Quick takes

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These brief summaries highlight the key points and action steps in the feature articles in this issue of Strategy & Leadership. *Larry Goodson, an* S&L *contributing editor, is a veteran strategy consultant based in St. Louis, Missouri. He is a Partner at LDGA Consulting, which offers Lean operations and strategy development services (ldgoodson@msn.com).*

Leading the experience ecosystem revolution: innovating offerings as interactive platforms

Venkat Ramaswamy

The Future of Competition: Co-Creating Unique Value with Customers, which the late C. K. Prahalad and I published 15 years ago, introduced strategists to a new frontier of "experience innovation." Fast forward to today, where networked interaction, propelled by the internet and the forces of digitalization, ubiquitous connectivity, globalization and social media has become the new locus for creating value.

Every enterprise is now faced with the challenge of learning how to create valuable impacts of experienced outcomes through smarter, connected offerings and the networked interactions of individuals. These individualized experiences take place through interactive offering platforms, powered by new cloud-enabled mobile applications of artificial intelligence (AI), the Internet of Things (IoT) and augmented/virtual reality (AR/VR).

The new age of offerings as digitalized interactive platforms

Consider the case of Starbucks, where the food and drink purchases are integrated into the digital experience of choosing, buying and consuming them. In an increasingly interconnected and interdependent "relational" ecosystem, a focus on innovating experiences of individuals in one part of the digital ecosystem can have positive effects on another part.

Offerings, when integrated into Digitalized Interactive Platforms (DIPs), become valuable, interactive experiences co-created with customers. Rather than simply elevating the user experience of a good or service, the "co-created experience" itself becomes the "product."

Innovating DIP offerings

At the core of DIP offerings is the design of digital networked arrangements or assemblages of "Artifacts, Persons, Processes and Interfaces" (APPIs) that enable value-creating interactions and new types of environments of experiences.

The innovation of APPI platform environments of experiences offers opportunities for stakeholders – customers, employees, managers, suppliers, financiers, partners and regulators, for example – to co-construct their own personalized experiences on demand. Such systems require businesses to develop the capabilities to engage and organize actors in digital experience ecosystems of DIP offerings.

In sum, any enterprise can now adopt a strategy of *"*capabilities as a service*"* by innovating its own ecosystems of customer and stakeholder experiences, with DIP offerings that are integrated into an ongoing interactional experience that customers value.

The importance of trust

To ensure experience quality management requires "event-driven"

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platform architectures that create more responsive, responsible and richer emergent experiences. A key role of senior leadership is to enable linkages in the digital experience ecosystem, from customer/community co-creation to employee/internal co-creation and partnership/network co-creation.

Enterprises as co-creative ecosystem orchestrators must work with all key stakeholders. From an innovation perspective, this means managing experience ecosystem offerings with leadership that involves suppliers and partners, while also engaging end customers and users on interactive platforms they can easily plug into.

As networked interactions become the infrastructure for interactive experience value creation, those agile enterprises that can gain a "co-creation advantage" by leveraging platforms of resourced capabilities and effectively co-shape expectations and engender valuable experience outcomes together with their stakeholders are more likely to endure in the long-term.

Interview:
Marco Iansiti and Karim Lakhani: strategies for the new breed of AI first organizations
Brian Leavy

The "digital revolution" is now in full swing and seems to be entering a defining phase that will leave few if any companies unaffected.

Clearly, the business world is in the midst of a seismic shift, even as corporate leaders struggle to understand and master the primary forces and drivers shaping the new competitive landscape. Harvard digital strategy experts, Marco Iansiti and Karim Lakhani, set out to help executives with this challenge in their new book, *Competing in the Age of AI: Strategy and Leadership When Algorithms and Networks Run the World*.

Strategy & Leadership: As close observers of the "digital revolution" why do you believe digital networks and AI are becoming ever more pervasive, is "defining a new age for business and for all of us?"

Marco Iansiti and Karim Lakhani: Over the last decade, the infrastructure has become truly ubiquitous, and the power of software and computing has increased to the level that a very large number of traditionally human and managerial tasks can be performed by algorithms and digital networks. This has sparked the emergence of a new kind of organization, "AI first," which has a fundamentally different way of operating.

The new "AI-powered" breed of firm

S&L: You define this new breed of digital firm as being "all about innovation in the business model," underpinned by "a very different kind of operating model. How does this work?

Iansiti and Lakhani: AI-centric ways of operating take the tasks that constrain the firm – what we usually think of as the bottlenecks – and move them to digitized processes run by algorithms, which enable entirely new levels of scalability, scope, variety and learning.

Strategy and competition in the new age of AI

S&L: What should be the central aim of strategic network analysis in developing future strategy and why?

Iansiti and Lakhani: Simply put, the concept of network is superceding the concept of industry in defining strategic options for firms. This means that competition is less about fending off traditional industry threats and more about looking across industries to understand the impact of new kinds of firms and business models.

Implications for leadership

S&L: Finally, what should be at the forefront of the "wise" leader's agenda to help them and their firm remain

relevant and effective in this new game-changing era and why?

Iansiti and Lakhani: The emergence of the "Age of AI" has possibly created the greatest entrepreneurial opportunity in the history of civilization. The leaders of new, AI-first companies need to recognize and respond to the many challenges digital technologies create. Nobody has this quite right yet.

Strategically managing the artificially intelligent firm

Dirk Nicolas Wagner

It's time to rethink and redesign business strategy for the artificial intelligence era. Clearly the management of AI resources and applications needs to be more strategic. In the future we will depend on managing AI so that it can cut through and master the complexity of an increasingly digitized and automated economy.

What to do with AI? – setting strategic goals

In this economically and technologically dynamic era, the future will certainly unveil unforeseen developments that require an organization to adapt and to adjust to changes in the market. This is where AI enters the stage with a threefold offer of unique capabilities:

- Predictive analytics, where AI has the potential to identify what will happen and why it will happen.
- Prescriptive analytics, where AI is designed to advise what to do and why to do it.
- Decision automation, where based on predictive and prescriptive analytics, AI will take autonomous action.

Given the three potential capabilities now offered by AI technology, when considering fruitful ways of implementing their initial strategic goals, organizational leaders should take into account the potential for innovation.

How to set up for AI? – leading organizational change

The commitment required by an AI strategy is to inspire an entire organization to team-up with AI to form so called Human-Agent Collectives (HAC). These are "socio-technical systems in which humans and smart software agents interact and engage in flexible relationships in order to achieve both their individual and collective goals. In business, HACs organizations commit their human resources to team-up with AI powered machines that predict, prescribe and autonomously execute actions. Once data is useable, AI will help data scientists and statisticians to derive insights from data and make decisions.

Where is the value? – consider the economics of AI

An AI strategy to pursue competitive advantage embraces the technological capability to predict-prescribe-automate, enacts machine learning by entering into a portfolio of experiments within a modular strategic framework and organizes man-machine teams following the concept of human-agent collectives. Strategic leaders have to ensure that they do not underestimate the potential of AI and fail to benefit from unprecedented economies of scale and scope.

How software developers instigated the transformation of management

Stephen Denning

In the year in which Google's parent, Alphabet, joined Apple, Amazon and Microsoft as the fourth of the world's firms with trillion-dollar market capitalizations, it is appropriate to note how rapidly and massively our lives have been transformed by digital innovation. Computer software, including artificial intelligence, machine learning and cloud computing, is now enabling, improving or accelerating almost

everything that humans, machines and organizations do.

The transformation in management

It is important to note that it is not technology alone that is driving the transformation. An equally important–and less noticed–enabler is the change in the way the organization has to be managed.

The Agile Manifesto

The organizational change revolution was initiated in 2001, by a group of software developers who believed that the very real problems in software development flowed from the top-down bureaucratic way in which the firms were being managed. Under the banner of the *Manifesto for Agile Software Development*, they proposed "uncovering better ways of developing software by doing it and helping others do it. This Agile approach to software development —under various labels—steadily spread and came to be seen as the normal way of managing computer software.

But when these software developers started telling the top management how to run their company more effectively, their advice wasn't often well received. However, customer-focused firms that learned to use Agile methods to deliver continuous new value for customers have achieved massive gains in the stock market while their less effective rivals fall behind.

What does organizational agility look like?

- Organizational agility means setting aside misguided goals like "maximizing shareholder value" and instead generating an obsession with improving value to customers.
- Strategic agility means seeing beyond Michael Porter's approach of "coping with competition" and instead mastering market-creating innovation.
- Organizational agility means establishing and embracing real-time external metrics.
- Organizational agility means human resource departments realizing that they not only have to adopt Agile practices and vocabulary; they also need to reinvent their function from the perspective of their customers.
- Organizational agility requires companies to recognize why the budget function is typically a stumbling block to agility and then learn how to fix it.

Agility in non-software functions

Business agility thus isn't just a matter of applying agile software practices to other functions. Functions like strategy, HR, budget, finance and manufacturing usually have a lot of anachronistic assumptions embedded in them. They need to be fundamentally re-imagined.

Interview
Amit Mukherjee: Seven principles that are shaping digital strategy
Brian Leavy

In his new book, *Leading in the Digital World: How to Foster Creativity, Collaboration and Inclusiveness*, MIT leadership expert, Amit S. Mukherjee identifies seven principles that together help to define the new context for work, organization and leadership. The principles offer a valuable template for corporate leaders everywhere seeking to understand the new imperatives of the digital age and why the new era "calls for a new kind of leader – one who emphasizes creativity, collaboration and inclusivity."

The seven principles are:

1. Digital technologies reduce, or eliminate, the value of an elite group's skills or knowledge and enable – and may even require – the automation of its work.
2. Digital technologies augment the capabilities of less-skilled people, enabling them to undertake tasks they otherwise couldn't.
3. Digital technologies enable – and may even require – work to be distributed over time and geography.
4. Digital technologies enable – and may even require – work to be increasingly thought-driven instead of being muscle-powered.
5. Digital technologies create needs that aren't predictable and add disproportionately great value.
6. Digital technologies expose organizations to radical transparency, which may – or may not – benefit them individually, or their networks or society at large.
7. Digital technologies interact with, and affect, an organization's external environment.

Strategy & Leadership: From your research you identified seven "principles" differentiating this technology era from all previous ones in ways which are radically changing the context for leadership. What was your reasoning?

Amit Mukherjee: Contrary to popular belief, leadership ideas aren't immutable. Every few decades, transformative technologies reshape work and organizational structures and profoundly change them.

Twentieth century executives didn't become leaders by creating new ideas, models, products or services. They increased productivity by raising revenues, profits or market share, or arranging mergers reducing expenses, assets and headcount. But today's best known CEOs personally created products or services or unconventional ideas.

In short, the principles taken together reflect how the new digital epoch is upending the nature of work and organizational structures and, hence, the context for leadership.

S&L: What advice do you have for executives on how to develop a more effective approach to leading strategically for these radically different times?

Mukherjee: My undoubtedly biased recommendation is: Embed the seven principles in individual and collective thinking. Two principles are particularly important. The first is about digital technologies interacting with the environment. Digital technologies can destabilize the world precisely when we expect it to give us infallible control.

Principle six, about radical transparency, is also key. We currently have an epidemic of self-inflicted corporate crises. Where will you set your company's "uncrossable lines?" In a world of distributed work, how will you ensure everyone honors them?

How leading CEOs drive a differentiating advantage through AI, data analytics and insight

Saul Berman, Anthony Marshall and Kazuaki Ikeda

IBM's latest Global C-suite Study asked top executives around the globe about the value they derive from data, how they intend to turn data into a differentiating advantage and how far they have progressed with their plans.

Increasingly, CEOs realize that they have entered an era in which data's full potential can be realized. Today, with the advent of artificial intelligence (AI), the Internet of Things (IoT) and cloud computing, companies finally have the means with which to turn

bytes into insights and generate contextualized, predictive knowledge.

Torchbearers light the way

So how are the most successful CEOs realizing the strategic value of data? During the course of the research, researchers identified four distinct kinds of enterprises – torchbearers, aspirationals, explorers and builders – each at a different stage on the path to data leadership:

- Torchbearers have established a new path to value by integrating data into their strategies, operations and culture.
- Aspirational organizations are just setting out on the journey.
- Builders have made greater headway in aligning their business and data strategies and creating a data culture.
- Explorers, by contrast, are half way along the road.

Initiative 1: Automate intelligently

The World Economic Forum estimates that AI and intelligent automation, combined with other digital advances, could generate more than USD 100 trillion by 2025. At least 84 percent Torchbearer CEOs expect to automate many of their decision-making processes over the next few years, in contrast to the 63 percent of Aspirational CEOs.

Initiative 2: Strategize with ecosystems

The top-performing CEOs in the study recognize that, rather than keeping data closely confined, either within a specific business unit or within the enterprise as a whole, they need to encourage the sharing of data freely across their organizations.

Initiative 3: Extract value through new models

Today, digital technologies and ecosystems have jointly facilitated totally new ways of doing business, birthing new industries, obliterating others and transforming the competitive landscape in the process.

However, the ultimate objective for many CEOs isn't to sell the data they collect; it's to create a strategic advantage by using data to define and test new business models.

Other CEOs are investigating the potential of platforms—hoping either to build their own platforms or to carve a role for themselves as essential participants on platforms operated by third parties.

Action guide to extracting value through new business models

1. Work backwards from the business case.
2. Look for the dollars buried in the data.
3. Draw on data to develop a strategic lead.

New business models—combined with intense competition and consolidation in certain industries—are hitting some companies hard. The CEO interviewees are in broad agreement. "The winner will be the company that gets the data, analyzes it quickly and makes the right decisions."