

Digital Entrepreneurship in ASEAN



Capitalising on the COVID-driven digitalisation phenomenon.

by Chiraphol New Chiyachantana and
Pattarawan Mai Prasarnphanich

Thailand-based QueQ CEO Rungsun Promprasith, or Khun Joh as he is commonly known, had to act fast when COVID-19 struck in 2020. The value proposition of his firm, which was centred on providing a mobile app for bookings and queue management, had suddenly become non-viable. With customers home-bound and only stepping out for essential services, demand for the app dried up as hardly anyone was placing restaurant reservations or fixing medical appointments.

To survive, Khun Joh had no choice but to pivot his business. In 2021, he saw an opportunity to manage the overflowing queues at the vaccination centres in Thailand. The situation was getting dire by the day as the number of COVID-19 cases soared, and overcrowding had become a common issue at the centres with people clamouring to get their vaccination shots. He quickly reached out to the authorities to offer them a queue management system.

By June 2021, he had adapted the QueQ app to address this issue at a few select vaccination centres. Thereafter, the app trialled at several centres, and was subsequently deployed across Thailand. Overcrowding became a thing of the past.¹

Pivoting was critical for digital entrepreneurial firms like QueQ in order to capitalise on the opportunities that had arisen from COVID-19. Unlike traditional brick-and-mortar businesses, digital entrepreneurial firms are more resilient, as digital technologies enable them to innovate, experiment, test, and improve quickly before scaling their businesses. For this article, we will draw upon our research on digital entrepreneurship in Southeast Asia, specifically six ASEAN countries (refer to box story for details on the research project). We will be using examples from our fieldwork in Thailand to illustrate our arguments.

ASEAN STUDY ON DIGITAL ENTREPRENEURSHIP

We interviewed 685 digital entrepreneurial firms, either owner-helmed or managed by a team of entrepreneurs, in six ASEAN countries, namely Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam, which have adopted a digital business model. The research project was sponsored and coordinated by the Asian Development Bank and conducted in collaboration with research teams from six leading academic institutions across the six ASEAN countries. It focused on the entrepreneurs' adoption of digital technologies in their business models, as well as their business model experimentation activities, and explored the implications of these processes for their business performance.

COVID-19 AND THE ACCELERATION OF DIGITALISATION

Given the penetration of digital technologies into so many domains, one simply cannot avoid having a full or partial digital business model. No longer is embracing digital technologies a 'nice-to-have'; it is a 'must-have' today. In the six countries where we conducted our research, all the 685 digital entrepreneurs have leveraged digital technologies as the backbone of their firms' strategy. Furthermore, COVID-19 has accelerated the digital phenomenon, bringing forward digital transformation by at least five years.

It was found that a massive 40 million people in ASEAN went online for the very first time in 2021.² This sudden jump in digital adopters increased the total number of Internet users to 440 million or 75 percent of the population in the six countries we studied.³ This was a huge jump in Internet adoption as the base just five years prior was only 190 million users.⁴

Another indicator of how rapidly digital technologies have spread is the size of the region's Internet economy which reached US\$170 billion in 2021. At this rate of growth, it is predicted to reach US\$360 billion by 2025.⁵

The pandemic has not only moved many businesses online, but also created new digital businesses that did not exist pre-COVID-19. Digital technologies are clearly shortening the idea-to-market cycle as firms can now easily test and refine their business models to either achieve the desired outcomes or improve their business performance.

The constant experimenting, testing, and learning has made the digital firms more resilient and adaptable to change. This is why we see many firms extending their offerings in the digital realm, as well as new digital firms popping up in the past two years. These firms have also been shown to cater to new digital habits and home-based lifestyles, as well as address societal shifts such as conducting commercial activities through mobile devices.

THE RISE OF DIGITAL ENTREPRENEURSHIP

Things are changing so fast that all businesses, whether big or small, have no choice but to make use of innovative digital platforms to constantly innovate, build, introduce, grow, and scale their businesses.

While few will ever reach the same heights as Jack Ma's Alibaba or Jeff Bezos' Amazon, just about anyone can be a digital entrepreneur because the barriers to entry are so low. There are many digital platform solutions that are 'plug-and-play'. Platforms such as Amazon, Alibaba, Lazada,

The pandemic has not only moved many businesses online, but also created new digital businesses that did not exist pre-COVID-19.

Shopee, and Shopify provide digital entrepreneurs an easy way to participate in economic or commercial activities without a huge capital outlay. To get onto the digital entrepreneurship bandwagon, entrepreneurs simply choose a subscription plan that suits their needs. These platforms also offer add-ons for e-commerce stores—for example, to enable a feedback mechanism, a product review app could be plugged in to give digital entrepreneurs important information to adapt, incorporate, and improve their value propositions for their customers.

However, digital entrepreneurship is not only about digital commerce or e-commerce activities.⁶ An important aspect of digital entrepreneurship is constant innovation.⁷ Digital entrepreneurs need to continually create new products, processes, services, and solutions to stay ahead of their competition. In other words, they have to be flexible in pursuing new ventures, and be willing to make fundamental, even drastic, changes to their established business models, even when these may still be working well for the business.⁸

Technology-wise, there exists a plethora of no code or low code development platforms for digital entrepreneurs to build amazing digital products or enhance their existing products with no coding or very minimum coding skills and knowledge.⁹ For example, to implement robotic process automation, simple rules can be written to automate workflows for simplifying a process.

BENEFITS OF DIGITAL TECHNOLOGIES FOR ENTREPRENEURS

Entrepreneurial dynamic

One huge benefit that digital technologies provide is what we call 'entrepreneurial dynamic'. In short, entrepreneurial dynamic means quick adaptation of the business model during a period of sudden change. The onset of COVID-19 was such an event of sudden change, which radically transformed everything from the way we learn, to the way we work, and the way we live. Firms that demonstrate strong entrepreneurial

dynamic would be able to benefit from the pandemic by turning this crisis into new opportunities, by adapting their business operations in a very short period. They would be able to discover new customer segments by taking their core digital services, realigning their business operations, and presenting their offerings to new customer segments.

One example of a Thai firm that displayed entrepreneurial dynamic is Locanation. Initially, it was set up as an online real estate portal for attracting foreigners to invest in properties in Thailand. However, when COVID-19 struck, the market for foreigners disappeared. The firm converted its original portal to a one-stop portal that provided important entry information for returning Thais and foreign visitors. Additionally, the firm provided information such as special promotions, and also developed a reservation portal for those who were interested in finding and booking the Thailand Alternative State Quarantine hotel of their choice.

Hungry Hub is another example of a Thai entrepreneurial dynamic firm. At the onset of COVID-19, the Bangkok-based firm changed its business model from offering buffet deals and reservations to dining patrons, to offering curated delivery meals at special prices instead. When the pandemic situation improved, Hungry Hub pivoted again by collaborating with selected hotels in Bangkok to offer staycation deals.

Process efficiency

Just as digitalisation can enhance the efficiency of an automated process, a digitalised business model can also improve the process efficiency while, at the same time, lowering operating costs.¹⁰

One process efficiency that has made electronic transactions seamless in ASEAN is the use of QR (Quick Response) codes. Wherever you look across the region, you will notice that QR codes are used to facilitate the entire process from ordering to payment. They are used for ordering food, unlocking shared city bikes, sharing contact details, and enabling contactless payments. The use of QR codes is so

pervasive in ASEAN that it was reported that 15 million QR codes were scanned in 2020.¹¹

Another process efficiency that digital technologies provide is the ability to make real-time changes. For example, when a business runs a very successful promotional campaign and its physical stocks are running low, the digital entrepreneur can easily change the terms in real time and end the promotion early on its e-commerce or social commerce store.

Food outlets that have a digital business model can also take advantage of real-time updates. When it is almost closing time, and the food outlet has a lot of food unsold, a digital entrepreneur can easily put out a promotion on the e-store and spread the word through social media to get customers to buy the unsold food at a reduced price.

Dynamic capabilities

Digital technologies help to enhance a firm's dynamic capabilities. David Teece, the originator of this concept, says that dynamic capabilities are essentially "the firm's ability to integrate, build and reconfigure internal and external competencies to address the rapidly changing environments".¹² Dynamic capabilities are idiosyncratic. This means they are unique to each firm and are rooted in the firm's history. These capabilities are not only captured in routines, but also in business models that are difficult to imitate by other firms. Dynamic capabilities are not the same as functional or zero-level capabilities, which are common capabilities that can be found industry-wide. According to Teece, zero-level capabilities are akin to 'best practices' whereas functional capabilities refer to the organisation's operational and technical abilities.¹³

There are three ways through which firms can develop their dynamic capabilities: sensing, seizing, and transforming. Sensing requires an assessment of the market opportunities and attuning to changing consumer needs. Seizing refers to how a firm reacts to market needs while at the same time, developing complementary capabilities to create value. Transforming is about how the firm is renewing its processes while maintaining its relevance to customers.

From the earlier example of QueQ, we can see how the sensing of the overcrowding situation at the vaccination centres led to the seizing of an opportunity when Khun Joh reached out to the relevant authorities to solve the problem. QueQ then transformed itself by adapting its retail queue management system to become one that could liaise seamlessly with both government facility managers and healthcare authorities.

Digital entrepreneurs need to continually create new products, processes, services, and solutions to stay ahead of their competition.

Another interesting example comes from Horganice. Pre-COVID-19, it was a cloud-based real estate leasing company. Its market shrivelled during the pandemic. Sensing an opportunity to address the issue of insufficient beds and facilities for COVID-19 patients, the firm reached out to the Thai authorities to propose the use of its apartment management portal for managing field hospitals. In so doing, Horganice transformed its business model from leasing real estate to managing field hospitals.

THE IMPLICATIONS FOR DIGITAL ENTREPRENEURSHIP

Our research revealed several implications for digital entrepreneurship.

The need to integrate digital technologies into the business model

As the examples in this article show, firms that have been able to pivot quickly to capture new market opportunities are the ones that integrated digital technologies into their business model. Other than enhancing the firms' resilience, these firms have an enhanced ability to innovate quickly, experiment, test and learn, grow, and improve before scaling their businesses.

Since there are benefits to be gained from public-private partnerships, regional governments can play three important roles. First, governments can help digital entrepreneurial businesses develop further by investing in digital infrastructure

and ensuring affordable accessibility to it. The digital resources can be organised around a defined geographical region for better accessibility and fit with the local context. Second, they can help build entrepreneurial ecosystems that are similar to the technological ecosystems found in Silicon Valley, New York, and London.¹⁴ Third, support programmes that are put in place should focus on the business justification for digital technology adoption, rather than the technology alone or strictly technology-led investment decisions. In such instances, experienced angel investors can play a vital role in helping entrepreneurs develop the requisite business skills, especially to view digital capabilities through the lens of their own business. In addition, the digital resources should be organised to reflect the special needs of various sectors with differing business models and activities.

The importance of entrepreneurship mindset and digital assets

The cultivation of the entrepreneurship mindset is best served through education. Thus, it is important that education systems develop entrepreneurial skills such as opportunity recognition, action orientation, experimentation, teamwork, and collaboration. Supporting structures such as accelerators and co-working spaces should be promoted to support knowledge sharing regarding digitalised business models. Cross-border flows of entrepreneurship talent and knowledge can enhance the regional knowledge base and encourage

knowledge spillovers. The combination of mindsets and digital assets has helped digital entrepreneurs use their digital business models to turn crises into opportunities while continuing to create economic value for their respective firms. Mechanisms to speed up business model experimentation should be further explored and promoted. The entrepreneurs whom we studied showed us that the pandemic crisis was a strong incentive in forcing them to rethink their business models, and experiment quickly to seize the opportunities available. It is worth further exploration to determine how we can speed up the sensing-seizing-transforming cycle during normal times to constantly innovate and stay competitive. Likewise, we should think about providing the right support, such as access to knowledge/skills, finance, and digital resources, and turning them into innovation assets at each of the three stages.

The significance of cross-sector collaboration

Digital entrepreneurship can apply across a range of industries. As evidenced from the QueQ example, what was originally designed for retail can be rapidly deployed in another field—in this case, healthcare. Similarly, Horganice's rental property management solution was redeployed to help the Thai healthcare sector manage field hospitals during the pandemic. Thus, engaging entrepreneurship communities and cross-fertilising across sectors should be promoted.

Moreover, promoting cross-sector networking and collaboration could uncover synergies among different start-ups, thus producing more innovative business models that may deliver even greater positive impact on all stakeholders. Government and related stakeholders could provide financial and non-financial incentives, supporting programmes, or partnership matching for entrepreneurs to help them look beyond a single sector and adapt or pivot their business models to serve various industries to further expand their market size. Creating co-working spaces, establishing associations and councils, and carving out innovation districts that can pull solution-seekers and providers across sectors together are some ways to power this endeavour.

CONCLUSION

With the Internet economy growing by almost two-fold by 2025, the future of digital entrepreneurship is promising. The use of digital technologies not only helps entrepreneurs to accelerate the idea-to-market process, but also provides different permutations of organisational arrangements for value creation, delivery, and capture. Digital technologies

can help entrepreneurs develop entrepreneurial dynamic, in order to adapt quickly to change while, at the same time, building up resilience in their business models. ■

Dr Chiraphol New Chiyachantana

is Assistant Professor of Finance (Education) at Singapore Management University

Dr Pattarawan Mai Prasarnphanich

is Lecturer at Sasin School of Management, Chulalongkorn University, Thailand

Firms that have been able to pivot quickly to capture new market opportunities are the ones that integrated digital technologies into their business model.



References

- True Digital Park, "Reducing the Crowds at Vaccine Units, Thai Startup 'QueQ' Works Quickly to Implement Queuing System", July 21, 2021.
- Google, Temasek and Bain & Company, "e-Conomy SEA 2021: Roaring 20s: The SEA Digital Decade", 2021.
- Ibid.
- Ibid.
- Ibid.
- Scott Shane and Sankaran Venkataraman, "The Promise of Entrepreneurship as a Field of Research", *Academy of Management Review*, 25(1), 217-226, 2000.
- Youngjin Yoo, Ola Henfridsson, and Kalle Lyytinen, "Research Commentary—The New Organising Logic of Digital Innovation: An Agenda for Information Systems Research", *Information Systems Research*, 21(4), 724-735, 2010.
- Nicolai J. Foss and Tina Saebi, "Fifteen Years of Research on Business Model Innovation: How Far Have We Come, and Where Should We Go?", *Journal of Management*, 43(1), 200-227, 2017.
- Amrita Pathak, "10 Best Low-code or No-code Platforms to Build Amazing Products", *GeekFlare*, February 21, 2022.
- Vinit Parida, David Sjödin, and Wiebke Reim, "Reviewing Literature on Digitalisation, Business Model Innovation, and Sustainable Industry: Past Achievements and Future Promises", *Sustainability*, 11(2), 391, 2019.
- Dashveenjit Kaur, "QR Codes Are Taking Over Again—Here's Why", *Techwire Asia*, December 21, 2020.
- David Teece and Sohvi Leih, "Uncertainty, Innovation, and Dynamic Capabilities: An Introduction", *California Management Review*, 58(4), 5-12, 2016.
- Art Kleiner, "The Dynamic Capabilities of David Teece", *strategy+business*, November 11, 2013.
- Startup Genome, "Startup Genome's 2021 Global Startup Ecosystem Report: An Analysis of 280 Ecosystems and 3M Startups", *Crunchbase*, October 1, 2021.