'17 thought leadership and business tool and its rich content and application process to further explore the evolution, context, use, and impact on your enterprise around these critical subjects. Transitioning from our 2017 Trends to TV'17 is a unique and reliable way to prioritize focus and action. It is a way to engage business and IT colleagues for purposes of better alignment. And, it will help to set a course for continual understanding of, improvement in, and impact from the most important and pressing business technology topics of today.

Beyond the Hype

‘74% of firms say they want to be “data-driven,” but only 29% are actually successful at connecting analytics to action.’

— Forrester 11/16

‘82% of people have stopped doing business with a company due to a bad experience. And 95% have taken some action as a result of a bad experience.’

— Forrester 11/16

While market demand, technology investment, and business forums continue to place a disproportionate emphasis on big data and analytics and the digital customer experience compared to essentially any another domain, the overall business impact and ROI of these both continue to fall short of expectations and vision.

Analytics for Action and Impact

We have witnessed an impressive progression in technology capabilities and their application as the market has evolved from its focus on data to information to insights, fueled by analytics. In fact, massive investments have been made to derive more and more targeted insights to allow enterprise leaders to make impressively informed decisions. Yet while so much has been put into deriving the insights, far less has been devoted to the actions taken by decision makers and ultimately the impact to the business. Going from data to information to insight as a technology-enabled process and value proposition has witnessed strong market investment and momentum. Alternatively, from insight to action to impact has been quite the contrary. Business technologies addressing next best action, automating the process from insight to action in real-time, and Otherwise, questions will start to appear more frequently, challenging the value of spend in big data and analytics.

Predictable and Sustainable DCX

It can be argued that digital customer experience has become the holy grail of any successful enterprise in a digital world. It is the basis for market-leading customer acquisition, customer loyalty, and customer retention. Massive investments and innovations have occurred in the customer mega-process domain for decades, be it salesforce automation, customer relationship management, customer experience, tools, etc. Arguably, not all are intended to directly address the customer experience; oftentimes, more at the process of selling to the customer. Unfortunately for many, a broad brush is often used to still consider these technologies related to the customer or enabling the customer experience. In turn, the question surfaces, have we witnessed a sustainable, predictable, and appreciable difference in the customer experience? Likely, short of the market investments and promotional promises. As we look ahead, a true holistic approach to customer engagement will be critical. This will, in short, require deep examination of the customer journey and all its components, the numerous variables contributing to and affecting the experience, the enabling processes and technologies – both front office and middle office/operations (e.g., supply chain, provisioning, fulfillment, warehousing, distribution, etc.) – necessary to deliver the end to end target experience, and those enterprise governance, behaviors, and organizational improvements to execute, reinforce, and monitor the “to be” state and outcomes. Similarly, the “last mile” of the customer experience, which is where the final hinge moment of a successful customer experience occurs, will need to gain further prominence in the design and realization of the intended customer experience. This is where the human element often remains and customer satisfaction is ensured and validated. Yet, oftentimes receives modest attention or improvement discipline. No question that aggressive pursuit and funding of a formidable DCX agenda should remain, however further investment in digital business technologies will be under extreme scrutiny unless the customer experience sees a marked improvement, both predictable and sustainable. The investment needs to be directed toward the whole of the customer experience, the 360-degree view, and the end-to-end value chain; not solely or even mostly the enabling technologies. Only this holistic approach gives a realistic opportunity to design, build and deliver predictable and sustainable DCX.

Platforms

We have been touting for years the concept of platforms as both a technology architecture and delivery paradigm, and as a business model paradigm. The term has now become quite commonplace, starting to take on many of the same attributes of terms such as digital, transformation, innovation, etc.—widely used, broadly applicable, and borderline too general and vague. Nonetheless, platforms are a major force in the market, will remain so, and will continue to increase their disruptive relevancy and impact.

Cyber Physical and OT

As we witness the unprecedented connectivity of devices, equipment, machines, systems, clouds, and people, we see platforms emerge as the aggregation, orchestration, and operating paradigm. Platforms, properly designed and managed, provide speed, agility, scale, and security in a world that is no longer just one of stateful transaction processing systems. At the same time, we are poised to accelerate beyond the heretofore concepts and instances of IoT. These platform concepts will further dominate as more and more physical devices, components, equipment, structures, and machinery become instrumented. They will be additionally reinforced as products are embedded with more sophisticated software and become increasingly smart, and as operational technologies receive a disproportionate share of the enterprise’s “technology” investments compared to the more traditional IT spend.

In 2017, we anticipate platforms becoming the business technology architecture and operating paradigm for the enterprise. At the same time, IoT moves from connectivity and a predominantly data-gathering medium and driver of analytics to an “impact IoT,” or the Internet of Action/Platform of Business Impact. Further, one of the most prominent uses of this paradigm will be for the increased connectivity, network, and value creation requirements of the business’s cyber physical and “smart” things strategy.

Business Models and Monetization

New business models have now become standard fare for enterprises pursuing new sources of revenue growth, contemplating new positions to secure differentiation or market share, and considering disruptive plays in their industry or in adjacent industries—either as disruptor or disrupted. Examples are many in nearly all industries in the market today. What is less obvious, although nonetheless prevalent, are the platform models driving these new business models. These platforms provide a unique, highly adaptable value creation and realization model, aggregating and scaling sources of supply and sources of demand through a robust technology networked platform.

What we now see more and more frequently is a recognition of the incremental value that specific elements of the platform can provide. Two examples are noted here: the analytics derived from the typically large amounts of information that pass through the business platforms and the tendency to adopt an open-API approach to allow non-enterprise labor to contribute to the growth, value, and future relevancy of the platform and therefore the new business model. In turn, these analytics and the API-driven transactions can be a formidable source of revenue in their own right. A further opportunity then emerges to commercialize and monetize these additional “services”. As we consider and pursue the power of platforms and new business models going forward, monetization opportunities, of which analytics and APIs are two, should be an integral part of the strategic intent, design, and projected new revenue considerations.

‘You may find you need to spend $4 on digital operational excellence for every $1 you spend on digital customer experiences.’

— Forrester 11/16

‘Without a disruptive focus you are merely building your business model on a “me too” platform of mediocrity.’

— Mike Myatt, The Executive Hub

New Enterprise Competencies

The fundamental make-up of the enterprise's core competencies continues to undergo significant change. Whether motivated by disruption from others, a proactive strategic move to ensure leadership status in its industry or markets, or a response to shifting customer demands and expectations, enterprises across the globe are re-thinking their mission, their mandate, and who they are in terms of their core business. Nothing is more evident in this regard than the trend we see in companies transitioning themselves to be more software-centric or even software companies. Right behind this are product companies taking on the characteristics of service businesses and service companies taking on attributes of product businesses. What enables this are two very key competency sets.

Applied Innovation

In 2014, we highlighted the acceleration of the pace, the increase in the impact, and the globalization of the sources associated with the emergence of business technology innovations. No longer were we in a world of a scarcity or infrequency of major innovation. Rather, enterprises were facing an abundance of innovation. Related, enterprises themselves were looking for speed, scale, security, and certainty to gain the benefits of these innovations. Yet, few of these enterprises were equipped to apply, adopt, consume, deploy, or sustain innovation.

Given the supply that had emerged and lack of proficiency to leverage these innovations, we put forth a position that the successful digital enterprise would need to become proficient at applying innovation. In other words, applied innovation would be a necessary core competency of tomorrow's enterprise. More broadly, this would include subscribing to a discipline or framework for discovery, contextualization, deployment, and sustainment. It would require a genuine curation, orchestration, and governance of a global ecosystem of third parties, the majority of which would be start-up entities. Innovation labs or centers, corporate venture funds, and investment in start-ups would need to occur with a much more thoughtful, strategic, and ROI orientation. And other key barriers to successful transformation and scaling and adoption of innovation such as culture, organization, mindset, vision, risk tolerance, legacy integration, talent, process change, etc., would need to be calibrated and addressed. Clearly, innovation in the broadest of terms is far from the random act that many might suggest.

'More than four of five respondents (81%) say their firms do not have the resources needed to fully pursue the innovations and new ideas capable of keeping their companies ahead in the competitive global marketplace.'

— Forbes.com 2/15

'Companies should put most of their focus on managing proactively for architectural disruptions, because they are more likely to be firm-ending events.'

— Harvard Business Review, 2016

VUCA Architecture and Engineering

Historically, technology solutions and systems were designed and built to last. In fact, the entire methodology for designing and building software was oriented toward getting all requirements defined, specified, and agreed to. The worth of the solutions and systems were oftentimes judged on how well they endured and how little they changed. Further, "change" was an exception, an event that would occur from time to time that had to be planned, managed, priced, tested, scheduled, etc. Not only is this far from the paradigm or principles for today's business technologies, but the environment in which today's solutions, systems, and platforms are built is characterized by just the opposite set of attributes.

The environments in which enterprises operate today, and will for the foreseeable future, are highly volatile, uncertain, complex, and ambiguous. In short, VUCA. How do we expect our business technology response to this to be stable, certain, definitive, predictable, or lasting? Perhaps counterintuitive, but the approach to solutions, systems, and platforms will be built to change, to evolve, to adapt, to respond, etc. And to do so with speed, agility, security, and certainty. Hence, we suggest an approach to architecture and software engineering that is aligned to and coherent with a VUCA business environment and a time of intense and rapid emerging technology introductions, innovations and discontinuities.

The ability to architect for change and to engineer for continuous adaptation, new requirements, efficient integration, and frequent releases will become a new core competency, drive the enterprise closer to a software-company operating mentality, and provide the kind of speed and agility needed in today's competitive business landscape. Certainly, techniques including open- and inner-source development and DevOps are quite relevant here. Lastly, we introduced the concept of Vanguard IT in 2016 and have evolved our point of view concerning Digital IT as well. These remain particularly relevant to ensure that the overall transformation of the IT function and capabilities within the enterprise progresses and even accelerates. IT governance, leadership, talent, process, work environment, tools, methods, automation, and technologies, to name a few, become prerequisites for creating the necessary operating conditions in which VUCA architecture and software engineering can take root, can deliver, and can be sustained.

Trust

Arguably no other topic commands the level of attention in today's market than "trust" in the broadest of terms. It manifests itself in subjects such as risk tolerance and risk management, security, privacy, data sovereignty, loyalty, reputation, hacking, threat landscape, and attack surface, to name but a few. In one form or another, it's a topic on the agenda of boardrooms and the C-suite, the highest levels of government, and enterprises in every industry, of every size, and across every geography. Two aspects of "trust" are highlighted here and should command an immediate primary focus from the enterprise, if not already embraced.

Cybersecurity and Risk Orchestration

A direct correlation exists between the number, scope, and potential impact of new technologies and new application of current technologies with the vulnerabilities these create for the enterprise. Fueling this are the:

- components of the infrastructure (network, compute, and storage) on which these technologies operate;
- continuum of security maturity across the multitude of devices and network elements supporting today's business technology solutions;
- risk profiles and tolerance and the behavior paradigms of the enterprise;
- intentions and growing capabilities of threat actors across the market;
- primacy of market availability over security adequacy in many product commercialization launches;
- sheer volume of access points and targets (note IoT and smart devices); and
- spectrum of safeguarding capabilities across the trading partner ecosystem of the enterprise.

Less apparent is simply the adequacy of the legacy application portfolio. Historically, applications were designed and delivered with security and privacy features and controls bolted on vs. built in, data flowed unencumbered across applications, and most interfaces and integration approaches had security and privacy considerations as afterthoughts, at best.

Considering today's threat landscape and risk management requirements and demands, these capabilities, let alone defenses, are highly inadequate and ineffective. In many enterprises, it remains unclear as to where accountability and responsibility clearly lie for cyber risk, response, governance, management and mobilization. And it is not for a lack of potential options: CEO, COO, CFO, CISO, CIO, CRO, CSO, Board Audit Committee, etc. Nonetheless, the attack surface of the enterprise will continue to expand as a function of further globalization or regional market expansion and the deployment and adoption of newer and emerging technologies. At the same time, the frequency and scope of vulnerabilities will also expand as a function of the growing threat landscape and the sheer number of actors and their intentions and motivations. The risk profile and tolerance of the enterprise will be called into question and put on notice. Compliance and regulatory requirements of states, quasi-governmental entities, and industry bodies will become more evident. And the debate emanating from customers, watch groups, employees, board activists, and the citizenry at large will only serve to add to the disruption, focus, and the need to respond. If not already poised for an enterprise-wide risk management and orchestration posture including adequate defensive and protective measures, detection capabilities, and remediation responses, you should consider the time to act as certainly being now.

'Worldwide spending on cybersecurity is predicted to top $1 trillion for the five-year period from 2017 to 2021.'

— Cybersecurity Market Report, Cybersecurity Ventures, 2016

The potential exposure for the enterprise from reputation to business continuity, from financial impact to social media adjudication, and from customer attrition to sheer survival is at an all-time high and only becoming more severe. A formal risk orchestration strategy and mobilization is now paramount for the enterprise as cyber risk, in all its forms, emerges as the leading threat for business continuity.

Distributed Ledgers and Blockchain

The architecture principles of distributed ledgers, more commonly referenced from a design and engineering perspective as blockchain, will make a move toward the center of the enterprise "trust" dialogue in 2017. Observing the maturation of blockchain over the past few years suggests a few important dynamics: first, the shift from a cryptocurrency or even suspicious application of the technology to more legitimate commercial and public sector trust, security and risk management applications; second, the consideration of blockchain's use case relevancy to industry sectors far beyond financial services into both other regulatory and non-regulatory verticals; and third, the significant increase in blockchain start-ups, venture funds, and R&D activity in major high tech players globally. While it is unlikely there will be broad market adoption and deployment of distributed ledger and blockchain solutions in 2017, we will see a very likely acceleration of consumption in financial services, noticeable progress in health care, life sciences, energy, payments, procurement, distribution and transportation, and other further disruptive use cases being explored even more broadly.

Many enterprises may find themselves vulnerable to disintermediation or other sub-process role elimination as start-ups and other players leverage blockchain to create solutions for greater (real or perceived) security, privacy, trust transparency, control, and access outside the control of existing global and regional institutions. For every enterprise, high priority and executive level consideration should be given to assessing the specific distributed ledger and blockchain opportunities and activities in its industry and adjacent industry domains: exploring which sub-processes in particular may be vulnerable or could be transformed for competitive advantage or threat protection; defining appropriate response scenarios; and identifying the first stage of the enterprise's own distributed ledger and blockchain business application strategy.

'Gartner predicts that through 2017, multimode blockchains and distributed ledger POCs will be deployed across industries and government agencies.'

— Forbes.com, 2016

Mainstream Realities

For many years we have quietly seen the maturation of both virtual and augmented reality technologies. Use cases, device form factors, and delivery technologies have all expanded and progressed. While the media, gaming and entertainment applications of both VR and AR have continued to gain ground two other dynamics have become more apparent and noteworthy. First, a legitimate set of business applications have quietly advanced and early stages of adoption are increasingly apparent. Use cases for knowledge transfer, training, and asset maintenance and management across industries as diverse as manufacturing, health care, transportation, automotive, distribution, and energy are in production and expanding rapidly. Further, AR and VR technologies are being introduced at an increased pace in education and, most importantly, across elementary and secondary education levels. This exposure and adoption in the domain of how we learn are significant as an indicator of broader future mainstream acceptance and adoption. And second, AR and VR devices have taken another significant step forward in the consumer electronics market recently with the introduction of more and more alternative reality consumer devices—typically an impetus, although not a guarantee—for future market visibility, experimentation, and potential broader commercialization.

While the AR and VR technologies advance and use cases continue to emerge, the more relevant, practical and immediate focus is Mixed Reality (MR), sometimes referred to as hybrid reality or merged reality. Here, we move from creating or engaging in an alternative reality to addressing the co-existence, merging, or interacting of both physical and digital realities and objects to produce new environments, solutions, or visualizations. In essence, it is not physical vs. virtual or digital, but both—co-existing or even merging. VR and AR are included in the MR paradigm. As was the case with AR and VR, media and entertainment leads the way in terms of commercialization and adoption of MR, but we are quickly moving beyond this obvious industry focus. Applications such as workplace safety, surgical procedures, equipment repair, next generation product lifecycle management, as a few examples, are very relevant MR solutions. For 2017, it will be prudent for the enterprise to explore the subject of MR; identify existing or new business processes that can be delivered more efficiently, more quickly, and with higher quality, great predictability, or less risk with the application of an MR solution—and then experiment. Not only is the use case important here, but gaining the knowledge and beginning to establish an understanding and competency in MR may be even more relevant in the near-term. MR, or its next generation application, will gain momentum very quickly, without question. Establishing a foothold and pursuing real competitive advantage from MR will serve the enterprise well. The key in 2017 will be to initiate the journey, gain experience, and set the course.

'The total revenue for virtual reality (VR) and augmented reality (AR) is projected to increase from $5.2 billion in 2016 to over $162 billion in 2020, representing a compound annual growth rate of 181.3% over a 5 year period.'

— IDC 2016

Automated, Smart, Intelligent

We conclude our 2017 Business Technology Trends discussion with a continuum of topics that may emerge as the most debated, invested, disruptive, and transformative for the enterprise in the near-term. The social, political, ethical and moral considerations associated with various aspects of these topics are no less relevant than the potential impacts of the technologies themselves. The ability and intent to **automate** processes and tasks are profound. While the efficiency and cost savings usually form the basis of a typical automation strategy, the opportunities for speed and cycle time compression, outcome quality and predictability, and safety and control are now driving more and more of the business case considerations. The potential dislocation of workforces due to automation creates a larger and broader debate that business and government officials will be called upon to address as automation opportunities continue to expand in number and scope.

The presence of embedded software, communications capabilities, and other data or object capture and dissemination means that "**smart**, connected, and pervasive" are present in more and more devices, products, and form factors. Costs for all componentry, transmission, and storage continue to decline rapidly. As a result, the opportunities to leverage smart and connected devices to disrupt, transform, or replace existing business processes or create new ones are equally vast. Beyond cost, the benefits derived from speed, agility, quality, certainty, etc., become material. This leads to a preponderance of new use cases, new revenue streams, especially those from the massive amounts of data being collected, and new competitive advantages. However, the attack surface of the enterprise also grows requiring substantial cybersecurity and protection considerations.

The next logical progression is the growth in application of artificial intelligence, natural language processing, cognitive computing, machine learning, machine-to-machine communication, and beyond. At this stage, business processes leverage and exploit the automation and the enormous access to gathering and processing data to now allow vast and faster learning and response to occur: in effect, transitioning beyond digital to the **intelligent** enterprise. In sum, this is a massively expansive set of topics for discussion. What is essential early in 2017 is for the enterprise to be proactive, consider these important domains in the context of its competitive market strategy, and formulate early stage directions and strategies for on-going refinement and experimentation.

'By 2018, 50% of the fastest-growing companies will have fewer smart employees than instances of smart machines.'

— Gartner, Predictions 2016

Going Forward

2017 will no doubt be a year of further disruption and the introduction of additional new technologies and business opportunities. We have attempted to present something other than the conventional listing of new and emerging technologies, classically abundant in the market. Adhering to the principles of applied innovation, it is our goal to shine a light on the trends that matter now with meaningful ramifications for the enterprise in the next 12 months. In addition, these trends are non-prejudicial to the enterprise; there are not a select few that matter—they all do. Every industry is in play when it comes to these disruptive forces. While these trends are presented here as industry-agnostic, they can be further contextualized for their unique application to a specific industry or industry segment. How quickly they will disrupt and with what impact may be open for debate. However, it is prudent to mobilize now and, at a minimum, begin the debate and establish a position no matter how early stage it may be. Last, we have identified topics that go far beyond technology for the sake of the technology. These are topics that are on, or should be on, boardroom and C-suite agendas. They can equally create opportunities for growth and competitive advantage, be the seeds for a disruptive attack, or threaten the very survival of the enterprise. While they clearly create upside and broad benefits, they are not without exposure and risk. And they have significant implications on the culture, social, behavior, and the fundamental competency and skill profiles of the enterprise.

Referencing the shrewd words of GE's Jack Welch, "If the rate of change on the outside exceeds the rate of change on the inside, the end is near," we underscore that the time to act is now. The pace, source, and impact of change in the market today is profound and becoming more dramatic. Whatever the motivation for the enterprise—opportunities and challenges alike—we believe our 2017 Business Technology Trends that Matter Now can provide a useful and relevant set of swim lanes to guide your discussions and help to establish your priorities.

So…..Go on the offensive. Mobilize the business and IT together. Act quickly through experimentation. And establish external partnerships.

Waiting to respond is too slow. The future is an integrated business and technology mandate. The perfect answer doesn't exist and it is better to start and learn than to wait to get it right. And solid partnerships with third parties of various sizes and geographic bases will be a bulwark for future success.

More is at stake in terms of competitive advantage, market positioning, risk management, and long term enterprise viability than perhaps ever before.

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