

EXECUTIVE INSIGHTS

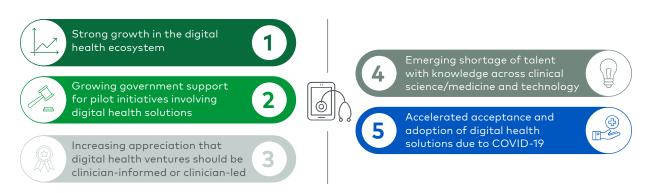
Scaling Digital Health in APAC — Key Trends and Challenges

H1 2022 saw US\$2.4bn of funding go into the development of digital solutions 'homegrown' in the Asia-Pacific region, according to Galen Growth, with the South East Asia sub-region actually seeing a year-on-year-acceleration despite the challenging financial markets. This level of funding makes APAC the second-largest market for digital health behind only North America. However, digital health innovation is still relatively nascent in the region and faces a number of key challenges.

L.E.K. Consulting recently hosted an expert panel discussion in Singapore that was aimed at understanding the key trends in digital health innovation and challenges facing the APAC region in scaling these innovations. Below, we summarise the key messages and takeaways from the panel discussion.

We have observed five key trends in digital health innovation across the APAC region, as illustrated in the infographic below (see Figure 1).

Figure 1Key trends in digital health innovation across APAC



Source: L.E.K. research and analysis



1. Strong growth in the digital health ecosystem

According to Galen Growth, there has been strong growth of c.10% p.a. over the past three to five years in terms of the number of digital health ventures in the APAC region. The growth in the APAC digital health ecosystem is also evidenced by the growing amount of funding raised by digital health start-ups and the number of commercial partnerships involving APAC digital health start-ups.

More than \$150m in funding has been raised by APAC digital health start-ups each year for the past three years. Innovations are focusing on bringing novel digital health solutions for conditions impacting large swathes of the general population (e.g. Healint's partnership with Nestlé Health Science to develop a digital health-based solution for migraines) or bringing unique digital approaches to delivering healthcare more effectively (e.g. Susmed's partnership with Aculys Pharma to conduct the world's first clinical trial using blockchain technology).

2. Growing government support for pilot initiatives involving digital health solutions

As the digital health ecosystem has grown, we have observed growing support from governments across the APAC region for innovative pilot initiatives involving digital health solutions. For example, the Singapore government is supporting the development and commercialisation of digital health solutions through the National Health Innovation Centre and Enterprise Singapore, which provide funding and capability support for digital health start-ups.

"Through the National Health Innovation Centre, we aim to help accelerate clinical innovations by working with our public health institutions, universities and research institutes and by partnering with the private sector. We also have strong linkages with government in order to help support any policy changes that are required to enable the commercialisation of innovative technologies." – Pauline Erica Tay, Director, National Healthcare Innovation Centre (Singapore)

3. Increasing appreciation that digital health ventures should be clinician-informed or clinician-led

Globally, we are now observing a wave of digital health start-ups that are either clinician-informed or clinician-led. Where the previous generation of start-ups was largely led by technology innovators, the newer generation has a greater appreciation of the needs and perspectives of clinicians as they develop their digital health solutions.

"We are seeing medical specialists coming in and complementing the tech expertise to develop innovative digital solutions. Akili is a good example of a company leveraging a combination of tech and medical expertise." – Dario Heymann, PhD, Chief Research Officer, Galen Growth

4. Emerging shortage of talent with knowledge across clinical science/medicine and technology

Expertise across clinical science/medicine and technology indicates a unique skill set, and the growth in digital health innovation has led to an emerging shortage of professionals who have this expertise. Greater cross-pollination and collaboration among clinicians and technology experts will be required to sustain the current growth trajectory of digital health innovation.

"Like many developing ecosystems, we need to support the development of more talent that can help commercialise digital health innovation.

The government will continue to support talent development." – Pauline Erica Tay, Director, National Healthcare Innovation Centre (Singapore)

5. Accelerated acceptance and adoption of digital health solutions due to COVID-19

COVID-19 was a devastating pandemic for much of the world, yet it has presented some silver linings in the field of digital health, specifically in two key aspects: the greater adoption of digital health solutions among physicians and patients, and the decentralisation of primary healthcare.

Figure 2COVID-19 as accelerant to digital health innovation

Greater acceptance and adoption of digital Decentralisation of primary healthcare health solutions among physicians and patients Lockdowns and social distancing restrictions Similarly, the pandemic forced governments from global governments forced physicians and and healthcare systems to adopt digital health patients to accept and adopt digital health solutions such as telehealth in order to alleviate solutions such as telehealth and remote patient the demand for hospital beds and face-to-face care during the pandemic monitoring Physicians and patients now have a much greater Post-pandemic, these institutions now realise understanding of the capabilities and value that that digital health solutions can help digital health solutions offer them decentralise the provision of primary care and reduce the burden on healthcare systems by Consequently, they are more willing to trial and providing remote/virtual care solutions adopt digital health solutions in a post-pandemic world than they would have been before

Source: L.E.K. research and analysis

Whilst there has been exciting growth among digital health start-ups, there are several key challenges involved in scaling digital health innovations in the APAC region. Our expert panel discussion revealed four key challenges as illustrated in the exhibit below.

Figure 3

Key challenges in scaling digital health innovation 3 1 There is great Clinical validation of Change Regulatory diversity in the benefits of digital guidelines often cultures, mindsets focusing on pose barriers to health solutions must and attitudes to be demonstrated to digital health innovation digital health gain adoption among behaviours and across APAC physicians and patients

Source: L.E.K. research and analysis

1. Diversity in cultures, mindsets and attitudes to digital health across APAC

APAC is a very diverse geographical region with different cultures, mindsets and attitudes towards digital health innovations. Local nuances and cultural differences are therefore critical considerations when scaling digital health innovations — or any health innovations, for that matter. In comparison, innovations can be scaled with a more homogeneous approach across North America and parts of Europe.

2. Clinical validation of the benefits of digital health solutions must be demonstrated to gain adoption among physicians and patients

In order to gain adoption among physicians and patients, digital health solutions will need to demonstrate clinical validation and quantifiable benefits to physicians and patients. However, the traditional approach of conducting randomised clinical trials may not be applicable for some of these digital health solutions. Therefore, novel approaches will be required that carefully take into account the benefits enabled by digital health solutions.

For example, mSense, a German digital health application designed to help patients suffering from migraines, had to design a real-world evidence study that compared the efficacy of recording migraine symptoms in the digital application versus writing them down on paper. However, the benefit of an application like mSense is in encouraging and enabling patients to record their migraine symptoms whereas otherwise they would not do so at all.

3. Deeper understanding of physician behaviours and preferences is vital

Adoption of digital health solutions will often require physicians to change the way they interact with and treat their patients. Yet digital health companies currently lack sufficient understanding of physician behaviours and preferences.

"When working with a company designing an innovative solution for wound care, I realised that none of the team members working on the solution had actually seen a patient's wound being dressed." – Dr Karen Wai, CEO, DentX Global

A greater understanding of physician behaviours and preferences is vital to developing digital health solutions that will eventually gain adoption among physicians.

4. Regulatory guidelines often pose barriers to digital health innovation

Digital health solutions are developed using a far more agile approach when compared to pharmaceuticals or medical devices. Consequently, regulatory guidelines for the approval and reimbursement of digital health solutions will need to be adapted to cater for agile approaches that are common in the technology world.

However, a number of traditional pharmaceutical/medtech regulatory approaches are already being applied to digital health solutions. For example, in Germany, regulatory guidelines for digital apps in home care/aged care settings prohibit the implementation of changes to the app once it is being trialled among patients. This is in direct conflict to the test-and-refine approach that is typical in app development and therefore creates unnecessary barriers to the development and implementation of digital health apps.

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