Close the Widening Gap
Accenture China Digital Transformation Index 2021
Chinese enterprises have performed well in the post-pandemic era. Once again, in 2021, more companies from China made the Fortune Global 500 list than any other countries. Now, as the pandemic recedes, Chinese companies of all stripes appear far more optimistic about their long-term prospects than do their Western counterparts.

Their confidence was boosted by China’s quick recovery from the COVID-19 pandemic, China having the most complete manufacturing industrial chain, and having easy access to digital technologies. However, COVID-19 related challenges remained top concerns for executives to achieving their recovery and growth goals, and many have accelerated digital transformation at their companies, hoping to achieve operational improvement in the next 6 months, and disruptive transformation in the next 3 years. That’s an ambitious and honorable goal, but the path to achieve transformation is full of uncertainties and struggles.

To better understand why so many Chinese companies continue to struggle with their digital transformations, we also conducted in-depth interviews with dozens of CEOs, who pointed to three common hurdles: (1) corporate leaderships have yet to articulate a grand vision for their business transformation; (2) weak digital workforce due to slow culture change and heavy legacy IT systems; and (3) limited ROI caused by short-term piecemeal efforts and small-scale projects.

To overcome these hurdles and thrive in their own digital transformations, Chinese companies - and those elsewhere - should study the practices of China’s digital transformation Champions, which get both the big picture right (such as sustaining strategic commitment and embracing stakeholder value) and master the details (such as prioritizing data and integrating cloud into the core of their business).

According to Accenture China Digital Transformation Index 2021 - an annual survey of more than 560 Chinese companies across nine industries-only 16% of Chinese companies have successfully transformed their businesses through digital investment, who we call digital transformation "Champions". While more companies have taken on the digital transformation endeavor, the gap between Champions and other companies continues to widen, in both digital maturity and business performance.
Chinese companies are bullish on their prospects…

A recent Accenture survey of 3,071 CEOs of large Chinese, European, and North American businesses found that 75% of Chinese-company CEOs thought their companies’ competitiveness in relation to North American companies had improved since the pandemic began. At the same time, only 22% of North American-company CEOs and just 16% of European-company CEOs thought their companies’ competitiveness in relation to Chinese companies had improved (Figure 1).

Figure 1: Chinese businesses have proved their international competitiveness

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>Europe</th>
<th>North America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compared to North America</td>
<td>75%</td>
<td>66%</td>
<td>16%</td>
</tr>
<tr>
<td>Compared to Europe</td>
<td>16%</td>
<td>33%</td>
<td>23%</td>
</tr>
</tbody>
</table>

**Question:** How do you think the competitiveness of Chinese, European, and North American enterprises has changed after the COVID-19 pandemic began?

**Source:** Accenture CEO Survey, All respondents (N=3071), North America (N=1450), Europe (N=1301), China (N=320)

1 The survey was conducted from Dec 2020 to Jan 2021.
The survey also found that 91% of Chinese-company CEOs expect their companies to hit growth targets for 2021, compared with 60% of other Asia-Pacific (APAC)-company CEOs, 47% of North American-company CEOs, and 45% of European-company CEOs who hold the same expectation (Figure 2).

**Figure 2: Chinese companies are also optimistic about their growth prospects**

Q: Given the current economic situation, do you believe your organization will achieve its growth goals by the end of 2021? (% of executives who answered Yes)

Source: Accenture CEO Survey, All respondents (N=3071), North America (N=1450), Europe (N=1301), China (N=320)
An important measure of a company's growth prospects is its progress on digital transformation - a key to improving current and future competitiveness. Accenture China Digital Transformation Index 2021 assessed the digitalization efforts of 563 large Chinese companies across nine industries: high-tech products, electronic components and materials, automotive and engineering machinery, medical and pharmaceutical, consumer goods, logistics, traditional retail, chemical and building materials, and metallurgy. 

To construct the annual index, first released in 2018, Accenture partnered with the China Industrial Control Systems Cyber Emergency Response Team affiliated to the country's Ministry of Industry and Information Technology, which surveyed senior executives at such companies. Accenture also conducted its own evaluations to measure companies' proficiency in six key areas of digital transformation - digital marketing and channels, smart manufacturing, intelligent functions, product and service innovation, digital business models, and digital ventures (Figure 3). (A “100” on the index is the highest score, while a “0” is the lowest score.)

---

**Figure 3: Accenture China Digital Transformation Index**

**Digital marketing and channels**
- Adopt personalized digital marketing
- Create integrated channels for seamless customer experience
- Protect customer data in digital activities/transactions

**Smart manufacturing**
- Use digital for agile development
- Automate routine tasks and optimize field operations
- Use digital to streamline supply chain

**Intelligent functions**
- Build and manage intelligent functions
- Create a culture for data-driven decision-making
- Use data-driven performance reviews and goal setting

**Product & service innovation**
- Enhance product portfolio with new intelligent/smart/digitized features
- Develop new digital products and services
- Provide customized products and services

**Digital business models**
- Explore platform-based business models
- Look for ways to monetize data
- Continuous iteration and refinement of digital business models

**Digital ventures**
- Incubate emerging digital technologies internally
- Encourage innovation and entrepreneurship
- Collaborate with start-ups in ecosystem

---

2 The index was produced in partnership with the China Industrial Control Systems Cyber Emergency Response Team, a research group.
In 2021, the average score was 54, up from 50 in 2020, 45 in 2019, and 37 in 2018 (Figure 4). Between 2018 and 2021, the share of top performers, or digital transformation “Champions” - defined as companies that aggressively scale new tech-enabled businesses, drive continuous transformation of their legacy businesses, and derive over 50% of their current revenues from business activities begun in the past three years - also increased, from 7% to 16% of companies, respectively (Figure 5).

**Figure 4: Corporate China is getting better at digital transformation**

Digital Transformation Index (0-100): Total sample average

<table>
<thead>
<tr>
<th>Year</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>37</td>
</tr>
<tr>
<td>2019</td>
<td>45</td>
</tr>
<tr>
<td>2020</td>
<td>50</td>
</tr>
<tr>
<td>2021</td>
<td>54</td>
</tr>
</tbody>
</table>

Source: CICS-CERT, Accenture Research, N=563
16% of Chinese companies are "Champions" that have accelerated their digital transformation journey

From 2018 to 2021, the share of top performers - defined as companies that derive over 50% of their current revenues from business activities begun in the past three years - increased, from 7% to 16% of companies.

Figure 5: More Chinese companies excel at digital transformation
Percentage of digital transformation Champions: 2018-2021

Source: CICS-CERT, Accenture Research, N=563
The digital maturity and performance gap between Champions and other companies continued to widen

For the first time, companies’ scores for digital proficiency passed the halfway mark to hit 54 out of a possible 100, showing that more Chinese companies are making steady progress in their digital transformation journeys. However, the digital maturity gap between Champions (average score: 84) and other companies (average score: 49) continued to widen in 2021 (Figure 6).

Getting digital transformation right is critical to the long-run thriving of nearly all businesses, but also offers immediate rewards. During 2016 – 2019, Champions saw their revenues grow 1.4 times faster, on average, than other companies; but during 2019–2020, Champions saw their revenues grow 3.7 times faster (Figure 7).

**Figure 6: Chinese Champions are pulling further ahead (2018-2021)**

![Chart showing the revenue growth rate of Champions vs. the others](chart.png)

Revenue growth rate: Champions v.s. the others

**Figure 7: Chinese Champions have translated digital advantage into performance advantage**

Source: CICS-CERT, Accenture Research, N=563

Source: CICS-CERT, Accenture Research, N=563
What China’s Digital Transformation Champions do differently

To better understand some of the challenges that China’s digital laggards face, Accenture conducted in-depth interviews and workshops with the leaders from dozens of large companies; from these conversations, three themes emerged.

The first challenge is around getting the business strategy right. Facing great uncertainty ahead, many corporate leaderships found it extremely difficult to articulate a grand vision for their business transformation. Without the business strategy, digital transformation is without direction. This tends to generate confusion among lower-level employees, as well as less vigorous support among staff for transformation efforts.

The second challenge is around capacity-building, including improving legacy IT systems, loosening up rigid managerial cultures, and hiring and retaining talents with the right mix of digital and business skills.

The third challenge involves patience. Because successful digital transformation covers all business operations and functions of an enterprise, it requires long-term commitment. Yet many companies - anxious to show immediate results - opt instead for ineffective piecemeal, pilot, and/or other types of small-scale projects that undermine their transformation efforts.

To overcome these and other challenges associated with digital transformation, Chinese Champions do numerous things differently - and/or do them better - than their competitors. Their efforts fall into two broad categories: getting the “big picture” right and mastering the details.
Ensure strategic commitment. As the pandemic recedes and new opportunities emerge, Champions are identifying their competitive advantages, defining their future business models, and clarifying their paths to transformation. They’re developing and articulating a clear vision and top-level strategy for transformation, based on their market positioning and business-development strategies. To do these things, Champions proactively seek the full support and engagement of middle management. Managers are, in turn, often equipped with dedicated digitalization departments that help them lead such efforts and track progress across the company.

Before 2016, annual revenue at Yunnan Construction and Investment Logistics (YCIL) never exceeded 2 billion RMB - a period when YCIL’s work revolved around managing the procurement and supply of materials for its parent company. But thanks to a bold vision from its senior leadership and the strong support of middle management, YCIL transformed itself into a global supply-chain leader. YCIL began its digital transformation by building an information platform to digitalize its end-to-end operations. Later, it digitalized other areas of its supply-chain service, including cold-chain and cross-border logistics. The upshot: a compound annual growth rate (CAGR) of more than 30% during the last 5 years, as well as revenue of 22.8 billion RMB in 2020.

Embrace a broader value agenda. Champions constantly assess the impact of their operations on a broad range of stakeholders. They prioritize sustainable growth. They use digital technologies to design their products, processes, and production in eco-friendly ways, including by measuring their carbon footprints and using less energy. And they otherwise meet their pledges to behave responsibly to people and the environment.
To better track its carbon emissions and support the Chinese government’s “net zero” commitment, **Guizhou Gas Group** (GGG) is rebuilding its digital-management platform. To do this, GGG is harnessing digital technologies, including the cloud, intelligent central-data management, 5G, IoT, big data, and blockchain. For GGG, the payoff will be greatly enhanced capacity to manage internal operations intelligently, optimize energy distribution dynamically, provide more personalized services to customers - and otherwise fulfill its obligations to the environment and to other key stakeholders.

**Harness the power of ecosystems.**
Champions develop complementary capabilities - including more diversified data, insights, and talent - through business ecosystem cooperation. They collaborate across their ecosystems to share applications, create digital platforms, and explore promising digital business models. They also develop common platforms through which they collaborate on R&D, manufacturing, and marketing initiatives.

**Wuchan Zhongda Group** (WZG), a global Fortune 500 company, provides integrated supply-chain services for upstream and downstream customers that deal in commodity goods. To better harness the power of its ecosystem, WZG is streamlining its organizational processes and consolidating resources to enhance both its own operations and those of its partners. For example, WZG recently helped tire manufacturers in its ecosystem upgrade their digital capabilities, thereby improving the overall efficiency of WZG's supply chain.
Establish data strength. Because data is the lifeblood of digital transformation, Champions create strong data-management and governance systems. To help do this, Champions prioritize the collection of data, while ensuring that such data meet their specification and standardization requirements. Champions also establish flexible and scalable data platform frameworks.

In recent years, Deppon Express, a leading provider of logistics, has invested more than 500 million RMB annually to strengthen its digital foundation and data supply chain. To do this, Deppon successfully overhauled its IT department. Among other changes, the department’s big-data team now oversees data collection, while its product team monitors how Deppon applies data to solve its business problems.

Enhance experiences across the value chain. Champions understand that the customer experience is no longer confined primarily to narrow, single points of contact, such as those generated by traditional marketing campaigns. Because customers now interact with companies across many platforms and mediums, Champions focus on delivering a broader range of experiences - and they obsess constantly over how to make such experiences better. To help them do this, Champions build agile supply chains; they use digital technology to integrate industry chain resources through connected platforms; they establish online business, intelligent data, and collaborative networks across different business segments; and they promote cross-departmental, cross-functional collaboration to create agile response systems.

Urban Revivo (UR), a fast-fashion brand, is using digital technologies to improve shopping experiences for consumers, both in store and online. When customers visit an intelligent UR store, for instance, they now can have their body shape scanned, with the data then stored securely online. Later, when shopping from home, customers can subsequently choose from a list of recommended styles based on their body shape and use UR’s 3D fitting service to try on clothes virtually. To stay ahead of trends, UR also introduces new fashion styles into its stores twice per week. To do this, the company relies on an advanced supply-chain management system that both harnesses big data and that optimizes the firm’s end-to-end processes, while reducing logistical and labor costs. Thanks to UR’s move to the cloud, the firm’s suppliers and factories are more efficiently managed on a single platform, too.
**Adopt cloud and innovate in the cloud.** Champions leverage cloud services to enhance their organizational agility and scalability, as well as to better integrate new technologies. To do this, they strengthen data governance, establish strategic data architecture, and select the appropriate infrastructure for large-scale migration to the cloud. They also adopt new operation methods to enhance their IT performance and sustainability. And they leverage the advanced analytics tools of cloud platforms to shorten product life cycles, test prototypes, and otherwise accelerate innovation.

Over the past decade, **JOMOO Group**, China’s leading bathroom-appliances brand, invested between 1% and 1.5% of its annual revenue on digital transformation. JOMOO, for example, completed the digitalization of internal processes, marketing operations, and product-development operations in, respectively, 2014, 2015, and 2018. During this period, the company’s annual revenue grew by double digits, production productivity improved by 90%, per capita output value tripled, and energy consumption declined by 40%. JOMOO is now adopting a “cloud-first” transformation to further accelerate its innovation efforts. The goal is to build a “light” front-end (i.e. customer engagement) to connect with users, a “strong” middle-platform (i.e. data analytics and smart operation) to serve internal functions, and a “robust” back end (i.e. agile IT infrastructure).

**Build future-ready operations.** Champions continuously enhance workflow automation and monitor their operations in real time. They use high-quality and diverse information to make data-driven decisions. They build digital platforms to achieve closed-loop management and control as well as dynamic optimization of operations. They also encourage human-machine collaboration, drive process transformation, and develop rapid-response capacity across their organizations.

Since 2017, **Master Kong**, a leading fast-moving consumer goods brand, has transformed its operating model by integrating its three central financial systems (expense control, SAPR3, and intelligent accounts payable/reimbursement management). Master Kong did this by standardizing and integrating the previously varied business procedures and policies of its four major business groups. The company’s now integrated finance function efficiently supports Master Kong’s 170+ subsidiary companies and their 40,000+ employees. As part of Master Kong’s efforts to build future-ready operations, paper-based document transmission was cut by over 5 million pieces of paper annually, business-related workload (i.e., process approval, risk control) was reduced by 30%, and financial-related workload (i.e., accounting treatment) was reduced by 70%.

**Accenture China Digital Transformation Index 2021**

13 Close the Widening Gap
In its latest five-year plan, China’s government made digital competitiveness a national priority, and we expect the pace of transformation to speed up across all sectors.

As the pandemic persists, global growth slows, inflation surges, and supply-chain disruptions continue, China’s Champions will have further opportunities to press their advantage. The struggle of many Chinese companies to accelerate their digital transformations threatens their current and future success. To catch up, companies will need to make the right big-picture moves, as well as master the details of digital transformation.

Become a Champion
About the research

This research is conducted in cooperation with China Industrial Control Systems Cyber Emergency Response Team (CICS-CERT).

Steering committee
Samantha Zhu, Chairperson and Market Unit Lead, Accenture Greater China
Xiaolong He, Deputy Director, CICS-CERT

Accenture Team
Serena Qiu, Greater China Lead, Accenture Research
Teresa Ye, Senior Manager, Marketing and Communications, Accenture Greater China
Ling Deng, Manager, Accenture Research
Han Song, Senior Analyst, Accenture Research
Daniel Yang, Senior Principal, Accenture Research
Taylor Guo, Senior Principal, Accenture Research
Freda Tong, Manager, Accenture Research

China Industrial Control Systems’ Cyber Emergency Response Team (CICS-CERT)
Xiaobin Lei, Director, Institute of Informatization, CICS-CERT; Secretary General, Internet+ Development Association of China
Dongyan Ma, Deputy Director, Institute of Informatization, CICS-CERT
Dan Wang, Engineer, Institute of Informatization, CICS-CERT
Yuhan Fu, Engineer, Institute of Informatization, CICS-CERT
Xucheng Ba, Engineer, Institute of Informatization, CICS-CERT

Acknowledgements (in alphabetical order)
Agneta Björnsjö, Anglin Cai, Minjie Cai, Jie Cao, Lei Cao, Bohan Chen, Jin Chen, Jiahui Chen, Xuyu Chen, Deyang Du, Hua Fan, Mengling Fu, Xiaoxi Gu, Francis Hintermann, Laurie Henneborn, Shan He, Jiao Jiang, Minhe Jin, David Light, David Kimble, Wen Li, Dong Liang, Liwei Li, Ya Li, Zhe Li, Ganlin Luo, Junhai Ma, Ling Mu, Paul Nunes, Hejie Qin, Feng Shen, Wenbo Shen, Xiaoyu Su, Wenjuan Wang, Yixin Wang, Jim Wilson, Dawei Yao, Haifeng Yao, Mengxue Yao, Jingli Zhang, Lei Zhang, Xun Zhang, Yitong Zhang, Chengbin Zheng, Yijun Zhou
About Accenture

Accenture is a global professional services company with leading capabilities in digital, cloud and security. Combining unmatched experience and specialized skills across more than 40 industries, we offer Strategy and Consulting, Interactive, Technology and Operations services - all powered by the world's largest network of Advanced Technology and Intelligent Operations centers. Our 624,000 people deliver on the promise of technology and human ingenuity every day, serving clients in more than 120 countries. We embrace the power of change to create value and shared success for our clients, people, shareholders, partners and communities.

The company has been operating in Greater China for over 30 years. Today, it has around 19,000 people servicing clients across the region with offices in the cities including Beijing, Shanghai, Dalian, Chengdu, Guangzhou, Shenzhen, Hangzhou, Hong Kong and Taipei. As a trusted Partner of Choice for digital transformation, Accenture is bringing more innovation to the business and technology ecosystems and helping Chinese enterprises and the government to embrace digitization and enhance global competitiveness to succeed in the new era.

For more information about Accenture, please visit its corporate homepage www.accenture.com and its Greater China homepage www.accenture.cn.

About the China Industrial Control Systems' Cyber Emergency Response Team

CICS-CERT, located in the Ministry of Industry and Information Technology, conducts strategic research, R&D, monitoring and early-warning, assessment, and emergency and industrial development related to industry information security.

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.

About Accenture Research

Accenture Research creates thought leadership about the most pressing business issues organizations face. Combining innovative research techniques, such as data science led analysis, with a deep understanding of industry and technology, our team of 300 researchers in 20 countries publish hundreds of reports, articles and points of view every year. Our thought-provoking research developed with world leading organizations helps our clients embrace change, create value, and deliver on the power of technology and human ingenuity. For more information, visit us at www.accenture.com/research.