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Winning in the Platform Game, Part 1: Understand the Game and Determine Your Role

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Foreword

There are an increasing number of success stories about pure platform players such as Airbnb and Uber. Now many traditional enterprises are moving into the platform space with their own platform business models. To ensure success in this arena, CIOs need to help executives understand these models and the role their enterprise can play concerning platform businesses.

This report addresses the questions: *What are platform business models, and how should enterprises position themselves to play and win in the platform game?*

This report is Part 1 of a two-part series. Part 2 will address the question: *What is the CIO's role in preparing the enterprise for the platform game?*

"Winning in the Platform Game, Part 1: Understand the Game and Determine Your Role" was written by members of the CIO Research Group, led by Lee Weldon (managing vice president), assisted by Mary Mesaglio (vice president and Distinguished Analyst), Kristin Moyer (vice president and Distinguished Analyst) and Hung LeHong (vice president and Gartner Fellow).

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Executive Summary

Platform business models are creating new revenue sources and disrupting industries. Although not all organizations need to create a platform business and associated business model, all of them do need a strategy for how to adapt to the industry value creation and directional changes that platform businesses will dictate.

New business models are a foundation of digital business transformation. Platform business models are not new, but they create value very differently from traditional business models. Senior enterprise leaders must have a common understanding of platform business models to determine the best enterprise response. CIOs need to have a firm grasp of the concepts and options to begin conversations with the executive team that develop this understanding and address any uncertainty or urgency.

This report will focus on the platform business model and the ways in which both new and established enterprises are using this model to disrupt and reshape their industries. It aims to help CIOs get the discussion going and establish an understanding of platform business before the hard choices need to be made. Part 2 will focus on the CIO's role in preparing the enterprise for the platform game and building the necessary foundation, whether the enterprise will become, or work with, a platform business.

We begin with definitions of “platform” in the context of this report.

DEFINITIONS

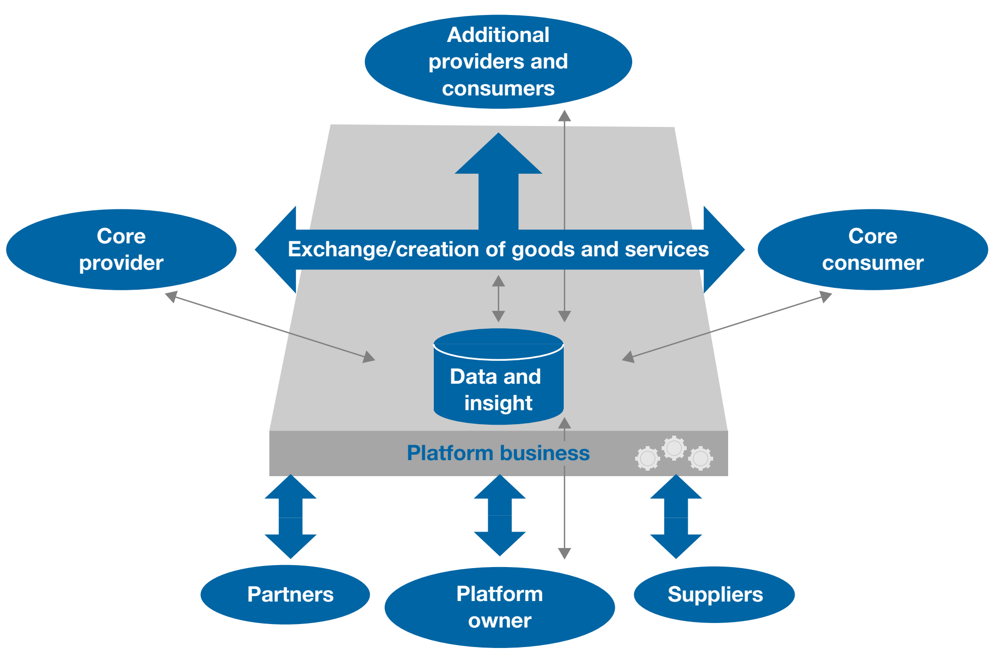
A **platform business** is an organization that enables value-creating interactions between people, businesses and things.

A **platform business model** is a design that consummates matches among providers and consumers (also referred to as users) and/or facilitates the creation and/or exchange of goods, services and social currency, so that all participants are able to capture value.

A **platform** is the combination of technologies that enables platform business models. Platforms share assets such as data, algorithms and transactions (both monetary and nonmonetary) with business ecosystems to match, create and exchange services.

The figure below depicts a platform business’s main components and their relationships.

Platform business framework



Platform businesses reshape and disrupt industries

We estimate that, by 2020, 25% of industries will have a new set of market leaders, many of whom will use a platform business approach to achieve this position. The best platform will control the industry. While the platform business concept is not new, what sets such a business apart is its focus on facilitating interactions between at least two distinct groups that want to interact with each other to form nonlinear value chains.

For example, limousine service brokers have long provided riders with conveyance using a set pool of vehicles. Uber, in contrast, provides the capability for riders to access a dynamic pool of vehicles. Similarly, Airbnb enables interactions between renters and a constantly changing set of room providers.

Platform businesses such as LinkedIn are multisided, whereby multiple players with different business models create and exchange value on the platform as follows:

– Professionals and businesses connect to form networks.

– Recruiting agencies connect with candidates.

– Partner developers create and utilize new shareable assets.

While *supply* economies of scale that created production efficiencies often drove strategic success in the past, platform businesses increase the potential impact of *demand* economies of scale, for an equally viable strategy. Increases in users and demand attract more providers, creating a virtuous cycle — for example, Airbnb users attracting suppliers of rooms in new locations, which, in turn, attracts more users.

Such shifts in strategic success have the potential to change entire industries. For example, traditional taxi companies feeling threatened by Uber and Lyft are seeking legal restrictions in many locales to slow if not prevent complete disruption. Not every organization will need to create a platform business aimed at dictating its industry direction, but it will need to formulate a response to how platform businesses are redefining or redirecting their industries. Even traditional, “non-digitally born” industries can adopt a successful platform business approach, whether it results in creating a platform or collaborating with one.

Create a common understanding of platform business model dynamics

A business model describes how an enterprise creates and retains value; a platform business model puts a modern twist on this old concept. Specifically:

– A traditional or pipeline business model is based on a linear value chain, with producers on one end and customers on the other, thus creating enterprise value from the inside-out.

– As defined on page 6, a platform business model is a nonlinear design. In matching users, or helping create/exchange goods, services, etc., it lets participants capture value created from the outside-in, through business ecosystems.

Successful platform businesses share key components and enablers that help enterprise leaders identify opportunities and threats posed by platform business models in their industries. The platform components are:

– Value units

– Filtered matching

– Core interaction

– Shareable assets

– Data and insight

– Curation

The components are wrapped in four enablers that influence the performance and potential success of a platform business:

– Reliability

– Governance

– Integration

– Attraction

Enterprise executives need to understand platform business models prior to formulating strategic plans. Critical to this process is identifying which of the following will be the primary means of differentiation for the platform business:

– Exclusive access to unique assets

– Ease of configurability and adaptability

– Enhanced platform design and user experience

– Encouragement and leveraging of innovation

– Reduced cost

Another critical strategic decision for enterprise executives will be which of the following platform roles they will assume:

– Provider

– Consumer

– Platform owner

– Supplier

– Partner

Understanding what each role gives and receives when interacting with the platform will help the enterprise make the right choice in response to existing or emerging platforms in the industry.

Determine your enterprise's platform business role, and take action

A "do nothing" strategy is not viable for an enterprise once platforms begin to impact its industry. In anticipation of such impact, an enterprise may choose a strategy to become either a platform business or a user of platform businesses. CIOs should help executive team members consider the level of control over the industry direction, and the level of risk they are willing to take, in response to an existing or potential industry disruption that arises from digital platforms.

Deciding how to respond to platform business trends is not unlike acquiring new technology. The possible responses fall into four main categories — build, acquire, collaborate or partner — and most established enterprises will need to engage in more than one of them. CIOs have the opportunity to take a leading role in creating an awareness of platform businesses and their disruptive potential, and in helping the executive team understand platform business models and their dynamics.

1. Platform businesses reshape and disrupt industries

Every industry will be disrupted by digitalization. In many cases, platform businesses are reinventing industries because they change the way value is created. New leaders often emerge, changing the rules of the game and the industry direction.

Platform businesses are successfully reinventing industries

Digitalization is not just changing enterprises; it is also reshaping industries and business ecosystems. No industry that exists today will look the same by 2020. Indeed, every industry is being dramatically reinvented in terms of how it creates value and what firms are leading the way to the future.

Not every enterprise will succeed in adapting. The average life span of a corporation listed on the S&P 500 over the past 50 years has dropped from 60 to 18 years (see "The Art of Corporate Endurance" in Further Reading). One of the most critical imperatives for CIOs today is to enable their organization to go digital to the core in order to remain relevant (see "Digital to the Core: Remastering Leadership for Your Industry, Your Enterprise, and Yourself" in Further Reading).

Platform businesses are proving to be successful in reinventing industries. Six of the top 10 companies in 2016 (based on market capitalization) are platform businesses, compared to only one out of the top 10 in 2006 (see top figure opposite).

The rise of platform businesses

Market capitalization (March 2006)

	Company	Market capitalization ($ billions)
1	ExxonMobil	362.5
2	General Electric	348.5
3	Microsoft	279.0
4	Citigroup	230.9
5	BP	225.9
6	Royal Dutch/Shell Group	203.5
7	Procter & Gamble	197.1
8	HSBC Group	193.3
9	Pfizer	192.1
10	Wal-Mart Stores	188.9

Market capitalization (July 2016)

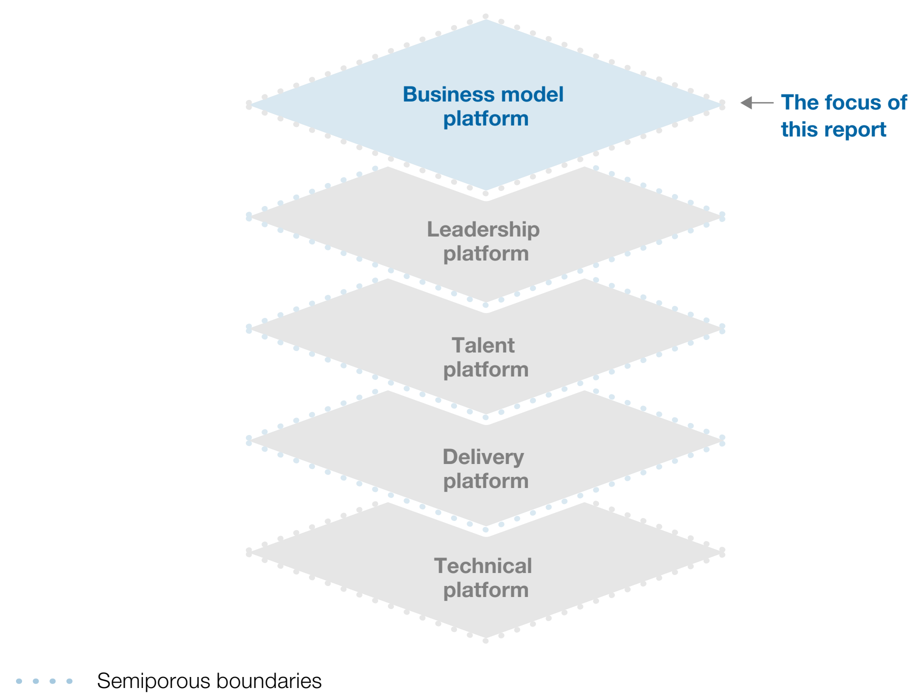
	Company	Market capitalization ($ billions)
1	Apple	586.0
2	Alphabet	500.1
3	Microsoft	407.0
4	Exxon Mobil	363.3
5	Berkshire Hathaway	360.1
6	Facebook	314.8
7	Johnson & Johnson	312.6
8	Amazon.com	292.6
9	General Electric	285.6
10	Wells Fargo	256.0

= Platform business

Source: Forbes 2000.

Technologists have long recognized the power of platform approaches to information and technology architecture. What is new is that platform dynamics are being applied to create value in all aspects of the business (see figure below and “Building the Digital Platform: The 2016 CIO Agenda” in Further Reading).

The 2016 CIO Agenda showed that digital visionaries are building fully “platformized” businesses



Source: Adapted from “Building the Digital Platform: The 2016 CIO Agenda,” October 2015.

This report focuses on the platform business model and the ways in which both new and established enterprises are using this model to disrupt and reshape their industries. We begin with the definitions of “platform” in this context.

DEFINITIONS

A **platform business** is an organization that enables value-creating interactions between people, businesses and things.

A **platform business model** is a design that consummates matches among providers and consumers (also referred to as users) and/or facilitates the creation and/or exchange of goods, services and social currency, so that all participants are able to capture value.

A **platform** is the combination of technologies that enables platform business models. Platforms share assets such as data, algorithms and transactions (both monetary and nonmonetary) with business ecosystems to match, create and exchange services.

Historically, a common denominator of platform businesses has been that they facilitate interactions between at least two distinct groups (the “sides” of the platform). However, many platform businesses today are multisided. This means there are multiple players, with different business models, creating and exchanging value on the platform. For example, to provide integrated travel experiences, companies such as travel agencies have served as focal points for multiple players — local transportation companies, event coordinators, tour guides, etc.

Digitalization enables a platform where these linear, deterministic value chains form and disperse in a more nonlinear, nondeterministic, outside-in manner between providers and consumers. Digital technologies make the barriers to entering and exiting value chains almost nonexistent. This dynamic, and a platform business model to direct and facilitate it, underlie modern platform businesses (points we will revisit in Part 2 of the report).

While *supply* economies of scale that created production efficiencies often drove strategic success in the past, platform businesses increase the potential impact of *demand* economies of scale, for an equally viable strategy. As Parker, Van Alstyne and Choudary explain in their book, “Platform Revolution” (see Further Reading):

“Demand economies of scale are driven by efficiencies in social networks, demand aggregation, app development, and other phenomena that make bigger networks more valuable to their users. They can give the largest company in a platform market a network effect advantage that is extremely difficult for competitors to overcome.

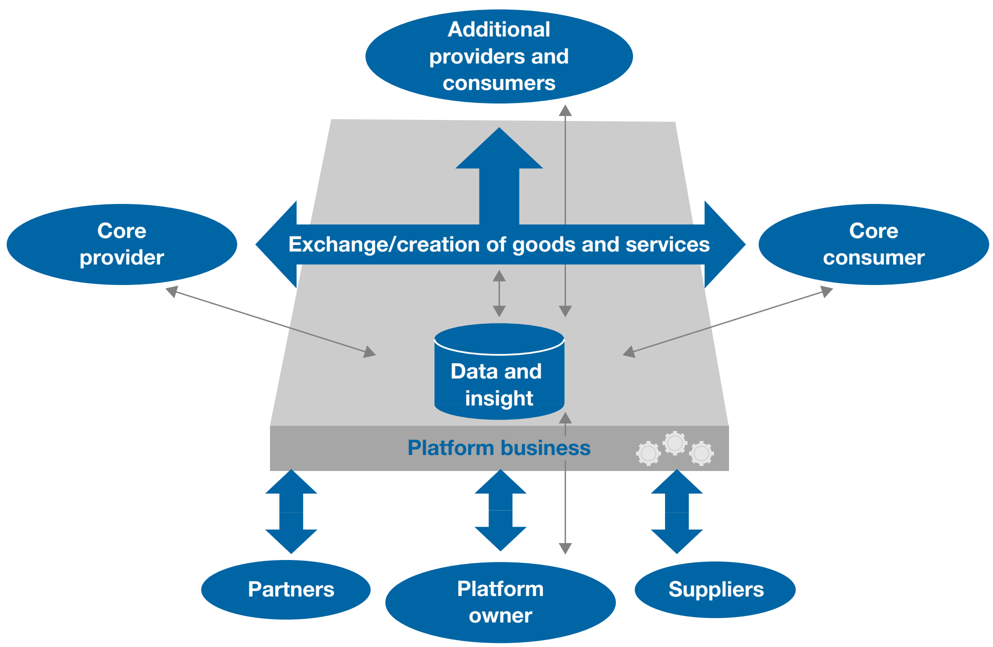
“Demand economies of scale are the fundamental source of positive network effects, and thus the chief drivers of economic value in today’s world.”

This focus on network effects drives growth for platform businesses; the value of the platform grows as it gains more users. For example, YouTube producers attract YouTube viewers, and the viewers attract video producers. Likewise, Airbnb users attract suppliers of rooms in new locations, and these suppliers attract new users.

Platform businesses are also different in that they separate ownership and management of assets from value creation. This has led to the unique situation that the news site TechCrunch pointed out in 2015: that Uber, in effect the world's largest taxi company, owns no vehicles, while one of the world's largest media owners, Facebook, creates no content, and one of the world's most valuable retailers, Alibaba, has no inventory. As a result of this separation, an asset such as an Uber taxi can be used in the most effective and efficient way to create value for consumers (in this case, satisfying someone who needs a taxi), while not being limited to the use of the platform owner.

The figure below introduces the basic building blocks and roles of a platform business, which work together to create new, disruptive dynamics.

Platform business framework



The figure below briefly expands on the platform business framework, showing how the roles interact at LinkedIn, the large networking platform for professionals (section 2 will go into more detail on the components and dynamics of a platform business).

The basic roles and interactions in a platform business (LinkedIn example)

Platform business role	Description	LinkedIn
Core provider	The person, business or other entity that provides products or services through the platform	Professionals who provide profile information and publish content about themselves
Core consumer	The person, business or other entity that consumes products or services through the platform	Professionals or businesses who use the network to build their professional connections and participate in groups
Additional providers/consumers	The people, businesses or other entities that create or consume additional platform value (in the case of a multisided platform business model)	Recruitment agencies that pay a premium to use the personal networks, profiles and recommendations on the platform to find candidates for open positions
Platform owner	The enterprise that owns and manages the platform rules (including their integrity and enforcement) and business model	In the process of being acquired by Microsoft
Suppliers	The businesses that collaborate with the platform owner to deliver components of the platform, such as cloud services to host the platform or software on which the platform is developed	The Apache Hadoop open-source software framework, used for big data analytics
Partners	The enterprises that work closely with the platform owner, often committing to use only that platform, and in return gaining some level of influence over its direction	The new “Talent Solutions Preferred Partner Program” that certifies application-tracking systems used, offering a seamless experience for recruiters and hiring managers

As the new platform business dynamics are introduced in industry after industry, established enterprises are being forced to respond; if they don’t, they risk becoming marginalized and even irrelevant as the rules of the game change around them. Platform businesses are more about establishing standards — the rules of the game — than making products. When Amazon created a standard for the e-books on its Kindle platform, it generated an arms race among competing standards for industrywide dominance.

Standards abound in the software industry, and with every business becoming a software business, enterprises need to be prepared. Understanding platform business and having conversations about it is thus not just about potential industry disruption; it may be a matter of survival.

The effects of platform businesses have already been felt in several industries, and more disruptions are on the way

"It's easy to become complacent, but it only takes one platform disrupter to have an impact. Once one does, others will follow and you've got to be in a position to move at pace and respond. I think the financial services industry has got to learn the lessons from other industries. Look at the Ubers of the world and how they are now starting to kill their own business model and reinvent themselves. Financial services needs to be better able to adapt and flex in the same way."
Darren Linden, Director of Programs, Barclaycard

Platform businesses are disrupting industries in three main areas:

Delinking assets from value. Platform businesses can turn products into services. For example, Rent the Runway rents luxury fashions such as $1,000 dresses for four or eight days.

Reintermediation. Platform businesses can introduce new intermediaries. For example, TripAdvisor enables customers to rate the quality of hotels, vacation rentals and restaurants, and it is now offering links to booking sites.

Market aggregation. Platform businesses can provide centralized marketplaces. For example, Etsy is a marketplace where vendors from around the world can sell products to buyers anywhere.

As the list below shows, many platform businesses are dictating industry direction:

– Amazon in retail and publishing

– Alibaba in retail, logistics and financial services

– Spotify in music

– Android Auto and Apple CarPlay in automotive design (specifically, car dashboards)

– Apple in healthcare, automotive apps, smart homes, payments and other industries

– The government of South Korea, with its open, useful and reusable data

We estimate that, by 2020, 25% of industries will have a new set of market leaders, with many achieving this position because of a platform business approach. The best platform can be expected to control a particular industry.

As observers have pointed out, “the champions of disruption are far more often ‘attackers’ than the established incumbent” (see “An Incumbent’s Guide to Digital Disruption” in Further Reading). This is also the case when it comes to platform businesses. Not all platforms are attackers from outside the industry, but many are. This means that most incumbent organizations are letting new platform businesses dictate the future direction of their industry. The banking industry is a good example (see figure below).

Platform businesses are recreating the banking industry

Retail/personal banking

Alibaba Group
Amazon
ANT Financial
Apple Pay
Facebook
Google
Link | Ford Credit
Puddle
Ripple
Uber
WeChat Pay

Lending
Cards
Mortgages
Student lending
SMB
Insurance
Payments

Wealth management and private banking

ANT Financial
CrowdCube
Nvest
Patch of Land
WeChat

Portfolio management
Financial planning/advice
Real estate

Corporate/business banking

Amazon
ANT Financial
Google
WeChat Pay

Invoice financing
Financing
Transaction banking
Document management

Investment/merchant banking

AngelList
Crowdfunder
Estimize
Seedrs
Symbid

Capital raising/underwriting
Market making
Syndications
Research
Investor relations

In their book, “Platform Revolution” (see Further Reading), authors Parker, Van Alstyne and Choudary analyze industries that have already been disrupted by platform businesses, along with industries such as healthcare, where platform businesses have so far struggled to take hold. As a result of this analysis, several signposts become clear as to what determines how susceptible an industry is to platform disruption. These characteristics have been adapted in the figure opposite to provide a checklist for determining the opportunity or threat that platform business disruption presents in your industry.

Checklist: Determining the susceptibility of your industry for platform business disruption

Is your industry ripe for platform disruption?

- ☐ Is your industry information-intensive, and are key parts of your industry being digitalized (e.g., 3DP or telemedicine)?
- ☐ Does your industry currently have nonscalable human gatekeepers, such as content editors in publishing or inventory managers in retail?
- ☐ Is your industry highly fragmented and complex for customers to find access to the goods and services they desire?
- ☐ Is your industry characterized by extreme information asymmetries, creating unfair advantage for suppliers over consumers?

Are there barriers that may limit or delay disruption?*

- ☐ Is your industry highly regulated, favoring incumbents and working against startups?
- ☐ Does your industry have high failure costs, such as matching a patient with the wrong doctor?
- ☐ Is your industry resource-intensive, such as mining or agriculture?

*Checking any one box does not make platforms less relevant but could mean that the wave of disruption is slower compared to other industries.

Source: Adapted from "Platform Revolution: How Networked Markets Are Transforming the Economy — and How to Make Them Work for You."

Platform business models are not just for digital businesses — traditional enterprises must also respond

"Platform business disruption will create winner-takes-all markets. The market makers will be the owners and controllers of the platform."
Marshall Van Alstyne, Professor, Boston University Questrom School of Business

"The decision to found our platform was made at the executive level so that there would be a platform entity imagined and implemented by incumbent enterprises, rather than having venture capital firms or outside parties be the primary drivers in this space."
Executive Director, Platform Business Unit (at an incumbent enterprise)

Every CIO needs to respond to how platform businesses are redefining industries and dictating their direction. This does not mean that every organization must create a platform business that tries to set industry direction. However, a strategy for adapting to the changes platform business brings to value creation and the future of the industry is required.

The good news is that platform businesses are not just for disrupters and "digitally born" companies. Incumbent enterprises have many advantages they can apply to excel with a platform business approach, whether it is a platform they create or one they collaborate with:

Industry knowledge. The incumbent organization has deep industry knowledge and value to provide in specific contexts.

Existing customer base. With a large customer base already in place, most incumbents are very well positioned to consummate matches and enable the exchange of value.

Trust. People and businesses may believe that the incumbent can, via platforms, enable personalized products/services in a safer, more reliable and more cost-effective way.

Brand. Clearly, some disrupters have strong brands (e.g., Apple, Google and Amazon). However, startup companies that attack an industry generally do not have the brand strength or recognition of the incumbents.

Physical locations. Incumbents often have an extensive set of physical locations, giving people and businesses a place to go to receive more complex, personal and responsive or specialized products/services. Even a platform business like Amazon is now building stores, and Apple has been doing this for years.

Supply chain. Incumbents already have an established supply chain that usually operates efficiently.

Regulatory compliance/risk management. Money, sensitive data and products/services are properly managed by incumbents, and protected to meet local government requirements and organizational risk thresholds.

CIOs at incumbent organizations do not need to stand by and watch platform businesses dictate the future direction of their industry. The organization can create a viable platform if it can use information and community to add value to what it sells. For their part, CIOs can use the advantages their incumbent organization already has to create a platform business strategy that ensures future relevance and market leadership. Examples of this include John Deere's platform, which enables farmers to use a mobile phone app to figure out where and when to plant which crops; and GE Healthcare's Centricity 360 platform, which allows physicians to share images and collaborate on patient cases in near real time.

The first step toward determining an enterprise's response to platform business is to create a common understanding among senior leadership of platform business model dynamics — the subject of section 2.

2. Create a common understanding of platform business model dynamics

New business models are a foundation of digital business transformation. Platform business models are not new, but they create value very differently from traditional business models. Senior enterprise leaders must have a common understanding of platform business models to determine the best response.

The platform business model is an old concept, but digitalization has given it a powerful new angle

A business model guides an enterprise in creating and retaining value. Platform business models have existed for decades (e.g., Visa and MasterCard), but as outlined in the figure on page 20, their value creation is quite unlike that of traditional business models.

"As much as I am a believer in, and supporter of, technology, I think it's the addition of the platform business model on top of the technology that makes a difference. This doesn't have to be restricted to technology companies. The beauty is that companies like Under Armour, Nike, McCormick spices — companies you do not necessarily associate with technology — are building platform business models that are extremely powerful. Yes, there's a presumption that it starts in technology, but it truly doesn't stop there."
Marshall Van Alstyne, Professor, Boston University Questrom School of Business

A traditional, or pipeline, business model, is based on a linear value chain — a step-by-step arrangement for creating and transferring value. Producers are on one end, customers on the other. Value is created from the inside-out as the enterprise seeks to acquire and retain consumers.

As a design that matches providers and consumers, and lets all participants capture value from the creation and exchange of goods, services and social currency, platform business models are nonlinear. They often create value from the outside-in, through business ecosystems of the providers and consumers who initiate interactions.

Comparison of traditional and platform business models

Elements of a business model	Traditional/pipeline business model	Platform business model
Assets (e.g., data, algorithms)	Protected	Shared and monetized with only key IP being protected
Value creation	Inside-out (producers to customers) Linear value creation	Outside-in (business ecosystem to consumers) Nonlinear value creation
Sources of value creation	Fixed (enterprise and supply chain)	Fixed and spare capacity (e.g., sharing economy); all users are a source of value creation; value can be direct or indirect
Monetization	Directly linked to value (i.e., you pay for what you get)	Decoupled from value; value can often be provided for free, with monetization by other means (e.g., ad revenue, premium services)
Control	By gatekeepers	By consumer choice and the rules and governance model of the platform
Ability to change	Often static	Dynamic
Ability to scale	Slowly	Exponentially (via network effects and near-zero marginal costs)
Partners	Known	Known and unknown

The Gartner Business Model Framework (see “Business Model Innovation Everywhere” in Further Reading) describes how the enterprise uses six processes — ideate, create, engage, offer, monetize and adapt — to deliver IT-driven innovation to the business. In the figure opposite, we show how this framework can be used to compare the process differences between traditional and platform business models.

Using the Gartner Business Model Framework to compare the process differences between traditional and platform business models

Phase of Gartner Business Model Framework	Traditional/pipeline business model	Platform business model
Ideate — where ideas come from and how decisions are made about what the enterprise does	Enterprise comes up with its own ideas and makes its own decisions.	Consumers, providers or business ecosystem partners come up with their own ideas and make their own decisions. **Example:** YouTube providers like Dude Perfect create instructional, humorous and other video content.
Create — how the product or service is produced and how internal operations are run	Enterprise creates its own products and services or contracts for them externally.	Platform owner provides a platform and enabling tools whereby providers and business ecosystem partners can create and/or offer their own products and services. **Example:** Kiip enables customers to create their own in-app advertising schemes.
Engage — how the customer interacts with the company and its products or services	Enterprise initiates interactions with customers.	Providers and consumers initiate interactions with the platform, or business ecosystem partners initiate interactions with the constituent products/services built on the platform. **Example:** E*Trade enables partners to build their own products/mobile apps and sell them to their respective customers.
Offer — what the customer value proposition/product/service will be	Enterprise creates and manages its own value proposition.	Providers create and manage their own value proposition. **Example:** Uber leverages Google Maps to power its platform but creates and manages its own value.
Monetize — how value is exchanged and transferred among customers, companies and others	Enterprise controls value creation and exchange.	Platform owner enables providers to control value creation and exchange. **Example:** Merchants create their own pricing on Amazon. Sometimes monetization is decoupled from value exchange. **Example:** The platform provides free services while receiving value from ads or premium subscribers.
Adapt — how the business adjusts to changes in its business context	Enterprise learns about, senses and executes change.	Providers learn about, sense and execute change; platform owner adapts the platform to better meet changing business partner and consumer needs, and new market opportunities. **Example:** At Nest, developers update their mobile apps based on new opportunities. **Example:** Uber and Lyft are experimenting with logistics platforms for Walmart food delivery opportunities.

"It is urgent for us to transform as an enterprise, and all our projects that move us toward digitalization begin with the enterprise architecture team analyzing our industry and others to see what is happening now and what will drive digitalization in the future."
Christiane Edington, CIO, Vivo/Telefonica Brasil

A well-designed business architecture is vital to platform business success

As the business model is central to ensuring platform business success, it is vital for the business architecture to be defined before any action is taken on developing a platform business. In fact, an enterprise architecture team that is focused on business models and business outcomes has become a key advisor to many CIOs faced with digitalization and business model innovation (see "The CIO's New Digital Business Advisor: A Resurgent EA Team" in Further Reading). As a first step toward becoming a platform business, enterprise leaders must consider the following aspects of their business architecture in conjunction with the design of their platform business model.

Strategic intent

Many enterprises lack a clear and actionable business strategy, and conflate business goals, vision and strategy (see "Deducing Business Strategy Is a Unique Opportunity for EA Practitioners to Both Drive Execution and Gain Credibility" in Further Reading). The business strategy fails if strategic planners don't have a clearly defined and actionable strategy, or if they don't understand the detailed implications of it.

A big part of business architecture work often includes helping the enterprise realize its strategy. To succeed with platform business models, CIOs and their EA teams will need to guide and facilitate business and IT leaders through the process of recognizing, articulating and documenting their strategic plans and how a platform will help the enterprise execute them.

Opportunities and risks

Many strategies fail because the impacts, risks and constraints are not fully understood. The figure opposite describes some of the opportunities and risks of adopting a platform business model.

Opportunities and risks of platform business adoption by incumbent enterprises

Opportunities	Risks
Relevance — remaining relevant with customers as a platform provider that meets key needs	**Revenue cannibalization** — some capabilities provided through the platform may compete with existing business capabilities.
Competitiveness — responding to competitive pressure from other platform businesses	**Regulations** — many EU members, for example, have blocked Uber in their local markets.
Growth — growing revenue, especially digital revenue	**Cultural challenges** — platform business models are an enormous change from the way most enterprises do business today.
Cost reduction — reducing cost as business ecosystems are used to create value with and for the platform owner	**Data privacy** — platform businesses heavily leverage data sharing, which poses privacy challenges.
Speed — speeding up time to market with new business capabilities	**Security** — many platforms expose assets like data, algorithms and transactions to business ecosystems outside the organization, creating concerns about the security of other organizational systems.
Value — adding new sources of value creation	**Reputation** — leveraging business ecosystems means that the platform owner has less reputational control.
Enterprise scalability — attaining high scalability at near-zero marginal costs	**Curation scalability** — new platform owners often use manual curation processes to ensure they are mitigating reputational risk, but this approach is not scalable long-term (see page 26 for an explanation of curation).
Customer experience — reducing or even removing gatekeepers as the customer experience improves and choices increase	**Integration complexity** — platforms require extensive integration, both internally and externally.

Targeted business outcomes

Platform business models will enable three primary business outcomes:

Improve the customer experience by using a broader business ecosystem to meet the “long-tail” needs (small volume but profitable customer segment).

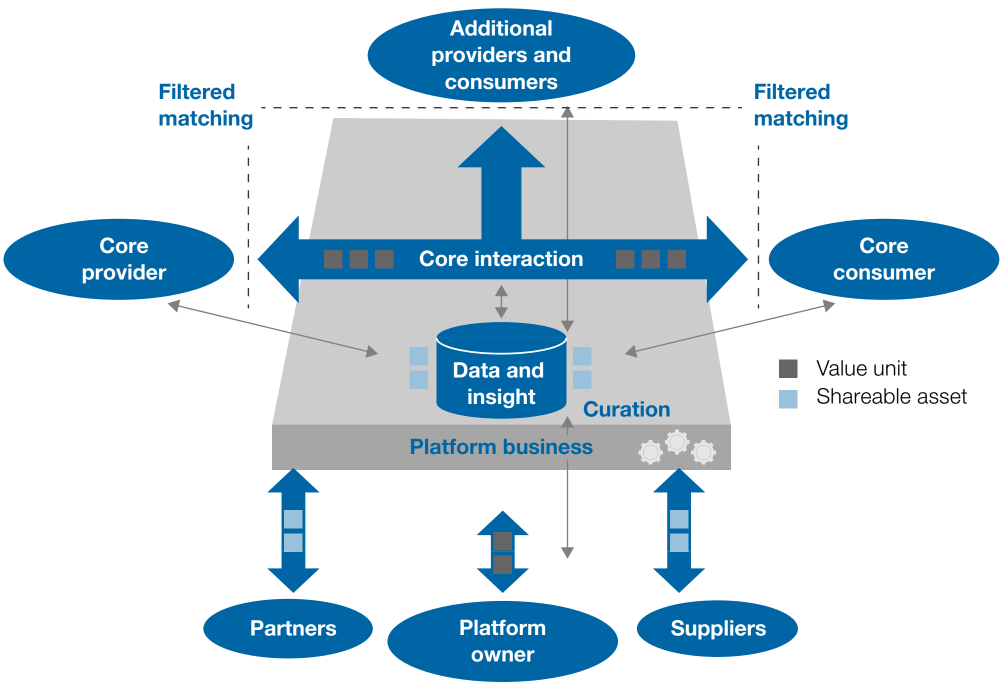
Increase revenue by engaging a business ecosystem that can attract new customers to the enterprise, and enable the ecosystem to create or exchange products/services that generate revenue-sharing and other fees.

Decrease costs by empowering business ecosystems to bring new capabilities to market more quickly, and by having a platform that can scale at near-zero marginal costs.

Key components and enablers

Although platform business models can be highly complex, and often must be tailored to meet the unique requirements of their industry and business ecosystem, a consistent set of key components and enablers has emerged across leading platform businesses (see figures below and on page 26). Enterprise leaders must become familiar with these building blocks to see all the opportunities and threats posed by platform business models in their industry.

Key components of platform businesses



Descriptions and examples of the key components of platform businesses

Value unit. Every platform business is centered on creating value through the connections between its consumers and providers. Value units can vary significantly, from intangible assets such as services and information, to physical products. Examples:

– Physical products (eBay)

– Digital products (Apple's iTunes and App Store)

– Physical work (Uber)

– Knowledge work (Goldman Sachs)

– Service (Biotechware)

– Information (LinkedIn)

– Transactions (LendingClub, Kickstarter)

– Traditional currency (Ripple)

– Nontraditional currency (bitcoin)

Filtered matching. Filters determine which units of connection are directed to which consumers, thereby optimizing the value every participant receives on the platform. They are often algorithms that draw on as much data and insight as possible to ensure that consumers are only offered products and services relevant to them. Imagine a ride-sharing service that doesn't filter by location, or a software marketplace that doesn't filter by operating system. Users quickly flee from such platform businesses in search of better options. Example:

– Netflix's filters based on viewer preference and viewing history enable it to provide targeted entertainment.

Core interaction. The core interaction is how the primary consumers and providers exchange value units, optimized by the use of filters. Although multisided platforms can have a number of different interactions that create value, the design of the platform must be optimized, first and foremost, for the core interaction. This ensures a sustainable critical mass of users. Example:

– Uber's core interaction is to match individuals in a specific location who need a ride, to the closest available Uber driver, limiting the wait time for passengers and optimizing the route for Uber drivers.

Shareable asset. Some platforms share assets to enable providers and/or consumers to create new apps, products/services and business models. Example:

– LinkedIn's partner program offers access to data through its API. The partner community develops apps that create value based on new and existing data (the API helps feed LinkedIn's data). The apps are then available as shareable assets for LinkedIn partners.

Data and insight. Insight comes from analyzing as much data as possible on all platform interactions. Gathering and applying insight improve the platform experience. Why one platform business succeeds and similar ones fail can often be traced to how this component functions. Example:

– Harvard is both a co-founder and user of the edX online education platform. The benefit of being a platform owner is the ability to analyze data and gain deep insight into the interests and profiles of students who use the platform.

Curation. Curation is crucial to platform quality and performance. It is applied to platform businesses in two primary ways.

First is the curation of interactions between users of the platforms. By continually analyzing user behavior and calibrating the algorithms that optimize filtered matching, this aspect of curation ensures that users easily find the products/services (or information) on the platform that are most relevant to them. Example:

– Amazon uses consumer behavior to modify its suggestions and recommendations.

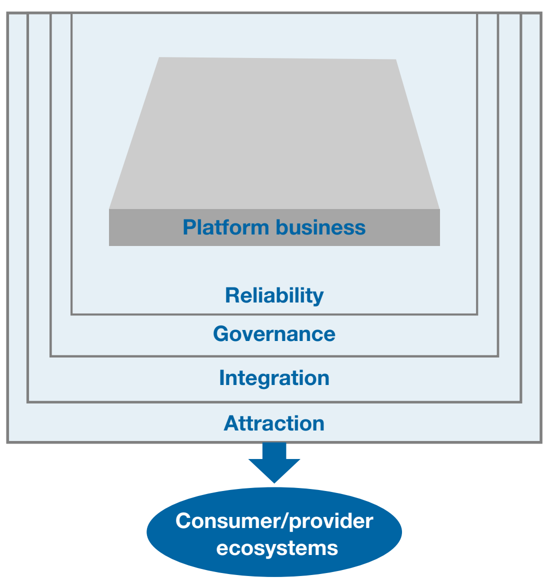
The second focus of curation is on the quality of products/services, as well as on consumers and providers. The platform provider often creates a mechanism, such as ratings or reviews, which allows platform users to directly curate products, services, providers and consumers. Examples:

– Wikipedia relies on user curation to improve accuracy in the content provided through its platform.

– Airbnb allows both accommodation providers and travelers to rate and review each other, thereby decreasing risk and improving visibility into the level of quality that each party expects.

The components described above are wrapped in four key enablers that influence the performance and success of a platform business (see figure below).

Platform business enablers



Descriptions and examples of key enablers of platform businesses

Reliability. Reliability through security and compliance boosts the "stickiness" of a platform — the more users can trust the platform, the more likely they are to continue using it, and the more open they will be to providing additional information (e.g., profile details, preferences). If users begin to experience interaction failure, such as waiting for an Uber driver who never arrives, they will quickly migrate to an alternate platform. And if they feel that their information is not being handled securely, they will not risk further interaction with the platform.

For platform businesses to remain reliable, they must continually analyze their platform transaction data and calibrate their rules and algorithms based on what they can learn. Example:

- P2P lending platforms must continually invest in analyzing data to improve their matching of borrowers and lenders (including assessing the risk of borrowers), thereby avoiding interaction failure (i.e., the borrower not paying back the loan).

In highly regulated industries, compliance is important to ensuring that users will commit to a platform. If users cannot confirm that a platform complies with industry regulations, they may see it as too high a risk. Some platform businesses lobby to change local and national laws to mitigate the problem. Examples:

- Uber enlists potential customers as allies in lobbying through social media.

- Financial services platforms must continually check for lending or financial compliance, and actively lobby for regulatory changes when required.

Governance. As defined in the book "Platform Revolution" (see Further Reading), "Governance is the set of rules concerning who gets to participate in an ecosystem, how to divide the value, and how to resolve conflicts. To understand good community governance is to understand the set of rules for orchestrating an ecosystem."

Governance and rules are put in place to ensure that the platform delivers value fairly to all participants. When value becomes imbalanced in a platform, or when providers perceive that the platform owner is taking more than its fair share of the value, then the platform will begin to lose users. This has a negative network effect that leads to the rapid decline of the platform. Example:

- Over the years, Facebook has at times had a rough journey with governance and rules. After being criticized in 2014 for publishing research based on data gathered by manipulating user news feeds to test their effect on emotions, Facebook introduced new governance rules to control the use of its data in experimentation. The company's data scientists must now formally review all research proposals for adherence to ethical standards relating to privacy and security (see https://www.technologyreview.com/s/601696/facebooks-rules-for-experimenting-on-you/).

Integration. For platform businesses to attract consumers and providers, they must make the experience of joining, or integrating with, the platform, as easy as possible. This means creating a plug-and-play infrastructure that ensures compatibility with legacy technology, provides APIs for easy and open integration with the platform, and offers appropriate channels through which to connect. (If APIs are not provided, third parties may use "screen scraping" to gather data anyway; by providing APIs, the platform owner can create a platform on its own terms.) The more "frictionless" the integration with the platform, the easier it is to attract and retain providers and consumers, which in turn fuels the platform's network effects. Example:

– Hotelbeds, a B2B platform for distributing accommodation and tourist services to travel agents, uses plug-ins and APIs, and even offers a white-label version of its website, to make it easy for travel agents to integrate with the platform. (See the Hotelbeds Group case study in the Appendix.)

Attraction. The ability to attract consumers and providers to the platform is a vital capability, ensuring that network effects are realized. Factors that can build attraction are ease of integration, brand awareness, price for performance, word of mouth, and volume of consumers and providers. Example:

– YouTube is an attractive video-sharing platform because it is free to use and has high volumes of content contributors and users. Moreover, the ease with which users can share YouTube content lets videos "go viral" as they move from person to person, compounding the network effects.

The key components and enablers of platform businesses combine to create value for the platform owner, providers and consumers across the relevant business ecosystems. Depending on the business model, this value is either monetized directly (e.g., Uber users paying for their ride) or indirectly (e.g., YouTube Partner Program content providers receiving advertising revenue).

"You have to continually keep an eye on the environment because it changes very quickly. Your enemy might become your friend, and the other way around, in the blink of an eye. It will be increasingly difficult to have a unique portfolio of products, except in areas where you can differentiate value, but even that will only last for two or three years."
Álvaro de Nicolás, CTO, Hotelbeds Group

To compete in increasingly crowded markets, platform businesses must show what differentiates them

Platform businesses must be clear on how they will position themselves in their industry. Without this clarity, the enterprise risks wasting money and effort in creating a solution that does not substantively improve its competitive advantage. Enterprise leaders should focus on five key strategies when considering how a new platform business model will differentiate itself:

Exclusive access to unique assets. The platform offers something for consumers and providers that can't be found anywhere else. Such platforms are often optimized to very specific user groups, such as one that supports the fans of a sports team, or another for collectors of specific memorabilia.

Ease of configurability and adaptability. The platform is easily integrated with, and tailored to, the environment of its consumers and providers. This is often done through continual innovation in the platform's interface — creating APIs, plugins, new channels and various data streams that allow users to work with the platform as if it were their own.

Enhanced platform design and user experience. The platform owner continually seeks to offer high-quality tools that attract and retain users, and increase the value they receive from their interactions. Great platforms can bring the most complex interactions together in a simple experience. Such platforms can often coexist as niche players — alongside larger, dominant platforms — because they provide a premium experience that appeals to certain users. They may even command a higher price than their bigger competitors.

Fostering and leveraging innovation. The platform encourages continuous innovation from its consumers, providers and ecosystem partners, creating an environment that makes it easy to share innovations with other users. This can be achieved through a developer portal or marketplace that showcases solutions developed through the API (see how LinkedIn does this at https://developer.linkedin.com). The platform owner must carefully follow the innovations and seek to obtain those with the highest added value for itself, so they can be folded back into the core of the platform and offered as an exclusive part of the platform experience. Thus the platform leverages its business ecosystem to stay ahead of competition.

Low cost. By using open-source software and off-the-shelf tools, platform owners can develop and maintain the platform at very low cost, avoid vendor lock-in and pass on the savings when monetizing the value of the platform. Furthermore, platform owners do not need to own all the critical assets, provided they have access to them in their ecosystem. By orchestrating third parties in developing and hosting the platform, the platform owner can actually be a small business with very low operating costs, charging less for its services yet behaving like a big player in the industry.

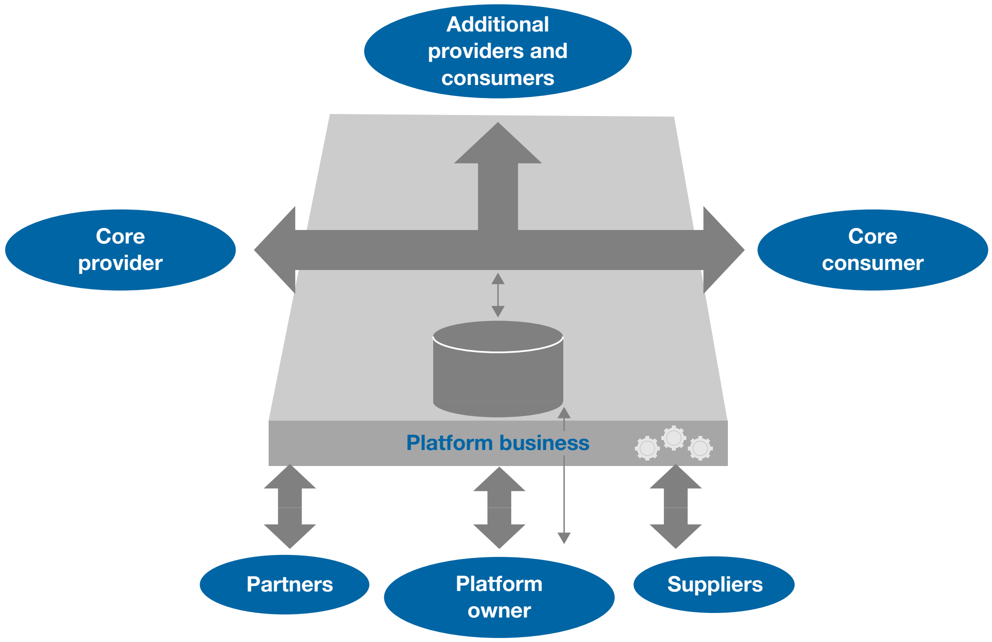
It is important to note that while many of these strategies may be relevant to a platform business, the enterprise must be clear on which will provide the primary means of differentiation. Additional strategies might be useful to the platform business, but they only need to be good enough to reinforce the primary means of differentiation.

Consider the roles that provide and consume value through the platform business

"Our platform provides us with a fairly large dataset of consumers we did not have access to before. It is not the same population as our traditional consumer base. It provides a forum to try out the methodologies and approaches that could turn the dataset into something we can exploit in various ways. This will be useful not only to our business but also to our partners and potentially the industry as a whole."
Executive Director, Platform Business Unit (at an incumbent enterprise)

As discussed in section 1, there are basic roles in a given platform: core providers and consumers, additional providers and consumers (in the case of a multisided platform) and the platform owner. In some cases, the platform owner might choose to outsource some aspects of the platform — for example, by hosting the platform with a cloud service provider or partnering with a third party to develop new functionality. Thus the role of supplier or partner to the platform owner should be considered. Understanding what each role gives and receives from interactions with the platform will also be helpful in clarifying how the enterprise should respond to existing or emerging platforms in the industry (see figure opposite).

The interacting roles in a platform business



Since the platform business model focuses on consummating matches among users and/or facilitating the creation and exchange of goods and services, every role gives and receives value from interacting with the platform. In some cases, a platform user will begin by having only one role, such as a consumer, but will eventually take on an additional role, such as a provider. An example of this dynamic is when consumers of videos create their own YouTube video channels and begin publishing content.

Value given and received by the interacting roles in a platform business

Role	Potential value given	Potential value received
Core provider	– Products – Services – Information	– Revenue – New channel options – New business model opportunities – New customer segments – Enhanced reputation and increased brand exposure – Analytics and insight – Access to third-party apps and platform tools
Core consumer	– Profile information – Feedback on likes, dislikes and interests – Ratings – Personal networks – Transactions (e.g., payments) – Content and additional data	– Access to third-party apps and platform tools – Access to a vast network of products, services and information – A tailored, filtered experience matching products and services to specific needs
Additional providers/ consumers	– Products, services and/or information – Insight from analytics of platform interactions – Additional revenue opportunities for the platform owner	– Revenue – New channel options – Ability to interact and transact with primary providers and consumers – Brand awareness – Enhanced reputation and increased brand exposure – Analytics and insight from the platform owner
Platform owner	– Filtered matching – Governance and rules – Curation process – Analytics and insight – Trust and assurance regarding avoidance of interaction failure – Promotion and marketing of the platform – Tools and processes for ease of integration – Security	– Revenue (direct or indirect) – Control over the rules of the game – Enhanced reputation and increased brand exposure – Data and unique insights into industry and ecosystem dynamics (which can fuel growth through business model innovation) – New channel for owner's products and services – Access to new customer segments – Customer retention – Reduced cost of customer acquisition and retention – Benefit from third-party development extending the value of the platform
Suppliers	– Infrastructure products and services – New features and functionality – Mobile apps and new channel options	– Revenue – Enhanced reputation and increased brand exposure – Cost reduction
Partners	– New features and functionality – Long-term commitment to the platform – Access to new users	– Revenue – Enhanced reputation and increased brand exposure – Preferential access to shared assets and data – Influence over platform design decisions

The next step toward determining an enterprise's response to platform business is to educate the executive team on some of the decisions it will need to make — the subject of section 3.

3. Determine your enterprise's platform business role, and take action

All enterprises should take a clear position in response to platform businesses, whether they become one themselves, collaborate with others in their industry, or do both. As platform strategies evolve, CIOs must enable the executive team to make platform business decisions.

The four ways incumbent organizations can respond to platform business trends

It bears repeating that, while not every enterprise needs to become a platform business, all enterprises should clearly understand their position in relation to digital platforms. An enterprise may choose to become a platform business or a user of platform businesses, but a "do nothing" strategy is not viable once platforms begin to impact its industry. CIOs and digital business leaders should consider two main drivers when making decisions about how to respond to platform business trends:

Level of control. Does the enterprise want to dictate industry direction or does it want to adapt to the industry direction set by someone else?

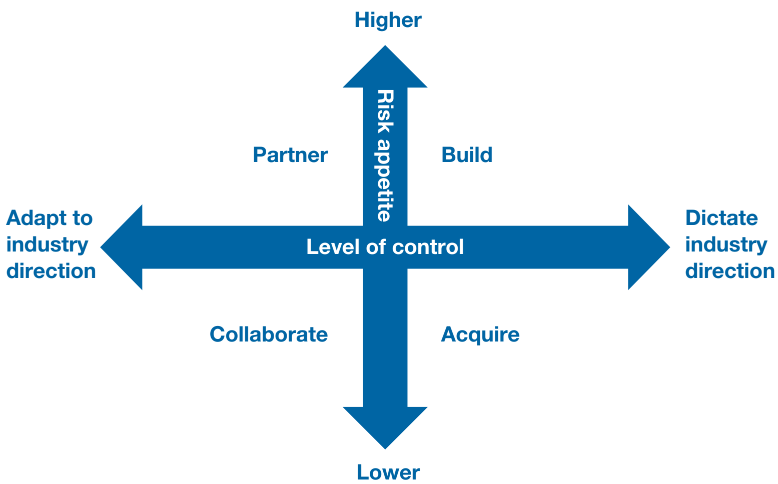
Risk appetite. Does the enterprise have a willingness to take risk in order to lead the market, or is it risk-averse?

Deciding how to respond to platform business trends is not unlike acquiring new technology. The possible responses fall into four main categories — build, acquire, collaborate or partner — and most established enterprises will need to engage in more than one of them (see figures on pages 34 and 35).

"At this point, partnering with platform businesses presents real opportunity. Barclaycard innovates in two ways: direct development and working with others — including startups — where it makes sense for us to do so. It very much depends on where our strengths lie on a project and how we either tap into them or substitute them with the strength of others."
Darren Linden, Director of Programs, Barclaycard

"We've always thought internally — within our own strategy — that our industry would never be limited to a single platform, so in addition to our own platform we intend to experiment with additional platforms over time. I think this is a luxury we have as a large incumbent enterprise."
Executive Director, Platform Business Unit (at an incumbent enterprise)

Four approaches to creating or collaborating with a platform business

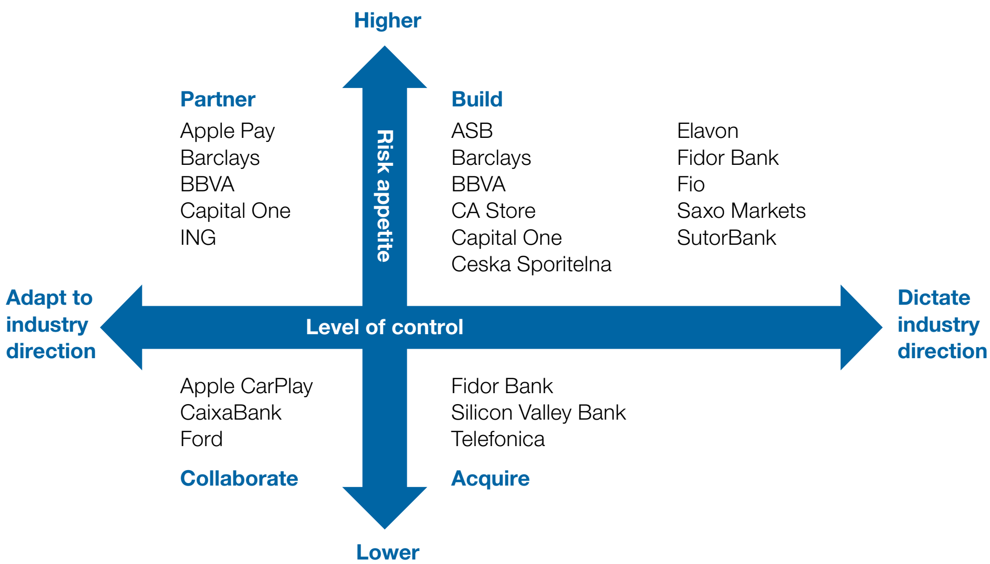


Benefits and risks of creating or collaborating with a platform business

Approach	Description	Benefit	Risk
Build	The incumbent organization creates its own platform business, platform business model, platform and business ecosystem.	The incumbent organization is able to dictate industry direction and has full control over how the platform is designed and positioned from the beginning.	Platform owners, especially those new to the role, are exposed to risks from fraudulent behavior or misuse of the platform, which can adversely impact the business and brand. An owner also risks losing its investment if the platform fails.
Acquire	The incumbent organization creates its own platform business and business model but acquires the platform from an industry competitor or vendor, perhaps also with access to the vendor's business ecosystem. The incumbent mitigates risk by using an established platform and business ecosystem, and bringing the core competencies for running a platform business in-house.	The incumbent organization is able to dictate industry direction and move quickly by not building the platform from the ground up.	The risk of failure lessens due to the acquisition of competencies and know-how for running a platform business. However, the enterprise still faces some risk due to challenges in integrating the acquired platform business.
Collaborate	The incumbent organization collaborates with a platform business (most often in a nondifferentiating function), providing products, services or some other form of value to the platform and becoming part of the platform's business ecosystem.	The incumbent organization benefits from becoming a platform user (see page 32 figure on the value received by providers and consumers using a platform).	The incumbent organization has little influence over the rules and dynamics of the platform business and risks losing competitive advantage if it becomes a commodity product or service provider.
Partner	The incumbent organization partners with a platform business, gaining some influence over the direction of the platform and becoming part of its business ecosystem.	The incumbent organization benefits from not taking the risk of owning a platform, while gaining influence over platform rules and dynamics.	The incumbent organization often becomes locked into a single platform; it faces a risk of loss of business and damage to the brand if the chosen platform does not become a key player in the industry.

Some banking CIOs and digital business leaders have already begun making choices about how to respond to platform business trends. The figure below plots these choices against the two decision drivers and the four platform business approaches.

Examples of platform business choices made by banks



BBVA, ING, Barclays and other banks have decided they want to dictate industry direction and so are building their own platforms. Still other banks have bought their way into becoming a platform business — for example, Silicon Valley Bank acquired startup company Standard Treasury to become a platform business, and Telefonica bought technology that Fidor Bank created to become a platform business. CaixaBank collaborated with Ford to create in-vehicle apps for finding the closest branch and ATM locations. According to Apple, more than 1,000 banks have partnered with Apple Pay.

A risk here is that the partner platform (e.g., Apple Pay) dictates industry direction and market leadership, not the incumbent organizations (the banks). However, banks have been concerned that not partnering with Apple Pay in particular would leave them at a competitive disadvantage — viewed as lagging the market when it comes to mobile payments. As CIOs engage executive team members in build, acquire, collaborate or partner discussions, they should raise risk and control issues, especially when potential platform business models are considered.

The six critical success factors for an enterprise that decides to become a platform owner

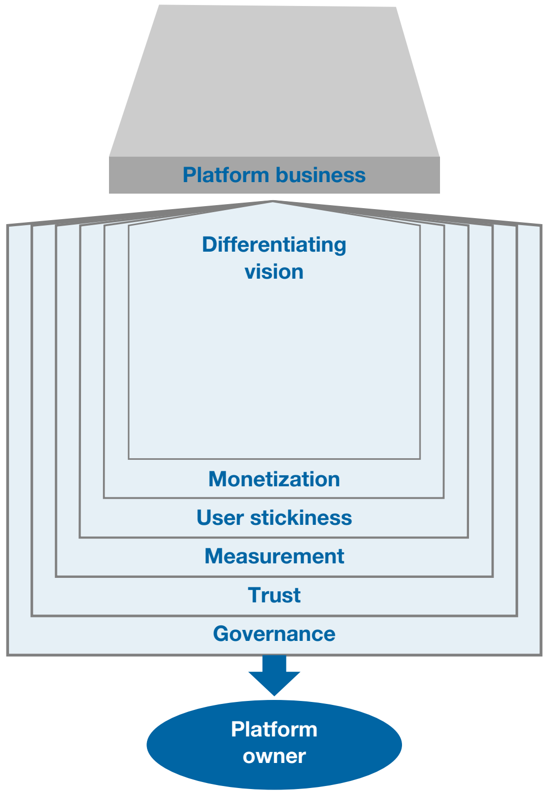
"If you are going to build a digital business platform, build it for where your providers and consumers will be in five years, not where they are today, which may be the same as five years ago."
Bob Noftle, CEO, TraceParts Inc.

"The business models we have today or create tomorrow may not be the ones that we run with in the future, so as a company, we're all up for disrupting ourselves, as it's where we need to be — for our customers and for ourselves."
Darren Linden, Director of Programs, Barclaycard

Many enterprises will need to take multiple approaches in response to platform business disruption, some content to be consumers of products and services through platforms. Increasingly, however, enterprises are moving from collaborating and partnering with platform businesses to buying or building a platform themselves.

The early adopters of platform business models were motivated to extend their reach with customers or unlock revenue opportunities by creating new value. For many of the enterprises exploring platform business models today, the motivation is to hold onto a degree of influence as their industry faces digital disruption, or to avoid being commoditized by other platform businesses. Regardless of the motivation, enterprises should consider six critical success factors when exploring platform business model opportunities (see figure on page 38).

Critical success factors for a platform owner



Differentiating vision. Set clear goals for what you want to achieve with a platform business before taking any steps toward buying or building it. Consider questions such as:

– How does your enterprise differentiate itself today, and how will the platform business model either reinforce that differentiation or act as a catalyst for creating new competitive advantage?

– What is your vision for the end state of your business ecosystem once you become a platform business? Who will be your partners? Who will be the primary consumers and providers?

– What will the core interaction look like? What data will be most essential to realizing the goals of your platform, and who owns that data today?

Many questions can be answered during the journey, after starting small and experimenting with what works and what doesn’t among different providers and consumers. But the primary vision for what the platform is aiming to achieve should be clear from Day 1.

Monetization. Identify how the platform business will create value and make money for the enterprise. In the early stages of platform deployment, monetization may come primarily from incremental revenue, and new digital revenue from products/services created or exchanged through the platform. Over time, the platform owner may be able to charge for things like API calls, compute time, and licensing and maintenance as part of reselling the platform to others (as Fidor Bank's TecS recently did with Telefonica).

User stickiness. Always take an outside-in focus when designing the platform business model. Due to the positive and negative impact of network effects, the greatest challenge faced by platform businesses is attracting and retaining consumers and providers. At the heart of this challenge is whether the platform provides unique value for potential users.

Traditional enterprises often have an advantage when moving into the platform business space, as they have an existing community of users (in some cases, even passionate fans), relationships with ecosystem players, valuable data and insights on the industry, and well-established value chains. But the temptation always exists to fall back on approaches that worked in the past, and design new solutions based on current products and services. Platforms that don't bring something new and compelling to the industry will fail to gain the traction and critical mass of users needed for success in the long term.

Platform business strategies should start by considering the target group of consumers and providers (perhaps in the existing customer base, but not necessarily), and looking to address needs that aren't being met with today's products and services. Then the core interaction of the platform should be designed to address new opportunities.

As the platform evolves, cultivate user stickiness as follows:

– Create a continuously evolving, compelling and valuable experience that isn't matched by competitors.

– Provide a product or service that can't be found elsewhere.

– Reduce friction in interactions on the platform so that moving off the platform seems complex and unattractive.

– Provide a feature that makes it difficult for users to leave (e.g., Amazon uses its cloud platform to back up all the photos of its Prime users for free).

– Act as an identity provider (IdP) — for example, Capital One is doing this with its API platform, where the "SwiftID" lets customers "login with Capital One" to other services. This adds value to the Capital One platform and makes it difficult for users to leave.

Measurement. Getting the metrics right can be a challenge for traditional enterprises that move into the platform business space. Many traditional metrics are not as effective when applied to platform business models, often focusing on pipeline efficiency and direct monetization of each investment. The value of a platform is focused on the interactions between users, often with indirect monetization. In addition, platform value is fueled by positive network effects. The value of each new user added to the platform is greater than a simple calculation of the potential revenue from the user, because each new user adds to the critical mass of the platform, making it even more attractive to others.

When considering how a platform is measured, the platform business owner should ask questions such as:

– What opportunities exist to create more and better types of interactions on the platform?

– What are the options for attracting new providers and consumers to the platform?

– What are additional ways to extend the platform business model so that new interactions through secondary providers and consumers can be added?

The typical leading indicator for platform businesses is the number of participants. Adding more participants will lead to greater revenue. Since revenue is a lagging indicator, focusing on it exclusively, which traditional businesses tend to do, will prevent the enterprise from seeing the value of the leading indicators.

Specific metrics should focus on the interactions between users of the platform. For example:

– Interaction failure — how often an interaction between a provider and consumer is dropped (e.g., an Uber user needs a ride but discovers that no car is available). The higher the number of interaction failures, the more likely trust in the platform will degrade and users will switch to a different platform.

– Interaction conversion — how often an interaction on the platform is converted to a transaction. The interaction could be in the form of a consumer viewing a product or service on the platform or a consumer-provider exchange facilitated by the platform. Another interaction could be between a user and the services provided by the platform, with the metric showing how often a search on the platform is converted into a transaction.

As noted in the book, “Platform Revolution” (see Further Reading): “The most important metrics are those that quantify the success of the platform in fostering sustainable repetition of desirable interactions.”

Trust. The platform’s ability to grow and sustain itself requires trust on the part of providers and consumers. Platform governance, content curation and effective business ecosystem management (e.g., treating the business ecosystem like a new type of customer) are key to maintaining trust. Most incumbent enterprises have a good degree of trust with their customers, which they can leverage to propel their platform.

Governance. Governance is a crucial issue with platform businesses, since enterprises often focus on connectivity and data gathering at the expense of economic incentives that get people to participate or that drive adoption of the platform. Any sense of incentive distribution inequality across users and/or the platform owner may motivate users to switch platforms.

Good platform governance provides the rules for who can participate in the platform, how value is divided and how conflicts are resolved. Without this, platforms struggle to retain a critical mass of users. "Platform Revolution" (see Further Reading) provides three crucial governance rules for creating an environment that attracts and retains users.

"Governance rules for equitable value:

– Always create value for the consumers [and providers] you serve.

– Don't use your power to change the rules in your favor.

– Don't make more than a fair share of the wealth."

To provoke a healthy discussion among senior leadership, CIOs should play the role of provocateur, asking challenging questions about the critical success factors and offering insight into the data and technology that the platform business strategy should consider.

Three important considerations for enterprises that choose to collaborate or partner with platform businesses

Enterprises that choose to collaborate or partner with a platform business, rather than buy or build their own, need to invest time in understanding and evaluating the owner's goals and ambitions, experience in managing a platform and approach to openness.

Ambitions. Consider what value your platform collaborator or partner gets from owning the platform. How does it monetize this value? What is its competitive advantage? How does it position its brand? Platform owners often play multiple roles, orchestrating the platform while providing their own products or services through it. While there is nothing inherently wrong in this approach, it means that governance rules for the platform are even more important in ensuring that all users have access to equitable value.

Also consider the natural tension between platform owners and users concerning primacy of the brand. Is a student who takes a course on the edX platform, for example, getting credit from edX or from the university that provided the course? Today university brands have primacy, but what happens in the future if the edX brand surpasses them? Platform collaborators or partners should always evaluate and track the positioning of the platform brand to ensure that it does not conflict with their own strategy.

Experience. If an owner is new to managing a platform, governance and policies may evolve or suddenly change in ways that do not favor users. With an inexperienced platform owner, collaborating or partnering enterprises should, at a minimum, invest time in building a relationship that puts them in a position to influence how the platform evolves. Sometimes the deeper partner relationship with the platform owner is the better strategy, especially when the platform is both new and quickly evolving.

Openness. When deciding whether to collaborate or partner with platform businesses, an enterprise should look for platforms that are as open as possible. Those with fewer restrictions concerning transactions are more likely to encourage innovations from users. Open platforms also allow more flexible ways of integrating or embedding the platform in existing user processes of the enterprise, through options such as white-label versions of the platform. However, enterprises must insist that platform owners are very clear about data ownership and whose customer is whose.

"You really need alignment on overall strategy and business goals between your enterprise and any platform you partner with. There is an inherent tension between whose product it is and who has the primary brand."
Executive Director, Platform Business Unit (at an incumbent enterprise)

Conclusion

Platform businesses are changing industry landscapes as they create new leaders, new rules of the game and new directions. Enterprise executives must decide how they will respond to current or impending industry disruption — decisions that require an understanding of platform business models and dynamics. CIOs need to take the lead in developing awareness of the new platform business landscape and the deeper understanding needed to create a strategy and timely response.

Part 2 of “Winning in the Platform Game,” scheduled for publication later this year, will cover how CIOs should build a foundation for the enterprise to either become, or work with, a platform business.

Appendix: Case Studies

Preparing Barclaycard for "platformization"

Barclaycard, part of Barclays Bank PLC and headquartered in London, is a leading global payment business. The Barclaycard was the first credit card in the U.K., coming into service in 1966. In the U.K., 10.5 million customers carry the Barclaycard, as do 10.8 million customers outside the U.K.

Preparing to become a platform business

As Director of Programs Darren Linden describes it, payment service providers are evolving to reflect the growing trend for "invisible payments," whereby the customer has little interaction with the payment process, which is subsumed into the purchase journey. Barclaycard has launched its own "bPay" mobile payment service that sits alongside other services offered, including its Android payment service, its "Contactless Mobile" and the equivalent Apple Pay.

“Apple effectively owns the customer experience and customers’ relationship with their devices,” says Linden. “Consumers want the experience Apple offers and are almost agnostic about who provides the pipe — the access to their credit card services and the payment rules. The payment ultimately becomes invisible in the transaction.”

Linden saw a similar trend during his 15 years of experience with large-scale business transformations, where customers switched from mobile brand loyalty to an interest in over-the-top (OTT) services (WhatsApp, Skype, Facebook Messenger, etc.) and a focus on cost. He notes that Barclaycard needs to retain its ability to work with multiple platforms and be willing to work with a broader set of ecosystem suppliers, such as it has in its relationship with Apple Pay.

“Barclaycard needs to continue to provide its services in the spaces where customers want to spend their time and transact,” says Linden. “If you want to retain your business and your market share, you have to have a platform culture. Customer behavior is constantly changing, and you have to adapt to keep up and ensure that you’re providing customers with the services they demand, before they’re even demanding them.”

To drive a strategic debate across the company, the COO’s organization created a future payments team to understand potential opportunities and threats both internally and externally, especially in terms of what customers do and do not want, and what they might want in the future. Most team members are strategists and customer experience experts, but as part of Barclaycard’s global digital board, Linden is one of the technology representatives. The strategists provide thought leadership and insight, while Linden pushes the technology perspective as to how to enable the business to meet the challenges of the future. “The key from a technology perspective is making sure that all options are open,” he says.

Demonstrating a future architecture and delivery methodology

Believing that “code beats paper” and that demonstrating the value of a new and flexible platform architecture would be the best way to engage the organization, Linden formed a 25-member team that spent 45 days creating a proof-of-concept platform architecture in a virtual sandbox and re-engineering a single customer journey. The team then demonstrated how a highly automated, highly digital customer journey would work across all channels, and how it could be optimized in real time and at low cost in response to insight (e.g., if Barclaycard could see customers starting to drop out of the journey). As Linden explains, “We felt that showing stakeholders how they could use a digitally enabled business architecture to optimize their offerings and the customer journey would be very seductive, especially given the power base shift from a technology to a business focus.”

Preparing Barclaycard for "platformization" (continued)

A one-step-at-a-time transformation approach

The platform architecture and the customer journey proof of concept enabled Linden and his team to create a plan of intent that provided the basis for an estimated capex calculation and the sequencing for what needed to be done.

"The plan of intent is a roadmap for the next three years," explains Linden. "We have a 90% confidence level in what we need to deliver in the first 90 days and the value associated with that. After this or any other 90-day package of delivery, the company could decide to stop further development, but the deliverable would continue to provide business value and a foundation for picking up the rest of the transformation at some future point. It's low-risk — a consistent principle all the way through the transformation. You can tackle the next deliverable and the next quickly. Then, if you do stop, every one of those deliveries pays back in its own way. You must ensure that each package of work delivers value in its own right."

For Linden, the main thing is not to create "a big, bloated transformation program that becomes unmanageable and will never deliver." So his focus has been to connect the transformation to business as usual and create value all along the way.

"I'm a big believer in starting small and scaling up," he says. "By tackling something quite small and getting it into production as quickly as possible, you generate belief that you can tackle the bigger challenge. Aspiring to deliver value back to the organization every 90 days means it can bake that value into its business plans right now, and that creates demand for more transformation. We can constantly assess where the market is going, and reassess the business strategy, to ensure that the business can consume the value we create every 90 days.

"Having these principles and this architecture means we will have the flexibility to make different decisions as we go. We can make choices about the technology that we plug in or swap out. Things are moving so quickly that what we assume today will probably be very different in six to nine months. You need the flexibility to adapt and change."

Based on an interview with, and material from, Darren Linden, director of programs, Barclaycard, June 2016.

Hotelbeds Group connects travel providers and their consumers to ultimately deliver personalized customer experiences

Launched in 2001, Hotelbeds Group is one of the largest global distributors of services to the travel trade. Active in 120 markets, the company holds a leading position in some of the fastest-growing segments of the industry. It offers distribution of accommodations, transfers and activities in more than 185 countries via the world's leading "bedbank," and destination management services in more than 40 countries. Headquartered in Palma de Mallorca, Spain, Hotelbeds Group registered total transaction value (TTV) of €3.80 billion (US$4.22 billion) in financial year 2014-2015, with 18% growth across its markets.

The company connects and distributes a portfolio of more than 85,000 properties to leading industry partners, including online travel agencies, retail agencies, tour operators and airlines. Hotelbeds Group annually handles more than 25 million room bookings. It has four business units: Bedbank, Transfer and Activity Bank (TAB), Destination Management and New Ventures.

Hotelbeds Group began as an offline destination management company contracting with transfers, tour, activity and accommodation suppliers to transport travelers between their planes or cruise ships and their local destinations. According to CTO Álvaro de Nicolás, the company realized some 15 years ago that an online platform connecting hoteliers with tour operators and travel agents would increase business volume. The company's subsequent success is based on a focused internationalization strategy. By continually innovating the business models and leveraging the powerful combination of global distribution with local destination infrastructure, it has been able to establish a virtuous circle of organic and sustainable growth, entering into new, high-growth segments worldwide as a digital platform business.

A global travel platform business with B2B, B2B2C and data components

Hotelbeds Group started as, and remains, a predominantly B2B platform, with some additional B2B2C options and a potential revenue stream from data. According to de Nicolás, the Bedbank is the premier organic growth story: A worldwide leader in its category, it has achieved double-digit growth every year since it was founded in 2001.

As Hotelbeds' core business, the Bedbank's initial supply integration platform connected travel agent "consumers" with room inventory information acquired digitally from accommodation providers. Having sets of both consumers and providers created the network effects for quick growth and expansion into new regions.

Hotelbeds receives either a percentage of the sale of a room, or a fixed-priced commission. Travel agents also receive a commission on the sale, and providers receive what the agent was able to sell the room for, less the commissions. Travel agents also benefit from the global reach of Hotelbeds, without language or currency concerns. Hotelbeds will never commandeer travel agent customers, making the value proposition for agents that much better. As a result, de Nicolás can report that "we have become the world's largest 'bedbank.'"

As the Bedbank grew, Hotelbeds Group expanded its platform capabilities to include a Transfer and Activity Bank of transport and other attraction providers, including Fútbol Club Barcelona, Disney Theme Parks, and Cirque du Soleil. This platform connects the transfer and activity providers with consumers of their services,

Hotelbeds Group connects travel providers and their consumers to ultimately deliver personalized customer experiences (continued)

including travel agents, hotels and independent travelers. This additional layer of B2B and the inclusion of direct B2C connections increase revenue and/or value for the providers and consumers, and for Hotelbeds Group as the platform owner.

The Transfer and Activity Bank was established on the same local destination management infrastructure and global distribution capability that originally helped drive the development of the Bedbank. By leveraging these two axes, it is making great strides in helping to consolidate a historically highly fragmented market space.

In addition to B2B capabilities, Hotelbeds provides websites, and plug-ins that travel agents can use on their own sites, for interacting directly with end consumers, including independent and business travelers. These web capabilities enable providers to advertise transfer, activity and travel offerings that consumers can select beyond the rooms and tours they book through travel agents.

Hotelbeds also provides white-label websites that foster greater intimacy between travel agents and their customers. De Nicolás cites a travel agent in India who created a web page using the white-label site. “This website helps the agent connect better and provide a more personalized customer experience,” he explains. “For example, after booking a trip, customers can see activities throughout the trip that they can book at any destination. Reservations, trip information and various options are all available to the customer.”

The 120 billion searches per year on the Hotelbeds platform generate a great deal of data. By combining this with credit card and mobile positioning data, the company has information on who customers are, where they are going, when they will arrive, what they like to do and where they spend their time. This data enables providers to target customers with specific advertising of goods and services, even before travel begins (e.g., adjusting hotel rates based on competitive offerings and the type of customer). As Hotelbeds grows, it can use this information to differentiate itself from competitors and earn higher commissions.

Evolving the platform business model

As for the future, de Nicolás sees the speed of change as one of the biggest threats to continued success. “You have to continually keep an eye on the environment because it changes very quickly,” he says. ”Your enemy might become your friend, and the other way around, in the blink of an eye. It will be increasingly difficult to have a unique portfolio of products, except in areas where you can differentiate value, but even that will only last for two or three years.”

To maintain differentiation, de Nicolás has a strategy team looking closely at technology and other trends; while a technology “radar team” looks at trends further out, such as autonomous cars and their potential effect on hotel and conference center bookings. He also sponsors open hackathons for his internal developers and external people, and sends technology teams to hackathons sponsored by other businesses and organizations.

“Hackathons are a good incentive for our team and provide a lot of insight into how other people are doing things in the industry,” says de Nicolás. “I am bringing some of the marketing guys and salespeople to the next one we sponsor so that they can talk to our developers, ask questions and see how things get done.

“We also encourage our people to participate in ‘ideation challenges’ and to work with our New Venture businesses that complement our portfolio — such as Carnect, our ‘car hire’ bank.”

To cultivate fresh talent and ideas, de Nicolás works with two universities. “Sponsorship programs with local universities,” he explains, “combine a search for talent, especially scarce big data talent, with crowdsourced solutions to problems and increased brand awareness.”

For de Nicolás, the biggest success factor in creating a digital platform business is to educate the executive team and the rest of the business. As CTO in a company that has no CIO, he wears both hats, splitting his time between managing the IT team and “trying to educate the business and take it to the next frontier” — a task that consumes about 10% more of his time than managing.

“You have to make sure your executive team is as good as it needs to be, including your colleagues in sales, marketing and product. You need to educate them from the start, making them allies, to be able to move the company forward quickly — or find other people who will play that role. Otherwise they can drag you down even if you do everything correctly. You need them to move forward. It’s not just that you have to play ball with them. They need to play ball with you as well.”

Based on an interview with, and material from, Álvaro de Nicolás, CTO, Hotelbeds Group, April 2016.

TraceParts Inc.: Building a B2B platform for delivering 3D product models

TraceParts Inc. is a leading provider of 3D digital content for engineering. Part of the Trace Group, founded in 1989, the company offers powerful web-based solutions such as 3D online product catalogs, product configurators and online marketing services. TraceParts is based in Nashua, New Hampshire, USA.

A B2B platform for 3D modeling

In the past, engineers designed new products or systems using templates to trace outlines of components and products — valves, controllers, tanks, etc. — into their designs. Now, with the advent of 3D modeling, they can obtain 3D CAD models of components from suppliers to incorporate into their designs. These virtual samples enable engineers to check form, fit and function, and iterate the model as needed. Component suppliers maintain catalogs of their 3D product models as sales tools,

TraceParts Inc.: Building a B2B platform for delivering 3D product models (continued)

but the cost to produce such a catalog is high, and suppliers then have to depend on engineers being able to find them online.

CEO Bob Noftle capitalized on the opportunity to create a digital platform business that would connect component suppliers with engineers by offering 3D design models. The manufacturer would have greater exposure, and the engineer would have more choices. Noftle purchased the U.S. subsidiary of TraceParts France, whose business model was creating catalogs of a manufacturer's 3D models using a proprietary internal system.

"Being in the middle, between the providers (suppliers) and consumers (engineers), is a win for everyone," says Noftle. "We provide the functionality for providers to publish their existing information, increase their product visibility and lead generation, and improve customer satisfaction. On the other side, consumers can download and try different component models without having to go through a sales rep. Once they make a decision, they have the information to give to purchasing."

Noftle took a "startup, fresh-sheet-of-paper approach" to rethink the existing model and design a cloud-based platform for the future. In purchasing the U.S. subsidiary, he had the advantage of starting with a sizable set of providers of 3D models on the one hand and engineer consumers on the other. He notes the potential for larger network effects and growth: "We're not limited to the fewer than 2,000 companies that currently have online 3D catalogs. The number of companies that could take advantage of this can be measured in the tens of thousands. I think we're still in the early adopter stage."

The provider value proposition

The value proposition for providers centers on being able to use their existing information to increase sales lead generation from the millions of people who will now have access to their catalogs.

TraceParts provides the resources for a provider to create a catalog or, for a fee, will create one for it. In addition, TraceParts functionality can be embedded in the provider's website, enabling engineers to serve themselves, reducing the amount of phone support needed to assist these consumers. The catalog is also accessible from 35 engineering websites affiliated with TraceParts. Moreover, TraceParts recruited CAD vendors as marketing partners who post all of the catalogs on their respective websites, making it easy for CAD software users to find whatever they need. To further increase consumer interest and usage, Noftle and team are adding platform functionality for creating communities associated with use of particular CAD systems. This will facilitate technical queries and discussions without involving salespeople.

The revenue model

TraceParts charges providers a monthly catalog-publishing fee, while consumers can download as many models as they want for free. The monthly fee is adjusted yearly based on transaction volumes, but providers equate increased download volume to increased sales opportunities. "We track every download," says Noftle, "and we give that information back to the supplier as potential sales lead information."

Engineers can opt into focused email campaigns based on their catalog interactions. Part numbers, model descriptions, and what a consumer looks at and downloads are used to target these campaigns, which range from the latest provider product information or service, to offers of rapid 3D printing or machine shop prototyping work. "As long as the engineers are not getting 'harassed' by calls from salespeople, this approach works well," reports Noftle.

The company also generates revenue from catalog creation. The platform contains a website and tools for creating catalogs of 3D models; again, providers can create their own catalog or let TraceParts build it. Rather than maintain a big staff for creating catalogs, the company draws on freelance designers and engineers, many certified on CAD software.

"Right now our revenue is mostly split between our e-marketing campaigns and 3D catalog monthly fees," says Noftle. "We spend more effort on the 3D catalog, because right now we are at a 98% renewal rate. It's a really good recurring revenue model. In contrast, the email campaigns mean selling something new every time."

Critical success factors

Given the lack of interoperability between the various CAD systems, Noftle believes that governance rules and guidelines are necessary for a platform business such as his to succeed. Though TraceParts has rules concerning neutral formats for 3D models, the company does a lot of testing since, as Noftle puts it, "a bad model could hang the server without much difficulty."

He advises others who are looking to build a platform to do their homework. His list of critical success factors includes the following:

– Evaluate all providers to ensure that they align with your vision and that everything they use is commercially available.

– Be aware of who your buyers will be and design your platform accordingly. For example, there may be generational differences in users' ability to navigate a platform and find what they want.

TraceParts Inc.: Building a B2B platform for delivering 3D product models (continued)

– If your consumers, like engineers, are being asked to do more with less, be sure your platform takes this into account. They may need to be efficient in a role that used to be handled by three or four people. For example, these consumers are looking for interaction and interoperability between the business platform they select and other platforms they might use internally.

Noftle offers this parting advice: “If you are going to build a digital business platform, build it for where your providers and consumers will be in five years, not where they are today, which may be the same as five years ago.”

Based on an interview with, and material from, Bob Noftle, CEO, TraceParts Inc., March 2016.

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