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**Eric Schaeffer**

# Digitalization central to product reinvention

**Ni Tao**

DIGITALIZATION is one of the hottest buzzwords of late, as company executives are fixated on how their businesses can become digitalized.

According to Eric Schaeffer, senior managing director of Accenture, this is already happening and executives the world over are leveraging digitalization to push for improvements on efficiency and management.

Speaking at a roundtable during the recent Shanghai Forum, held by Fudan University and the Korea Foundation for Advanced Studies, Schaeffer said many digital-savvy companies are reinventing their products and services to make them more “intelligent.”

Part of the reason, said the leader of Accenture’s Products Industry X.0 practice, is that consumers, firms and markets are demanding more of the type of user experience that transcends a product’s role in value creation.

For centuries, a product’s sale marked the end of its value chain, from the sourcing of raw materials to assembling of

finished parts, but this routine is about to experience a tectonic tilt toward a new product world where traditional product-making businesses will need to apply much more fluid business practices if they want to survive, said Schaeffer.

Drawing on his experience in industries including the manufacture of cars and industrial equipment, Schaeffer said these sectors are undergoing a systemic transition to stay competitive in what he called the “post-digitalization era.”

## Reinventing the product

“By ‘post-digitalization’ I don’t mean digitalization is past its prime,” said Schaeffer. “It’s just that digitalization alone is no longer a comparative edge, because it is on the agenda of almost everyone.”

A hallmark of this coming era of post-digitalization, in his opinion, is a dwindling role of the manufacture of products in the overall industrial value chain, as this process cedes ground to emerging factors such as the platform, service providers and software designers.

Together, they have moved up



the value chain in terms of their contribution to making smart, connected products, Schaeffer noted. The veteran French pioneer of industrial digitalization has laid out his argument in a book he co-authored with David Sovie, entitled “Reinventing the Product: How to Transform your Business and Create Value in the Digital Age.”

The key thesis of his book is that day-to-day products, ranging from a printer to industrial machines, from an airplane engine to medical equipment, will become self-adaptive as they are increasingly integrated with software and underlying IT infrastructure, exchanging millions of gigabytes of data in a split second. The constant

interaction will turn an originally lifeless, stand-alone product into a “living” product capable of reacting automatically to surrounding environments, making decisions and “communicating” with other players in a collaborate network — or as is now better known — “ecosystem.”

“In the future, products will be reinvented and reconfigured,” said Schaeffer. “This means hardware or the product itself will only be the basics.”

Creation of value will, to a large extent, depend more on software.

He cited the example of Tesla, saying that Tesla is an “evergreen tree” as the in-car software updates itself in a ceaseless cycle, receiving upgrades and delivering the most up-to-date functions and “experience” to users.

“This is a fundamental change,” Schaeffer claimed.

Waves of innovation led by Tesla and other poster boys of digitalization are also redefining the value composition of industrial goods.

In addition to features like connectedness based on the

practicality of everyday life, enhanced user experience is also deemed central to the rebirth of mundane industrial products.

The Michelin tire company is an example. Built-in sensors in tyres from Michelin are the underpinnings of the company’s new strategy of “tire as a service.”

Michelin monitors its tires’ performance in whatever weather and road conditions through data transmitted via the Internet of Things.

The followup analysis enables it to forecast potential glitches and send in service staff before a major breakdown. This is a way of ensuring its tyres are “invariably at their best.”

“This is how they turn tyres into a service,” said Schaeffer. “The company also cooperates with other suppliers to help cut fuel costs.”

Through digitalization, Michelin has turned a product into not just a service, but also a part of an ecosystem, a platform for products from other stakeholders. “What used to be at the heart of an ecosystem may now find itself on the periphery,” said Schaeffer.

## Other takeaways from the 2019 Shanghai Forum

### A BRICS ‘Ivy League’

Top universities in China can benefit from their cooperation with counterparts in the BRICS union — Brazil, Russia, India, China and South Africa — according to educators and scholars who attended a high-profile conference on cooperation in higher education.

Speaking at the first annual general assembly since the founding in 2015 of the “BRICS Universities League,” Zhang Jin, deputy head of the international department of China’s Ministry of Education, said the league will serve as an important mechanism to encourage the flow of talent toward more emerging economies such as the BRICS nations.

At the conference held by Fudan University, which holds the rotating BRICS “Ivy League” secretariat, it was decided that colleges and research institutions in BRICS nations should promote people-to-people exchanges. Moreover, they are expected to boost the role of educators and think tanks in providing intellectual support to BRICS and other emerging economies.

Measures being discussed include sending students and teachers on regular exchanges and conducting joint research, among many others.

Maxim Khomyakov, vice president of Russia’s National Research University Higher School of Economics, said BRICS countries can rise to the common challenges by rewarding academic excellence through a variety of fellowships.

The priority, he added, is to found elite schools to cultivate the brightest minds capable of addressing daunting issues facing individual societies.

### Data openness

One of the Shanghai Forum’s two principal organizers, Fudan University, also released a report on Chinese local governments’ information transparency, which drew widespread attention.

The report, compiled with the State Information Center, a unit of the National Development and Reform Commission, is the first of its kind that measures Chinese localities by their data openness.

Shanghai topped the list with the most open attitude toward sharing data and information, followed by provinces such as Zhejiang as well as other cities and autonomous regions.

In the category of provincial capital or prefecture-level city, Guiyang, capital

of Guizhou Province, surprisingly came at the top, beating candidates such as Harbin and Jinan. This is partly because Guizhou has embarked on an audacious campaign to embrace big data and cloud computing, among other technologies.

The study recognizes cities that go the furthest of all on Chinese mainland in making official data publicly available. While the report applauds improvement by local governments in data transparency, it also highlights the lack of concrete examples of data application.

The blame, it says, lies not with scant demand for data or the user being less data-savvy. Rather, the problem boils down to the fact that most highly sought-after and high-value government data has yet to be disclosed.

### Leveling ‘green’ playing field

As a result of China’s campaign to build a society with a low-carbon footprint, such concepts as green finance are gaining currency. This means financial philosophies and practices tend to be more influenced by the awareness of reducing environmental impact.

One of Fudan University’s

contributions to the literature on this subject is a study on green finance in the prosperous Yangtze River Delta.

Researchers behind the study looked at how 41 cities in the region scored on 22 criteria — including economic growth, tertiary-industry development, tech innovation — and then rated their performance on a scale of 0-100.

The study reveals a discrepancy in green development between the south and north, and the east and west of the roughly 210,000-square-kilometer region that 150 million people now call home. For instance, cities from Jiangsu and Anhui provinces account for over 90 percent of the 20 cities that rank near the bottom of the survey, suggesting that Shanghai and Zhejiang have fared better in green development relative to their neighbors.

The study lists several things the authorities can do to enhance the so-called coordinated green development, including setting unified standards governing green finance, employing mechanisms to relocate industries within the region and setting up an ad hoc foundation to incentivize eco-friendly growth.

(Compiled by Ni Tao)