THE JOURNEY OF DISCOVERY BEGINS WITH

A DIGITAL FOOTPRINT IN THE RIGHT DIRECTION, ONE STEP AT A TIME - TO FOSTER AND SCALE DIGITAL ALCHEMY!

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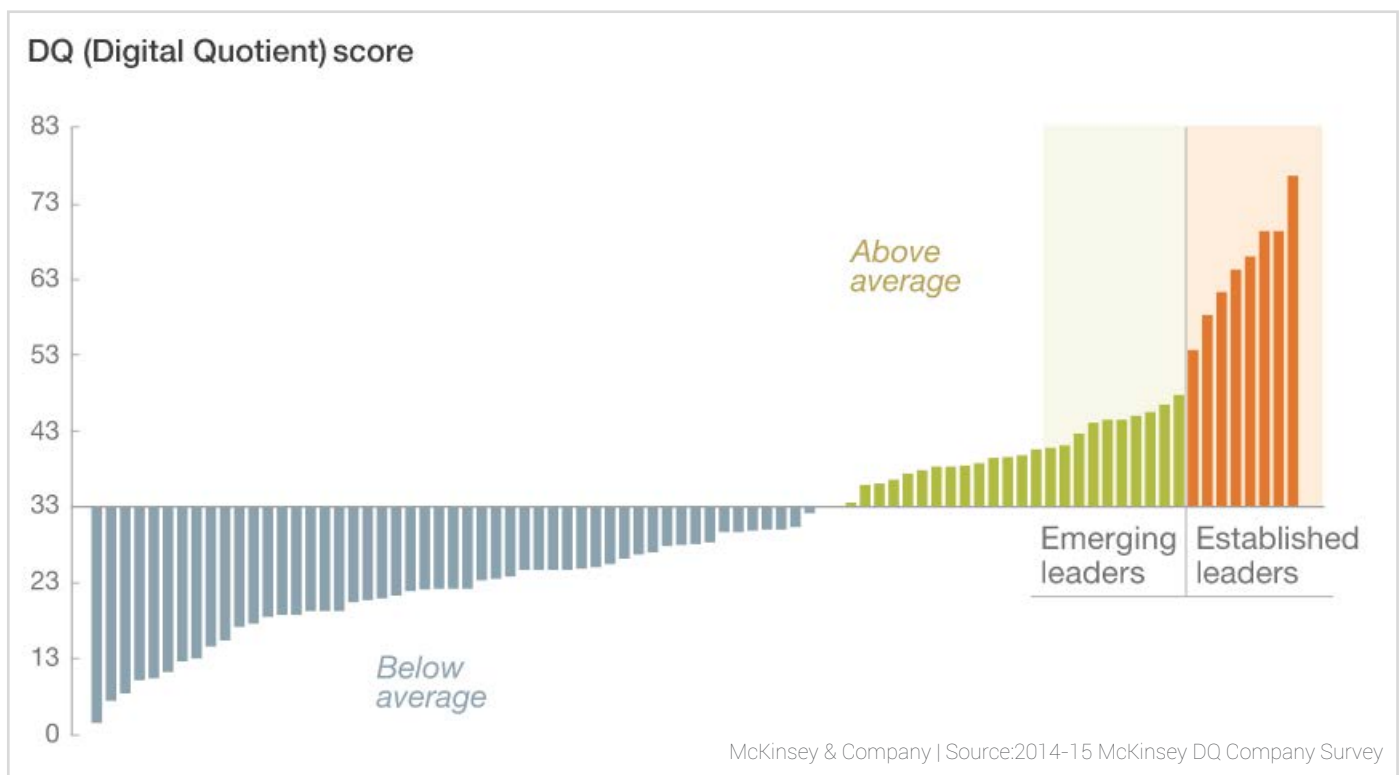Thought Leadership & Research Lead

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SYSTEMS
attention. always.

Jack Welch once remarked, *'If the rate of change on the Outside exceeds the rate of change on the Inside, the end is near'!* As the possibilities of Digital technologies hope to see the light of day, forward-thinking enterprises are seizing opportunities for higher revenue growth and customer engagement. But how do incumbent institutions strategize to compete with new entrants and competitors or do they need to collaborate with them for better efficiencies? What disruptions do they choose to make the biggest impact and do they always fall in line with organizational objectives?

World Economic Forum and Deloitte's Research on

Financial Services have revealed that employing **parallel strategies for coopetition** would lend traditional institutions the sophistication and efficiencies to build strategic advantage. After a two year drought of no financial firm making the cut, six have made it to Boston Consulting Group's annual list of top 50 global innovators. This includes Fidelity Investments, MasterCard and Visa that compete against upstart financial technology or FinTech firms to build new processes and technology with innovation labs to foster **Digital Alchemy**. How does one build digital acumen and hazard when to cooperate and when to compete on capabilities without the right digital strategy in place?

McKinsey & Company | Source:2014-15 McKinsey DQ Company Survey

McKinsey's diagnostic survey of 150 companies around the world uses a metric for Digital Maturity called Digital Quotient that witnesses quite a gap in performance from the graph. Success has been attributed to the way digitization can reinvent products and services to enhance interactions on the digital customer journey as efforts to digitize at scale is largely complex. High performers differentiate by using agile architectures and modernized portfolio of applications to respond quickly to business change. However, the business operating margin volatility has more than doubled since 1980 when compared

to the 1950s given this age of risk and uncertainty with market leadership and profitability losing their significant correlation. The challenge of strategy-making is starker than ever before with companies asking themselves:

- How to experiment with products, services, business models, processes in dynamic businesses with complex multi-stakeholder systems?

- Given the unpredictable environment how do we apply frameworks to build and sustain competitive advantage?

Digital Alchemy is an enduring state to be able to sustain a hybrid model, synthesizing the best of technologies and assets for DIGITAL EXCELLENCE.

PERVASIVE INTEGRATION & THE INNOVATOR'S DILEMMA

Are successful companies giving undue importance to the customer's current needs at the cost of new technology or business model adoption? Harvard professor and businessman Clayton Christensen in his renowned work *The Innovator's Dilemma: When new Technologies Cause Great Firms to Fail* speaks about organizations losing the potential of great ideas by rejecting innovations only because customers cannot currently use them. Nokia has witnessed 'doing the right thing is the wrong thing' when the CEO announced after its acquisition by Microsoft, **"we didn't do anything wrong, but somehow we lost"**. There is great emphasis 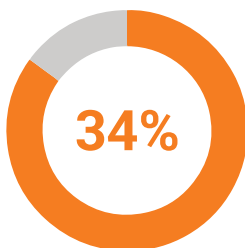given to a losing dominance in the market even when companies have adopted new technologies. On the other hand, Jill Lepore, another Harvard University Professor has challenged 'The Innovator's Dilemma' and brought out the 'bad side' of disruption in her piece 'The Disruption Machine'. Lepore points out that Seagate Technology that Christensen calls a late entrant and unsuccessful by the disruptive innovation yardstick, was, on the contrary, the largest company in the disk-drive industry that was not felled by disruption and triumphantly obliterated the other disruptors. *Making 'potentially' disruptive technologies that do not improve performance don't, in the least, make them disruptive.*

So, what is the attitude toward new technology adoption amidst market disruptors? HBR's survey of 672 business and technology leaders globally saw a third identified as IT Pioneers that seek to have a favourable view of the market position with a first-mover advantage.

It's not about sustaining disruptive innovations but beating the PERFORMANCE CURVE in an age seized by technological terror.
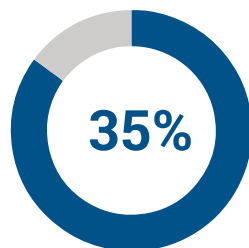
Attitude Toward New Technology Adoption

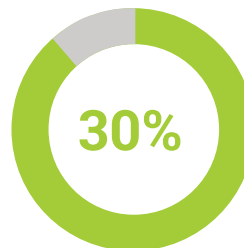Which one of the following best describes your organization's attitude toward adopting new technology?

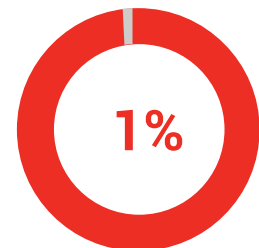| **34%**	**35%**	**30%**	**1%**
PIONEERS	FOLLOWERS	CAUTIOUS	DON'T KNOW
Strongly believe in benefits and seek to get first-mover advantage	Watch leaders and invest once benefits are proven	Cautious and generally wait until tech is well-stablished	

Source: Harvard Business Review

Integration, the Holy Grail of technology supremacy in today's interoperable world is often looked at as a necessary evil. However, digital business demands an agile approach to support the adaptive, pervasive and bimodal nature of modern integration needs. Such adaptive integration would make way for DIY integration that can be performed just-in-time by LOBs rather than by integration specialists. CIOs that are most forward-looking would take to such modern integration platforms.
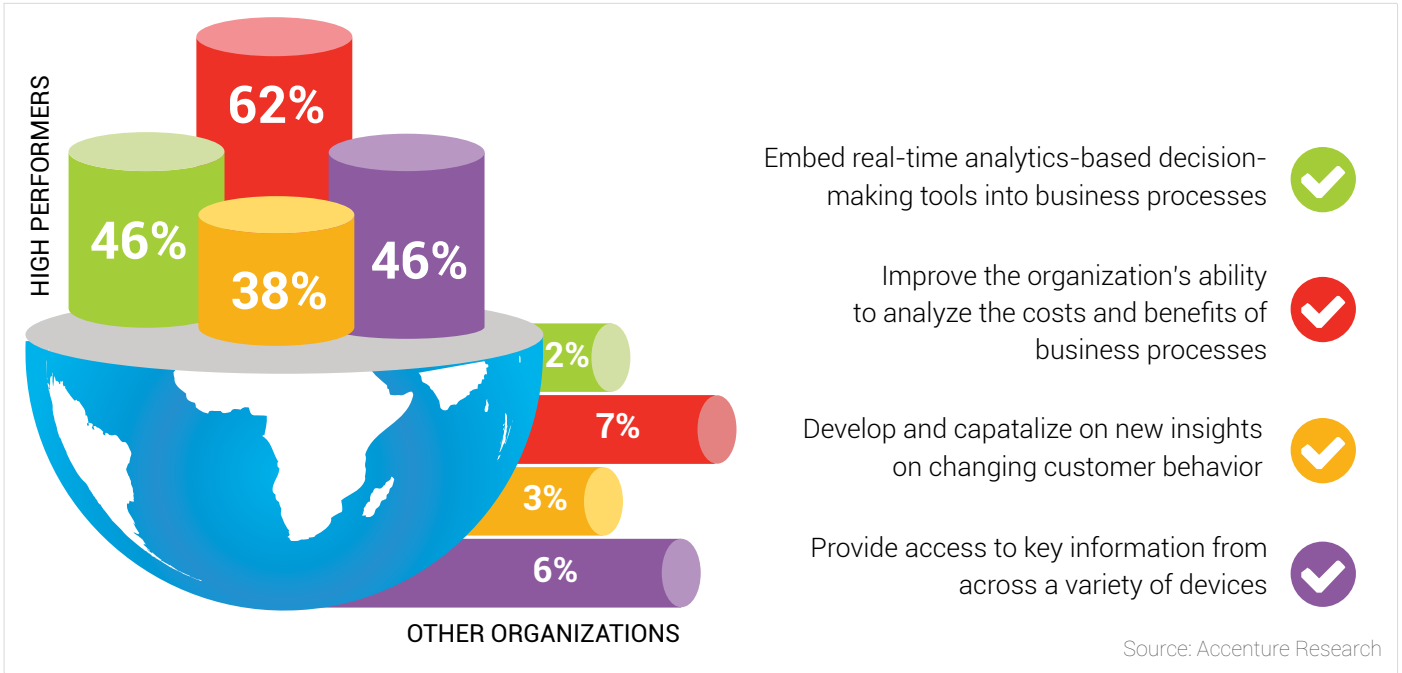
AD = application development; B2B = business-to-business; DW = data warehouse; ICC = integration competency center; LOB = line of business

DIGITIZATION STATE MATRIX- WHERE IS YOUR DIGITAL FACTORY?

Digitization begins with a state of order; staking out strategic positions to cultivate and integrate digital capabilities into the main business. 'Let a hundred flowers bloom' approach to independently experiment can yield success but cannot scale to mark digital transformation across the business. Some of the benefits from integration of business processes, information and IT systems are depicted in the graph below.

DIGITAL FACTORY

HIGH PERFORMERS

62%

46%

38%

46%

2%

7%

3%

6%

OTHER ORGANIZATIONS

Embed real-time analytics-based decision-making tools into business processes ✓

Improve the organization's ability to analyze the costs and benefits of business processes ✓

Develop and capatalize on new insights on changing customer behavior ✓

Provide access to key information from across a variety of devices ✓

Source: Accenture Research

The lean management concept of the work cell can work wonders to the digital factory at ensuring cross-functional expertise to scale the digitization effort at all levels. How does one embed structured predictability and agility at the same time to different cross-functional work cells? This is what separates the high performers that treat IT as a strategic asset and perform Digital Alchemy from the ones in a state of Digital Entropy.

DIGITAL CAPABILITIES

DIGITAL ENTHALPY

DIGITAL ALCHEMY

DIGITAL ENTROPY

HYBRID ENTHALPY

INTEGRATION CAPABILITIES

DIGITAL ENTROPY

It is a state of the enterprise at variance with its digital strategy implementation and low adoption of emerging technologies. The state of digital integration in the current system doesn't capture value for the employees and customers.

DIGITAL ENTHALPY

It is a condition which is hot on digital and is on top of the agenda for the enterprise with every emerging technology adopted with alacrity to the point of it losing synergies with the rest of the infrastructure. It's a case of first-mover advantage without firmly capitalizing to integrate seamlessly into the current infrastructure.

HYBRID ENTHALPY

It is the condition that enterprises manage within their converged systems and traditional IT to interact for synergies across the enterprise given their change resistance to innovative technologies. Such organizations believe in a high level of information and system consolidation in their existing infrastructure at the cost of technological change.
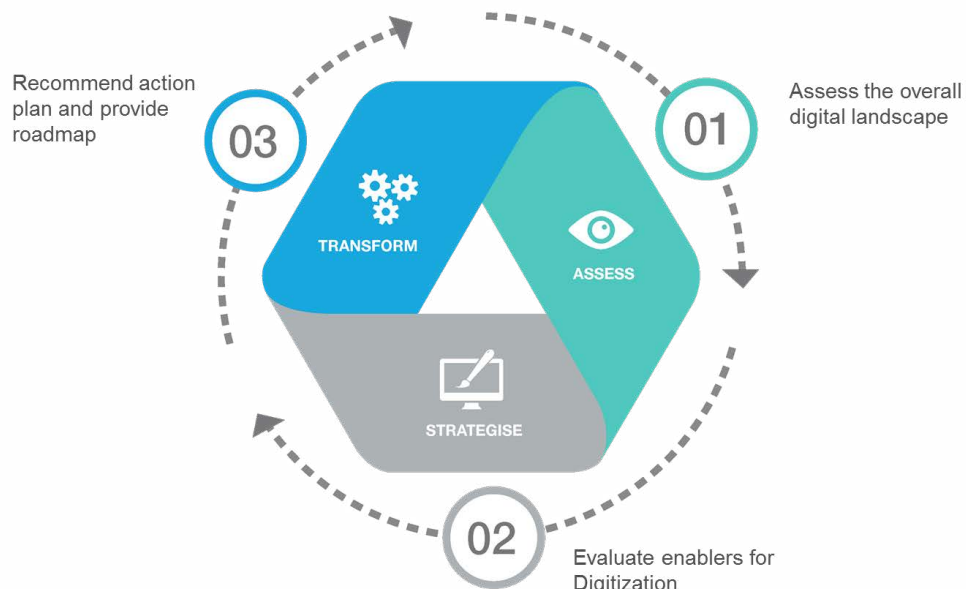
DIGITAL ALCHEMY

It is the state every enterprise would want to attain, **distilling the best out of every asset and technology synergistically to redesign operations and innovate with disruptive forces to digitally transform the enterprise**. The transformation into a hybrid model maintains the enthalpy of the whole system functioning at an optimal level for digital success.

NEED FOR DIGITAL DISCOVERY

Companies that are on their path to digital excellence would want to reach the state of Digital Alchemy by natural progression. This can be achieved through a process of Digital Discovery to digitally transform at a level best strategized in line with organizational objectives. Digital Discovery gives enterprises the advantage of being able to pause on the digital transformation journey, take a self-assessment and decide how to reinvent themselves while adopting digital technologies and in the process outperform competitors on differentiable KPIs.

DIGITAL DISCOVERY MODEL

Recommend action plan and provide roadmap — 03

Assess the overall digital landscape — 01

TRANSFORM

ASSESS

STRATEGISE

Evaluate enablers for Digitization — 02

The Assessment phase helps in understanding the overall digital readiness of the business in line with the organizational objectives. Companies with high digital quotients are always aiming to bring in a transformative impact for their customers. 'Technology platforms' continues to be the leading factor driving innovation according to a survey of 1503 executives by The Boston Consulting Group. However, Technology platforms that are in Hybrid Enthalpy would need to gear up for Digital Alchemy to foster Multidimensional Digitization and provide a superior individualized customer experience in a dynamic business landscape.
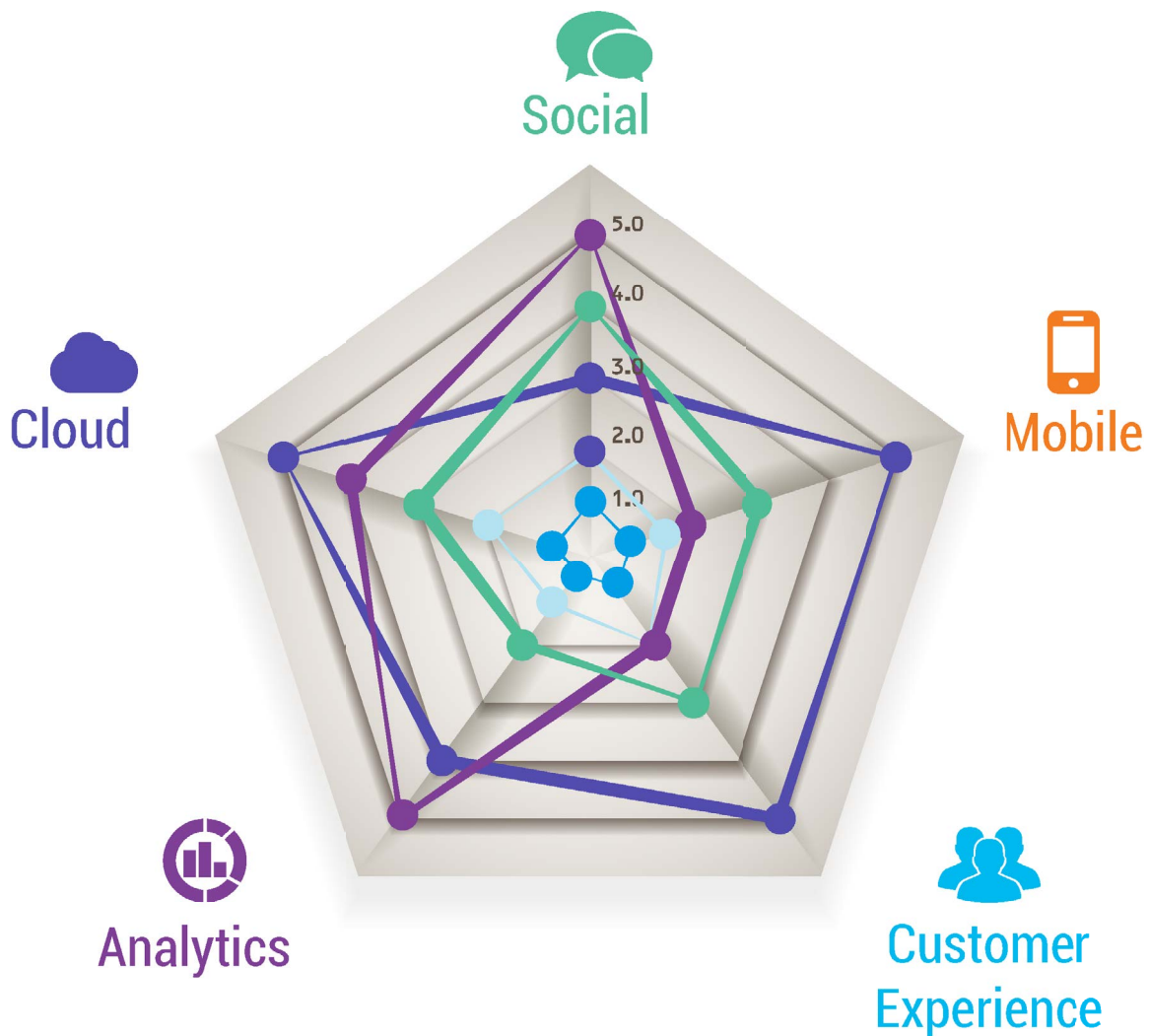
DIGITAL READINESS ASSESSMENT INDEX

EXHIBIT 8 | High Expectations for Technology Platforms and Big Data

WHICH OF THE FOLLOWING AREAS OF INNOVATION/PRODUCT DEVELOPMENT WILL HAVE THE MOST IMPACT ON YOUR INDUSTRY OVER THE NEXT THREE TO FIVE YEARS?

% of respondents

Category	%
Technology platforms	50
New products	49
Operations process	36
Customer channel	35
Business model	34
Big-data analytics	33
Extension of existing products	32
New service	31
Marketing	26
Mobile products/capabilities	26
Speed of adopting new technology	26
Extension of existing services	25
Digital design	23
Supporting capabilities	18

Source: BCG Global Innovation Survey, 2015.

The Assessment phase constitutes the following steps:

- Providing a comprehensive measurement of the company's digital readiness
- Comparing the digital capabilities against industry benchmark
- Comparing current digital performance against objectives
- Citing both external and internal challenges in adopting Multidimensional Digitization

STRATEGIZE

The Strategize phase involves classifying strategies that aid objectives in facilitating Multidimensional Digitization. Even Digital Alchemists are realigning priorities from time to time in their forward-looking vision. Facebook went public in a website-only offering and then Mark Zuckerberg rebuilt the company for a mobile-first strategy that went on to fetch 40% of its revenue from mobile. GE has shown what **digital ubiquity** can do to its business by extending digitization and connectivity to formerly analog transactions, processes or operations. How should companies strategize to foster Digital Alchemy to scale across the enterprise?

Even Digital Alchemists are constantly reassessing their strategies in this DYNAMIC BUSINESS LANDSCAPE

Cloud Strategy

Organizations are looking to create new business models to build agility resulting in better cost efficiencies, scalability and operational flexibility. CIOs are reinventing their IT architectures to a hybrid model that is growing at a CAGR of 27% according to researcher MarketsandMarkets. Security, that is still cited as a barrier will be the biggest driver to cloud adoption through investments in state-of-the-art security. Strategy-making would involve:

- Providing enterprise-level cloud vision strategy

- Suggesting scalable architecture solutions

- Recommending high-medium-low impact applications for cloud migration
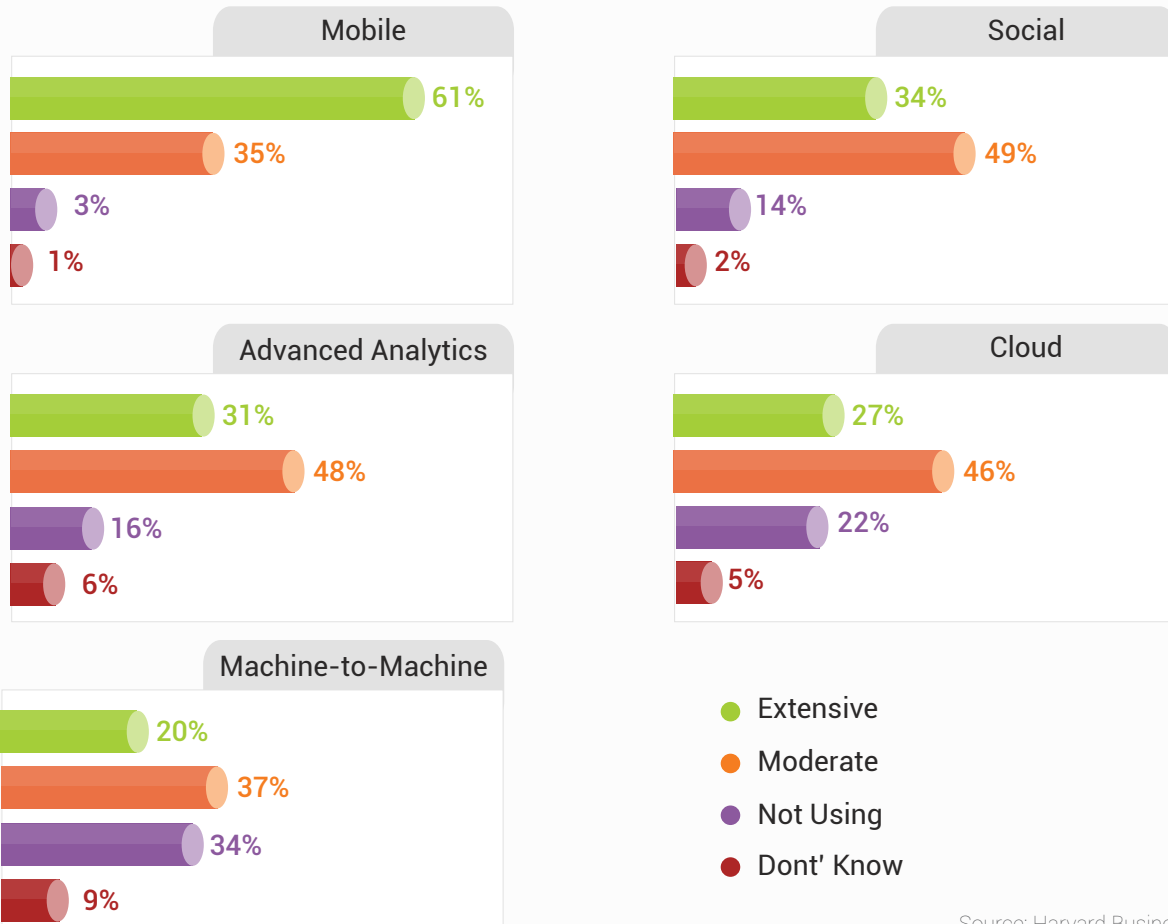
Channel Strategy

Organizations that don't adopt a mobile-first strategy and deliver exceptional user experiences (UXs) would be exposed. A recent report by Flurry says mobile app usage has risen by 58% in 2015, which is surprising given that such rates remain a rarity in a mature industry. IT capacity would need to rise 5 times in the next 24 months to keep pace with demand for mobile app development services. Through 2018, half of the cost of IoT implementations will be spent on various complex integrations. Strategy-making would involve:

- Identifying ways to target users and understand user behavior using multi-channel strategy

- Setting up a roadmap for channel development, deployment and integration

New Technology Adoption

To what extent has your organization adopted the following technologies?

Mobile
- Extensive: 61%
- Moderate: 35%
- Not Using: 3%
- Dont' Know: 1%

Social
- Extensive: 34%
- Moderate: 49%
- Not Using: 14%
- Dont' Know: 2%

Advanced Analytics
- Extensive: 31%
- Moderate: 48%
- Not Using: 16%
- Dont' Know: 6%

Cloud
- Extensive: 27%
- Moderate: 46%
- Not Using: 22%
- Dont' Know: 5%

Machine-to-Machine
- Extensive: 20%
- Moderate: 37%
- Not Using: 34%
- Dont' Know: 9%

Legend:
- Extensive
- Moderate
- Not Using
- Dont' Know

Source: Harvard Business Review

Data Strategy

Self-service apps, big data discovery and visual analytics will converge into a pervasive next-generation platform that will analyze new IoT application data in motion for actionable insights. Gartner has predicted that by 2020, 40% of new investments would be made in predictive and prescriptive analytics. Strategy-making would involve:

- Streamlining organization's approach to big data & analytics
- Designing a suitable roadmap for unified data architecture & smart data discovery across LOBs and customer segments

Social Strategy

Only 39% of employees say their company encourages collaboration across teams according to the Digitalist Magazine. There is a move from personalization to individualization with partner organizations aiming to consolidate 30% of their interfaces for more individualized offerings by 2017 according to IDC. Strategy-making would involve:

- Developing social media strategy and framework
- Creating a personalized user experience across multiple channels
- Supporting external customer engagement and internal employee collaboration

Other Emerging Strategies

Strategic technology trends according to Gartner are the ones with a foreseeable potential to have a significant organizational impact. Strategy-making would involve:

- Providing Digital Personalization strategies on emerging technologies like Device Mesh, User Experience, Machine Learning, Adaptive Security and so on and so forth.

TRANSFORM

The end goal of the Transformation phase is to continuously foster Digital Alchemy across the enterprise through a Multidimensional Digitization framework. Sustaining

Digital Alchemy is an ongoing journey of exploiting all value chains in dynamic ecosystems with a systematic approach:
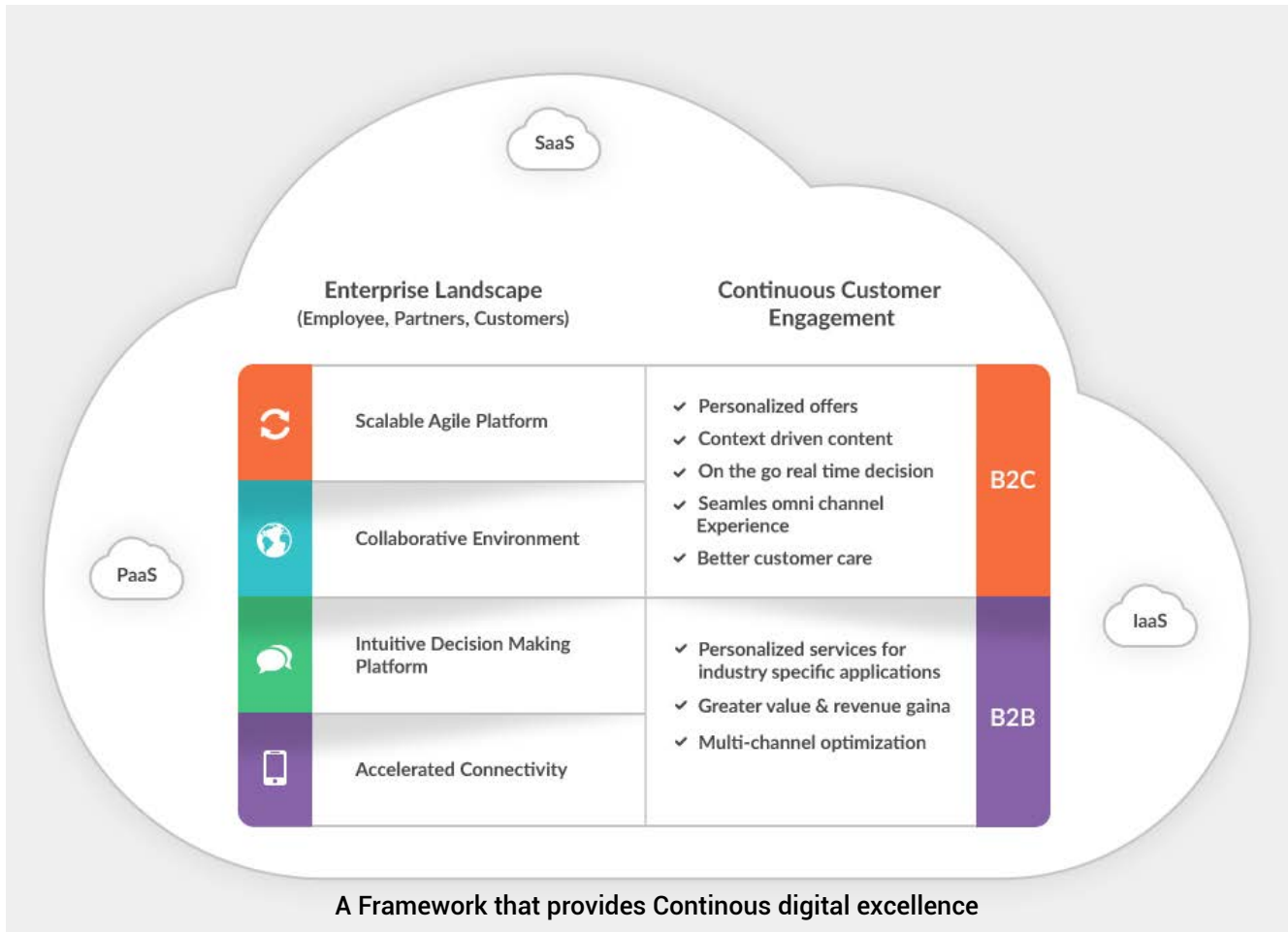
- Providing recommendation on digital strategy tailored to business needs
- Prioritizing digital initiatives based on goals and objectives
- Providing simulated models for adopting the strategy
- Developing a roadmap including milestones, work break-down structure and accountability

DIGITAL ALCHEMY WITH MULTIDIMENSIONAL DIGITIZATION FRAMEWORK

Personalizing our overall architecture to sustain digital business transformation would entail embedding analytics into all the business processes and social collaboration; in the figure, the digital drivers combine the interplay of **Social** for a collaborative environment, **Cloud** for business agility, **Mobile/IoT** for accelerated connectivity and **Analytics** for intuitive decision-making paving the way for continuous customer engagement.

A Framework that provides Continous digital excellence

It's in the journey of Digital Discovery, one step at a time that gives rise to a state of Digital Alchemy- one that is nurtured through an optimal enthalpy of technological excellence for business growth and individualized customer experience.

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