Digital Transformation in Vietnam: the SME and SOE experience

RMIT UNIVERSITY

CENTRE **O**F **D**IGITAL **E**XCELLENCE

SBM School of Business & Management

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Foreword

Digital transformation changes everything

The rapid transition of customers, employees and suppliers to the online space due to pandemic restrictions has offered many enterprises in Vietnam – as elsewhere around the world – little choice but to accelerate their implementation of digital business processes and systems.

While some commentators continue to suggest that business-as-usual should quickly return once restrictions were lifted, we need look no further than the UK; even after the so-called 'Freedom Day' many companies are continuing some form of work from home in order to reduce office costs and improve employee work/life balance, while the likelihood of future lockdown is high. At the same time, the permanent shift by many consumers to online shopping has placed a question mark over some smaller retail stores and centres.

The longer-term imperative for digital transformation by key industries and services worldwide has become clear, as governments and corporations around the world quickly accelerate carbon emission reduction through electric vehicle legislation and power grid efficiencies etc. Mr. John Markus Lervik, the well-respected CEO of Cognite – the Oslo-based energy sector software provider – recently observed that:

"***Digital can make sustainability profitable by enabling cost cuts, improving efficiency and reducing environmental footprint – all at the same time – and in most cases, it comes hand-in-hand***" [1].

The significant 2021 commitment by Electricity Vietnam to a digital transformation strategy encompassing generation, distribution, infrastructure, management and staff as well as customer services provides clear evidence of how digital can drive both sustainability as well as the bottom line.

We can understand 'digitalization' as the rapid capture and analysis of performance data via technologies such as cloud and data analytics, in order to drive business efficiencies. These data are the essential ingredients to marketing information, warehouse management, enterprise resource planning and other business-critical systems. The capability of such systems to "enable major business improvements in operations and markets such as enhancing customer experience [or] streamlining operations" [2] is well-acknowledged.

Jerry Watkins
Head, Centre of Digital Excellence
RMIT University Vietnam

The ambition of 'digital transformation' goes well beyond digitalization by using data to change everything about how the business interacts with its ecosystem of staff, customers and suppliers; in other words, to create "entirely new business models that undermine existing ways of delivering services" [3]. We can witness the success of digital transformation in data-oriented companies like Tiki, Shopee, Moca, Momo and Grab, all of whom have been sufficiently agile to turn pandemic restrictions to their advantage.

Data-oriented systems continue to increase in capability and decrease in price, so that even SMEs with modest cashflow can afford cloud-based software services. Perhaps the scarcest resource for both SMEs and SOEs are leaders who are fluent in the language of digital. These leaders are needed to deliver effective digital transformation across the enterprise, since "the enhanced competitive positioning of successful firms does not depend solely on the technologies they adopt, but, more importantly, builds on the strategies that their leaders deploy" [4].

Every transformation starts with a first step: to help take this step, this report features a guide to the key steps required by those leaders who are genuinely committed to the huge opportunities that digital transformation can offer. We hope that our research helps to guide your journey.

Executive summary

This report is based on findings from surveys, interview and focus groups conducted between 2019-20 with middle- to senior-level managers at state-owned enterprises (SOEs) and small- to medium-sized enterprises (SMEs) operating in Vietnam (n=180).

When asked to identify the goals of digital transformation within their enterprise:

- 75% of SOE vs. 39% of SME respondents identified workflow optimization.
- 44% of SOE vs. 45% of SME respondents identified increased product features
- 21% of SOE vs. 54% of SME respondents identified enhanced customer experience.

These findings are somewhat expected and may suggest that SOEs may be more focused on internal processes to optimise efficiency, while SMEs may be more externally focused on engaging customers to maximise cashflow.

An analysis of responses by sector – primary, secondary and tertiary – indicates slightly different priorities for digital transformation across each sector:

- Primary sector priorities: workflow optimization (61%), customer experience (52%), product features (44%).
- Secondary sector priorities: product features (51%), customer experience (43%), workflow optimization (32%).
- Tertiary sector priorities: customer experience (59%), workflow optimization (58%), product features (54%).

A series of survey questions were asked in order to investigate two critical capabilities required for successful digital transformation:

Transformation management capability: how effectively the leadership team guides the enterprise – including its staff, suppliers and customers – towards digital transformation [5].

Digital capability: how the enterprise leverages data-oriented technologies – such as artificial intelligence, cloud computing and internet of things – to scale operations, engage customers and add value [6].

The responses to these questions indicate that secondary sector SOEs and SMEs operating in Vietnam are trailing the primary and tertiary sectors in terms of a perceived readiness for digital transformation.

In terms of transformation management capability, the secondary sector reported:

- Inconsistent and/or poorly oriented digital transformation strategy within the enterprise.
- The lowest level of interaction within the enterprise around digital transformation.

In terms of digital capability, the secondary sector reported:

- A somewhat negative perception of data-oriented technology investment by the enterprise.
- A strongly negative perception of the digital competencies of staff across the enterprise.

This self-assessment of a general lack of readiness for digital transformation by secondary sector SOEs and SMEs contrasts clearly with a generally positive self-assessment by tertiary sector respondents.

We shall continue to monitor these assessments in our future research.

SOEs and SMEs in Vietnam: a developing story

Digital transformation signifies fundamental change, and with change comes risk – something which many managers of SMEs and SOEs may often prefer to avoid. Long experience shows that the SME usually avoid any distraction from sales and cashflow; while the SOE may naturally gravitate towards stable revenue growth rather than high-risk opportunity-seeking. The *IDC-Cisco 2020 Asia Pacific SMB Digital Maturity Study* reported that the majority of companies surveyed were "struggling to execute their digitalization goals" [5], with Vietnam ranked in last place from a list of 14 markets.

Dr. Nguyen Huu Le
Chairman, TMA Solutions
Advisor, Vietnam Digital Technology Alliance (VNITO)

I hope that more Vietnamese companies will embrace technology, innovation and digital transformation to overcome this pandemic and to be stronger in the post-Covid era. We are already supporting companies worldwide in creating innovative products and solutions to increase competitive advantages and diversify their business portfolio. We have many case studies to demonstrate that technology, innovation and digital transformation not only help companies to maintain operations during social distancing but also open new business opportunities due to market and behavior changes.

The Vietnamese economy is moving higher up the value chain and technology can help the country progress even further by increasing productivity and quality, creating more value and becoming more competitive in both domestic and global markets. After more than 20 years of fast growth, Vietnamese software providers are more ready than ever to provide end-to-end solutions for companies in Vietnam and around the world.

DIC Corporation
https://www.dic.vn/

DIC Corporation was founded in 1990 as a construction company under the Ministry of Construction. By 2008, DIC had refocused its core business on real estate for both the residential and tourism sectors. By 2017, DIC had become a fully private entity after the Government of Vietnam sold its 49.65% stake in the corporation.

Prior to 2020, the company's leadership was somewhat skeptical of digital transformation and its potential impacts. Pandemic restrictions forced a reconsideration of this viewpoint, as employees could not come to work and customers could not be contacted and converted by traditional sales and marketing channels. At the same time, some of DIC's competitors were able to maintain their workflow and marketing activities by applying alternative systems.

Therefore the pandemic provided the impetus for DIC to urgently consider which aspects of its business could be conducted differently. As a result, the company's leadership has increased its investment in digital infrastructure in order to improve its internal systems. It has also improved external-facing communication including the public website as well as customer feedback and analysis systems. DIC has already achieved positive outcomes through its investment in digital capability.

Omn1 Solution
http://omn1solution.com/

Founded in 2016, HCMC-based Omn1 Solutions is a SME specializing in digital customer experience (DCX) consultancy and solutions. The strategic benefits of DCX include optimizing the profit-loss model, stimulating collaboration between departments and enhancing customer experience.

Omn1's recommended SaaS solutions help its clients to manage their internal work processes as well as their external partner communication and customer data analysis. The enterprise aims to become a regional leader in DCX by offering multiple cloud-based SaaS customer relationship management (CRM) platforms including Salesforce.

"Omn1 understands that our market and customers are no longer product-oriented. Instead, effective digital customer experiences are now the driving factor for success in adapting to and succeeding in a competitive marketplace."
– Mr. Hung, Director and Founder of Omn1 Solutions

In the context of the new normal and ongoing social distancing, Mr Hung believes that DCX is now essential for every enterprise. Omn1's digital transformation strategy is a proven success: the company reported 250% growth in 2020, as well as increased revenue and operational efficiencies.

Why do SMEs and SOEs want to digitally transform?

We asked our survey respondents to rank the main goals that their enterprises were seeking from digital transformation.

SOE goals

Workflow optimization: 75% of SOE respondents identified optimal workflow as a goal for digital transformation (Figure 1). This finding is expected, as improved workflow is a generally accepted outcome of investment in – and motivation towards – increased digital capability.

Product features: 44% of SOE respondents identified increased product features as a desirable outcome of digital transformation.

Customer experience: 21% of SOE respondents identified enhanced customer experience. This rather low percentage may support the notion that some larger enterprises may be more internally focused and less customer focused.
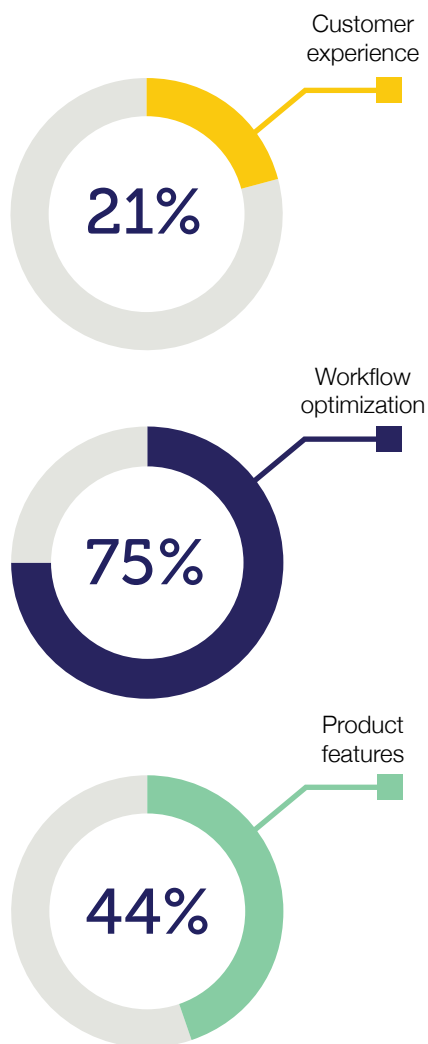
Customer experience

21%

Workflow optimization

75%

Product features

44%

Figure 1. Digital transformation goals: SOEs

SME goals

Customer experience: in contrast to SOE respondents, 54% of SME respondents identified enhanced customer experience as a priority for digital transformation (Figure 2). This finding may support the notion that smaller enterprises need a clear customer focus in order to sustain cashflow.

Product features: 45% of SME respondents identified increased product features as a desirable outcome of digital transformation, which is a similar proportion to SOE responses (44%).

Workflow optimization: 39% of SME respondents identified optimal workflow. Note that SME responses to all three criteria (workflow, product features and customer experience) are much more evenly distributed than SOE responses.
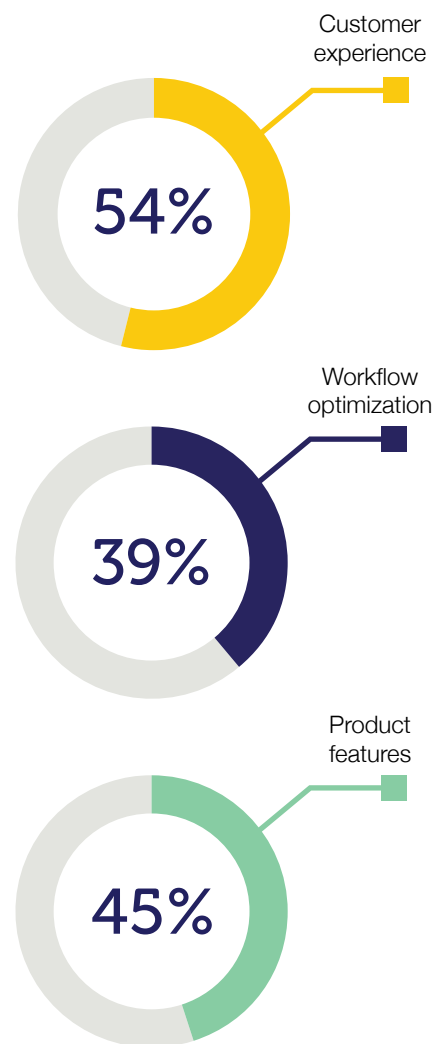
Customer experience

54%

Workflow optimization

39%

Product features

45%

Figure 2. Digital transformation goals: SMEs

Sector goals

In addition to comparing SOEs and SMEs, we analysed the goals of digital transformation by industry sector.

PRIMARY

52%	Customer experience
61%	Workflow optimization
44%	Product features

SECONDARY

43%	Customer experience
32%	Workflow optimization
51%	Product features

TERTIARY

59%	Customer experience
58%	Workflow optimization
54%	Product features

Figure 3. Digital transformation goals: by sector

Primary sector

**Agriculture**

Forestry

Fishery

Mining

Workflow optimization was the digital transformation priority for primary sector managers (61%), which might be expected from the nature of these more process-driven industries (Figure 3).

Although we might anticipate that customer experience might be considered least important due to the mainly B2B nature of the primary industries, in fact customer experience (52%) was rated more highly than product features (44%) as a goal of digital transformation by primary sector managers.

Secondary sector
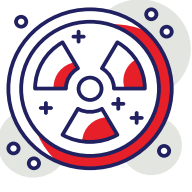
Chemicals

Electronics
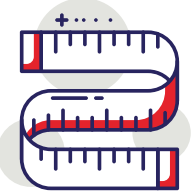
Textiles

Steel
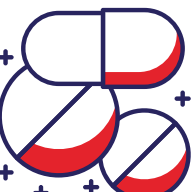
Pharma

Food Manufacturing

Construction

Increasing product features was the digital transformation priority for secondary sector managers (51%), followed by customer experience (43%) (Figure 3).

Workflow optimization received the lowest rating (32%) in our cross-sector comparison.

This low perception of possible workflow improvements achieved via increased digital capability correlates with the secondary sector's somewhat negative perception of data-oriented technology investment (see *Valuing data* below).

Tertiary sector

Healthcare

Finance

Transportation

Real estate

Education

Communication

Hospitality

Commerce

Tertiary sector managers responded comparatively evenly across all three suggested digital transformation goals: customer experience (59%); workflow optimization (58%); and product features (54%) (Figure 3).

This balanced and generally positive perception of digital transformation goals correlates with the tertiary sector's neutral-to-positive perception of investment in technology to support digital transformation (see *Technology and connectivity* below).

Start right now: your company must transform exponentially

Rick Yvanovich
Founder & CEO
TRG International

Rick Yvanovich is a USA Today and Wall Street Journal best-selling author, Executive Coach, serial Entrepreneur, Techie, Brit, baby boomer, professional bean counter (certified FCMA CGMA FCPA), USA Today & Wall Street Journal best-selling author. Rick has 40+ years' experience in supermarkets, the accounting profession, breweries, newsagents, defence manufacturing, IT, Talent, F&B, property development and BP; in the UK, China, Singapore, Switzerland and Vietnam.

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Digital transformation is old, decades old. Industry 4.0 made it more visible a decade ago. Business As UnUsual brought about by the pandemic has turned the spotlight on enterprises to transform or face the inevitable consequences.

First movers hardly missed a beat as they went entirely virtual and saw their business thrive. On the other hand, laggards locked out of their offices have seen their operations grind to a halt and watched their business slowly or quickly collapse and die.

The report's findings of two critical factors for successful digital transformation, 'Transformation management capability' and 'Digital capability,' also resonate with our 7-step roadmap to digital transformation.

It's no coincidence that the very first two steps in the roadmap are 'Securing the C-suite commitment' and 'Setting a digital vision and strategy.' Without digitally-minded leaders at the helm, businesses will fail in their digital journey.

'Culture', 'Governance' and 'Strategy' are the three pillars of transformation management. A digital strategy will point your transformation journey in the right direction. Good governance will keep it on the right path, and digital culture will sustain your transformation in the long run.

Failed digital transformation projects are standard. However, business leaders who embrace cultural transformation and fully understand the behavioural shifts amongst their employees will drive success.

Likewise, our third step also deals with digital capabilities, or rather how to acquire them. Again, it usually comes down to a strategic decision to Build or Buy – whether the company will build its digital capabilities and expertise, or bring them in from outside.

Specific sectors remain hesitant to invest in digital capabilities, which is most unfortunate. As we live in a world where technology is increasingly commoditised, acquiring digital capabilities is increasingly affordable, even for SMEs.

Additionally, digital disruptions are levelling the playing field. Companies, regardless of size, belong to interconnected ecosystems and can access the same on-demand, inexpensive capabilities, and resources. And when your business can find its place in these ecosystems, the possibilities are endless.

Arguably, shortcomings in both transformation management capability and digital capability are closely related. Thus, one can speculate that the senior management's negative perceptions of investment in digital technologies stem from its lack of a digital strategy and a digital culture.

I believe what people most misunderstand about digital transformation is that it is purely technology-centric. For example, launching a new mobile app, connecting your website to Apple Pay, moving data to the cloud are all typical digital initiatives. But digital transformation is a lot more than just a collection of disparate IT projects. Instead, these projects should be directed by an organisation-wide effort, with buy-in from all business functions.

The key takeaway is that the fundamentals of digital transformation remain unchanged despite the pandemic. Of course, this is to be expected, as you would want your transformation to be a rock-solid foundation for your enterprise in any situation. What changes, though, is its urgency. As the pandemic is reshaping the business landscape exponentially, your company must transform exponentially. Start right now as enterprises that fail to transform digitally are doomed to be left behind for good.
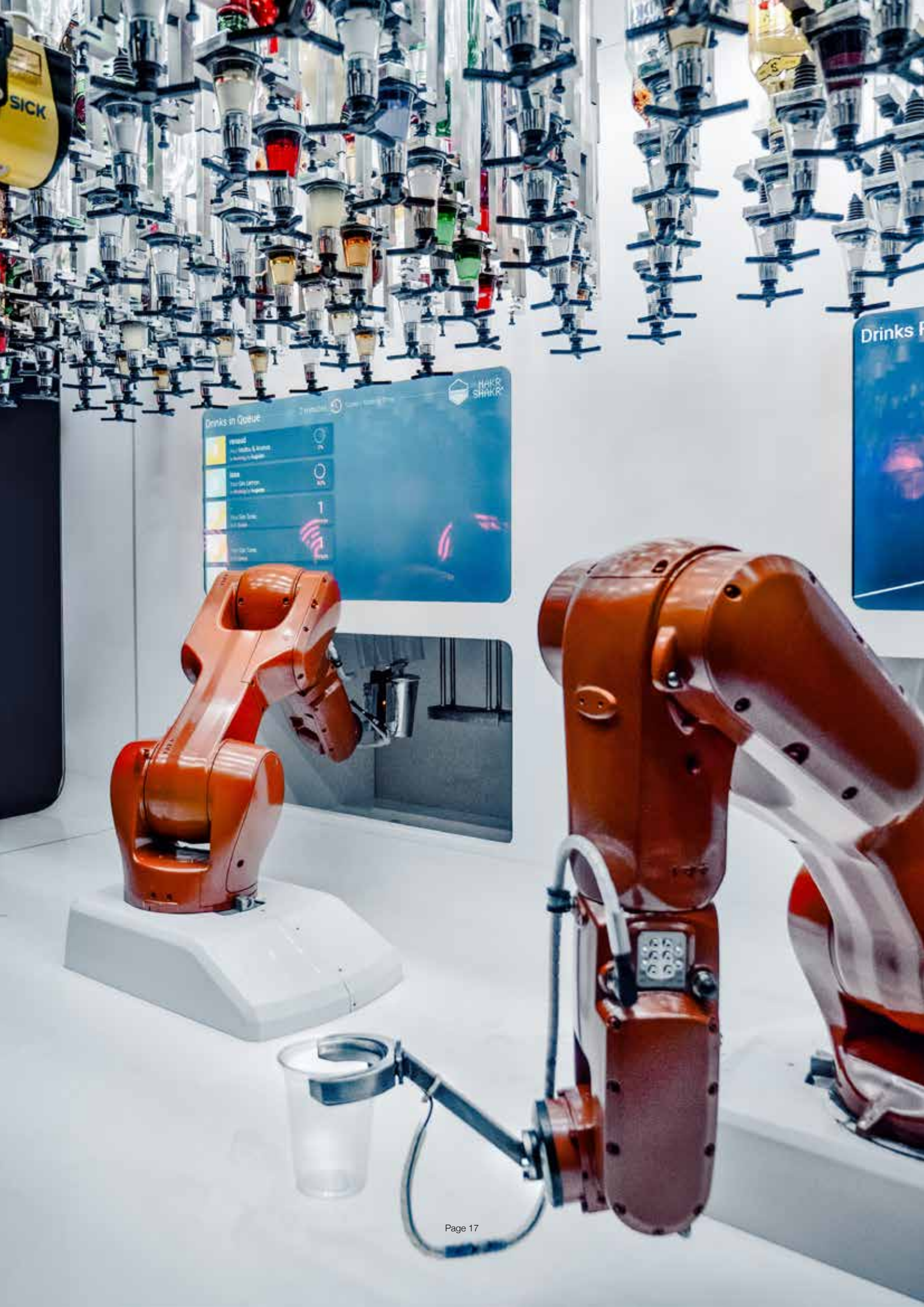
Transformation management capability

Transformation management capability describes how effectively the leadership team guides the enterprise – including staff, suppliers and customers – towards long-term digital transformation [5].

Transformation management is a *dynamic* capability which requires continuous assessment of internal and external factors in order to re-align the enterprise to a rapidly changing environment. The most obvious ongoing test of transformation management remain pandemic restrictions, the resulting supply chain interruptions and the rapid transition of customers, employees and suppliers to the online space.

Some of the leaders we interviewed have responded proactively to the new trading conditions and have taken risks through the dynamic management of technology and innovation. Looking beyond the ongoing search for process efficiencies via technology-based solutions, these leaders with transformation management capability were able to plan, build and adapt new business models through effective innovation across the whole organisation – including processes, people and customers.

In contrast, other enterprises have – understandably – remained risk-averse during a period of high uncertainty. Such leaders may support – consciously or not – an internal culture of blame which punishes mistakes and creates employees who may be reluctant to step outside their comfort zone. As a result, such cultures may struggle to adjust their business model to current conditions.

Our research used three interconnected concepts to assess the transformation management capability of our respondents' organisations: *governance*; *strategy*; and *culture*.

▪ Governance

Secondary sector SMEs and SOEs reported the least effective guidance and control of digital transformation strategy. The tertiary sector reported the most effective governance.

Five survey questions were asked about leadership's effectiveness in guiding and controlling the enterprise's digital transformation strategy:

1. *Awareness* of the impact of digital transformation on the enterprise and its ecosystem.
2. *Delegation* of digital transformation initiatives throughout the enterprise.
3. *Resource allocation* including a realistic schedule for people and systems to commit to digital transformation.
4. *Leadership communication* of digital transformation initiatives to staff at all levels.
5. *Collaboration* across departments and contractors to progress digital transformation.

43% of secondary sector responses were at 2, indicating that people taking the survey did not consider their digital transformation leadership effective in term of governance (Figure 4). Responses to our follow-up interviews suggested that management in some secondary sector SOEs remain skeptical of digital transformation and prioritize business-as-usual.

56% of primary sector responses were at 3-4, indicating a neutral-to-positive perception of leadership's effectiveness in governance.

66% of tertiary sector responses were at 4-5, indicating a positive-to-very positive perception of digital transformation governance.

> *Leadership agrees with the benefit of digital transformation and agrees to change. The transformation is top-down. The market has a lot of room for garment manufacturing. Digital transformation will increase productivity and revenue and increase incomes for employees. The company, as a result, embraces change.*
>
> **Manager,
> large garment company.**

> *To make sure a proposal for digital initiatives is accepted, we should have resources available for it. However, sales and other targets still come before digital transformation.*
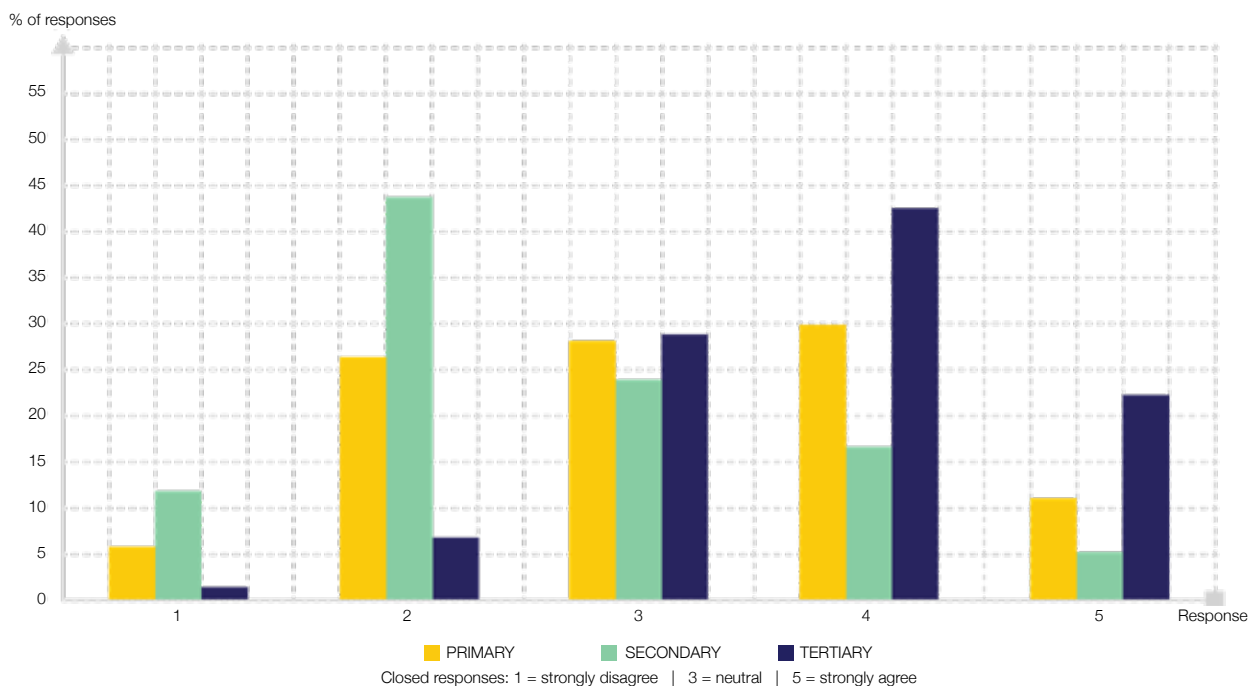> **Middle manager,
> secondary sector SME.**

Figure 4. Governance: responses by sector

Strategy

Tertiary sector SMEs and SOEs reported the most effective leadership of digital transformation strategy.

Five survey questions were asked about leadership's effectiveness in planning, implementing and measuring its digital transformation strategy:

1. *Planning* – a clear enterprise-wide roadmap for digital transformation.
2. *Consistency* – maintaining a consistent digital transformation strategy over time.
3. *Compatibility* of the business model with digital transformation strategy.
4. *Initiatives* are clearly assigned, with defined roles and responsibilities.
5. *Measurement* – specific KPIs are defined to measure digital transformation.

78% of tertiary sector responses and 67% of primary sector responses were 3-4, indicating a neutral-to-positive perception of leadership's effectiveness in planning, implementing and measuring digital transformation strategy (Figure 5).

68% of secondary sector responses were 2-3, indicating a perceived inconsistent and/or poorly oriented digital transformation strategy.

Additional data from our separate interviews highlighted a link between strategy and governance, to the extent that respondents with poorly oriented digital transformation strategy also had lower perceived capability in governance, especially regarding an awareness of digital transformation's impact on the business.

> *The business model of our firm will likely be disrupted by digital transformation. In other words, when firms become digitalized, they will be able to gather sufficient data and insight about customers and sell directly to customers via the digital marketplace. Therefore, the role of service firms like us could be ignored. In order to survive, we also need to digitalize our business so that we can participate in the digital era race. Those that fall behind may be eliminated from the service map.*
>
> **Manager, foreign-invested enterprise.**

> *We have had strategies for years, beside business strategies we do have digital strategies on ecommerce, automation, tools to enhance our system with the leverage of digital. We have an umbrella strategy, and then we align strategy, cascade down and set up a team for the details and execution.*
>
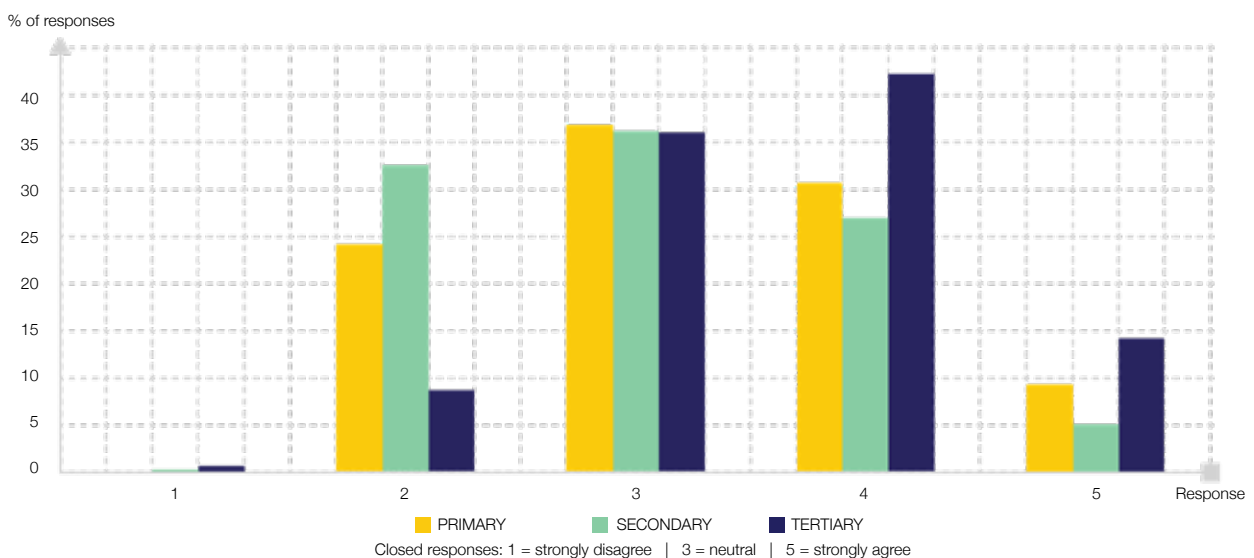> **Senior manager, tertiary sector multi-national corporation.**

% of responses

PRIMARY   SECONDARY   TERTIARY

Closed responses: 1 = strongly disagree | 3 = neutral | 5 = strongly agree

Figure 5. Strategy: responses by sector

. Culture

Both primary and tertiary sector SMEs and SOEs reported an internal culture that supports knowledge-sharing. The secondary sector reported a lower rating, suggesting a conservative culture less ready to innovate through digital technologies.

Five survey questions were asked about how employees, management and stakeholders interact with digital transformation initiatives and teams within the enterprise:

1. *Knowledge-sharing* of innovation and lessons learned.
2. *Acceptance* of innovation and change.
3. *Effective use* of digital systems.
4. *Embrace* of digital transformation across the enterprise.
5. *Co-creation* – a bottom-up co-creation culture is common practice.

63% of tertiary sector responses were at 4-5, indicating a positive-to-very positive perception of knowledge sharing and co-creation within the enterprise (Figure 6).

64% of primary sector responses were at 3-4, indicating a neutral-to-positive perception of an internal culture which is somewhat accepting of innovation and change.

74% of secondary sector responses were at 2-3, indicating that the sector may be the least likely to embrace digital transformation over the medium-term.

With the onboarding of the digital platform, the company already has the system for daily operations but employees would prefer the traditional working process over using the centralized platform.

**Manager,
foreign-invested enterprise.**

Digital maturity is about learning, and a part of our company culture is to embrace learning. The company always motivates people to have specific skills, key learning that people think they would need even at the CEO level.

Middle manager, tertiary sector SME.

The fear is automation and robotics will cost employees their job; hence, the people resist change.
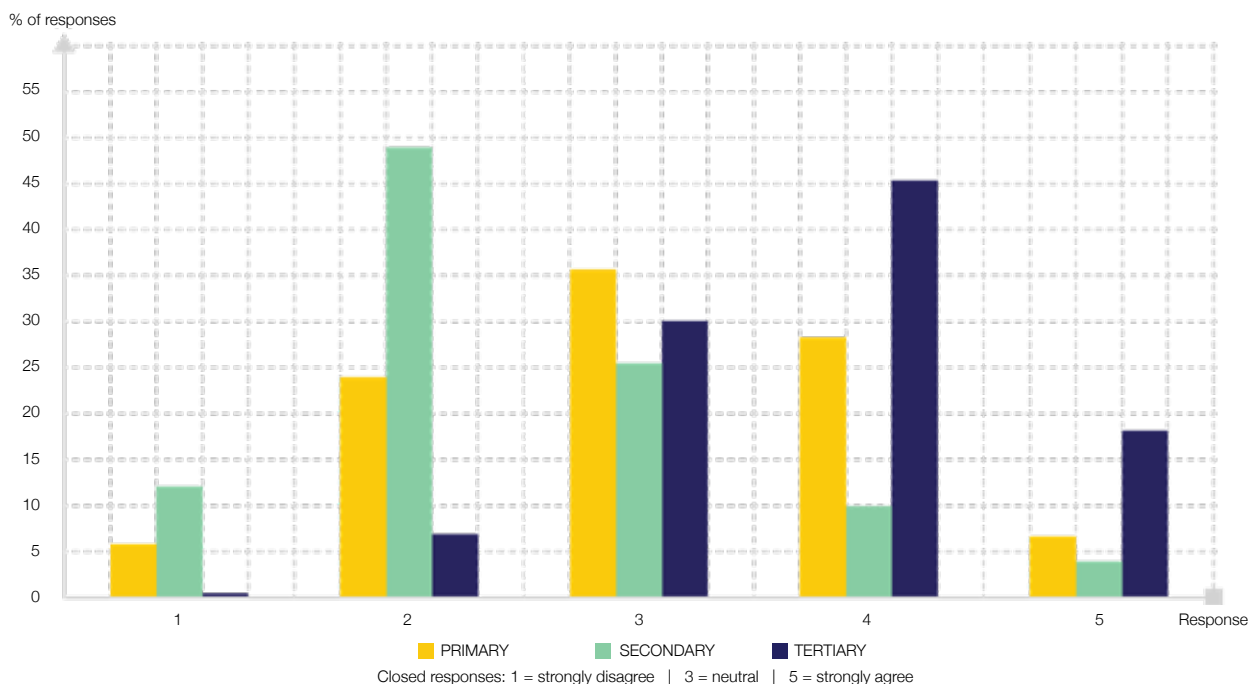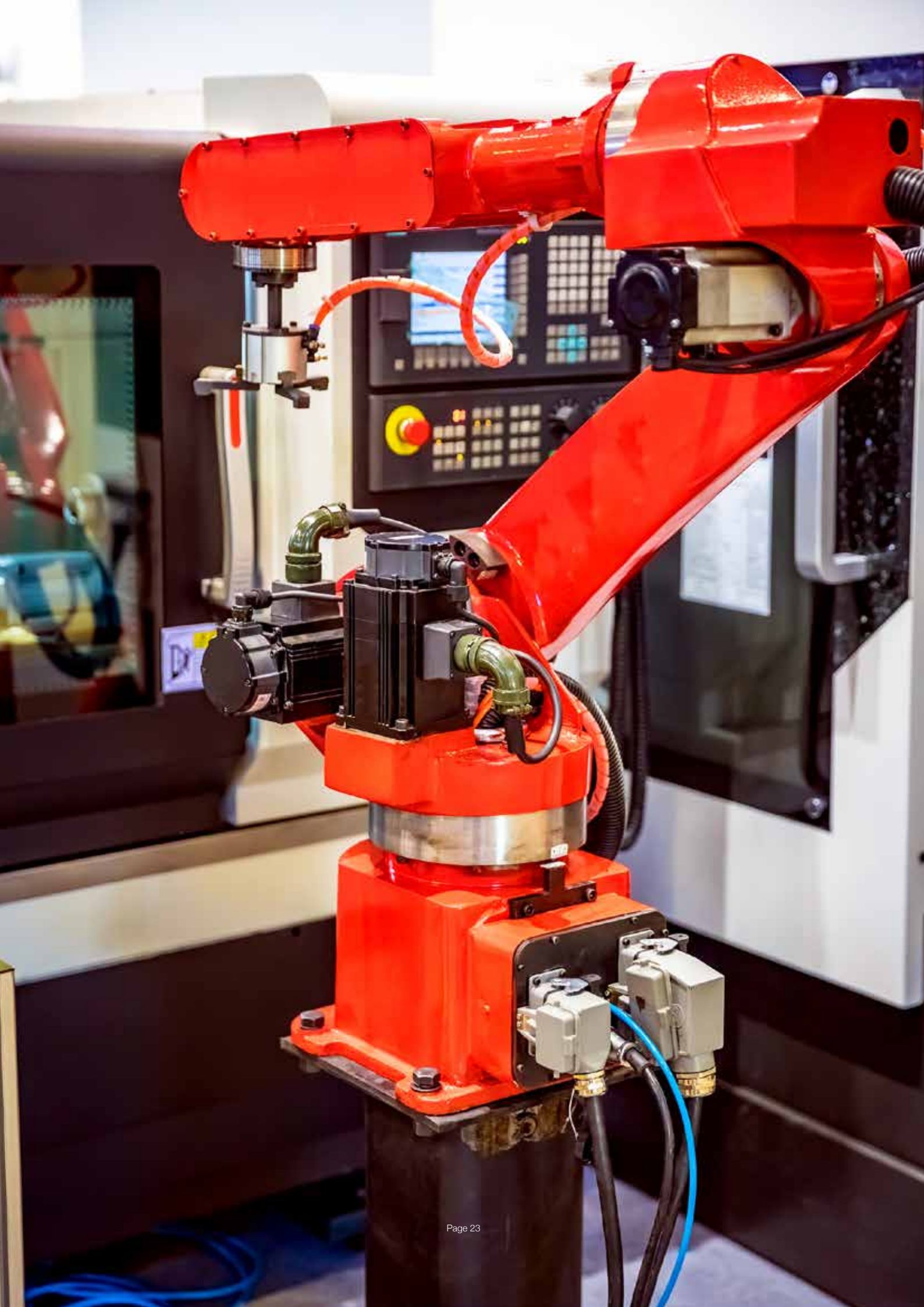
**Manager,
foreign-invested enterprise.**

% of responses

PRIMARY   SECONDARY   TERTIARY

Closed responses: 1 = strongly disagree | 3 = neutral | 5 = strongly agree

Figure 6. Culture responses by sector

Commentary

Being agile is the key to success

Doan Kieu My (Kimiko)
Initiator & Founder
YellowBlocks

Doan Kieu My (Kimiko) is Initiator & Founder of YellowBlocks, the first consulting firm in Vietnam focusing on Emerging Tech. YellowBlocks quickly became the trusted partner for more than 120 organizations in over 40 countries, including four governments (Vietnam, Australia, Singapore, and Austria). Kimiko is Assistant To The Chairman & Excellent Innovation Think Tank Director at Vingroup JSC - one of the leading conglomerates in Asia with a market valuation of more than 30 billion USD.

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The COVID era has assured us that the necessity and demand for digital transformation will continue to increase. With changed consumer behaviors and disrupted supply chains, this is the new normal – and it is here to stay. The pressure to adapt to the times is now; thus, change is happening in months, not years. If an organization is not methodically preparing for digital transformation, it will simply fade away in time. Possessing an innovative and dynamic culture with a readiness to adapt or – in other words – being agile is the key to success.

Therefore I am astonished that the findings of this qualitative research indicate that many companies in Vietnam have yet to understand the nature and purpose of digital transformation. Digital transformation is not just about disruption or technology; it embraces the cultural, organizational and operational business potentials unleashed by a customer-centric focus.

Unlocking these business potentials requires a shift from antiquated management towards dynamic structures. Yet some of the SOEs and SMEs surveyed by this research are merely focusing on operational optimization while overlooking customer experience excellence. In other words, their focus is on digitization and digitalization, rather than fully fledged digital transformation. Nevertheless, I think this indicates a positive trend to show that we are at the initial phase of serious recognition of the path towards digital transformation.

One reason for the gap between SOEs and SMEs is that both camps have different metrics for success and financial models. SOEs have a higher incentive to reduce costs rather than risk driving new ventures and building new revenue streams. On the other hand, SMEs experience a much faster pace with constant pressures and a relentless appetite for growth. Therefore, SMEs tend to focus on the customer experience in their digital transformation journey to obtain growth.

For SMEs in particular, digital skillsets are becoming increasingly essential as the world becomes borderless. These skills are the key to unleashing global and regional core competencies for business. Understanding an organization's data and innovation frameworks helps business leaders make well-informed and timely decisions that deliver the competitive edge necessary for market expansion.

As the founder of Women in Tech Vietnam, I advise Vietnamese women entrepreneurs to understand and acknowledge their business needs before developing digital frameworks. Next, they need to establish the proper motivation to pursue digital transformation and its outcomes, before creating a workable action plan. I recommend participating in industry working groups to share and practice, as well as enrolling in upskilling courses, to build condensed and distilled knowledge while surrounding oneself with inspiring peers and partners.

With all this in mind, I remain optimistic about the future. The digital transformation trend creates a positive push for rapid ecosystem growth. For example, Vietnam's ecommerce and logistics boom was caused by the sudden shift in the behavior of the country's young consumers. Such abrupt shifts fragment the ecosystem since most stakeholders simply cannot keep up with the disruptive pace of transformation. Moreover, many of our core institutions – including universities, government agencies and legal systems – are always lagging behind the latest cultural and technological trends. Nevertheless, despite these temporary drawbacks, this is all understandable and expected. This is a time for growth, and sectors will eventually harmonize.

Digital capability

Digital capability **describes the capability of the enterprise to leverage emerging technologies – such as artificial intelligence, cloud computing and internet of things – in order to scale operations, engage customers and add value [6].**

Many enterprises can consider building digital capability in three incremental stages:

1. Digitization
The conversion of analogue data to digital data [8] is fundamental to digital capability. The obvious example is replacing paper-based systems with electronic data capture, storage and retrieval.

2. Digitalization
Using digital data and systems to "enable major business improvements" through enhanced customer experience or streamlined operations [2]. For example, careful data analytics can reveal previously unseen customer segments and behaviours; from these data, enterprises can develop new, more targeted product/service offers.

3. Digital transformation
Using digital data and systems to transform how the enterprise interacts with its ecosystem of staff, customers and suppliers in order to create "entirely new business models that undermine existing ways of delivering services" [3].

Fortunately for enterprises around the world – especially SMEs – digitalization is becoming more affordable by the year. Cloud computing and software-as-a-service (SaaS) providers allow enterprises to effectively rent specialised software applications and digital infrastructure from third-party providers, greatly reducing up-front expenses as well as ongoing maintenance costs.

Our research used three interconnected concepts to assess the digital capability of our respondents' organisations: *technology and connectivity*; *valuing data*; and *competencies*.

Technology and connectivity

Secondary sector SMEs and SOEs rated least-ready for digital transformation of technology and connectivity.

Five survey questions were asked about the enterprise's track-record in implementing technology and connectivity for digital transformation:

1. *Data standardization* allows efficient information sharing and collaboration across departments and trusted suppliers.
2. *Networks and platforms* allows fast, reliable and safe access to enterprise-wide datasets.
3. *Digital pilots* to test new systems which can advance digital transformation.
4. *Multiple channels* of data collection and analysis.
5. *Integration* of the enterprise's products and services within digital systems.

75% of tertiary sector responses and 57% of primary sector responses were 3-4, indicating a neutral-to-positive perception of leadership's investment in technology to support digital transformation (Figure 7).

52% of secondary sector responses were 2, indicating a somewhat negative perception of technology investment. Additional data from our separate interviews indicated that low awareness of digital capability by managers in the secondary sector was linked to low investment in technology.

> *We have a call centre for customer service that had about 200 people dealing with customer complaints and concerns. When we applied the chatbot, we reduced the total number to 35 people. There is a large cost reduction with the chatbot, and the people witnessed that their skillset improves with the chatbot application. The people have become supervisors and work on the improvement of that chatbot rather than answering to customers. Customers can have their answers instantly.*
>
> **SME manager.**

> *Customers are becoming more familiar with digital technologies, and they frequently use smart devices. Customers expect more ease of access to instant financial services.*
>
> **Manager, large company.**

% of responses

Closed responses: 1 = strongly disagree | 3 = neutral | 5 = strongly agree

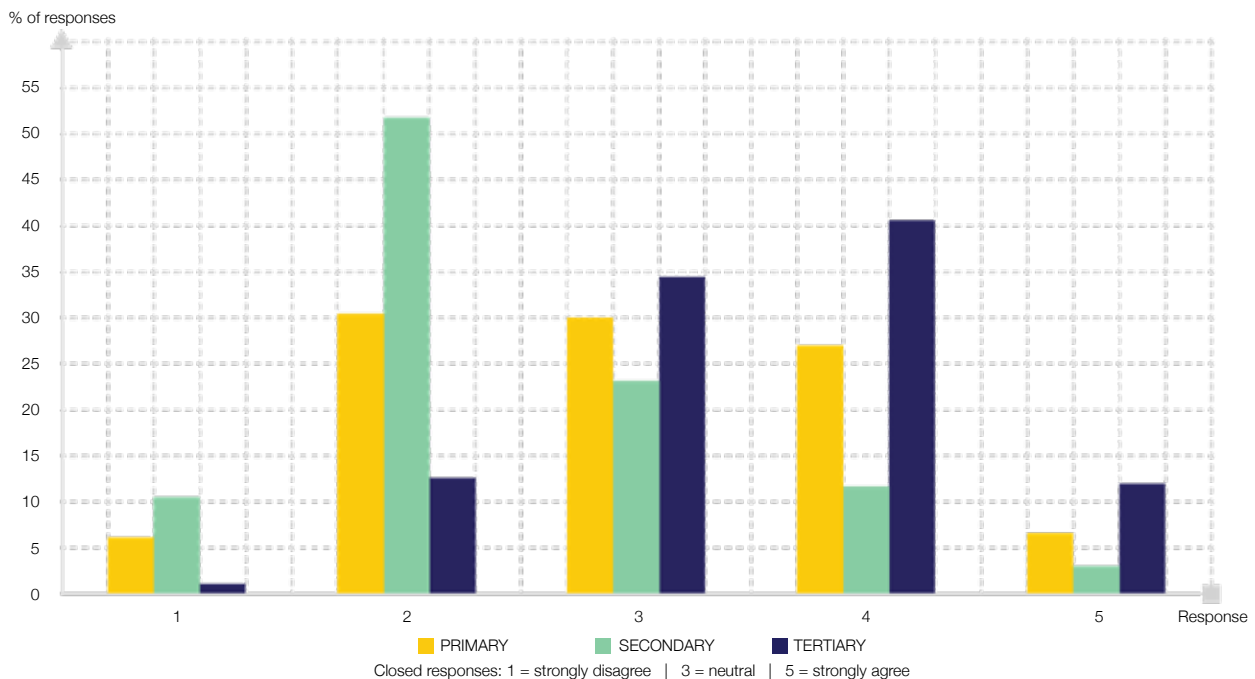PRIMARY SECONDARY TERTIARY

Figure 7. Technology and connectivity: responses by sector

Valuing data

Tertiary sector SMEs and SOEs respondents were positive about their enterprise's ability to generate value from data capture and analysis.

Six survey questions were asked about the extent to which the enterprise was able to add value and create profitable insights through the capture and analysis of key performance data:

1. *Data as assets* – understanding how to create new value through data.
2. *Customer data* are analyzed to generate business insights.
3. *Insights* from customer data drive the digital transformation strategy.
4. *Personalization* of products/services is offered, based on insights and analytics.
5. *Operational data* (sales, customers, plant efficiency etc.) are integrated and analysed.
6. *Real-time data* drive decision-making.

80% of tertiary sector responses and 62% of primary sector responses were 3-4, indicating a neutral-to-positive perception of how well the enterprise generated value from performance data (Figure 8).

81% of secondary sector responses were 2, indicating a somewhat negative perception of data-oriented technology investment.

The company is developing a platform to integrate all services for customers. We are also developing a digital community for customers.

Middle manager, tertiary sector SME.

I do believe it is an invaluable asset. Our company is not large in size, but we proactively collect and use data analytics in our decision making. An accurate decision needs data, but it must be a good data source.
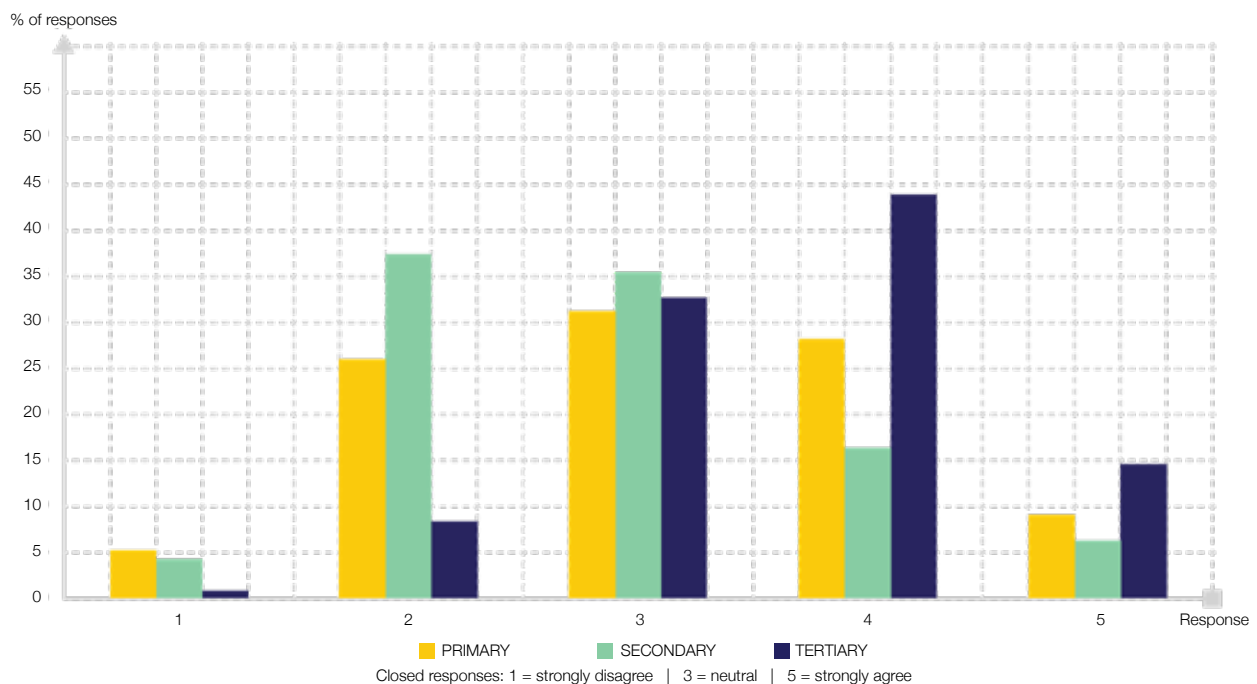
Senior manager, primary sector SME.

Closed responses: 1 = strongly disagree | 3 = neutral | 5 = strongly agree

Figure 8. Valuing data: responses by sector

Competencies

Two-thirds of secondary sector responses indicated a negative/strongly negative perception of digital competencies in staff across the enterprise. Just over half of tertiary sector responses indicated a positive/strongly positive perception of digital competencies.

Five survey questions were asked about how competent both employees and management were in using existing and/or adopting new digital systems; as well as the extent of external partnerships to support training and upskilling:

1. *Digital literacy* – are employees competent in the use of existing digital systems?
2. *Open to learn* – are employees willing to adopt new digital systems?
3. *Upskilling* – the enterprise invests in digital skills and literacy.
4. *Digital expertise* of leadership and management.
5. *Partnerships* with training centres, universities and other reputable institutions to enhance digital competencies across the enterprise; and to recruit new employees and future enterprise leaders.

53% of tertiary sector responses were 4-5, indicating a positive-to-strongly-positive perception of digital competencies in staff across the enterprise (Figure 9).

66% of secondary sector responses were 1-2, indicating a strongly negative-to-negative perception of digital competencies.

> *Our employees have always wished to pursue new things out there, insisting that we have to try applying new technology. So we need to be ready to send them to study and have the mindset that they can apply the knowledge, and may be developing something useful.*
>
> **Middle manager, large tertiary sector company.**

> *Every employee has to understand the message. Leadership constantly sends the message to employees to make technology and change management the core of the business.*
>
> **Manager, foreign-invested enterprise.**

% of responses

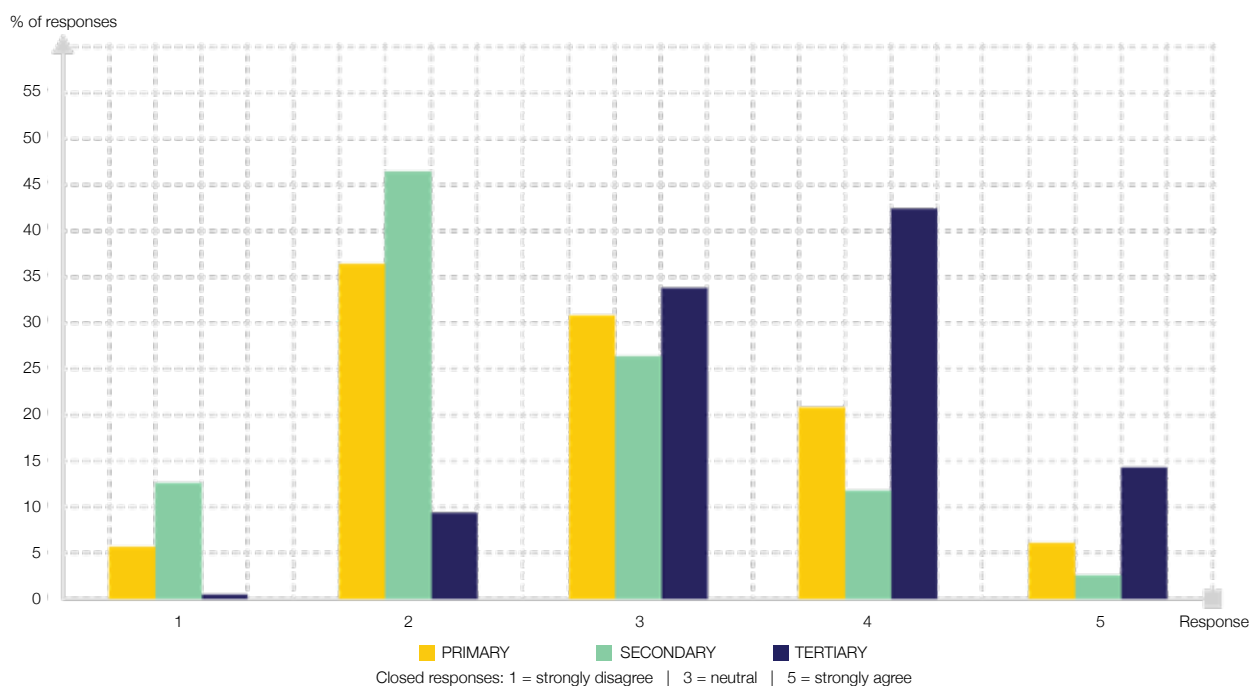Closed responses: 1 = strongly disagree | 3 = neutral | 5 = strongly agree

Figure 9. Competencies: responses by sector

Planning digital transformation: key steps

The ambition of digital transformation is not a one-off improvement to existing processes; neither should a short-term return on investment be expected. Instead, a genuine digital transformation innovates the business model, using operational and customer data to create new value over an extended period.

Digital transformation is difficult and every enterprise will take a different approach, so there is no clear roadmap. Instead, this guide is based on our research and shares some key steps towards planning, building and adapting successful digital transformation.
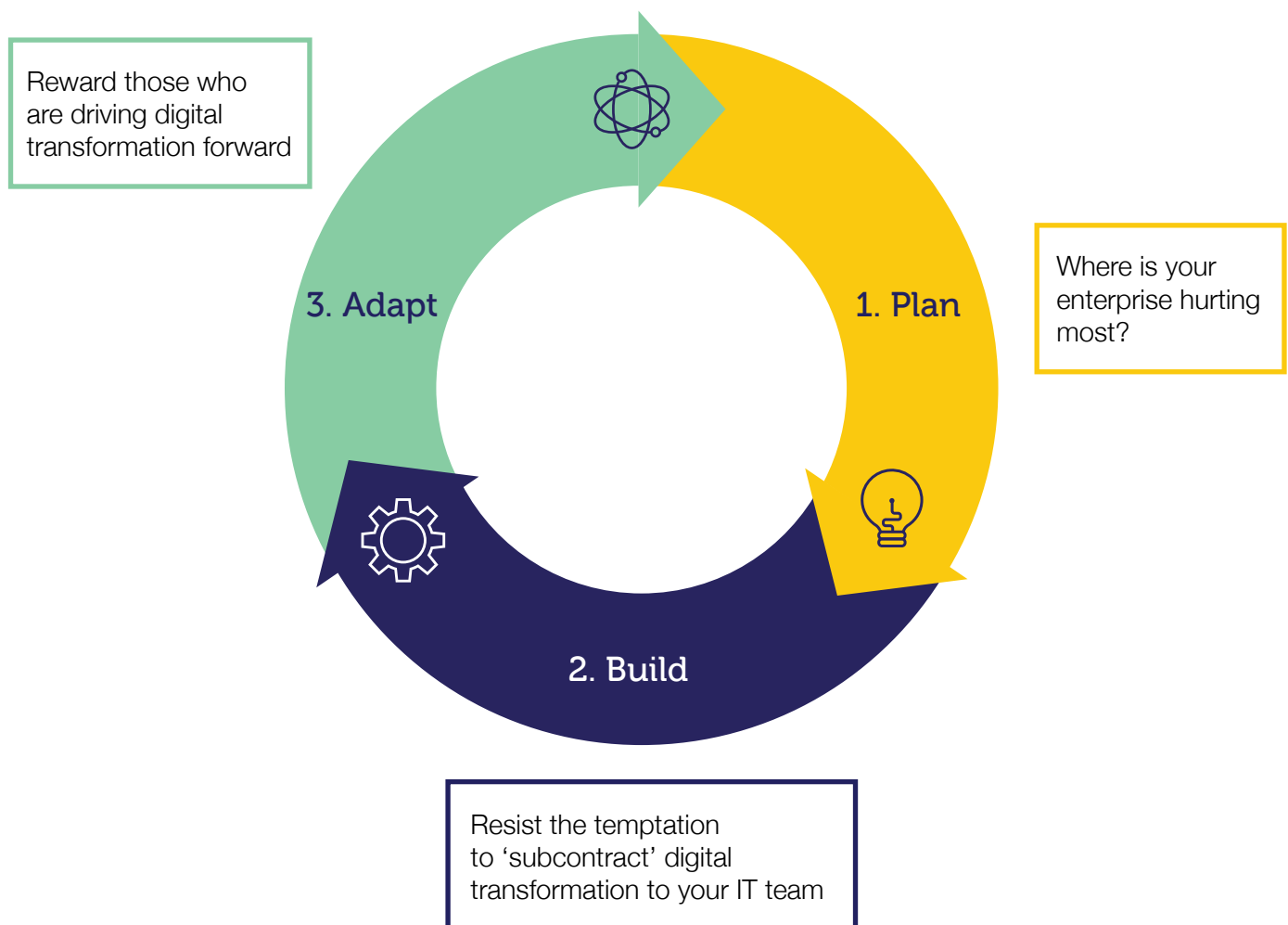
Reward those who are driving digital transformation forward

3. Adapt

1. Plan

Where is your enterprise hurting most?

2. Build

Resist the temptation to 'subcontract' digital transformation to your IT team

Figure 10: key steps for digital transformation

Plan

Bottom line. Where is your enterprise hurting most – perhaps net margin, customer retention, or cashflow? And where are you performing strongly – maybe revenue, or return on assets? Compare your critical metrics against your close competitors and assess how digital transformation should change these metrics over time [9].

This step can provide an understanding of how digital transformation will improve the bottom line and – as a result – how much you should consider investing in your transformation strategy.

Big picture. Like any major organisational change program, digital transformation can be expensive, time-consuming and risky. Therefore take the time to research which digital solutions are available now (or will be soon); what your competitors and suppliers are planning; what your current customers are expecting; and where your next market lies. Our research indicates that some leaders may delegate this kind of innovation research to their IT department. However, since digital transformation is business-critical, senior leadership must drive the 'big picture' review.

Valuing data. Don't get stuck planning how technology can improve your current processes. More importantly, consider which data your key department managers currently use to support decision-making. Did your 'big picture' research provide any ideas or examples of how could they use and share existing data to generate effective real-time insights? Or which new datasets could transform the business model?

This step requires understanding of how decision-making takes place across all major enterprise functions [10].

Build

Call to action. Seek strong and clear buy-in from senior leadership. Communicate a clear, consistent digital transformation strategy to – and seek meaningful feedback from – all management layers, lead customers and critical suppliers.

Digital pilots. Use available funds to pilot possible solutions. Demonstrate these to key stakeholders, who need to see what digital transformation can deliver. Where appropriate, use cloud / software-as-a-service to build pilots in order to reduce up-front digital development expenses

Goals, resources, funding. Building and testing digital pilots also helps to define achievable transformation goals and measurement; identify available and required resources (human and digital); and quantify what level of funding will be required to fuel digital transformation.

Digital capability. Ensure critical datasets are cleanly digitized and shared. Push the enterprise and its key suppliers towards standard data formats, networks and platforms. Drive the understanding of how to use real-time data as assets which create new value.

Transformation management capability. Governance of digital transformation is perhaps the single most important success factor. Allocate sufficient resources and delegate key tasks across the enterprise. Digital transformation requires a culture of effective co-creation across the enterprise, so – once again – resist the temptation to 'subcontract' the project to the IT team.

Adapt

Motivate, share, upskill. Digital transformation is an ongoing commitment. To maintain this commitment, motivate and reward those individuals and teams who are driving digital transformation forward. Share their best practice throughout the enterprise. Partner with a quality training organisation to provide regular upskilling activities which build the digital literacy of your leadership, management and staff.

Evaluate and adapt. Set realistic intervals to measure digital transformation progress against your 'bottom line' metrics e.g. return on assets, customer retention etc. Adapt your strategy to changing conditions. Show that digital transformation has a clear impact on the enterprise's key performance metrics in order to sustain buy-in.

Keep watching the big picture. As the momentum of digital transformation builds, it is tempting to focus once again on internal processes. But every technology has a limited lifespan and leaders must always think to the future. So keep repeating the same step with which we started: check which new digital solutions are available; what your competitors and suppliers are planning; what your current customers are expecting; and – most importantly for growth – *where your next market lies*.

Research methods

A qualitative survey was conducted online in late 2019 using Qualtrics software, with options for either Vietnamese- or English-language responses. Companies were contacted directly by the research team and invited to participate.

In order to assess the effectiveness of SME and SOE leaders in Vietnam in guiding digital transformation, fifteen questions were asked regarding transformation management capability in strategy, governance and culture.

Similarly, sixteen questions were asked regarding digital capability in technology & connectivity, digital value and competencies.

Responses were recorded on a closed 1-5 scale, with 1 indicating 'strongly disagree', 3 indicating 'neutral' and '5' indicating 'strongly agree' with the question.

180 responses were received from 57 SOEs and 123 SMEs operating in Vietnam. All respondents remained anonymous. Respondents self-identified as:
- 16.2% senior managers.
- 54.5% middle managers.
- 29.4% junior managers and staff.

The survey data were supplemented with:
- Three focus group (2x HCMC- 5th & 6th December 2019, 1x Hanoi - 22nd November 2019) with 16 managers.
- Eleven individual interviews with managers (conducted in 2019 and 2020).

Using these data, the research team mapped the extent of digital transformation achieved by SOEs and SMEs across primary, secondary and tertiary industries.

Roles

Middle and senior managers

Industry

Agriculture	Manufacturing
Commerce	Services
Communications	Textiles
Construction	Tourism
Finance	

Respondents

180 respondents

Influence

Take part in making decisions on Digital Transformation

Company sizes

50-750 employees

RMIT research team

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About RMIT University

RMIT is a global university of sustainable technology, design and enterprise. Our mission is to help shape the world through research, innovation, teaching and engagement and to create transformative experiences for our students, getting them ready for life and work.

One of Australia's original educational institutions founded in 1887, RMIT enjoys an international reputation for excellence in professional and practical education, as well as applied and innovative research.

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https://www.rmit.edu.vn

The mission of the RMIT Centre of Digital Excellence (CODE) is to equip learners with the knowledge and skills needed to thrive in a digitally transformed world. CODE assembles expert teams and resources from across RMIT University to advance the management of technology and innovation across Vietnam. CODE's current focus is on analytics, augmented reality, robotics and STEM education. Our digitally enhanced learning initiatives include the ongoing development of the Technology and Innovation minor of the RMIT Master of Business Administration (MBA) program.

The RMIT School of Business & Management (SBM) delivers work-ready graduates with the skills to adapt to a challenging and ever-changing business world. Its programs offer fresh perspectives on business problems and are recognised internationally for meeting the highest standards of quality. Its degrees put students in a prime position to pursue careers in the local and global companies that are driving change in Vietnam's dynamic and growing economy.

https://code-rmit.edu.vn

https://www.rmit.edu.vn/about-us/schools-and-centres/school-of-business-and-management

References

[1] Lervik, J.M. (11 Mar 2021) '"You can't go green while operating in the red" Cognite CEO tells CERAWeek audience'. In: *Cognite News* https://www.cognite.com/en/blog/you-cant-go-green-while-operating-in-the-red-cognite-ceo-tells-ceraweek-audience

[2] Fitzgerald M., Kruschwitz N., Bonnet D. & Welch M. (2013) 'Embracing Digital Technology'. *MITSloan Management Review*

[3] Mergel I., Edelmann N. & Haug N. (2019) 'Defining digital transformation: Results from expert interviews', *Government Information Quarterly*, 36.4

[4] Ismail MH., Khater M. & Zaki M. (2018) 'Digital Business Transformation and Strategy: What Do We Know So Far?' University of Cambridge, Cambridge Service Alliance working paper

[5] Chugumbaev R.R. & Chugumbaeva N.N. (2020) 'Problems of Transformation Management Business Models in Organizations'. In Bogoviz A. & Ragulina Y. (eds) *Industry Competitiveness: Digitalization, Management, and Integration*. ISCI 2019. Lecture Notes in Networks and Systems 115, Springer

[6] Warner K. & Wäger M. (2019) 'Building dynamic capabilities for digital transformation: an ongoing process of strategic renewal'. *Long Range Planning*, 52.3, 326-349

[7] IDC-Cisco (2020) *2020 Asia Pacific SMB Digital Maturity Study*. p.2

[8] Chapco-Wade C. (2018) 'Digitization, Digitalization, and Digital Transformation: What's the Difference?' *Medium*

[9] Westerman G., Tannou M., Bonnet D., Ferraris P. & McAfee A. (2012) The Digital Advantage. *Capgemini / MIT*

[10] Martin J-F. (2018) 'Unlocking success in digital transformations'. *McKinsey & Co*.