Powering up a post-pandemic rebound for MSMEs through digital transformation
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As it transforms to become a digital telecommunication company, TelkomGroup implements a customer-oriented business and company operational strategy. The transformation aims to trim down TelkomGroup’s organization to be leaner and more agile in adapting the fast-changing nature of telecommunications industry. The new organization is expected to be able to improve efficiency and be more effective in producing a quality customer experience.

TelkomGroup’s activities grow and change in accordance to the development of new technology, information and digitalization, but still within the corridor of telecommunications and information technology. This is evident in the newly developed business lines, which complement the company’s existing legacy business.
Contents

04 | Powering up a post-pandemic rebound for MSMEs through digital transformation

06 | Challenges for MSMEs in a COVID-19 Era

07 | Technology adoption barriers for MSMEs

09 | What it takes for MSMEs to go digital

10 | Product Operations

11 | Go-To-Market Digital Talent

12 | Improved Access to Funding

13 | Supportive Regulatory Environment
Powering up a post-pandemic rebound for MSMEs through digital transformation
Powering up a post-pandemic rebound for MSMEs through digital transformation

Micro, small, and medium-sized enterprises (MSMEs) play a vital role in the global economy, accounting for over 90% of global businesses and half of global employment\(^1\). MSMEs represent a particularly critical pillar of economic activity in emerging economies, with formal MSMEs contributing up to 40% of national GDP, and informal MSMEs contributing to an even more substantial economic impact.

Some estimates indicate that in emerging markets, MSMEs are a source of over 70% of total jobs\(^2\), and generate more than half of national GDP. This frames the essential role these enterprises play as engines of economic growth and opportunity.

MSMEs will continue to play a major role in ensuring equitable economic opportunity in coming years. These businesses will account for seven out of ten\(^3\) of the projected 600 million new jobs globally by 2030 required in order to ensure employment for the growing global workforce.

The importance of MSMEs is particularly pronounced in developing nations of Southeast Asia, where they account for between 88.8% and 99.9% of businesses\(^4\). In Indonesia, MSMEs form a key pillar of the national economy, accounting for 99% of businesses, 60% of GDP, and employing over 117Mn individuals as of 2018\(^5\). These enterprises are significant local employers, providing opportunities and jobs to local communities, and with clearly stated commitments to empower the local economy.

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1. World Bank, Small and Medium Enterprises (SMEs) Finance
2. World Bank; Organization for Economic Cooperation and Development.
3. United Nations, MSMEs: Key to an inclusive and sustainable recovery
4. Association of Southeast Asian Nations (ASEAN) Development of Micro, Small, and Medium Enterprises in ASEAN
5. Ministry of Cooperatives and SMEs (Kemenkop)
Digitalization is already playing a role in the operation of these enterprises in countries like Indonesia. The findings from a survey of over 3,700 MSMEs undertaken by Boston Consulting Group (BCG) reveals these efforts are largely focused on customer outreach and supplier management, with more than 60% of MSMEs\(^6\) implementing digitalization efforts in these two pillars of operations, and only 2% of MSMEs currently not planning any form of digitalization in these functions. (See Exhibit 1)

Exhibit 1 | >60% of SMEs already implemented digitalization in supplier finding & customer outreach use cases

% SME respondents utilizing each digital use case

<table>
<thead>
<tr>
<th>Use case</th>
<th>Implemented</th>
<th>Currently preparing</th>
<th>Considering</th>
<th>Not planning to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding suppliers</td>
<td>16%</td>
<td>16%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Customer outreach</td>
<td>65%</td>
<td>63%</td>
<td>7%</td>
<td>9%</td>
</tr>
<tr>
<td>Business process digitalization</td>
<td>21%</td>
<td>27%</td>
<td>30%</td>
<td>33%</td>
</tr>
<tr>
<td>Use of digital tools &amp; analytics</td>
<td>9%</td>
<td>26%</td>
<td>32%</td>
<td>21%</td>
</tr>
</tbody>
</table>

1. Including education, health, financial services, media, etc.  
Source: BCG Digital Indonesia SME Survey (N=3,763)

In terms of sector, BCG’s findings in Indonesia show the food and beverage sector currently has the highest penetration of digital adoption (71%), followed closely by trade (70%) and services (68%). (See Exhibit 2)

Exhibit 2 | Trade and F&B sectors has the highest digital adoption (>70%)

% SME respondents implementing digital use cases by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Finding suppliers</th>
<th>Customer outreach</th>
<th>Business process digitalization</th>
<th>Use of digital tools and analytics</th>
</tr>
</thead>
<tbody>
<tr>
<td>F&amp;B</td>
<td>71%</td>
<td>69%</td>
<td>26%</td>
<td>23%</td>
</tr>
<tr>
<td>Trade</td>
<td>70%</td>
<td>68%</td>
<td>26%</td>
<td>21%</td>
</tr>
<tr>
<td>Services(^1)</td>
<td>68%</td>
<td>63%</td>
<td>32%</td>
<td>30%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>63%</td>
<td>63%</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>Agriculture &amp; Fishers</td>
<td>58%</td>
<td>52%</td>
<td>22%</td>
<td>19%</td>
</tr>
<tr>
<td>Real estate &amp; cities</td>
<td>58%</td>
<td>54%</td>
<td>31%</td>
<td>34%</td>
</tr>
<tr>
<td>Transportation</td>
<td>56%</td>
<td>53%</td>
<td>29%</td>
<td>30%</td>
</tr>
</tbody>
</table>

1. Including education, health, financial services, media, etc.  
Source: BCG Digital Indonesia SME Survey (N=3,763)

6. BCG Digital Indonesia SME Survey
Challenges for MSMEs in a COVID-19 Era

The COVID-19 pandemic triggered significant disruption across the global economy, with firms of all sizes and sectors of operation affected by the widespread impacts. MSMEs were particularly vulnerable to these effects, and experienced substantial and dynamic challenges as a result of these disruptions.

MSMEs are significantly overrepresented in the most exposed sectors to the pandemic impacts, including areas such as hospitality and accommodation. While many MSMEs were forced to close their doors, others have been able to continue with operations while suffering significant revenue challenges, resulting in severe liquidity shortages. According to the World Bank Future of Business Survey undertaken in partnership with Facebook and the OECD, among MSMEs that remained open from May to December 2020, between 55%-70% experienced a fall in sales, with two-thirds experiencing falls of more than 40%.

Research undertaken by Boston Consulting Group (BCG) into pandemic impacts on Indonesian enterprises reveals that more than 80% of MSMEs experienced declines in revenue, with the share of impact evenly distributed across enterprises of all sizes and sectors. (See Exhibit 3)

Digital transformation provides an important platform to support and uplift opportunities for MSMEs during this challenging period. Digital technologies can provide invaluable tools to ensure business continuity while accessing new and emerging markets nationally, regionally, and globally. These technologies also provide a rewarding pathway to enhance operational efficiency, optimize processes and ways of working, and reduce ongoing business costs.

7. OECD, SME and Entrepreneurship Outlook, 2021
8. Global Financial Planning Institute (GFPI)
9. BCG, The Road to Surviving, Sustaining, and Future-proofing MSMEs in a Post-COVID Era
MSMEs often position themselves as forces for local good, with 77% of Indonesian MSMEs actively employing local communities, and 67.5% noting a belief that they actively provide positive community impact⁷. Digital transformation offers an opportunity to further uplift MSMEs, and ultimately the local communities in which they operate.

Analysis from Indonesia reveals that digitalization offers a multiplier effect¹⁰ to MSMEs and local economies, providing a 1.1X uplift to revenue, while providing 1.7X industry multiplier to GDP and a 1.3X non-revenue multiplier. BCG’s research also revealed that digitally-engaged MSMEs were 2.1X more likely to sell goods nationwide than offline counterparts, and 4.6X more likely to export abroad, demonstrating the significant potential for increased market reach evident from digital commerce.

The economic uplift from digital participation also enhanced the wider community benefits of MSMEs. Digitally-engaged enterprises in Indonesia were 1.3X more likely to employ others, 1.1X more likely to involve their local community, and 1.4X more likely to employ others in order to achieve improved business scale.

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**Technology adoption barriers for MSMEs**

Digital transformation is not without its challenges for MSMEs, who face a number of key barriers, both technical and financial, according to global analysis by the World Economic Forum. These barriers can manifest in hurdles such as reliable connectivity or digital access, possibly related to infrastructure challenges around internet access or quality of connectivity. Affordability may also be a challenge, presenting a cost barrier to truly digitally-empowered operations. (See Exhibit 4)

![Exhibit 4 | Barriers to the implementation of digital technologies for SMEs]({})

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10. BCG, Blibli, Kompas Data, Digitalization in Indonesian MSMEs
11. World Economic Forum
Less than half of MSMEs globally have access to fixed broadband services\textsuperscript{12}, and only 25% offer customer service online, compared to almost 100% of large companies. Despite this existing digital divide, MSMEs often struggle to catalyze further digital transformation. A survey of businesses in Singapore revealed that only 50% of SMEs had plans for digital transformation, compared to over 98% of larger companies.

Hurdles to digital transformation are not unique to these more modest sized enterprises and have presented a persistent challenge for even large enterprises and multinational corporations (MNCs) during their own respective digital transformation journeys. Just 30% of transformations\textsuperscript{13} meet or exceeded their target value and result in sustainable change. MSMEs are more exposed to the challenges of these transformations, with more limited resources, liquidity, and smaller workforces with less access to specialized technology talent.

Analysis of the Indonesian MSME landscape reveals similar findings, with a range of barriers identified across funding, human capital, government-related challenges, and technical and business implementation. Funding support (57%) is the most significant challenge, followed by difficulties in digital training and learning centers (49%), regulatory support (43%), and need for business consulting or mentoring services (32%). (See Exhibit 5)

Exhibit 5 | Challenges for MSME to adopt digital solutions in Indonesia

<table>
<thead>
<tr>
<th><strong>Lack of Funding</strong></th>
<th><strong>Digital training/learning center</strong></th>
<th><strong>Regulatory support</strong></th>
<th><strong>Business consulting mentoring service</strong></th>
<th>** Connectivity infrastructure**</th>
<th>** Provision of national digital platform**</th>
<th><strong>International expansion (e.g. export)</strong></th>
<th><strong>R&amp;D support equipment</strong></th>
<th>** Device/ incentive support**</th>
<th><strong>Incentive for local content</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>57%</td>
<td>49%</td>
<td>43%</td>
<td>32%</td>
<td>26%</td>
<td>22%</td>
<td>13%</td>
<td>11%</td>
<td>9%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: BCG Digital Indonesia SME Survey

\textsuperscript{12} BCG, A $2 Trillion Down Payment to Close the Digital Divide

\textsuperscript{13} BCG, Flipping The Odds of Transformation Success
What it takes for MSMEs to go digital

The journey through digital transformation isn’t simple, and MSMEs face numerous strategic challenges alongside the wider ecosystem barriers which must be overcome.

Boston Consulting Group has worked with enterprises around the world to support digital transformation, informed by extensive research onto the true path to successful digital transformation. BCG research reveals that as many as 70% of digital transformations fall short in meeting their objectives.

(See Exhibit 6)

Exhibit 6 | Strategic levers and enablers for MSMEs to go digital

Supporting successful digitalization of MSMEs requires integrated elements of transformation. Product, operations, go-to market are key pillars which must be strategically delivered. When implemented correctly, these three pillars offer real benefits to MSMEs in enhancing operational efficiency while unlocking new market value. Digital talent, access to financing, and government support represent critical ecosystem enablers to support this journey, providing the foundational environment that enables MSMEs to succeed in their digital journeys. Encouraging and investing in both the pillars and the enablers of success are vital to empower digital transformation of MSMEs.
Recommendation 1: Product

MSMEs can adopt potential digital solutions for product offerings in several ways, helping identify product segments, develop product offerings, and market them in effective ways.

- **Market intelligence to produce data-driven insight.** Access to digital platforms can be utilized for market intelligence activities (for example, understanding products that are trending) to design product development and portfolio strategies, as well as building a brand identity. Data-driven decision making can help inform product design, product packaging, attractive market segments, and even help promote and target sales to the right customers.

- **Direct access to customer feedback.** Access to digital platforms can also provide direct customer feedback through comments and ratings on what needs to be improved from the product offering.

Recommendation 2: Operations

Digital technologies also empower MSME operations, allowing the implementation of effective new tools to optimize processes.

- **Enhanced sourcing strategies.** Digital solutions allow MSMEs to source and engage new suppliers through a range of platform solutions, including suppliers engaged through e-commerce channels providing a cost-effective route to optimize the cost of goods.

- **Efficient and resilient day-to-day operations.** Digital technologies provide a powerful solution for day-to-day operations, through technologies such as cloud computing which facilitate workforce collaboration and have helped maintain operational continuity during the COVID19 pandemic. These digital technologies allow MSMEs to expand and extend their IT infrastructure in a cost-effective, scalable manner.

**Case study.** Tech giant JD initiated a program in response to the Chinese Government to develop and launch ‘Spark’, an economic incentive program aimed at helping MSMEs adopt end-to-end digital tools. This included optimizing back-end processes in areas such as order logistics and inventory management to enhance operations in these enterprises.
Recommendation 3: Go-To-Market

Digital technologies can enhance go-to-market capabilities of MSMEs, speeding up processes and boosting marketing efforts.

- **Enhance market access.** Digital platforms allow MSMEs to access new markets, while also refining their targeting to appeal to the right customer segments.

- **Agile pricing strategies.** Digital channels enable enterprises to deploy agile pricing strategies, often informed by fast-moving, real-world data and market insight. These agile pricing actions can include adopting discounts or vouchers through e-commerce channels during special sales periods, allowing MSMEs to rapidly deploy specific promotional events in line with key holidays or high-interest occasions.

- **Digital payment potential.** Adoption of digital payment tools allows MSMEs to increase the ease of paying for transactions by customers, providing new ways for payment.

**Case Study.** The rapid adoption of non-cash transactions in Indonesia during the COVID-19 pandemic demonstrates this area is growing, as customers turned to debit cards and electronic money solutions. Analysis of Indonesia’s Quick Response Code Indonesia Standard (QRIS)—a standardization QR code for cashless payments—shows that as of January 2022, annual transaction volumes increased by 326% year-on-year.\(^\text{14}\)

Recommendation 4: Digital Talent

Digital literacy is the first step to successful digital transformation. Addressing the digital skills gap is a critical step to empowering MSMEs with digital capabilities. Analysis indicates that 14 of the 20 G20 countries could miss out on a projected USD11.5Tn uplift to GDP growth if the demand for digitally-skilled workers is not fulfilled.

Improving the technical skills of individuals working in MSMEs will enhance their confidence in use of digital technologies, products, and services. It will enhance their ability to safely and securely navigate the digital sphere, with a clear understanding of opportunities and challenges. Digital technology can assist this strategy in a number of ways.

- **Training and development.** Upskilling and reskilling talent on digitalization itself provides a powerful opportunity to amplify the general impact of digital transformation within an enterprise. Digital technologies also provide a wider boost through factors such as capacity for change management, ability to integrate digital systems into production processes, data management capabilities, internal stock of digital skills, and access to knowledge of potential operational technology solutions.

- **Workforce education.** Digital technologies can help support education opportunities, including vocational education as a fast-track initiative to develop and upgrade digital skills and competencies.

- **Sharing and expanding knowledge.** Access to online platforms and forums provides a valuable example of how enterprises and workers can engage with the wider business ecosystem, sharing and informing digital transformation opportunities and best practices to improve the chances of successful digital adoption.

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14. Tempo, QRIS Limit Raised to Rp10mn Starting Today
15. WEF, Future of Jobs
Recommendation 5: Improved Access to Funding

MSMEs have traditionally suffered from limited funding and liquidity to power investment in digital transformation, a challenge which has been further compounded by the economic impact of the COVID-19 pandemic. BCG estimates that just 20% to 25% of MSMEs currently engage in some form of credit service. This problem is growing more acute as a result of the current economic environment, with many lenders unwilling to lend to MSMEs due to perceptions around the riskiness of such businesses. Analysis of more than 90 rescue and recovery packages globally indicate that funding for SME digitalization increased in absolute terms but decreased as a share of total investment in digitalization, from around 23% (USD8Bn) in rescue packages in immediate response to the crisis, to 8% (USD49Bn) of recovery packages captured in medium or long-term recovery plans.

Governments and private institutions must increase efforts to provide fair and sustainable financing for MSMEs, with a focus on accessing digital technologies. This is particularly critical in developing countries where MSMEs represent such a substantial share of economic activity. Increasing awareness of financing support such as investment support, funds, and grants, is key for this process. This includes developing effective communication strategies and building digital platforms aimed at clearly identifying the channels for application, eligibility criteria, awarding process, and requirements for companies to access specific subsidies or support. Creating awareness of new digital solutions to close the MSME financing gap is equally critical. The application of digital financial services (DFS), or provision of financial products and services through new digital channels and providers acts as an enabler to close the MSME financing gap. Technology innovations also act as the foundation to develop new business models and digital financial products such as digital loans, microloans, and other innovative credit products which can support MSMEs, as well as providing new avenues to access equity capital.

There is a number of potential solutions whereby digital technologies can enhance funding to MSMEs. Direct funding schemes which target eligible participants, leveraging digital identification to identify which MSMEs qualify, and which do not. This digital approach can also help streamline the application process, making it easier, and quicker, for MSMEs to access time-sensitive funding.

In order to expand the coverage of these programs, particularly taking into account the position of many unbanked enterprises, governments should look to engage provincial and district regional governments which may have particular local knowledge or resources to support initiatives. These local governments and agencies can assist in identifying and collecting relevant information on MSMEs within their respective region.

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16. Infocom Media Development Authority, Helping MSMEs Go Digital
17. BCG, OJK, The Road To Surviving, Sustaining, and Future-proofing MSMEs in a Post-COVID-19 Era
18. OECD Library, SME Digitalization to “Build Back Better”
A supportive regulatory environment is required to help Indonesia transition from technology consumer to technology producer. Evolving and adaptive regulatory and bureaucratic reforms will be required to attract appropriate investment and build the valuable ICT sector. This must include appropriate regulatory support for MSMEs, focusing on the critical need to maintain a level playing field, encouraging innovation while ensuring an appropriate balance between traditional vs disruptive digital players. There is a number of solutions which could be adopted to deliver on this need.

- **Lower barriers to entry.** Lowering legal barriers to entry and improving ease of doing business can be introduced by the government, helping nurture innovation and digital expansion for MSMEs.

- **Supportive tax regulations.** Tax incentives or supportive tax structures could be introduced for companies that have just started operating.

- **Intellectual property (IP) regulations.** Effective IP laws can be introduced, encouraging innovation and protecting propriety IP in order to encourage innovators and disrupters to explore new opportunities, while maintaining the value of their innovations.

**Case Study.** Switzerland lowers legal barriers to new business models by first conducting a "digital test" to identify areas where existing legislation is unnecessary or redundant, and then examining measures to lower legal barriers, such as formal requirements arising from both public and private law, with the goal of lowering barriers to digital business models. Switzerland is also working to centralize the communications between public agencies and enterprises in order to lower the administrative load on firms even more.\(^{19}\)

Estonia built one of the world’s most advanced digital society long before the COVID-19 pandemic, establishing electronic systems, which include things like digital signatures, making bureaucracy more efficient, saving money for entrepreneurs and the government.\(^{20}\)

Denmark is proposing tax deductions for wage and salary costs linked with starting and growing a firm, for example, by making the administration of digital business development simpler.\(^{21}\)

**Conclusion**

MSMEs maintain a critical part in global economies, as both enablers of economic opportunity and significant drivers of community employment. This importance is further heighted in developing economies where these enterprises make an even greater share of economic activity.

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19. OECD, Firms Going Digital
20. World Economic Forum, ‘E-residents’: the surprising new citizens outpacing Estonia’s birthrate
21. OECD, Firms Going Digital
Supporting enhanced digital participation is key to uplifting MSMEs, providing a welcome economic boost that can help enterprises build back in the wake of the COVID-19 pandemic. These capabilities will enhance efficiencies, optimize operations, expand MSMEs’ access to wider markets, and ultimately help build more resilient businesses capable of surviving future disruptions.

MSMEs face many barriers in pursuing their own digital transformations and must be supported through efforts to enhance digital literacy, boost access to digital platforms, and improve financial access. Enabling the digital transformation of MSMEs will require a focus on the three pillars of product, operations, and go-to-market, built on a supportive ecosystem foundation of appropriate digital talent, access to financing, and government support.

Delivering on these efforts will not only enhance economic activity in MSMEs but provide a consequent multiplier effect that will have positive impacts across wider economies.
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