The share of economic activity facilitated by digital technologies has soared throughout the world. In China, the “digital economy” accounted for 36% of GDP in 2019, up from 30% in 2016.¹

Contrary to the impression made by many digitally born Chinese internet giants, many companies in traditional industries are digitally immature, and that immaturity was exposed in the pandemic. Even though many of them were able to quickly “jump” online, thanks to the apps and services provided by the internet giants, they soon realized that being able to work remotely and sell through online channels is far from enough. They realized that, in the core functions like manufacturing, operation, and organization management, they were operating far from the digital frontier: only 39% of the companies we surveyed were using cloud services to the best efforts they could, while even fewer (28%) were using AI or RPA to improve their operation (Figure 1).
As companies enter an extended period of uncertainty, the digitally mature ones are going to enjoy many advantages over their less advanced peers. Among the most important are superior operational resilience and innovation agility.

But just how many Chinese companies hold the distinction of being “digitally mature”? And in what ways do they outperform their peers? The Accenture China Digital Transformation Index was developed in 2018 to track the progress of traditional industries’ digital transformation in China. This is the third consecutive year that Accenture collaborated with China Industrial Control Systems Cyber Emergency Response Team (CICS-CERT) to conduct the research and we surveyed nearly 400 Chinese enterprises across nine industries.

Figure 1. Chinese companies operate far from the digital frontier

Note: % of respondents saying their companies have taken all the necessary actions in the respective areas.
Source: Accenture Business Continuity Measures Survey, N=123, April 2020
In 2020, 11% of the firms we surveyed qualified as “Digital Transformation Champions”, up from 9% in 2019. These companies invest decisively in scaling up new tech-enabled businesses while driving continuous transformation of the legacy business and now derive over 50% of their current revenues from new business activities begun in past three years. In 2020, Champions earned an average score of 77, up from 66 in 2018; meanwhile, the average score for other companies was 47, up from 35 in 2018 (Figure 2).

**Figure 2.** Chinese companies made steady progress in digitalization

Accenture China Digital Transformation Index (Score: 0 - 100)

Data Source: China Industrial Control Systems Cyber Emergency Response Team (CICS-CERT); Accenture Research
The pandemic, in particular, has highlighted how being digitally mature makes companies more agile and better positioned for growth. Consider a few examples. After the virus struck, 63% of Champions returned to their pre-crisis levels of productivity within three months, compared with 47% of the other firms we surveyed. And despite today’s many headwinds, nearly three quarters (74%) of Champions expect their revenues to still grow in 2020, compared with fewer than half (49%) of other firms. In the first quarter of 2020, Champions’ EBITDA was 16%, on average, 5% higher than the other companies (Figure 3).

**Figure 3. Champions are better positioned for growth**

<table>
<thead>
<tr>
<th>Faster recovery to full productivity</th>
<th>Stronger confidence in growth</th>
<th>Higher ability to profitability</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Proportion of enterprises recovered within 3 months)</td>
<td>(Proportion of enterprises that predict achieving positive annual revenue growth in 2020)</td>
<td>(2020 Q1 EBITA)</td>
</tr>
<tr>
<td>Champions 63%</td>
<td>Champions 74%</td>
<td>Champions 16%</td>
</tr>
<tr>
<td>Others 47%</td>
<td>Others 49%</td>
<td>Others 11%</td>
</tr>
</tbody>
</table>

Note: The EBITA refers to a comparison of listed companies in the sample.
Data Source: China Industrial Control Systems Cyber Emergency Response Team (CICS-CERT), Capital IQ, Accenture Research

Facing unprecedent pressure brought by the pandemic, both on demand and supply, companies face a dilemma. While they are fully aware of the necessity of digital transformation to their survival in the post-COVID world, their cash flow is constrained more than ever. As a result, executives we surveyed would like to adopt a more pragmatic approach when taking on future digitalization projects, and 85% of them expected to see returns on their digital investment within 12 months.
If the benefits of digital maturity are evident, achieving it is less straightforward. By analysing and synchronizing the Champions’ best practices, we suggest that companies should prioritize six areas for improvement (Figure 4).

**Figure 4. Champions enjoy advantages in six areas**

- Develop data transparency of all businesses
- Elevate omnichannel "games"
- Build resilient digital supply chains
- Create Living Systems to enhance IT adaptability and business flexibility
- Nurture a flexible organization
- Grow agile innovation capabilities

Data Source: China Industrial Control Systems Cyber Emergency Response Team (CICS-CERT); Accenture Research
The first area requires **developing data transparency of all businesses**. Companies that do well in this category have managers who are well informed of what’s happening both inside and outside their enterprises. These are companies that rely extensively on real-time data analysis and have the IT tools that enable “intelligent” decision-making (i.e., assisted by AI). And they’re companies that constantly stay ahead of the curve, by reacting proactively to trends and events. In 2020, Champions earned an average score of 87 for end-to-end data transparency, while other firms averaged a 53.

LBX Pharmacy is a company that excels in this area. To predict market demand, it deploys intelligent decision-making platforms. To move products efficiently around China, it also feeds sales data to warehouse-sorting robots, to suppliers’ inventories, and to its transport operations, allowing LBX Pharmacy to efficiently operate over 5,000 stores across the country.

The second area involves the need for companies to **elevate their omnichannel “games”**. This means shifting from a focus on creating business value to creating a great customer experience, seeking customers’ feedback early and often, designing offerings that solve customers’ problems, and digitizing the various channels through which a business connects with customers. Here, Champions earned an average score of 82, while other firms averaged a 50.

Peacebird is a firm that has had success applying its Udesk system—which incorporates data analytics, AI robots, and ServiceGo remote operations—across its various channels. By doing so, the fashion retailer shapes its product-design processes around shoppers’ preferences. This system helps Peacebird build a closer relationship with consumers. Also, the data-driven, user-centric system reduced the replenishment lead time to 10-14 days from 30+ days, meeting the needs of various channels. At the end of 2019, the number of its offline stores rose to 4,496 and the omnichannel revenue reached 7.9 billion Yuan. Even during the pandemic, in the first half of 2020, revenue of Peacebird increased by 3.11% year-on-year, reaching 3.2 billion Yuan.
The third area of need involves building resilient digital supply chains. This means creating data-architecture capabilities and processes, to analyze data in real-time. And it requires creating data synergies with upstream and downstream companies, to better adapt to changing market dynamics. In this area, Champions earned an average score of 70, while other firms averaged a 42.

The supply chain management system of Sinopharm Group, a pharmaceutical firm, is a model of effective demand forecasting, distributed inbound and outbound strategy, and automatic replenishment. The company’s management system also integrates resources across its entire supply chain, which facilitates information sharing, transparent monitoring, and efficient scheduling. Through this integrated supply chain management system, Sinopharm operates over 100,000 pharmacies and clinics, as well as more than 10,000 hospitals. The system reduces the lead time of long-distance transportation, and lowers logistics costs at the same time. Its pharmaceutical distribution business now accounts for nearly 80% of the market share. Meanwhile, its operating income in 2019 was 425 billion Yuan, and it’s expected to exceed 500 billion by the end of 2020.

The fourth area of need involves creating Living Systems to enhance IT adaptability and business flexibility. This means deploying cloud-based systems that can learn and adapt. It requires thorough long-term digital planning, to ensure that technologies complement each other. And it necessitates freeing up space for innovation and new partnerships, as well as removing obstacles to business development. Here, Champions earned an average score of 81, while other firms averaged a 53.

Proya Cosmetics, for instance, has excelled in creating a future-ready system to improve its distribution channels and enhance its brand and management, and in using its platform in innovative ways. Proya is also applying AI, Big Data, and other advanced technologies to its integrated information platform, to support multi-channel, multi-model and multi-brand development. Since January 2020, the company’s share price has risen by more than 30%. Through this platform, Proya’s internal management expense ratio was 6.25% in 2019, which was a decrease of 1.01% from the previous year. In the first half of 2020, operating income of Proya was 1.384 billion Yuan, a year-on-year increase of 4.26%, compared with industry growth of 3.5%.
The fifth area of need involves **nurturing a flexible organization**. This means crafting human resources’ capabilities that provide companies with the talent to execute their business strategies. And it requires replacing hierarchical managerial methods with flatter organizational cultures that encourage employees to express their views. In this area, Champions earned an average score of 69, while other firms averaged a 46.

In June, for example, Hema Fresh, Alibaba’s online food-delivery service, teamed up with some traditional catering companies to launch an “employee-sharing” program. The platform matches furloughed employees with partnering companies that are short of staff. As of the end of July, Hema Fresh has accepted more than 5,000 shared employees from more than 40 companies, which not only solves the shortage of delivery personnel, but also reduces the cost of idle employees for partnering companies.

The sixth area of need involves **growing agile innovation capabilities**. This means pursuing a more pragmatic attitude to innovation, such as by releasing product upgrades and tweaking product portfolios faster. It requires embracing “open innovation”, by seeking the inputs of different stakeholders. And it necessitates setting up internal venture-capital units, to help spur innovation. Here, Champions earned an average score of 74, while other firms averaged a 39.

To better meet customers’ needs, Haier Smart Home incorporated AI network devices, voice terminals, and Big Data analytics into designing its apps and smart products. During the epidemic, Haier was praised for quickly incubating the insights of consumer needs into innovative products or services. Until now, Haier has continued innovating at a dizzying pace, launching 19 phone apps related to disinfection and sterilization. Customers can download and use the apps to update their smart washers/dryers/dish washers with these newly added functions. As of 2020, Haier has more than 3,800 interface teams, which create more than 220 innovation projects each year.
When COVID-19 struck China, the country’s Digital Transformation Champions were better prepared than their peers to handle the challenge. This should not have come as a surprise—Champions had been building up their advantage over rivals, in operational resilience, for years. The resilience in turn better positioned them to innovate and meet the emerging needs.

For today’s digital laggards, there is still time to catch up. But the clock is ticking.
We launched the Accenture China Digital Transformation Index research in 2018. This legacy research is conducted in cooperation with China Industrial Control Systems Cyber Emergency Response Team (CICS-CERT).

Through survey and executive interviews, and financial and text analysis on publicly available data, a comprehensive evaluation was conducted on the digital transformation of Chinese enterprises. The research covers nine industries, including electronic components and materials, electronic high-tech manufacturing, chemicals/building materials, automotive and engineering machinery, medical and pharmaceutical, fast-moving consumer goods, logistics and aviation, traditional retail, and metallurgy.
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REFERENCE

1 China Academy of Information and Communications Technology.

2 "Help medical logistics say goodbye to manual labour: a smart warehouse", Rednet, December 2019

3 "Omni-channel strategy: insights into the market ambitions of Peacebird", Customer Care & Management World, August 2019

4 Data enabling, Peacebird achieves a leap with full channel operation, Ali Research, August 2019

5 Peacebird has launched more than 30 co-branded series, with revenue of 7.928 billion yuan in 2019, 21st Century Business Herald, April 2020

6 Peacebird welcomed its best "second quarter" in five years, Tencent News, August 2020

7 "Digital transformation is driving consumption upgrades", Sohu News, December 2019

8 "Sinopharm Group creates 'SAVE' supply chain management cloud platform - Situation Exchange Session No.5", Department of Market Supervision in Ministry of Commerce, September 2016

9 "FSSC Cases During the Pandemic - Case 2: Proya's digital transformation ahead of the pandemic", Tencent News, April 2020

10 "Hema launches Shared Employee Platform, and Jumei Jiedian' order volume rebounded...'Sharing Economy+' re-emerges", IT Home, July 2020.
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CICS-CERT aims to become China’s leading research institute in the fields of industry information security and informatization-industrialization integration. Its work is part of the national strategy of “making China great through manufacturing and informatization,” guided by the principle of “supporting government and serving industry,” and focused on the integration of manufacturing and Internet, as well as industry information security.

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