Deloitte.

Beyond connectivity

Unlocking new revenue streams in Southeast Asia's
intelligent home services market

July 2023

MAKING AN
IMPACT THAT
MATTERS
since 1845

Contents

Beyond connectivity

Our homes are becoming increasingly connected. From lighting fixtures to refrigerators, virtually any and every household device and appliance now exists in intelligent versions capable of connecting to the Internet via Wi-Fi. Within Southeast Asia, growth in the intelligent home services market has not only been palpable, but is also accelerating. Valued at about US$1.6 billion in 2022, the regional market is expected to nearly double in size to reach a total of US$3 billion by 2026[1].

For telecommunications providers, the rapid emergence of a nascent intelligent services market in Southeast Asia represents a clear opportunity to define – or in some cases, redefine – their role as ecosystem participants beyond their traditional functions as connectivity providers. Yet, as things stand, most telecommunications providers have yet to make significant forays into this new domain.

One oft-cited reason for this is, of course, the fact that the pure connectivity market continues to be a growing one in many Southeast Asia geographies. While that may be true, the reality is that telecommunications providers that only play in this traditional domain are likely to find themselves dealing with a core service that is becoming increasingly commoditised and subject to intense competitive pressures.

In such a context, the intelligent home services market therefore offers telecommunications providers not only the potential to develop new sources of revenues, but also the opportunity to differentiate their core connectivity business. To realise this value, however, telecommunications providers must, first and foremost, evolve beyond current efforts in this space – specifically, their existing focus on device-centric models – and towards new platform-centric models that will enable them to entrench themselves as end-to-end service telecommunications providers within the broader ecosystem.

This shift, in turn, entails a fundamental shift in the way telecommunications providers approach their business and operations. In this report, we will present an approach – covering the four pillars of strategy; partnerships; product design and development; and program management – that we have developed to support telecommunications providers in overcoming the numerous challenges standing in their way as they embark on this journey.

To illustrate how this approach has been put into practice, we will showcase a case study of how we recently supported an Indonesia-based telecommunications provider in pivoting its intelligent home services business away from a device-centric revenue model, and towards a recurring services revenue model.

We hope that you will find this publication insightful, and look forward to more conversations with you on what the future beyond connectivity may hold for all of us.

---

1.   "Digital Markets – Smart Home: Southeast Asia". Statista. Accessed on 21 March 2022.

A four-pillar approach

In a recent global benchmarking study conducted by Deloitte Southeast Asia on the business models and value propositions of 18 leading telecommunications players across the globe, we found that telecommunications providers in the intelligent home services market can broadly be categorised into three different archetypes: Marketplace Provider, Interoperable Platform Developer, and Managed Services Provider.

Of the three archetypes, the Managed Services Provider archetype offers the most attractive value proposition and potential for traction, given its relatively higher level of product differentiation and ability to drive recurring revenues. Currently, however, with several notable exceptions being of the Interoperable Platform archetype, the majority of telecommunications providers within Southeast Asia can be observed to be of the most basic Marketplace Provider archetype, offering simple intermediation of products and services with limited to no value-add (see Figure 1).

One of the main reasons for this is a lack of investment, which is perhaps an understandable phenomenon given the associated uncertainties and risks. However, while holding back may seem like the risk-conscious choice – and indeed, the Marketplace Provider model may prove to be sufficient in the short term – such a model would ultimately be unable to provide a telecommunications provider with any sustainable differentiation in the long term.

Figure 1: Three different archetypes of telecommunications providers in the intelligent home services market

	MARKETPLACE PROVIDER for intelligent home devices	INTEROPERABLE PLATFORM DEVELOPER for intelligent home devices	MANAGED SERVICES PROVIDER for intelligent home services
Description	Providers offering an e-commerce platform for intelligent home devices	Providers offering a single platform to support their ecosystem of intelligent home devices	End-to-end managed services providers
Level of differentiation	Low level of differentiation relative to other existing e-commerce channels	Medium level of differentiation, with ecosystem services primarily focused on interoperability	High level of differentiation, with differentiated value-added services
Scope of impact	Low impact (Less than 1% of subscriber base)	Medium impact (About 2% of subscriber base)	High impact (5% to 15% of subscriber base)

Based on observations of mature intelligent home services markets across the globe, it is irrefutably clear that players who had moved decisively into either Interoperable Platform Developer or Managed Services Provider models at an early phase tend to be the ones who have been more successful at unlocking new revenue streams.

In the sections ahead, we will present a structured approach that we have developed to support telecommunications providers in Southeast Asia in their evolution towards the Interoperable Platform Developer and Managed Services Provider archetypes. Briefly, our approach will cover four pillars of the journey: strategy; partnerships; product design and development; and program management (see Figure 2).

Figure 2: A four-pillar approach for the evolution towards Interoperable Platform Developer and Managed Services Provider archetypes

1	2	3	4
Strategy	**Partnerships**	**Product design and development**	**Program management**
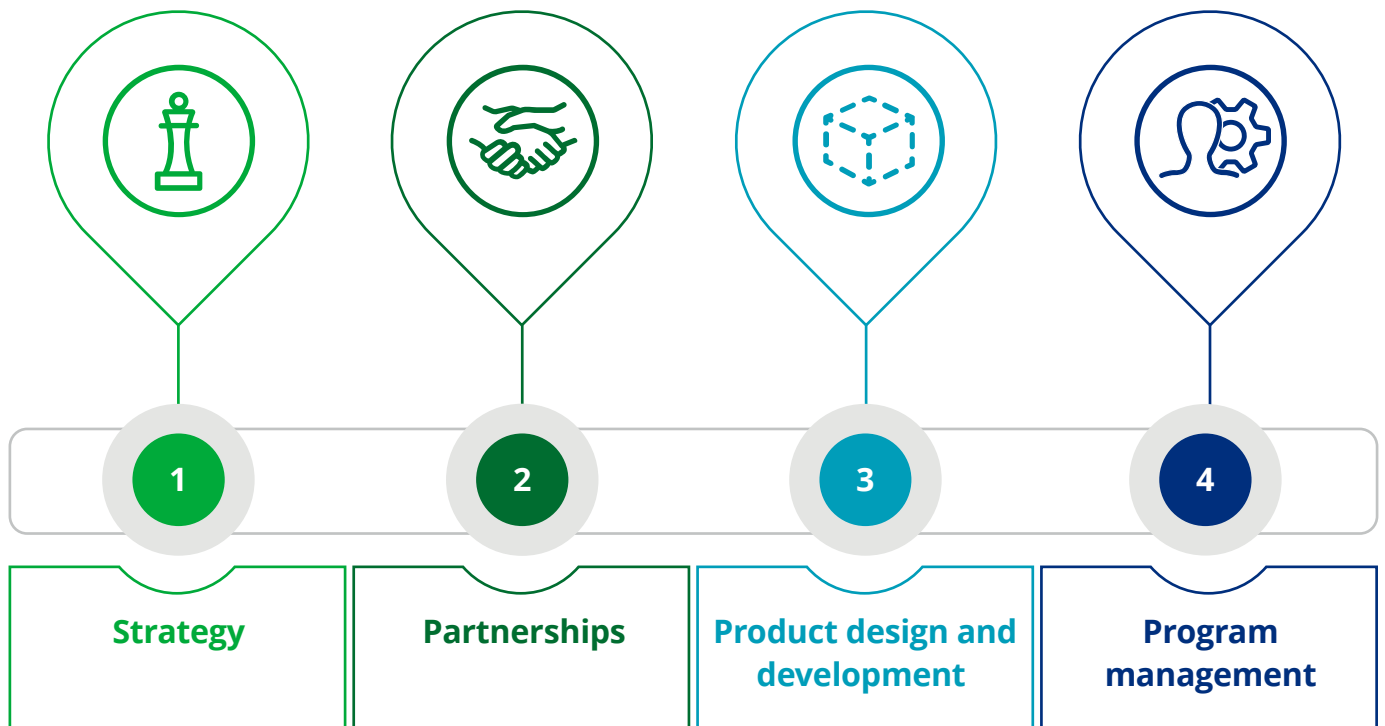
♟ Pillar 1: Strategy

A clear and robust business roadmap is instrumental in establishing a strong foundation for telecommunications providers to pursue future platform growth. Developing this, however, requires an in-depth understanding of the relevant marketplace opportunities and best practices.

Developing a successful strategy for a telecommunications provider to unlock new revenue streams in the intelligent home services market essentially entails making the right decisions along two main dimensions: product and partnerships.

To inform these decisions, there is a need to first assess the total addressable demand within the market of interest and outline specific customer needs within each segment. Based on this information, strategic services can then be identified and prioritised for the development of the telecommunications provider's business model, taking into consideration its unique set of capabilities and competencies.

Briefly, our approach to strategy development consists of the following two key phases:

Phase A: Outside-in and inside-out scans

To obtain outside-in and inside-out perspectives of the market and the telecommunications provider's overall positioning in the intelligent home services market, a series of four scans focusing on the following areas will be conducted: global benchmarking of intelligent home services markets; emerging value chain configurations; strategic conditions for success; and internal assessment (see Figure 3). In the section ahead, we will discuss each of these scans in turn.

Figure 3: A series of four outside-in and inside-out scans
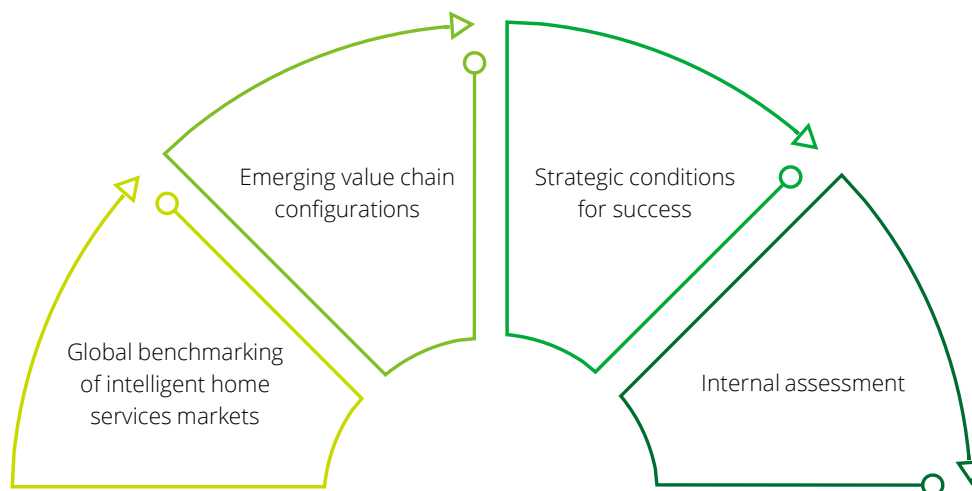
• **Scan 1: Global benchmarking of intelligent home services markets**

The objectives of the global benchmarking scan are to firstly, develop a granular understanding of intelligent home services markets, and secondly, identify appropriate benchmarks and key success stories for the telecommunications provider under consideration (see "A benchmarking exercise conducted for an Asia Pacific telecommunications provider" for an illustrative example).
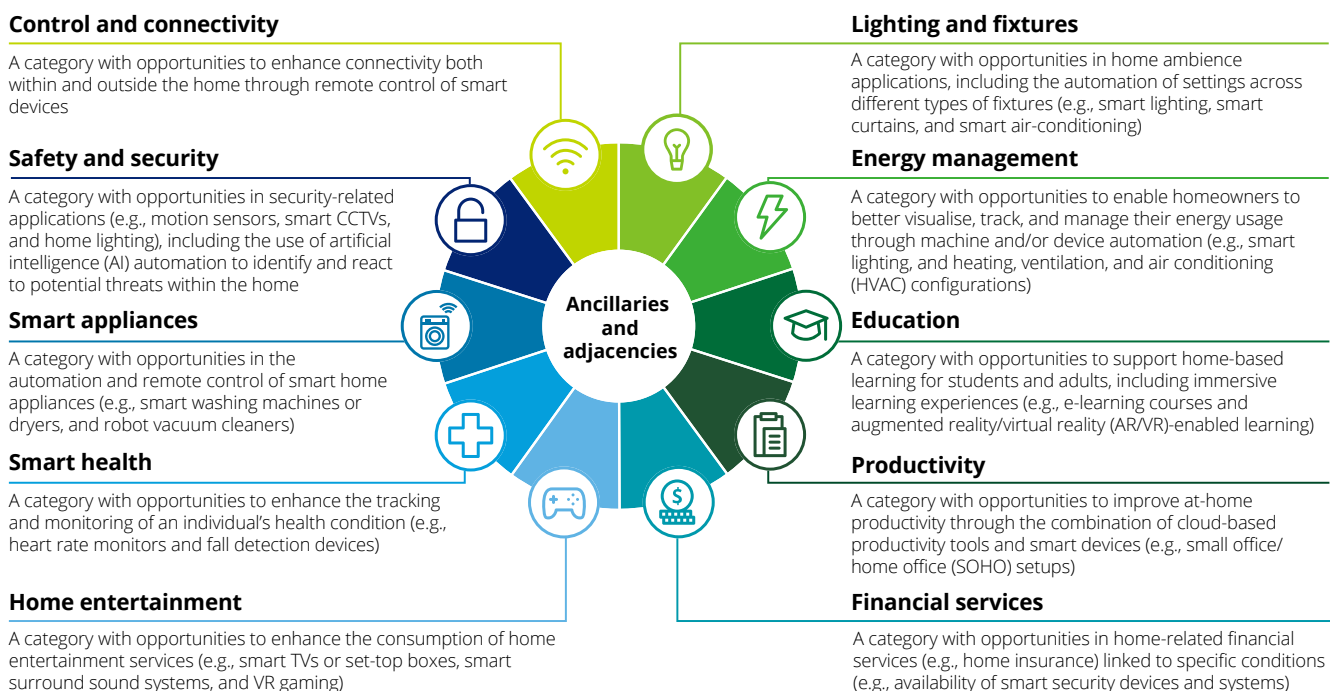
When analysing external case studies of how intelligent home services are being delivered by telecommunications providers, it is important to also consider the relevant similarities and differences between the global comparisons and the telecommunications provider's specific local context so that the appropriate benchmarks and success factors can be established.

A benchmarking exercise conducted for an Asia Pacific telecommunications provider

Intelligent home services may be categorised into 10 broad categories of service offerings (see Figure 4). Across different markets, however, the differing configurations of service offerings provided by telecommunications providers tend to result in the display of unique marketplace dynamics, which could in turn have important implications on their corresponding partnership models.

For example, in one particular benchmarking exercise that we conducted for a telecommunications provider with a broad presence across the Asia Pacific region, we found that its service offerings can be understood as being tiered into two segments: Luxury (comprising service offerings related to lighting, air-conditioning, curtains, gates, and cleaning robots); and Necessity (comprising service offerings related to security cameras, doors, fire alarms, and pet monitors). In line with this construct, its partnership models could also be distilled into three different tiers: High-end; Emerging; and Original Equipment Manufacturers (OEMs).

Figure 4: Overview of 10 broad categories of service offerings

Control and connectivity

A category with opportunities to enhance connectivity both within and outside the home through remote control of smart devices

Safety and security

A category with opportunities in security-related applications (e.g., motion sensors, smart CCTVs, and home lighting), including the use of artificial intelligence (AI) automation to identify and react to potential threats within the home

Smart appliances

A category with opportunities in the automation and remote control of smart home appliances (e.g., smart washing machines or dryers, and robot vacuum cleaners)

Smart health

A category with opportunities to enhance the tracking and monitoring of an individual's health condition (e.g., heart rate monitors and fall detection devices)

Home entertainment

A category with opportunities to enhance the consumption of home entertainment services (e.g., smart TVs or set-top boxes, smart surround sound systems, and VR gaming)

Lighting and fixtures

A category with opportunities in home ambience applications, including the automation of settings across different types of fixtures (e.g., smart lighting, smart curtains, and smart air-conditioning)

Energy management

A category with opportunities to enable homeowners to better visualise, track, and manage their energy usage through machine and/or device automation (e.g., smart lighting, and heating, ventilation, and air conditioning (HVAC) configurations)

Education

A category with opportunities to support home-based learning for students and adults, including immersive learning experiences (e.g., e-learning courses and augmented reality/virtual reality (AR/VR)-enabled learning)

Productivity

A category with opportunities to improve at-home productivity through the combination of cloud-based productivity tools and smart devices (e.g., small office/home office (SOHO) setups)

Financial services

A category with opportunities in home-related financial services (e.g., home insurance) linked to specific conditions (e.g., availability of smart security devices and systems)

• Scan 2: Emerging value chain configurations

The emerging value chain configurations scan will cover several aspects – value chain models, value analysis, viable entry points for new players, and partnership candidates – to provide an overview of the common roles emerging in the intelligent home services landscape. This will then inform the development of a value chain map covering various emerging intelligent home services or platform configurations, which will be constructed to identify potential value capture opportunities for the telecommunications provider.

During this exercise, value chain advantages that are specific to the telecommunications provider in question will also be identified. These could include, for instance, existing customer relationships or access, go-to-market channels, unified billing processes, and brand endorsements.

• Scan 3: Strategic conditions for success

In this scan, our focus will shift towards identifying and defining the strategic conditions – including external conditions, industry dynamics, as well as internal capabilities and organisational environment – critical for the telecommunications provider's success in the intelligent home services market.

Leveraging lessons learnt from global case studies (see "A 'hero' product at a US-based telecommunications provider" for an illustrative case study), enablement areas will then be identified to guide ecosystem development to meet the relevant pre-requisites. Where such ideal conditions are not or cannot be present, contingency paths will also be specified.

A 'hero' product at a US-based telecommunications provider

As an example of lessons learnt from global case studies, our analysis of a US-based telecommunications provider yielded insights into a successful intelligent home services platform model where a 'hero' product has been embedded into broader anchor service offerings.

In this instance, the 'hero' product – a service capable of supporting Internet, video, and voice applications – is integrated into the telecommunications provider's anchor service offerings for land lines, TV and streaming services, Internet connectivity, mobile services, and home security. This integration is, in turn, supported by the following underlying ecosystems:

• **Internet-of-Things (IoT) device ecosystem:** The telecommunications provider's own brand digital video recorder (DVR) device acts as a home operating system (OS) platform to integrate the customer's TV, Internet, and home security subscriptions, and provide additional IoT capabilities through voice search and Smart device integration. Third-party devices with the telecommunications provider's proprietary certification can also be added to the OS platform.

• **Product ecosystem:** The telecommunications provider's home security products are integrated with its TV, voice, Internet, and mobile services. For example, Smart devices can be linked to its TV services, and controlled via its mobile application and voice services. Similarly, third-party devices with the telecommunications provider's proprietary certification can also be seamlessly integrated into this platform.

• **Customer service and support ecosystem:** The telecommunications provider's customer service and support team provides customised installation and whole-home assessment services, including one-on-one tutorials with customers to facilitate the bundling of intelligent home services with other existing services. For customers on the home security plan, highly trained specialists are also on standby to alert the authorities in the event of a security breach or fire alarm.

- **Scan 4: Internal assessment**

To obtain a complete 'lay of the land' ahead of any effort to venture into the identified space, service initiatives already undertaken by the telecommunications provider will be mapped out during the internal assessment scan. Key activities include detailing all existing offerings, capabilities, and initiatives; examining the relevant technical platforms; and assessing the telecommunications provider's ability to form partnerships.

Phase B: Business roadmap

Having established the relevant market opportunities and best practices for the intelligent home services market, our attention now turns towards structuring a clear and robust business roadmap. To achieve this, a series of steps will be conducted to enable the telecommunications provider to define its future business model; prioritise service offerings; identify resource or capability gaps; and finally, develop a platform and services roadmap (see Figure 5).

Figure 5: A series of four steps towards a business roadmap

| Define future business model | Prioritise service offerings | Identify resource or capability gaps | Develop a platform and services roadmap |
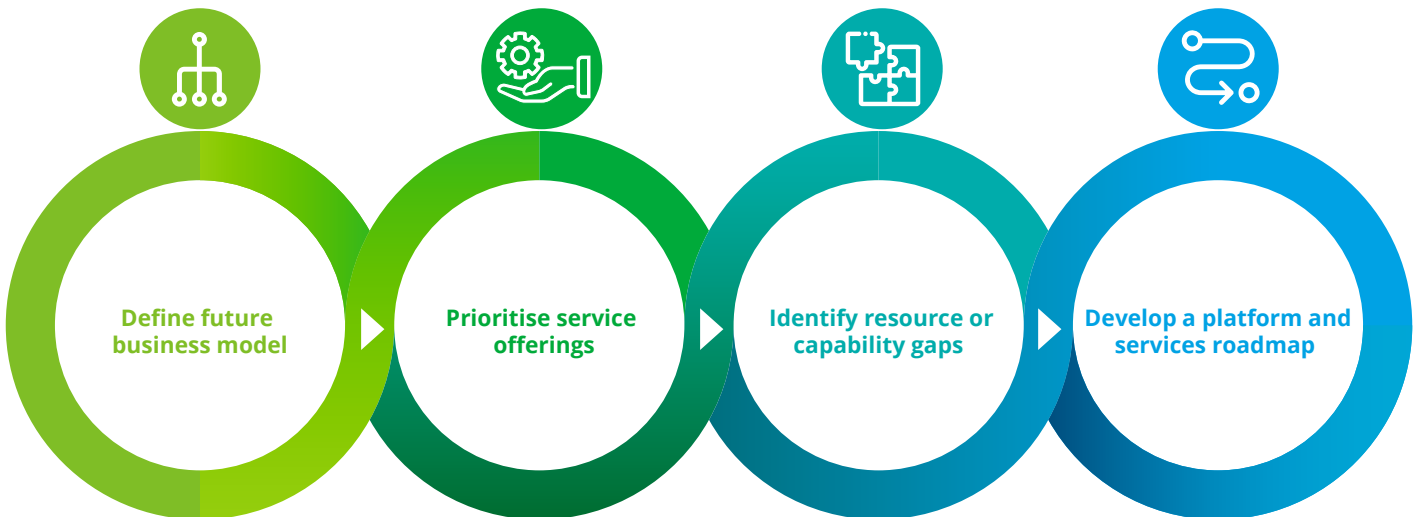
- **Step 1: Define future business model**

This step will focus on defining the value creation principles – that is, the 'who', 'what', and 'how' – of the telecommunications provider's intelligent home services platform, and designing the commercial and marketplace pillars to deliver this platform. Key outputs include a business model canvas for the intelligent home services platform, as well as a masterplan detailing existing competencies to be leveraged and new competencies to be developed through a greenfield approach.

At this juncture, it must be emphasised that it is critical to ensure that the business model is optimised for the telecommunications provider's end-customers and potential partners, as a platform can only be successful if it addresses the needs and interests of all parties involved. In addition, there should also be sufficient degrees of freedom allotted to the different parties to ensure that the business model continues to remain robust and dynamic over time.

• Step 2: Prioritise service offerings

To identify the services that can best combine the telecommunications provider's earning potential and its strategic fit with its customer base, this step will evaluate the service offerings for its specific target market. The output of this exercise would typically assume the form of a value proposition canvas, detailing each of the prioritised services and their respective expansion strategies.

In addition, there would also be an assessment of how a telecommunications provider can gain traction and scale more quickly by targeting its existing broadband customers and leveraging its existing insights on the preferences and interests of these customers. This would enable the telecommunications provider to not only improve the targeting of its value propositions, but also select the right channels to address its segments of interest.

Furthermore, the prioritisation of service offerings should also take into consideration the customers' willingness to pay. To this end, campaign testing exercises – accompanied by an analysis of the eventual click-through rates – can be conducted to obtain a 'real-world' understanding of the willingness to pay, and validate the revenue potential of a given service offering.

• Step 3: Identify resource or capability gaps

In this step, an analysis of the operational, organisational, and technology requirements will be conducted to identify the resource or capability gaps that need to be addressed for the telecommunications provider to deliver its prioritised service offerings and overall future business model.

A set of clear criteria will also be defined to help the telecommunications provider decide if these identified gaps should be addressed with organic or inorganic approaches. Key takeaways would include a preliminary understanding of the capabilities that should be built organically, obtained through partnerships, or outright acquired through strategic acquisitions.

• Step 4: Develop a platform and services roadmap

As the focus in this step shifts towards finalising the design of a high-level technical concept for the new intelligent home services platform, it is important to emphasise that the platform must be designed such that it is capable of providing the telecommunications provider's partners with an economically attractive portfolio of anchor offerings to facilitate experimentation in new areas.

During this step, a build-up blueprint for the new platform and its services will be developed to help the telecommunications provider coordinate the synchronisation of all relevant commercial, partnership, and technical development activities – with priority accorded to services with higher market potential and probabilities of success.

Pillar 2: Partnerships

Given the uncertainties surrounding the introduction of a new universe of intelligent home services, telecommunications providers could benefit from an agile, light-touch approach to partnership development.

As a telecommunications provider makes its foray into the intelligent home services market, it is likely to encounter uncertainties on several fronts. It will need to consider, for example, which type of intelligent home services are likely to be more successful, the type of partners that will be the best strategic fit for its go-to-market strategy – and more importantly, how these two factors will interact with each other and evolve over time.

With so many moving parts, the telecommunications provider would do well to adopt an agile, light-touch approach towards partnership development, taking on different partnership models or roles to mitigate different types of risk – including but not limited to obsolescence and inventory carrying costs risks – as the situation requires. This will, in turn, require a "try fast, fail fast" mindset, as well as flexible technology, finance, and procurement platforms to accommodate rapid shifts in the partnership model.

Guided by a playbook that aims to institutionalise partnerships as a repeatable model, increase speed to market, build insurgency, and rationalise metrics for partner selection and evaluation, our approach to partnerships broadly consists of the following three key phases:

Phase A: Partner candidate assessment
With the objective of identifying appropriate partner candidates for the telecommunications provider under consideration, a list of potential partner candidates will be evaluated for their suitability and expected value potential based on a range of defined criteria and metrics.

These include, but are not limited to, their eminence or presence in specific regions or markets of interest, technical requirements – and most importantly, their willingness to collaborate or form partnerships in a mutually beneficial manner.

Phase B: Partner outreach
Having shortlisted several potential partner candidates, this phase will focus on reaching out and engaging with these candidates to establish a common understanding, shared goals, and other terms of cooperation. Leveraging a well-defined outreach methodology that will enable the rapid assessment of strategic fit, our process will also incorporate feedback from the outreach activities to inform the 'go or no-go' decision.

For the pursuit process, a combination of 'push' and 'pull' strategies will be employed. 'Push' refers to proactively pursuing a network of potential partners – typically, about five to 10 candidates – to ascertain their individual levels of interest, and set up touchpoints with interested parties. 'Pull', on the other hand, refers to attracting potential candidates so that they reach out to the telecommunications provider on their own accord. This is achieved, for example, by publicising the telecommunications provider's business growth aspirations or issuing an open invitation for potential partnerships.

Phase C: Partnership roadmap

During this phase, efforts will be focused on steering the initial contacts with shortlisted partner candidates into subsequent partnership formalisation. At this point, it is crucial for the telecommunications provider to conduct detailed technical discussions and clearly define roles and expectations with its prospective partners.

In this respect, the key objective would be to assess the level of required technical integration and their associated complexities, as well as corresponding implications on "time to partner" metrics. These findings would in turn act as the inputs for the resulting partnership roadmap, which should take into consideration the product roadmap, and complexities associated with engaging specific partners for each service.

Furthermore, there also needs to be agreement on the terms of the partnership – including key performance indicators (KPIs), review cycles, and termination clauses – to establish a strong basis for strategic alignment between all parties. Once this has been achieved, Memorandums of Understanding (MOUs), as well as subsequent agreements to refine the scope of the partnerships, can then be prepared to onboard the finalised list of partners.

Pillar 3: Product design and development

The design of a minimum viable product (MVP) will set the stage for the collaboration between the telecommunications provider and its partners on the product development process.

Product design processes emphasise the design of an MVP, which represents the minimum level of functionality that a product needs in order for it to meet basic user needs and achieve viability in the market. In this section, we outline the three key phases of our approach for the design and development of an MVP that will serve as the basis for the collaboration between the telecommunications provider and its partners (see "Deloitte's design thinking toolkit" for an overview of our methodology):

Phase A: MVP journey and UI/UX design
As a start, a series of design thinking sessions will be conducted to enable us to step into the shoes of the customer. Insights obtained from these sessions will then inform the creation of key customer personas, as well as the translation of their target MVP experiences and journeys into tangible feature sets and user interface and user experience (UI/UX) requirements for the platform.

During this phase, wireframes will be developed to detail each step of the customer experience starting from a single touchpoint, and a range of prototypes of the different customer journeys will also be created to conduct iterative testing of the UI/UX with potential customers and key stakeholders.

Phase B: MVP design and management
In this phase, brainstorming sessions will be conducted with various stakeholders on the potential functionalities that the platform should possess. The proposed product is then put through a series of idea validation, product validation, and business model validation user tests to ensure problem-solution fit, product market fit, and business model fit.

Following a prioritisation of product features and user stories, an MVP development backlog document will be created to translate the design of the strategy into a product backlog. Highly structured and modularised specifications will also be used to ensure scalability and agility for future iterations of the product.

At this point, rollout planning will be conducted to plan for multiple product version releases for piloting, testing, and iterating. Briefly, the rollout plan should include a build plan, which details the recommended build approach, including development phases and sprints, product backlog, as well as technical architecture and stories; and a launch path, which details the launch plan of the pilot product, including its objectives, milestones, KPIs, and prioritised hypotheses.

Given that the idea of an MVP is to create a simple but compelling design, it is important to note that the entire design process of the MVP must be tightly controlled to prevent any scope creep, and remain laser-focused on the core value propositions that truly matter the most to the customer. To this end, tight and continuous user research should also be conducted along every step of the process.

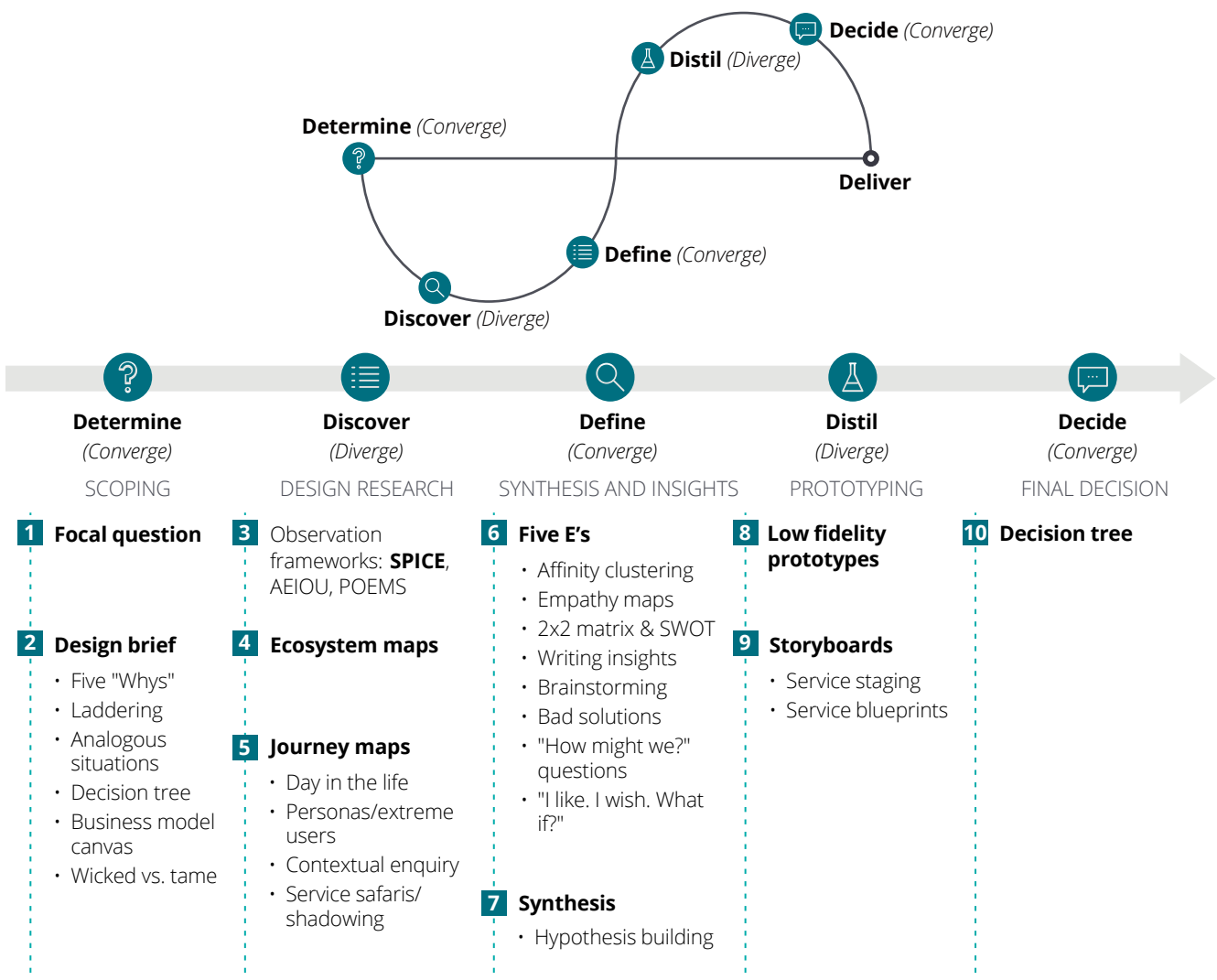### Phase C: Technical platform and security recommendations
As the high-level technical platform concept begins to take shape, this phase will focus on providing recommendations on security, and developing suggested approaches to meet the relevant security standards, including those relating to data privacy and platform security.

Deloitte's design thinking toolkit

Our toolkit consists of 10 different tools that aim to deliver an optimised design through five alternating phases of divergence and convergence: Determine; Discover; Define; Distil; and Decide (see Figure 6).

Across all five stages, a spectrum of different prototyping tools – including but not limited to storyboards, process visuals, business cases, role plays, sketch wireframes, controlled test campaigns, and even an MVP – can be deployed to help transform an intangible concept into a tangible product that users can understand and experience first-hand.

Figure 6: Five stages of divergence and convergence

Determine *(Converge)*	**Discover** *(Diverge)*	**Define** *(Converge)*	**Distil** *(Diverge)*	**Decide** *(Converge)*
SCOPING	DESIGN RESEARCH	SYNTHESIS AND INSIGHTS	PROTOTYPING	FINAL DECISION

1 **Focal question**

3 Observation frameworks: **SPICE**, AEIOU, POEMS

6 **Five E's**
- Affinity clustering
- Empathy maps
- 2x2 matrix & SWOT
- Writing insights
- Brainstorming
- Bad solutions
- "How might we?" questions
- "I like. I wish. What if?"

8 **Low fidelity prototypes**

10 **Decision tree**

2 **Design brief**
- Five "Whys"
- Laddering
- Analogous situations
- Decision tree
- Business model canvas
- Wicked vs. tame

4 **Ecosystem maps**

9 **Storyboards**
- Service staging
- Service blueprints

5 **Journey maps**
- Day in the life
- Personas/extreme users
- Contextual enquiry
- Service safaris/ shadowing

7 **Synthesis**
- Hypothesis building

Pillar 4: Program management

By enhancing visibility, adaptation and iteration, an Agile Scrum Master can help to better manage complexity, unpredictability, and change in an environment characterised by iterative and incremental development.

The iterative nature of product development requires a more flexible approach to managing organisational change. One common misconception of Agile methodologies is that it somehow allows for a lower degree of delivery control. But the opposite is in fact true: as Agile provides greater transparency and visibility of progress, it requires greater cross-functional collaboration and discipline than traditional approaches.

Of the different Agile concepts, Scrum principles have been found to be particularly well-suited for the management of self-organising, cross-functional teams, where product requirements often evolve through collaboration. To run the different workstreams on Scrum principles, an Agile Scrum Master could be deployed to orchestrate a scaled, Agile approach to program management for the launch of the MVP.

Agile Scrum Master

Briefly, an Agile Scrum Master's key roles include identifying and communicating potential risks and blockers, providing recommendations to mitigate these risks or roadblocks, as well as engaging key stakeholders and decision-makers to fast-track critical decision-making.

Leveraging the Agile Scrum methodology, they will oversee teams working across different workstreams from the MVP proposition development, to the design, building, and testing of the prototype, until the eventual deployment of the MVP and its corresponding product support (see Figure 7).

Figure 7: A Scrum approach to the product development process

Strategic direction and vision	Customer strategy and UX	MVP/Release prioritisation	Budget management	Timeline and milestone management	Release/ delivery management	Risk management	Change management	Operationalisation and commercialisation
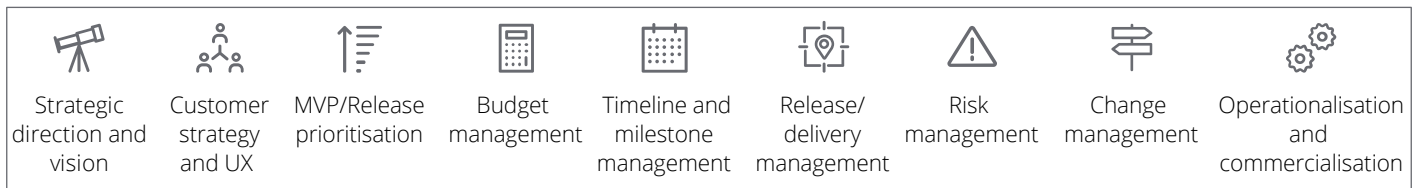
Core and regional teams

- Business leads
- IT leadership
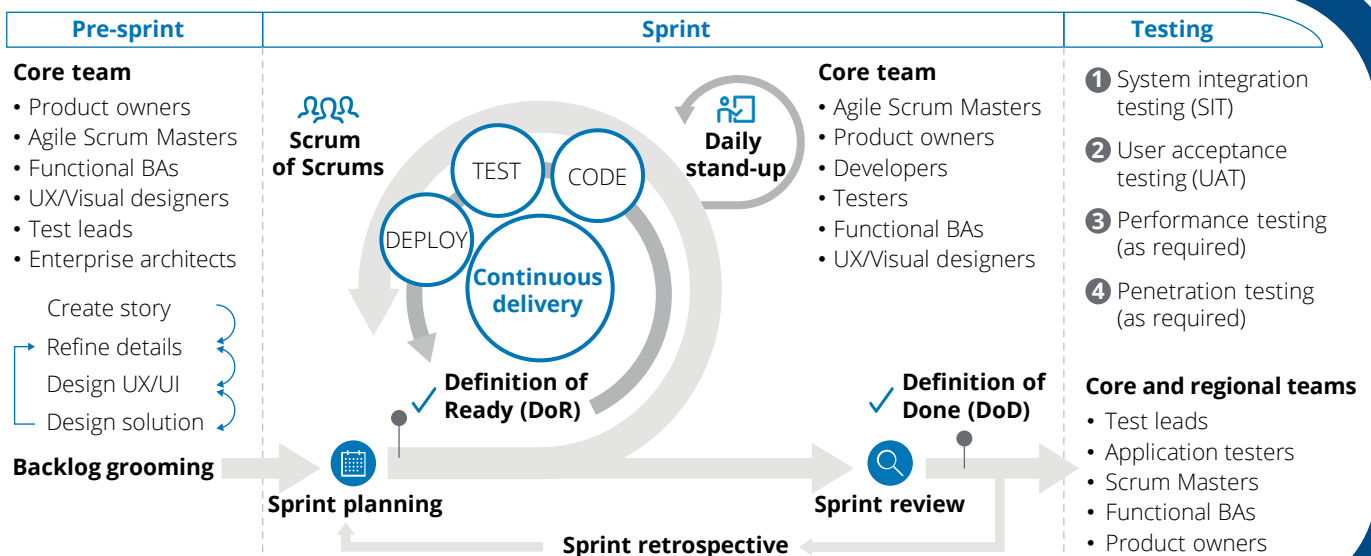- Test managers
- Product owners
- Enterprise architects
- Program managers

Prepare

❶ Capability and feature refinement/prioritisation

❷ MVP definition

❸ Project kick-off

❹ Feature planning (as required)

Core team
- Business leads
- IT leadership
- Test managers
- Product owners
- Business analysts (BAs)
- Enterprise architects
- Program managers
- Creative and branding leads
- Subject matter experts

Analyse, design, build, and test

Pre-sprint	**Sprint**	**Testing**

Core team
- Product owners
- Agile Scrum Masters
- Functional BAs
- UX/Visual designers
- Test leads
- Enterprise architects

Create story
Refine details
Design UX/UI
Design solution

Backlog grooming

Scrum of Scrums

TEST CODE
DEPLOY **Continuous delivery**

Daily stand-up

Core team
- Agile Scrum Masters
- Product owners
- Developers
- Testers
- Functional BAs
- UX/Visual designers

✓ **Definition of Ready (DoR)**

✓ **Definition of Done (DoD)**

Sprint planning

Sprint review

Sprint retrospective

❶ System integration testing (SIT)

❷ User acceptance testing (UAT)

❸ Performance testing (as required)

❹ Penetration testing (as required)

Core and regional teams
- Test leads
- Application testers
- Scrum Masters
- Functional BAs
- Product owners

Deploy and support

❶ Production implementation

❷ Operational monitoring

❸ Production support

Core team
- Test leads
- Application testers
- Agile Scrum Masters
- Functional BAs
- Product owners
- Release manager

Case study: Creating a first-mover advantage

Over a 12-week period, we worked with an Indonesia-based telecommunications provider to develop a strategy to identify and prioritise two new product offerings for its go-to-market strategy, and in turn extend its intelligent home services business beyond broadband connectivity – that is, away from a device-centric revenue model, and towards a recurring services revenue model.

Business problem

As a background, the client had been operating its intelligent home services business as an Interoperable Platform Developer archetype, with a revenue model largely centred around the low-end device segment. While it had previously implemented a single platform to support its ecosystem of intelligent home services, the platform had primarily focused on ensuring interoperability between different intelligent home devices rather than enabling the provision of value-added services.

With the objective of reducing its reliance on device sales and enabling it to benefit from higher recurring revenues, we embarked on a 12-week project with the telecommunications provider to develop a strategy for it to evolve into a Managed Services Provider archetype. This entailed the identification and prioritisation of two new products that will enable it to act as its customers' end-to-end intelligent home services partner, and thereby increase its level of differentiation relative to the competition.

Given that the intelligent home services market in Indonesia is still nascent – most players in the marketplace continue to be focused on device-centric business models – this move is expected to create a first-mover advantage for the telecommunications provider. In the section below, we outline some of the key steps that were taken as we supported our client on this journey.

Product prioritisation

Within our client's target market of interest, homeowners typically look to satisfy five key needs with intelligent home services. These needs are, in turn, fulfilled through an interplay of hardware (devices), software (applications and platforms), and services across 10 product categories that form the universe of intelligent home services under consideration (see Figure 8).

Figure 8: A simplified overview of the intelligent home services universe

Homeowner needs	Safety and security	Control and connectivity	Lighting and fixtures	Energy management	Smart appliances	Smart health	Education	Productivity	Financial services	Home entertainment
Recreation			✓		✓				✓	✓
Home management	✓	✓	✓	✓	✓					
Working and learning from home							✓	✓		
Health and well-being			✓		✓	✓			✓	
Safety and security	✓	✓	✓							
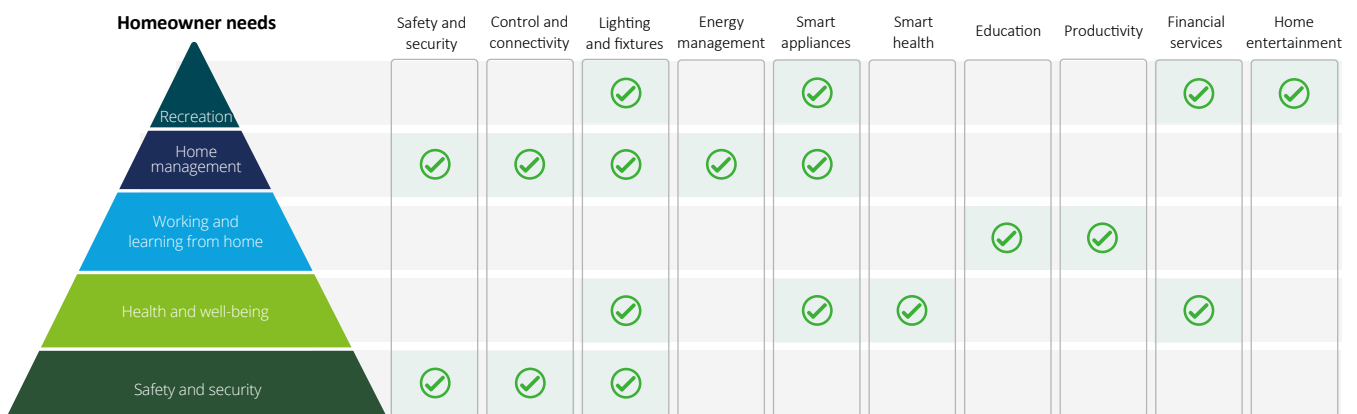
To identify a set of priority product offerings, each service within the entire universe of intelligent home services was analysed according to a defined scoring rubric, and awarded a set of scores along the following two dimensions (see Figure 9):

• **Desirability**, which refers to the product's market potential, including factors such as the size of its potential market relative to other products, and customers' relative propensity of purchase; and

• **Feasibility**, which refers to the telecommunications provider's ability to add value with this product, including factors such as its potential sources of value-add, customer base and insights, operational economies of scale, channel footprint, as well as brand recognition and trust

Figure 9: Illustrative example of product prioritisation map
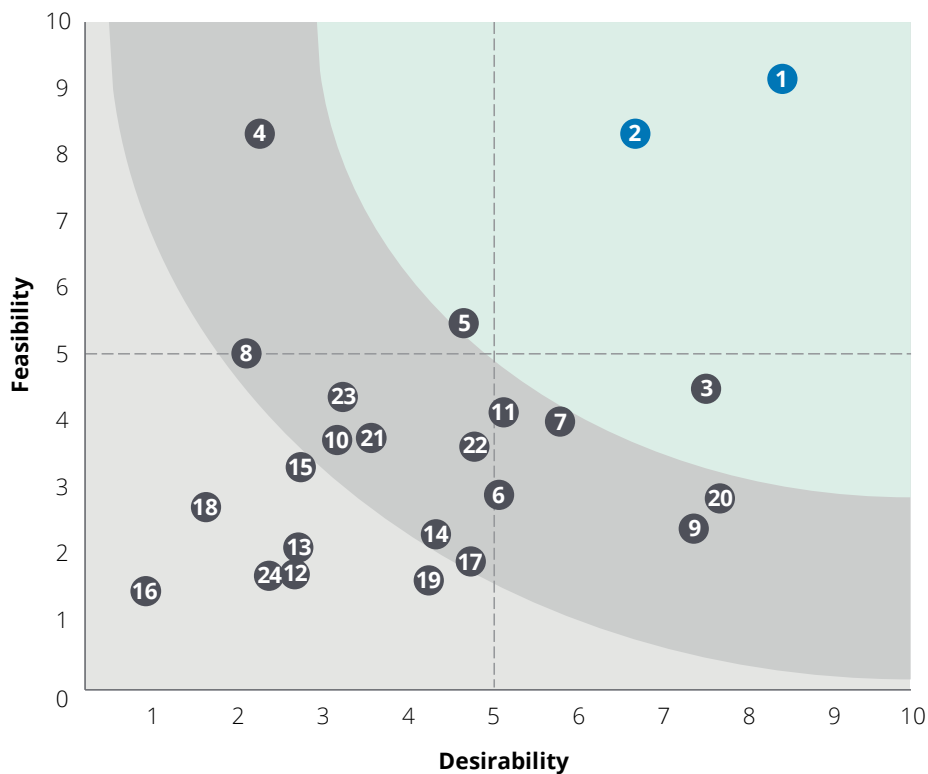
Based on this analysis, two products had been identified to be of the highest levels of desirability and feasibility for the telecommunications provider. Given the potential for these products to be accompanied by premium features and subscription services, they could potentially enable the telecommunications provider to unlock new and recurring revenue streams – that could, in turn, grow significantly over time as the telecommunications provider's customer base increases.

By moving beyond the sale of devices to offer holistic, end-to-end solutions for these products, the telecommunications provider would also be able to better differentiate itself from its competitors, and in the longer term, find the footing to become their customer's trusted telecommunications provider for intelligent home services.

Partnerships and product development

Following a rigorous partnership candidate assessment of over 100 potential partners relevant to the markets for Product 1 and Product 2, a shortlist of about 40 candidates was generated for further outreach and discussions, which continue to take place at this time of writing.

In terms of the product development process, a stage-gate approach was designed on the premise that the cost of being slow to market is often higher than the cost of being perfect. By deploying such an approach, we can achieve more efficient de-risking by failing faster and learning faster, as insights generated at each stage can immediately be used for course correction.

Each stage-gate of the incremental and iterative product development process will also be accompanied by metrics to enable the telecommunications provider to assess its progress, as well as ensure alignment with internal objectives and key results (OKRs) and stakeholders' ownership of desired outcomes (see Figure 10).

Figure 10: A stage-gate approach to product development

Wave 4
MVP 2.0

Wave 3 goals met? No

Further risk reduction
Key dependencies include process automation, infrastructure capacity, and technical debt

Wave 3
MVP 1.1 in other target cities

Wave 2 goals met? No

Further risk reduction
Key dependencies include the application platform, channel optimisation, and new customer onboarding processes

Wave 2
MVP 1.0 in first target city

Wave 1 goals met? No

Wave 1
Pilot 1.0 and Pilot 2.0

Risk reduction
Key dependencies include partnership contracts and software integration

Expected outcomes

Expected outcomes from the launch of Product 1 and Product 2 include a 4% revenue uplift to the telecommunications provider's fixed broadband revenue by Year 5, accompanied by the potential for further upside from the provision of additional features and software through the new intelligent home services platform.

In addition, recurring revenues will be driven by the provision of software and services, including but not limited to analytics software, monitoring services, cybersecurity protection services, bandwidth and device control services, as well as managed services. Other upsides could also potentially be realised with additional plan upgrades and initiatives to reduce churn.

Unlocking new revenue streams

Through improved networks and system resilience, telecommunications providers in Southeast Asia have been successful at capitalising on the exponential growth of connectivity over the last few decades. But the success formula of the past – specifically, their reliance on traditional, device-centric revenue models – may soon become a stumbling block as we approach a new world beyond simple connectivity.

The good news, however, is that telecommunications providers are well-positioned to play a dominant role in the new ecosystem. For one, they have a large captive customer base that can be leveraged to generate low cost, high quality sales leads for new and recurring services revenue models. With the appropriate use of data analytics tools and techniques, telecommunications providers can also conduct highly targeted customer segmentation, and thereby scale more quickly and economically than new entrants and other competitors.

But to stay ahead, telecommunications providers will need to build and enhance their competencies in several new areas. Central to success will be their ability to form new partnerships – including identifying the right partners with the right capabilities that will enable them to deliver quality services, accelerate time-to-market, and mitigate business risks – and more importantly, their ability to manage these external relationships as they evolve over time.

In addition, telecommunications providers will also need to adopt a more agile approach and mindset to the product development process. In an environment with multiple moving parts, an Agile rollout – one that is conducted in phases with built-in course correction mechanisms, and with an emphasis on continual data-gathering and concept-testing – is the best risk mitigation strategy. By starting small, and scaling in tandem with market viability, telecommunications providers stand a better chance of managing the level of risks that they are undertaking.

Ultimately, the bottomline is that as telecommunications providers look to unlock new revenue streams, the key to success will lie not only in their ability to re-imagine and re-design their business models, but also in their ability to strategically identify which of their existing competitive advantages need to evolve – and which can be leveraged or even repurposed – as they implement and execute these new strategies.
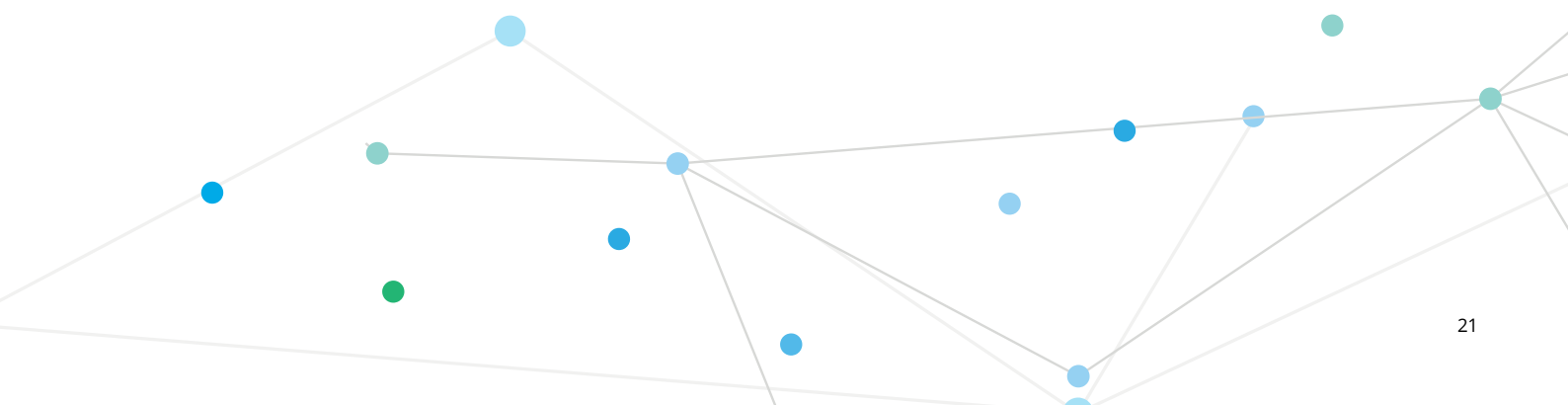
For more insights, please contact

Javier Gonzalez Pinal
TMT Consulting Leader
Deloitte Southeast Asia
javiergonzalez@deloitte.com

Piyush Jain
Executive Director, Consulting
Deloitte Singapore
pijain@deloitte.com

Contact us

Southeast Asia TMT industry practice

Southeast Asia TMT Industry Leader
Yang Chi Chih
chiyang@deloitte.com

Cambodia
Kimleng Khoy
kkhoy@deloitte.com

Audit & Assurance
Yang Chi Chih
chiyang@deloitte.com

Guam
Dan Fitzgerald
dafitzgerald@deloitte.com

Consulting
Javier Gonzalez Pinal
javiergonzalez@deloitte.com

Indonesia
Brian Johannes Indradjaja
bindradjaja@deloitte.com

Financial Advisory
Leonard Woo
lwoo@deloitte.com

Lao PDR
Choopong Surachutikarn
csurachutikarn@deloitte.com

Risk Advisory
Brian Johannes Indradjaja
bindradjaja@deloitte.com

Malaysia
Leonard Woo
lwoo@deloitte.com

Tax & Legal
Heru Supriyanto
hsupriyanto@deloitte.com

Philippines
Jesus Ma. Lava III
jlavalll@deloitte.com

Singapore
Yang Chi Chih
chiyang@deloitte.com

Thailand
Parichart Jiravachara
pjiravachara@deloitte.com

Vietnam
Nguyen Trung
trungnguyen@deloitte.com

Deloitte.