Everything-as-a-service technology platforms

How the right IT architecture and transformation delivery approach can accelerate transition to an everything-as-a-service business model
Many technology, media, and telecommunications (TMT) companies are making a fundamental shift to flexible consumption models, also known as everything-as-a-service (XaaS) models, that allow customers to consume and pay for offers or products based on how much they use. To make a successful transition, companies will not only need to evaluate their strategies, business model, capabilities, and operating model, but also their information technology (IT), including technical architecture and associated solution delivery approach.

Flexible consumption or “pay-per-use” models can take a variety of forms, from subscriptions with unlimited access to pure pay-per-use models. But one thing is clear: they will require a different set of technology capabilities and architecture from traditional business models, owing to their dynamic nature. If you are moving to XaaS, you will need to look across your technology capabilities to identify the gaps and determine where adjustments should be made.

An important question to ask when considering a transition to pay-per-use, is whether the current technology architecture can enable the new model, and if not, how it needs to evolve. To effectively deploy an XaaS business model, companies need to align their technology architecture with their business capabilities.

Depending on the specific type and complexity of those business capabilities, this may mean redefining the technology architecture across key business functions such as configure-price-quote, billing, and revenue recognition.

Making the shift to everything-as-a-service

Every day brings new ideas and possibilities to the Technology, Media, and Telecommunications sectors. Everything-as-a-service (XaaS) model transformation allows customers the flexibility to consume and pay-per-use, but transitioning is complicated and challenging.
IT is stepping into the strategic spotlight

Under XaaS, IT needs to not only enable business strategy, but actually inform it.

Technical architecture must be scalable, reliable, and secure

Rethinking the application, integration, and infrastructure architecture is key to enabling XaaS capabilities.

Data is a new strategic asset

XaaS models generate various types of data (customer engagement, telemetry, service usage and operational data) throughout the customer lifecycle. That’s a treasure trove that companies can mine for business insights on potential opportunities.

An Agile and DevOps delivery approach will help accelerate business transformation

XaaS requires IT organizations to adopt an Agile software delivery methodology. This iterative approach to building and deploying offers and features is essential to accommodating constantly changing customer needs.

IT will need a skills transformation

Deploying XaaS solutions calls for the right balance of business and technical skills to ensure that the IT workforce has the capabilities and competencies to deliver on the IT value proposition.
The XaaS operating model digitally integrates different business functions so that the organization is better equipped to rapidly develop and deliver new offerings to customers. This calls for closer collaboration among IT, research and development (R&D), sales and marketing, and finance. As a result, the shift to XaaS is driving a need for greater alignment of IT with business functions and channel partners.

In addition, to accommodate ever-changing customer preferences, every business segment that touches the customer now needs an element of technology, be it pricing, offer customization, data analytics, subscription management, or marketing. This, in turn, enhances the importance of IT as a critical business partner. The IT function is also central to optimizing operational costs due to its role in moving the organization to cloud-based systems, migrating to newer systems, or retaining and maintaining existing platforms for each subsystem.

While Chief Marketing Officers (CMOs) are responsible or managing the marketing of offers and services, and Chief Financial Officers (CFOs) are tasked with handling financial information, it is Chief Information Officers (CIOs) who are most often entrusted with rolling out the capabilities required for XaaS and for collaborating with other CxOs as part of the process. From working with the analytics teams to understand the latest customer trends, to helping offer development teams decide on new features, to advising the pricing and financing teams, CIOs and their teams have a far more front-end role in the decision-making process than they have ever had in the past.

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XaaS demands new capabilities, such as the ability to accommodate a tiered pricing structure, subscription billing, and recurring revenue. For example, with traditional licensing or direct-purchase models, the data of different customers is stored and mapped to fixed services, driving a regular—and relatively simple—billing process. However, an XaaS model calls for a fundamentally new architecture with a fluid data management mechanism—one that allows customer data to be mapped to different services at different times. This model is not as discrete and linear as a traditional one. Rather, systems will need to be more dynamic and interactive, so that they can maximize value or both the customer and the company.

These are complex processes, requiring IT to rethink the company’s application, integration, and infrastructure architecture. How big a change is needed depends on the company’s business model, industry, and a host of other actors. It is important to assess the current architecture based on the parameters that are central to the XaaS model, such as scalability, performance, features, and functionality, and to gauge the ease with which such a model can be adopted.

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Data pertaining to the company's offers and services, customers, channel partners, subscription plans, and customer usage are all vital to monetization of the offering. Revenue generation depends on deriving business insights from these data streams that companies can then use to identify upsell or cross-sell opportunities, create new offer features, increase customer satisfaction, and improve internal and partner business operations. Moreover, data enables companies to drive a seamless and consistent individualized customer experience that goes beyond monetization opportunities.

With XaaS, the speed at which data changes makes it critical for companies to develop the capabilities needed to rapidly analyze new information and shifting patterns and parlay the results into better offers and services. Failure to use this strategic asset will leave significant money on the table in the form of missed sales opportunities.

It is especially important that the customer, offer, and channel partner data models are standardized and have a single source of truth. Furthermore, security capabilities need to be enhanced to protect customer data and privacy. Loss of any confidential information will not only have legal implications, but also result in irrevocable damage to revenue streams and the company's reputation in the marketplace.

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Pay-per-use models require the organization to be nimble in order to accommodate and implement changes quickly. This means they will need to adopt a more flexible approach to software delivery.

One of the primary drivers of XaaS models is that customers are demanding companies to innovate and enhance offers better and faster. To achieve faster time to market of new features, product and IT teams are adopting an agile software delivery approach. Unlike traditional development models like the waterfall approach, agile development does not run in sequential phases of design, development, testing, and deployment of capabilities. Instead, the phases are both iterative and simultaneous. This approach enables continual feedback from customers that dramatically improves the offers and enhances customer experience.

In addition to agile, IT is also adopting DevOps techniques to rapidly implement the business capabilities needed to enable and support XaaS offerings. DevOps helps eliminate waste, rework, and bottlenecks, and automates manual tasks across the agile delivery lifecycle. Automation can decrease costs associated with manual processes, improve productivity, and speed up development of new services so that they can be rolled out to the market faster—all while supporting the XaaS model objectives.

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XaaS is all about quickly adapting to customers’ requirements and providing them with services on an as-needed basis. By necessity, this entails leveraging a cloud-based infrastructure to meet the dynamic needs of such a model. Companies need to assess the suitability of their infrastructure to operating in the cloud and determine the best cloud-adoption model. But to make this transition, businesses need to ensure their IT workforce has the skills to handle efficient operations. In particular, companies will need IT professionals with skills in and knowledge of cloud-based services so they can manage and oversee the transition of existing systems, as well as determine which business capabilities need to be migrated to a cloud-based platform and which ones can remain on traditional systems.

Skills in analytics and subscription billing are important to understanding customer usage patterns and planning appropriate subscription models with a good mix of offerings that are priced appropriately. Relevant financial tracking processes have to be implemented in order to determine pricing strategies that are cost effective for customers and that result in acceptable operating margins or the company.

Because both speed and business segment consistency are essential with XaaS, many companies have adopted an agile development approach, and IT professionals will need to be adept in leveraging its tools and methodologies.

Since these technologies are evolving every day, companies need to ensure that their IT professionals remain up to date. This may entail a combination of ongoing workforce training and a new-hire program focused on bringing in talent with these specialized skills.
Let’s talk

Moving to an XaaS business model means juggling a lot of balls and making a lot of changes. IT teams have a major role to play—not just in developing solutions, but in every aspect of making the transition to XaaS a success—from implementing a new technology architecture to managing Agile delivery, to deploying the new IT operating model and analytical solutions.

Deloitte has guided numerous companies to enable technology capabilities and architecture as companies transform their business model towards XaaS, and we understand the complexity of the challenge.

Let’s talk about what this change could mean for you.

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XaaS Models: Our Offerings

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