



TOSHIBA

SESSION 1: Adoption of Digital Technology for MSMEs Development

Case Studies on Digital Technologies for MSMEs

Karthik Varada

MbSC2030, The University of Tokyo

23 Feb 2022

Digitizing MSMEs is an important policy priority for Indonesia

- COVID-19 re-emphasizes the need to prioritize resilience of MSMEs.
- By embracing digital technologies, SMEs can maintain business continuity, beside improving productivity.
- Digitization enables SMEs to minimize vulnerabilities in the face of pandemic and repeated climate-induced disasters.
- “Empowering MSMEs” is one of Indonesia’s 10 national priorities as per the ‘Making Indonesia 4.0’ roadmap.
- The government aims to get **30 million MSMEs into digital ecosystem by 2024.**
- **16.4 million MSMEs** are a part of digital ecosystems, as of Nov 2021, which is a **105% growth** from pre-pandemic levels

Key policy actions for advancing technological transformation

“Innovate Indonesia: Unlocking growth through technological transformation” published by ADB and Indonesia’s Ministry of Finance highlights five key pillars for the country’s technological transformation.

Pillar 1: Advanced innovation infrastructure and institutions

Pillar 2: Awareness of the business value of new technologies

Pillar 3: Technology transfer and technical support for firms

Pillar 4: Low-cost plug-and-play technology solutions for Indonesian firms

Pillar 5: A tech-savvy workforce

Alongside policy action pertaining each of these pillars, private sector participation also has a major role to play.



Case studies : policy actions aimed at digitizing SMEs

Awareness building

United Kingdom: **Innovate UK – Business Basics**

- Funds local authorities to run trials or develop new ideas aimed at improving SME productivity
- Cheshire East Council worked with strategic partners like Siemens and RedEye to share expertise with SMEs on digital automation

Low-cost plug-and-play solutions

Japan: **Industrial Value Chain Initiative**

- METI* and JSME** -led collaborative forum involving large and small firms to develop “smart manufacturing scenarios”
- Participating firms built a low cost “IOT Kits” that help cash-constrained SMEs get started with adopting smart manufacturing technologies

Financial and technical support

Japan: **IT Introduction Subsidy Project**

- Subsidy targeting SMEs aiming to upgrade their IT operations and/or shift to tele-working
- Government covers 50-75% of expenses, within the range of 300,000 – 4.5 million JPY
- Incentivizes IT providers to build for SMEs

Skill development

India: **National Employability Through Apprenticeship Program**

- Public-private partnership involving industry bodies and a skill training company. Trained 60,000+ apprentices
- Trainees learn IT and computer skills. They gain practical expertise by working with partnering firms, who also pay trainees a stipend.

Sources: March 2020, ADB and Ministry of Finance (Republic of Indonesia), [“Innovate Indonesia: Unlocking growth through technological transformation”](#)

JETRO, [Government Initiatives | ICT - Industries - Investing in Japan - Japan External Trade Organization – JETRO](#)

METI* – Ministry of Economy, Trade and Industry, JSME** – Japan Society of Mechanical Engineers

Private sector is playing a crucial role in helping SMEs digitize

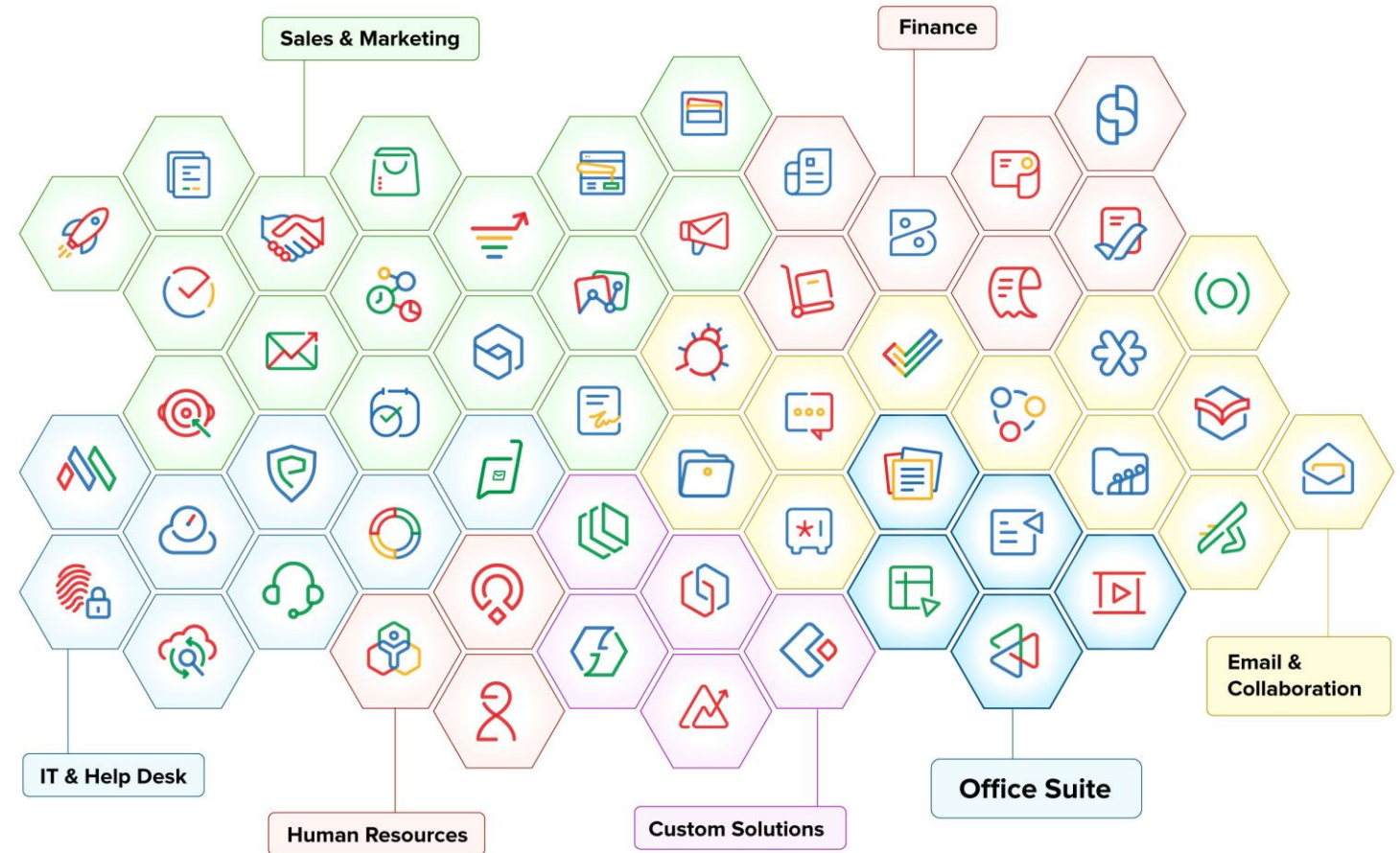
- Private sector participants, including large global corporations and local technology leaders are **increasingly focused on serving the digital needs of MSMEs.**
- SME-focused technology firms in Indonesia and other emerging markets like India have been **attracting significant capital to build digital solutions** for peer-to-peer lending, e-commerce, mobility, book-keeping, logistics, and more.
- We delve into **examples of two firms** offering unique examples for advancing SME digitization.



Case 1 – Zoho : operating system for businesses



- 45+ cloud-based applications catering to all digital needs of businesses.
- One-stop and easy-to-use solution catering SMEs.
- Relatively affordable pricing, making it relevant for small businesses
- Privacy first – businesses own the data and are not tracked online
- 75 million users across 180+ countries



Case 1 – Zoho : building for the world from anywhere



“Cloud-enabled rural revival”

- Starting in 2010, this Indian firm experimented with building **satellite offices in rural areas**, closer to the hometowns of employees
- The firm has 20+ rural offices, mostly in South India. It plans to launch 100+ offices across the globe
- Alongside benefits for the firm like saved costs and improved retention, **40% of their employees indicated preference to work in remote offices** closer to their hometowns.
- By brining high-tech jobs to places that would otherwise not have them, the firm is aiming to **stimulate local economies**, while at the same time decongesting urban spaces
- South Indian **village with the first rural office set up 10+ years ago saw improvements** in women’s empowerment, wealth creation, and community engagement.
- First rural office in Japan’s Kawanehon-cho, a small and remote town with a population of 6,731 people

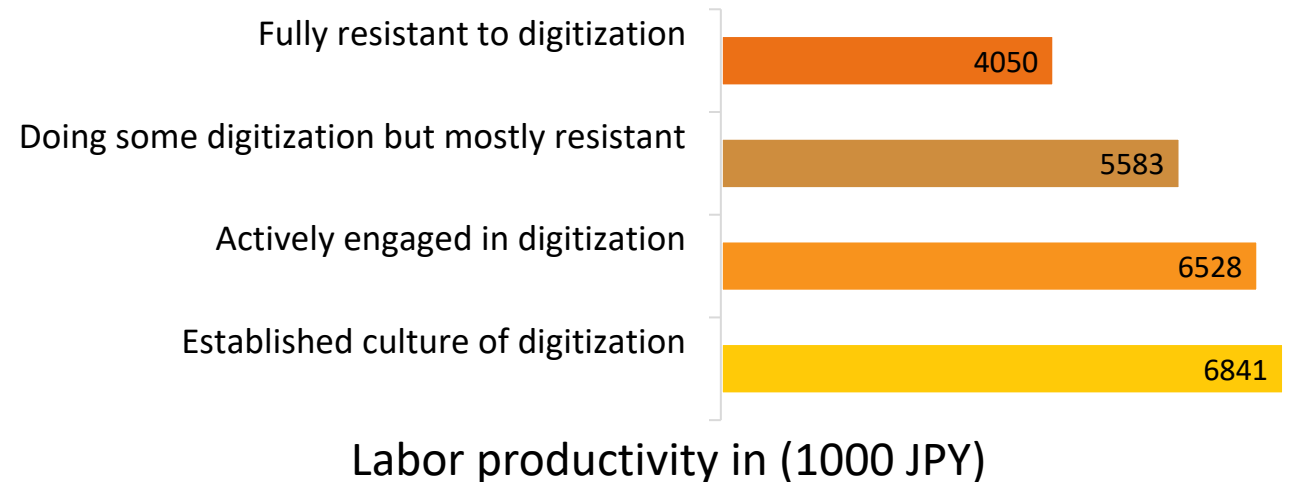
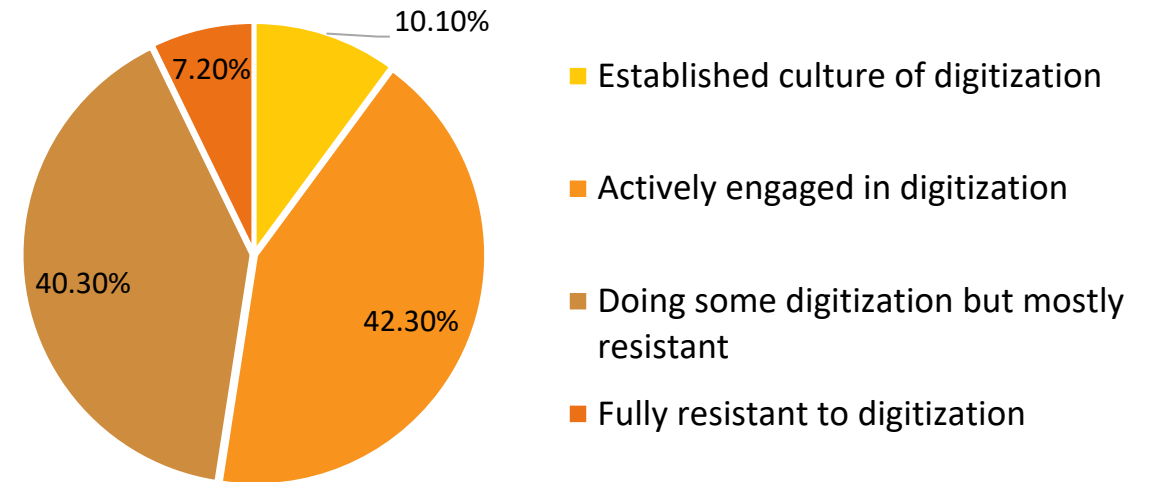
Case 1 – Zoho : re-thinking skill building



- The firm **hires high school students and trains** them in its vocational schools dedicated to different topics.
- Free program trains students on software engineering and other skills alongside providing them with a stipend, followed by a full-time job.
- Some of the **schools are also located in rural communities**, thereby contributing to up-skilling populations in the areas it operates
- 10-15% of the firm's overall employees are from their schools of learning.
- The program also contributes toward **skilling small businesses in the local ecosystems** it operates in.

Case 2 – About half of the SMEs in Japan are resistant to digitization

- SME digitization is an important challenge in Japan.
- METI's 2021 White Paper on SMEs surveyed 4756 firms in Japan.
- Of them, only 10.1% of firms have an established culture of digitization and **about 50% are still resistant towards digitization.**
- Labor **productivity is 40% lower for firms fully resistant to digitization** in comparison to those firm with an established culture of digitization.
- Helping SMEs improve productivity through digitization **is essential to advance rural revitalization** while addressing challenges associated with ageing population.



Case 2 – Ricoh aiming to support productivity innovation for SMEs



- Offering scrum packages for SMEs since Oct 2017
- 150+ packages across 9 industries for 3 common tasks
 - Workstyle reform
 - Data security
 - Back-office operations
- 160,000 packages sold, as of June 2021.
- Many clients use IT introduction subsidies from the government

Ricoh maintains branch offices in all prefectures of Japan to **help local SMEs find the right set of digital tools** that suit their business needs.

Furthermore, it maintains a **repository of case studies** which offer SMEs with actionable insights from experiences of other relevant businesses. These examples improve awareness among SMEs and nudge them toward improving their productivity using digital solutions.

Example 1: GPS-enabled communication system for a concrete mixing company with 30 employees to ensure that raw concrete is delivered in-time without any damage

Example 2: Software helping a 9-person food production company maintain process management charts and data necessary to acquire food quality certifications

Example 3: Time management system with VPN helping a construction company (with 45 staff members) significantly improve their productivity

Conclusion

- Helping MSMEs digitize is an important lever for a nation's resilient growth and countries across the world are taking steps to achieve this goal.
- Private sector innovators are playing an increasingly important role in helping MSMEs digitize at scale.
- Innovations are observed not just in the digital products, but also in the processes by which such products are built and delivered.
- Cloud technologies enable remote work. With adequate infrastructure and incentives in place, decentralizing work and revitalizing local areas may be possible.
- By working closely with private sector participants, policymakers can devise schemes that enable SMEs to gain digital skills, learn about relevant digital tools, and make adequate decisions about investing in such tools.