

Digital Business Models

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Digital Business Models

Evolution of business models

(Osterwalder et al. 2005; Wirtz 2019)

The diagram illustrates the evolution of business models through three stages represented by blue arrows pointing upwards. The first stage, at the bottom, is labeled 'Computer and system modelling and its relationship with business processes'. The second stage, in the middle, is labeled 'More strategic orientation and its relation to revenue management and relationship management'. The third stage, at the top, is labeled 'Building blocks of business models on how an organization creates, delivers, and captures value'.

Computer and system modelling
and its relationship
with business
processes

More strategic
orientation and its
relation to revenue
management and
relationship
management

Building blocks of
business models on
how an
organization
creates, delivers,
and captures value

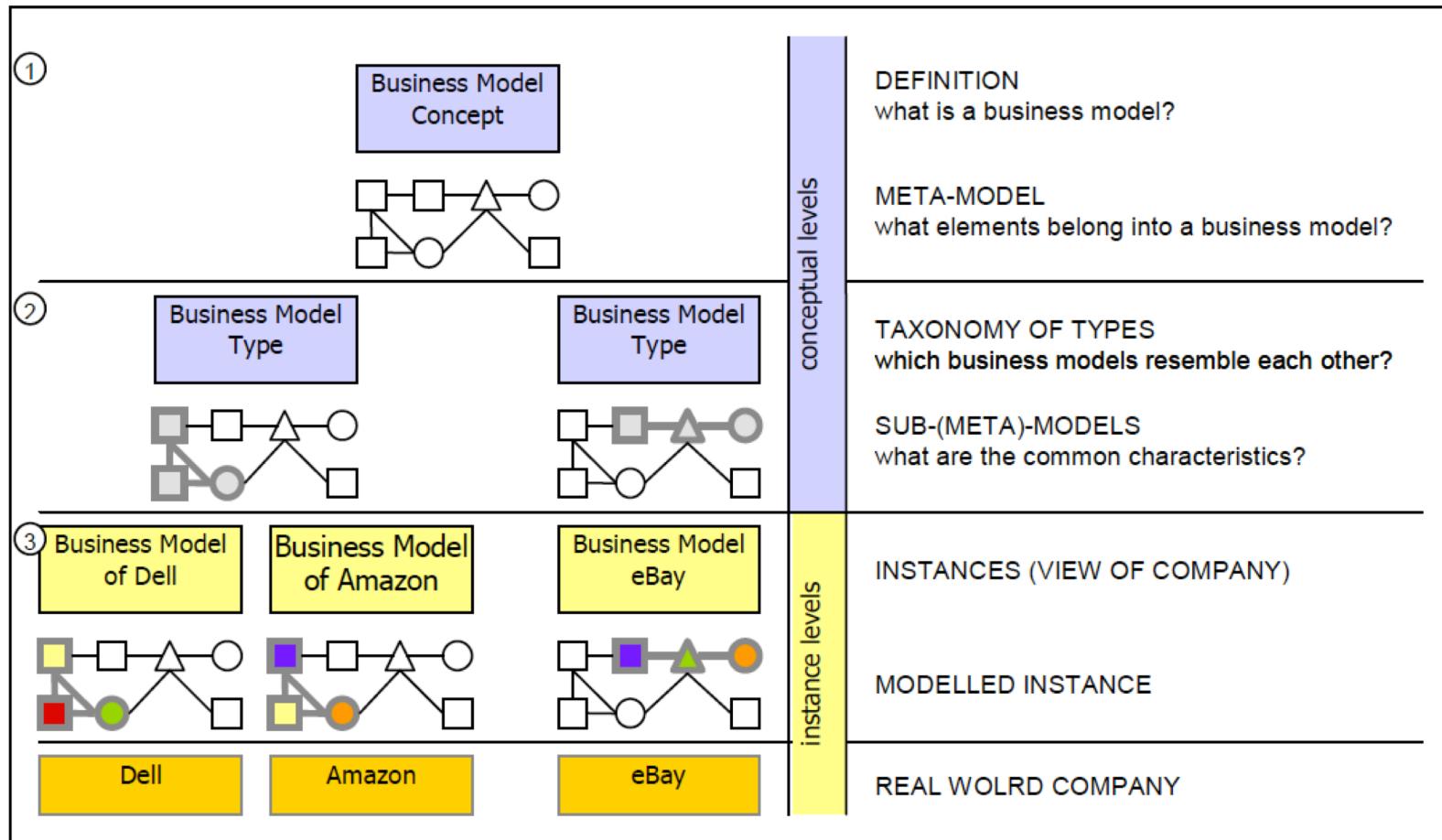
Business model

(Osterwalder et al. 2005)

- the blueprint of how a company does business. It is the translation of strategic issues, such strategic positioning and strategic goals into a **conceptual model that explicitly states how the business functions.**
- The business model serves as a building plan that **allows designing and realizing the business structure and systems** that constitute the company's operational and physical form.

Business model concept hierarchy

(Osterwalder et al. 2005)

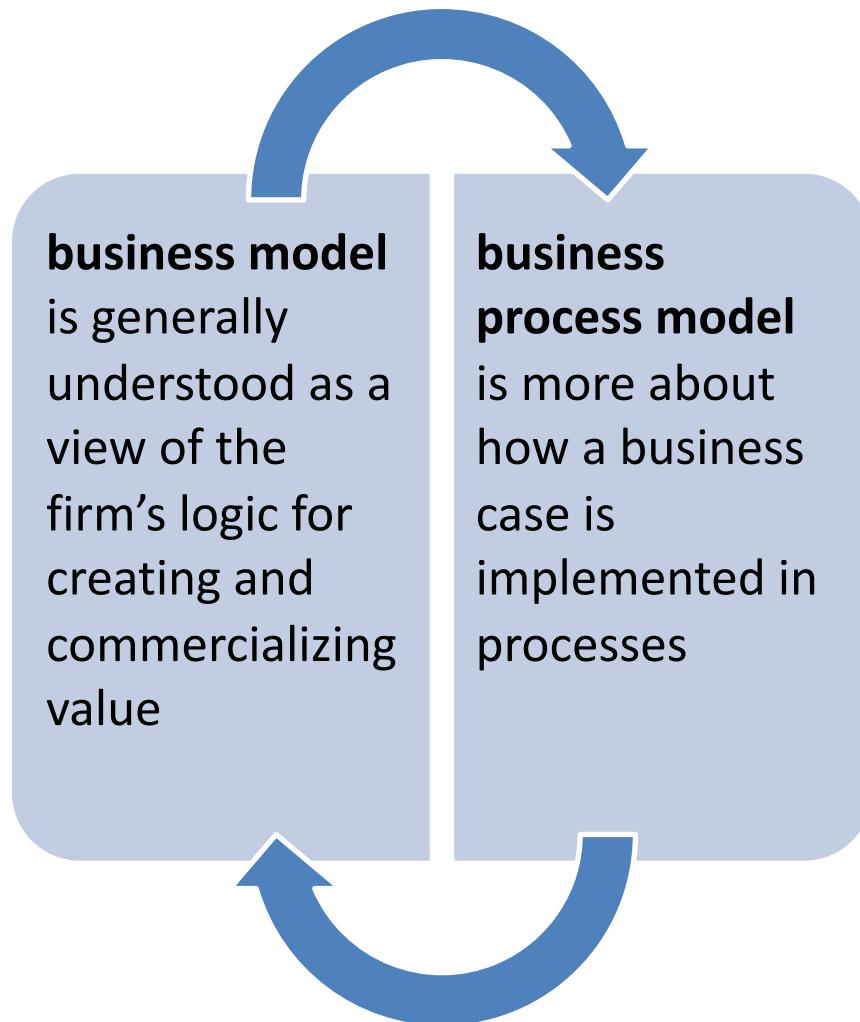


Business Models

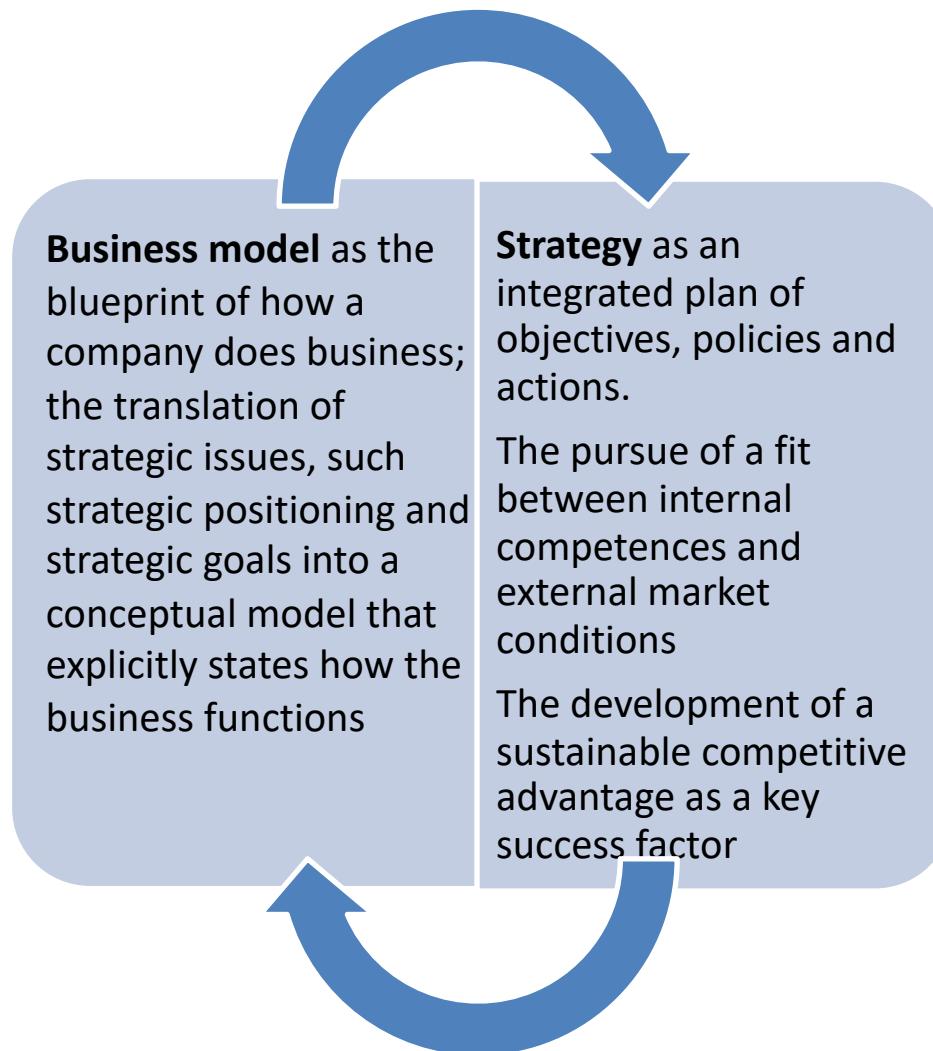
A business model describes the rationale of how an organization creates, delivers, and captures value

(Alexander Osterwalder & Yves Pigneur, 2010)

Business Models vs. Business process modelling



Business Models vs. business strategy



Business Models vs. Business Strategy

(Osterwalder et al. 2005)

- First, the business model can be seen as the conceptual link between strategy, business organization, and systems. The business model as a system shows **how the pieces of a business concept fit together, while strategy also includes competition and implementation.**
- Second, **business model implementation contains its translation into concrete things, such as a business structure** (e.g. departments, units, human resources), business processes (e.g. workflows, responsibilities) and infrastructure and systems (e.g. buildings, ICT).

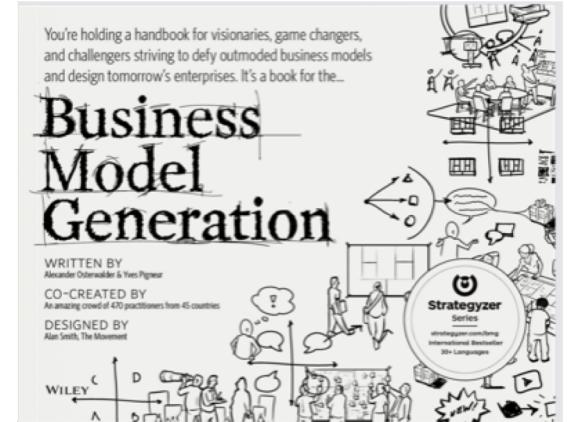
Definition of business model (Osterwalder et al. 2005)

- A business model is a conceptual tool that contains a **set of elements and their relationships** and allows expressing the business logic of a specific firm.
- It is a description of **the value a company offers to one or several segments of customers** and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams.

Building blocks of business models

(Osterwalder et al. 2005)

Pillar	Business Model Building Block	Description
Product	Value Proposition	Gives an overall view of a company's bundle of products and services.
Customer Interface	Target Customer	Describes the segments of customers a company wants to offer value to.
	Distribution Channel	Describes the various means of the company to get in touch with its customers.
	Relationship	Explains the kind of links a company establishes between itself and its different customer segments.
Infrastructure Management	Value Configuration	Describes the arrangement of activities and resources.
	Core Competency	Outlines the competencies necessary to execute the company's business model.
	Partner Network	Portrays the network of cooperative agreements with other companies necessary to efficiently offer and commercialize value.
Financial Aspects	Cost Structure	Sums up the monetary consequences of the means employed in the business model.
	Revenue Model	Describes the way a company makes money through a variety of revenue flows.



Business model Canvas

(Alexander Osterwalder & Yves
Pigneur, 2010)

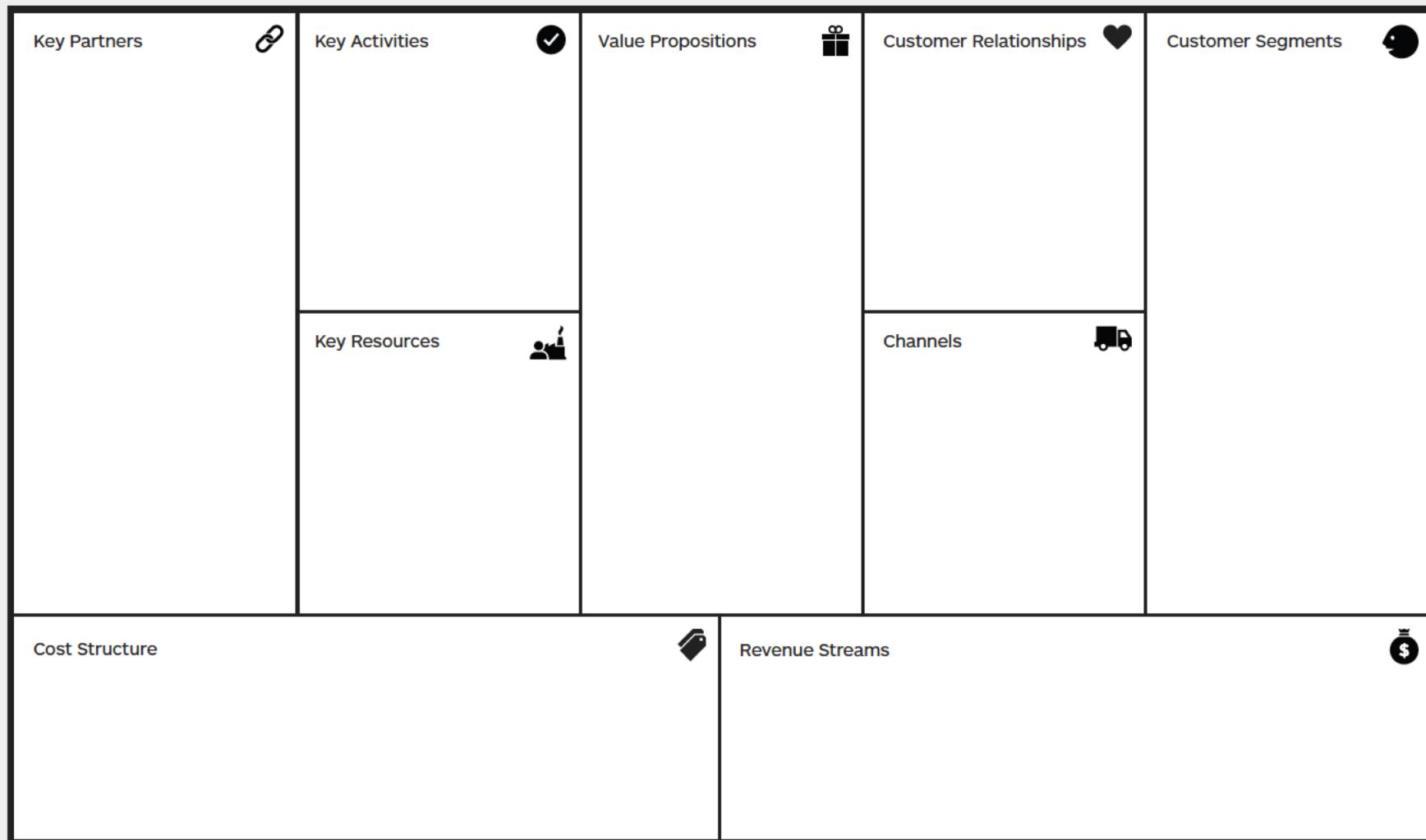
The Business Model Canvas

Designed for:

Designed by:

Date:

Version:



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Customer Segments

The Customer Segments Building Block defines the different groups of people or organizations an enterprise aims to reach and serve

Customers comprise the heart of any business model. Without (profitable) customers, no company can survive for long. In order to better satisfy customers, a company may group them into distinct segments with common needs, common behaviors, or other attributes. A business model may define one or several large or small Customer Segments. An organization must make a conscious decision about which segments to serve and which segments to ignore. Once this decision is made, a business model can be carefully designed around a strong understanding of specific customer needs.

Customer groups represent separate segments if:

- *Their needs require and justify a distinct offer*
- *They are reached through different Distribution Channels*
- *They require different types of relationships*
- *They have substantially different profitabilities*
- *They are willing to pay for different aspects of the offer*

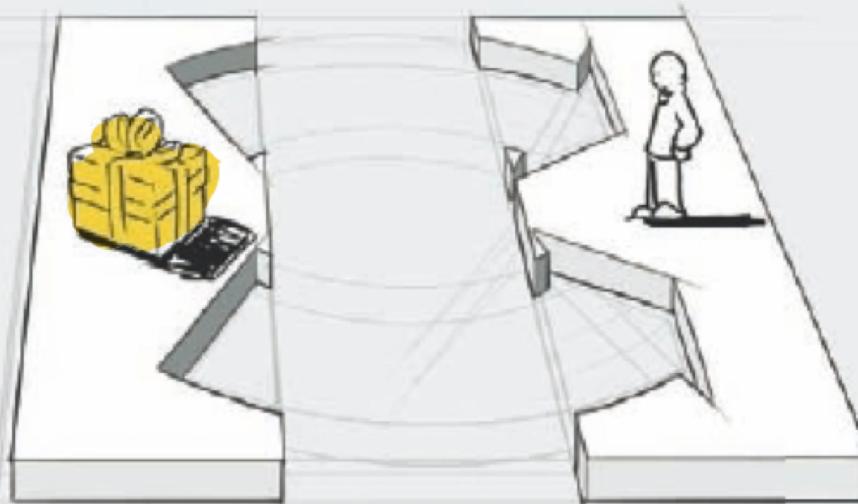


Value Propositions

The Value Propositions Building Block describes the bundle of products and services that create value for a specific Customer Segment

The Value Proposition is the reason why customers turn to one company over another. It solves a customer problem or satisfies a customer need. Each Value Proposition consists of a selected bundle of products and/or services that caters to the requirements of a specific Customer Segment. In this sense, the Value Proposition is an aggregation, or bundle, of benefits that a company offers customers.

Some Value Propositions may be innovative and represent a new or disruptive offer. Others may be similar to existing market offers, but with added features and attributes.



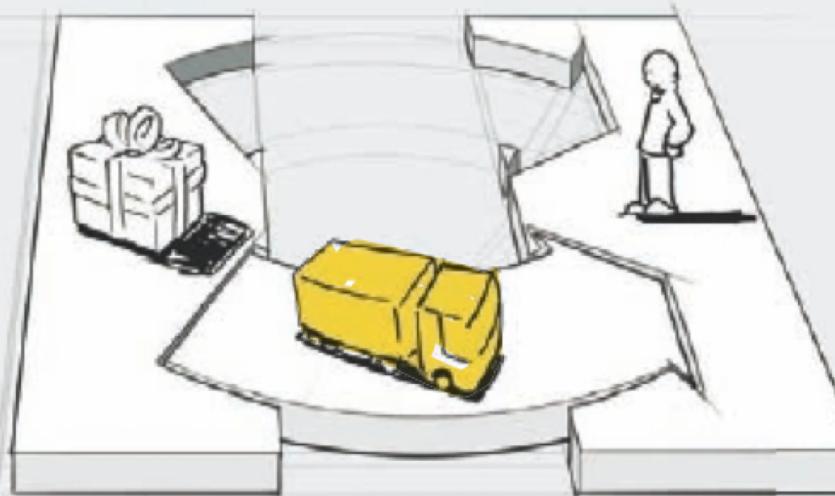
Channels

The Channels Building Block describes how a company communicates with and reaches its Customer Segments to deliver a Value Proposition

Communication, distribution, and sales Channels comprise a company's interface with customers. Channels are customer touch points that play an important role in the customer experience.

Channels serve several functions, including:

- *Raising awareness among customers about a company's products and services*
- *Helping customers evaluate a company's Value Proposition*
- *Allowing customers to purchase specific products and services*
- *Delivering a Value Proposition to customers*
- *Providing post-purchase customer support*



Customer Relationships

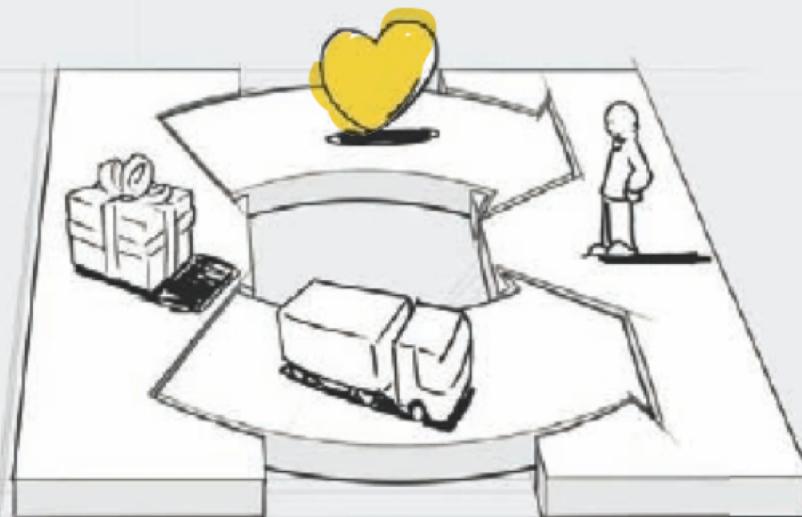
The Customer Relationships Building Block describes the types of relationships a company establishes with specific Customer Segments

A company should clarify the type of relationship it wants to establish with each Customer Segment. Relationships can range from personal to automated. Customer relationships may be driven by the following motivations:

- *Customer acquisition*
- *Customer retention*
- *Boosting sales (upselling)*

In the early days, for example, mobile network operator Customer Relationships were driven by aggressive acquisition strategies involving free mobile phones. When the market became saturated, operators switched to focusing on customer retention and increasing average revenue per customer.

The Customer Relationships called for by a company's business model deeply influence the overall customer experience.



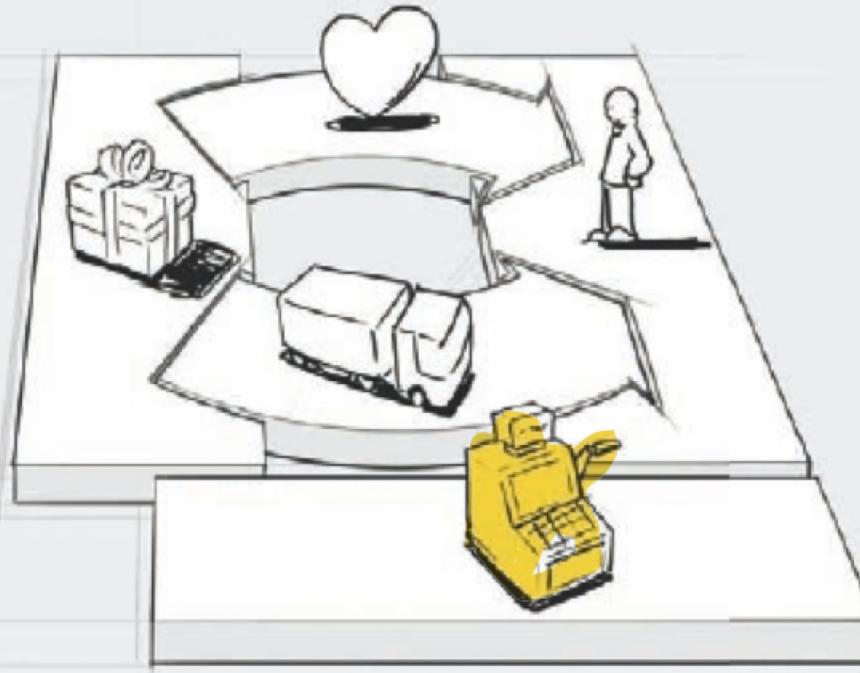
Revenue Streams

The Revenue Streams Building Block represents the cash a company generates from each Customer Segment (costs must be subtracted from revenues to create earnings)

If customers comprise the heart of a business model, Revenue Streams are its arteries. A company must ask itself, For what value is each Customer Segment truly willing to pay? Successfully answering that question allows the firm to generate one or more Revenue Streams from each Customer Segment. Each Revenue Stream may have different pricing mechanisms, such as fixed list prices, bargaining, auctioning, market dependent, volume dependent, or yield management.

A business model can involve two different types of Revenue Streams:

1. *Transaction revenues resulting from one-time customer payments*
2. *Recurring revenues resulting from ongoing payments to either deliver a Value Proposition to customers or provide post-purchase customer support*

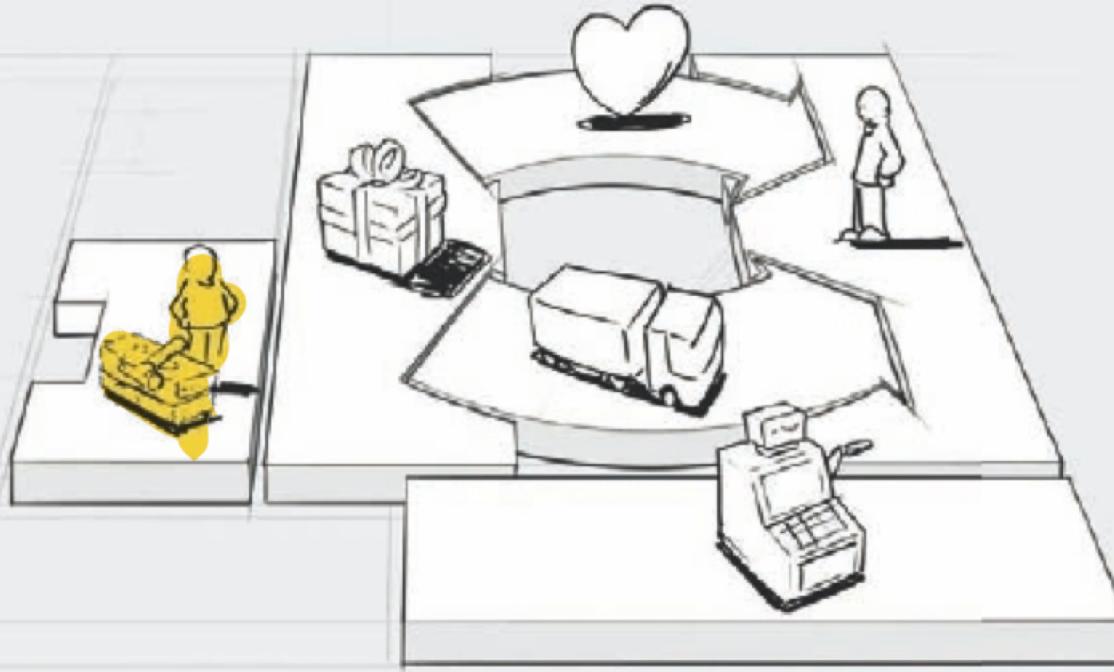


Key Resources

The Key Resources Building Block describes the most important assets required to make a business model work

Every business model requires Key Resources. These resources allow an enterprise to create and offer a Value Proposition, reach markets, maintain relationships with Customer Segments, and earn revenues. Different Key Resources are needed depending on the type of business model. A microchip manufacturer requires capital-intensive production facilities, whereas a microchip designer focuses more on human resources.

Key resources can be physical, financial, intellectual, or human. Key resources can be owned or leased by the company or acquired from key partners.

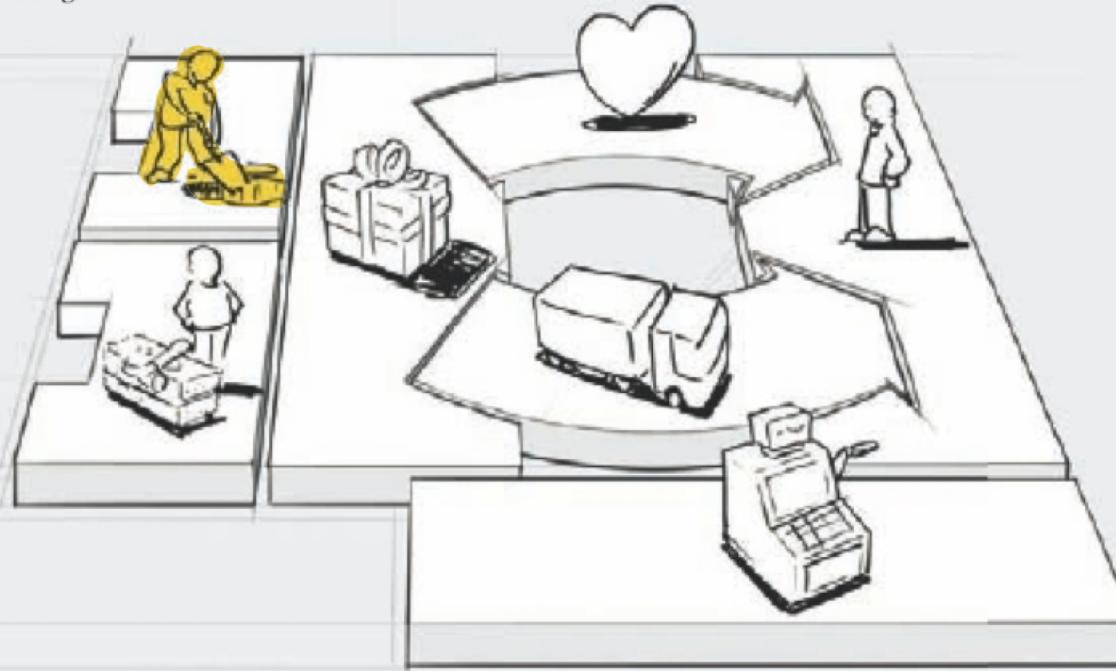


Key Activities

The Key Activities Building Block describes the most important things a company must do to make its business model work

Every business model calls for a number of Key Activities. These are the most important actions a company must take to operate successfully. Like Key Resources, they are required to create and offer a Value Proposition, reach markets, maintain Customer Relationships, and earn revenues. And like Key Resources, Key Activities differ depending on business model type. For software maker Microsoft, Key Activities include software development.

For PC manufacturer Dell, Key Activities include supply chain management. For consultancy McKinsey, Key Activities include problem solving.



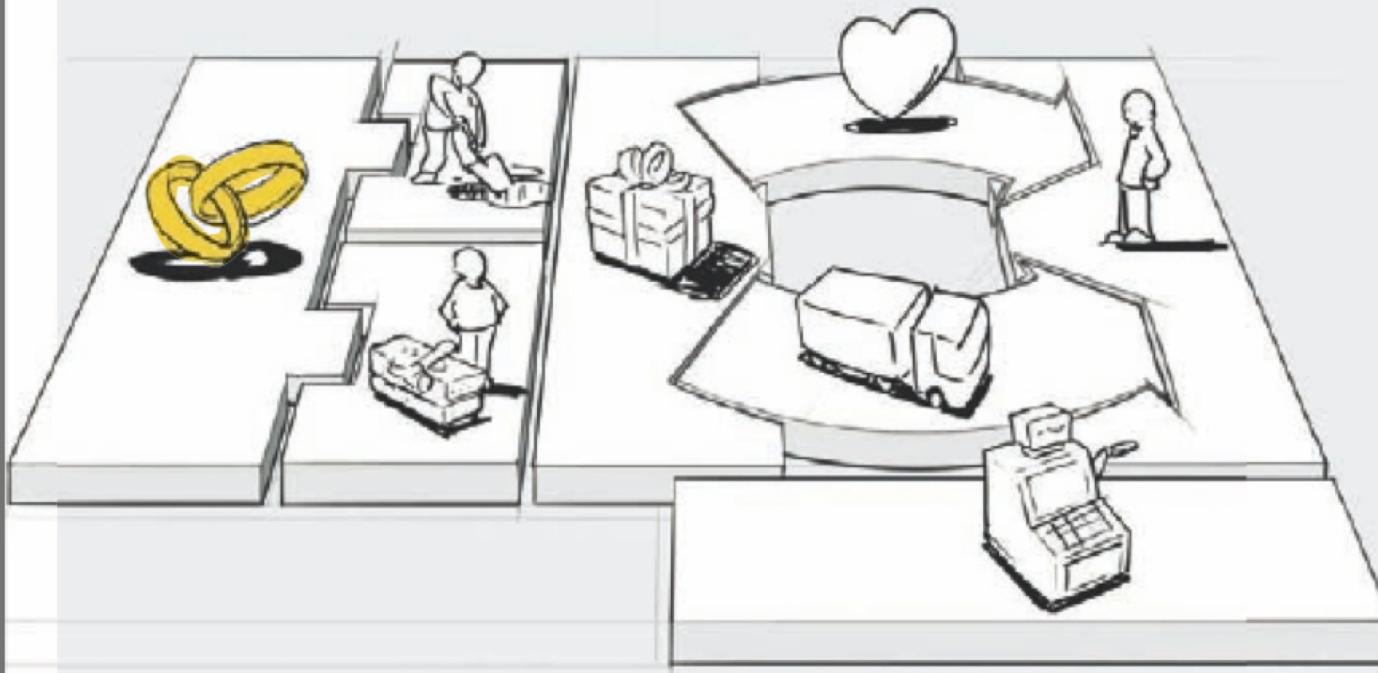
Key Partnerships

The Key Partnerships Building Block describes the network of suppliers and partners that make the business model work

Companies forge partnerships for many reasons, and partnerships are becoming a cornerstone of many business models. Companies create alliances to optimize their business models, reduce risk, or acquire resources.

We can distinguish between four different types of partnerships:

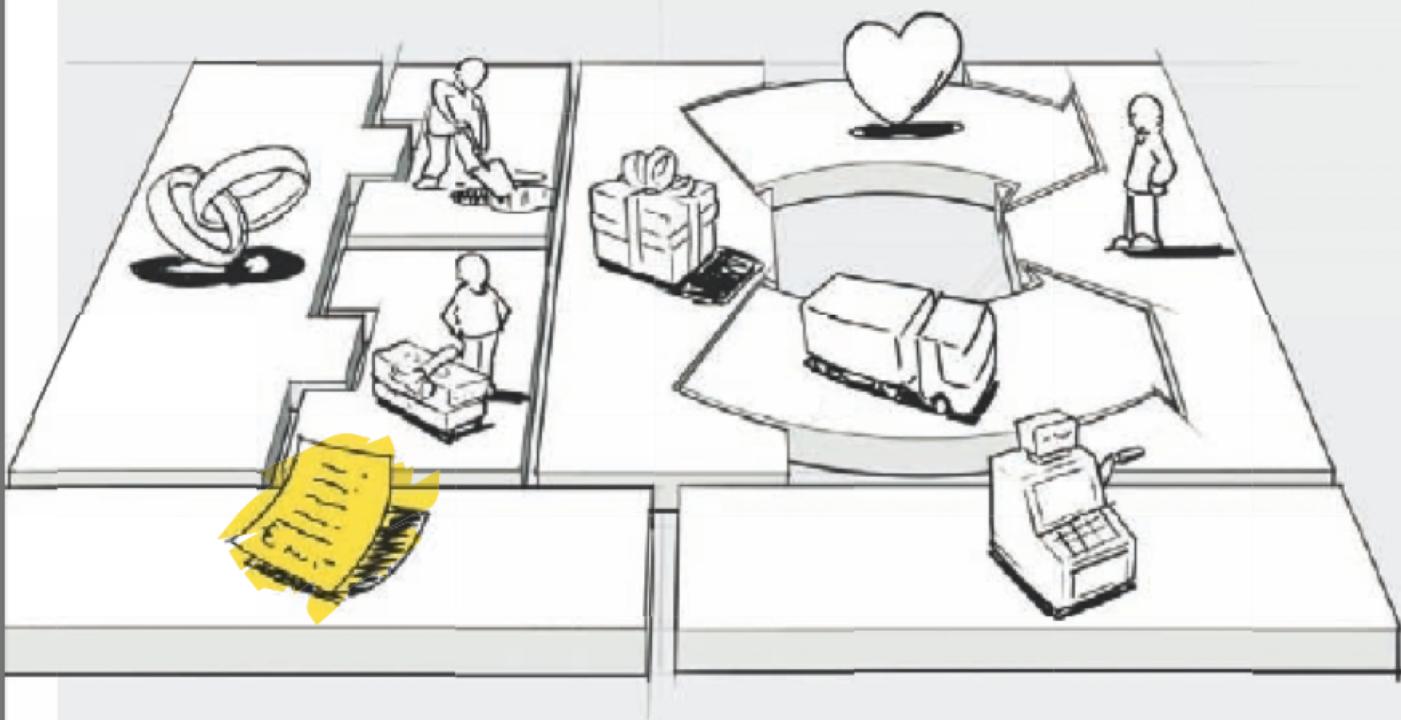
1. Strategic alliances between non-competitors
2. Coopetition: strategic partnerships between competitors
3. Joint ventures to develop new businesses
4. Buyer-supplier relationships to assure reliable supplies



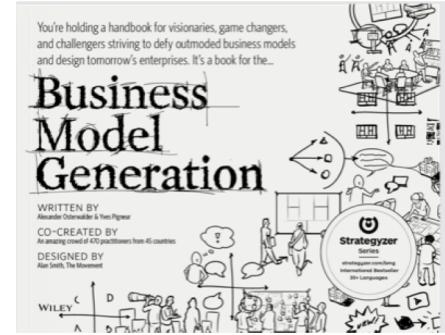
Cost Structure

The Cost Structure describes all costs incurred to operate a business model

This building block describes the most important costs incurred while operating under a particular business model. Creating and delivering value, maintaining Customer Relationships, and generating revenue all incur costs. Such costs can be calculated relatively easily after defining Key Resources, Key Activities, and Key Partnerships. Some business models, though, are more cost-driven than others. So-called “no frills” airlines, for instance, have built business models entirely around low Cost Structures.



Business model canvas



<https://www.youtube.com/watch?v=RpFiL-1TVLw>

A man with dark hair and glasses, wearing a black shirt, stands in front of a large whiteboard displaying the 'Business Model Canvas'. The canvas is a grid of nine boxes, each containing a yellow sticky note labeled 'building block'. The boxes are arranged as follows: Row 1: 'Key Partners' (with a question about partners), 'Value Propositions' (with a question about what value is delivered), 'Customer Segments' (with a question about target customers). Row 2: 'Key Resources' (with a question about required resources), 'Channels' (with a question about distribution channels), 'Revenue Streams' (with a question about revenue models). Row 3: 'Customer Segments' (another one, with a question about most important segments), 'Building Block' (empty), 'Building Block' (empty). The whiteboard has a footer with a video player showing '5:40' and some icons.

What is your Digital Business Model?

Working in teams

- Compal - <https://compalworld.com/>; <https://sumolcompal.pt/>; <https://www.compal.pt/> (PT)
- Farfetch - <https://www.farfetchinvestors.com/>; <https://www.farfetch.com/>
- Sonae MC - <https://mc.sonae.pt/>; <https://www.continente.pt/> (PT)
- Unbabel - <https://unbabel.com/>

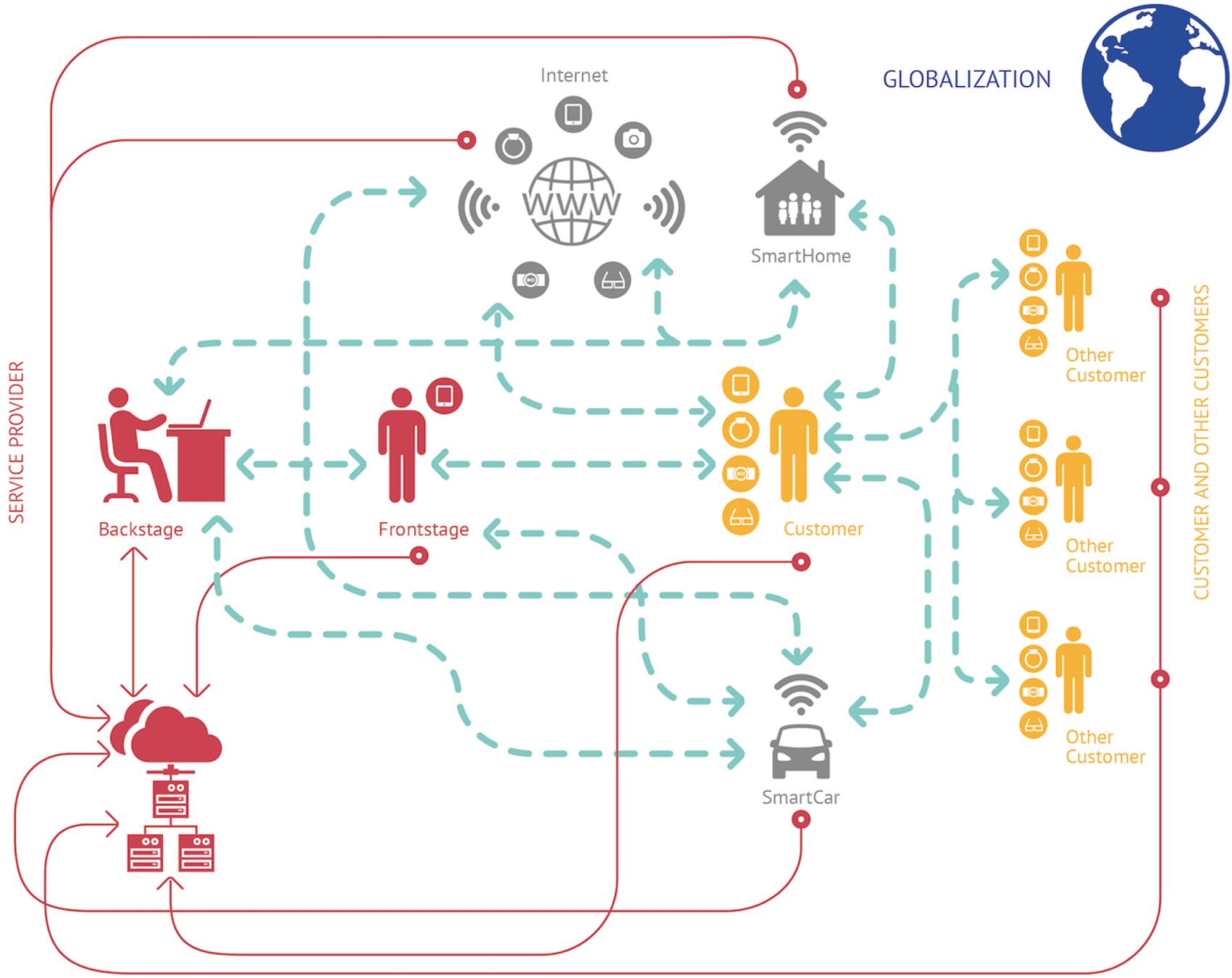
What is your Digital Business Model?

- <https://moodle2324.up.pt/course/view.php?id=5419>
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Digital business models

“Digital transformation is not about technology— it’s about change. And it is not a matter of if, but a question of when and how.”

(Weill & Woerner 2018)



(Ostrom, Parasuraman, Bowen, Patrício, Voss, 2015)

Digital transformation

(Weill & Woerner 2018)

- **New entrants:** different business model and superior digital capabilities— enter an existing industry offering new value propositions (Uber, Airbnb).
- **New business models for traditional competitors:** Existing businesses adopt a business model that is more appealing to their customers (Nordstrom transition to an omnichannel business, combining the best of place (tangible, product- based, customer- oriented transactions) and space (intangible, service based, and oriented toward the customer experience)).
- **Crossing industry boundaries:** Enterprises that are successful in one industry (or customer domain) use digital tactics to move into a new industry or domain.

Creating the next generation enterprise (Weill & Woerner 2018)

Because almost every enterprise can use these digital technologies, they don't necessarily offer a competitive advantage.

The key is differentiating your business by offering customers something new and compelling, enabled by the vehicle that digital offers, and creating a destination customers want to visit

Two dimensions of digital business models (Weill & Woerner 2018)

- From controlled value chains (à la Michael Porter circa 1980) to more- complex, networked systems.
 - to what extent they are part of a value chain that can be controlled (and that they believe they or someone must control),
 - or to what extent they are part of a more complex digital ecosystem, in which the dynamics are less about command and control and more about building maintaining, and using networks.
- From less familiarity with customer needs and life events to a better, closer understanding of them, resulting in better customer engagement.
 - how much they know about the needs of their end customers and how much they can know.

Digital Business Models (Weill & Woerner 2018)

- **Supplier:** producer that sells through other enterprises
- **Omnichannel:** integrated value chain that creates multiproduct, multichannel customer experiences to address life events
- **Modular producer:** provider of plug- and- play products or services
- **Ecosystem driver:** organizer of an ecosystem, a coordinated network of enterprises, devices, and customers to create value for all participants, which is the destination in a particular domain (such as shopping)
(Many large companies operate in more than one model)

Digital business model framework

		Omnichannel	Ecosystem driver
		<ul style="list-style-type: none">• “Own” the customer relationship• Create multiproduct customer experience to address life events• Customer chooses channels• Integrated value chain	<ul style="list-style-type: none">• Become <i>the</i> destination in your space• Add complementary and possibly competitor products• Ensure great customer experience• Obtain customer data from all interactions• Match customer needs with providers• Extract “rents”
Complete		<i>Banks, retail, energy companies</i>	<i>Amazon, Fidelity, WeChat</i>
Partial		Supplier <ul style="list-style-type: none">• Sell through other enterprises• Potential for loss of power• Core skills: low-cost producer, incremental innovation <i>Insurance via agent, TV via retailer, mutual fund via broker</i>	Modular producer <ul style="list-style-type: none">• Plug-and-play product/service• Able to adapt to any ecosystem• Constant innovation of product/service <i>PayPal, Kabbage</i>
		Value chain	Ecosystem

Business design

Who controls key decisions like brand, contracts, price, quality, participants, IP and data ownership, regulation

Suppliers

- Firms in this quadrant have, at best, a partial knowledge of their end customers and typically operate in the value chain of another, often more powerful enterprise (e.g. Sony and other appliance companies).
- As enterprises continue to digitize, suppliers are likely to lose more power and be pressured to continually reduce prices
- To learn more about, and connect directly to, its more than four billion end customers worldwide, using a variety of branding, social media, direct- to- customer and data- based approaches, effectively moving up in the DBM framework.
- Example: Procter & Gamble - P&G (<https://us.pg.com>)



Omnichannels

- Businesses with an omnichannel model provide customers access to their products across multiple channels, including physical and digital channels, delivering greater choice and a seamless experience.
- The challenge is to move up the vertical axis of the DBM framework, acting on an increased knowledge of the end customers and their goals and life events, and reducing customer churn.
- Enterprises use big-data analytics, social media, sentiment analysis, mobile apps, and measures of customer experience as avenues for increasing their understanding of the end customer
- Example: Citibank (<https://www.citi.com>)

Modular producers

- Businesses that provide plug- and- play products or services that can adapt to any number of ecosystems are modular producers. To survive, they have to be one of the best producers of their core activity (like payments).
- To thrive, they must constantly innovate their products and services, ensuring that these offerings are among the best options available and at the right price.
- Modular producers typically operate in a hypercompetitive market, as it's usually easy for customers or a robot to search for an alternative and switch— and the whole point of being a modular producer is being plug- and- play.
- Example – Paypal (<https://www.paypal.com>)

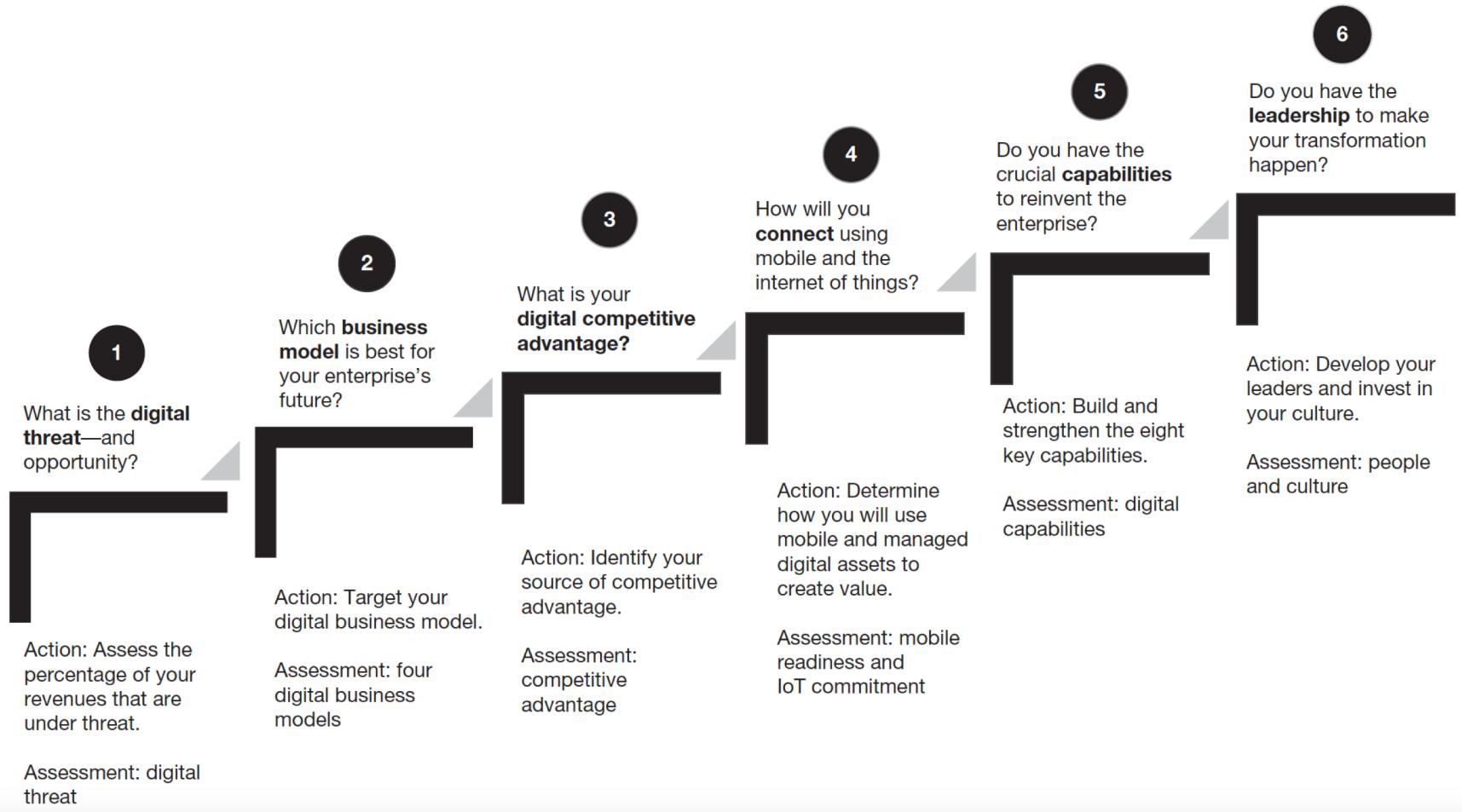


Ecosystem drivers

- Enterprises with this DBM establish a digital ecosystem (a coordinated network of enterprises, devices, and customers to create value for all participants) by fostering relationships with other providers who offer complementary (and sometimes competing) services to their own to more completely meet the needs of customers.
- An ecosystem driver offers a full range of services to a subset of its customers from both its own capabilities and those of its partners.
- Ecosystem drivers use their brand strength to attract participants, ensure a great customer experience, and offer one-stop shopping. Like omnichannel businesses, they also aspire to “own” the customer relationship by increasing their knowledge of their end customers. But more importantly, ecosystem drivers want to become the destination for a subset of their customers.
- Example: Apple, Google



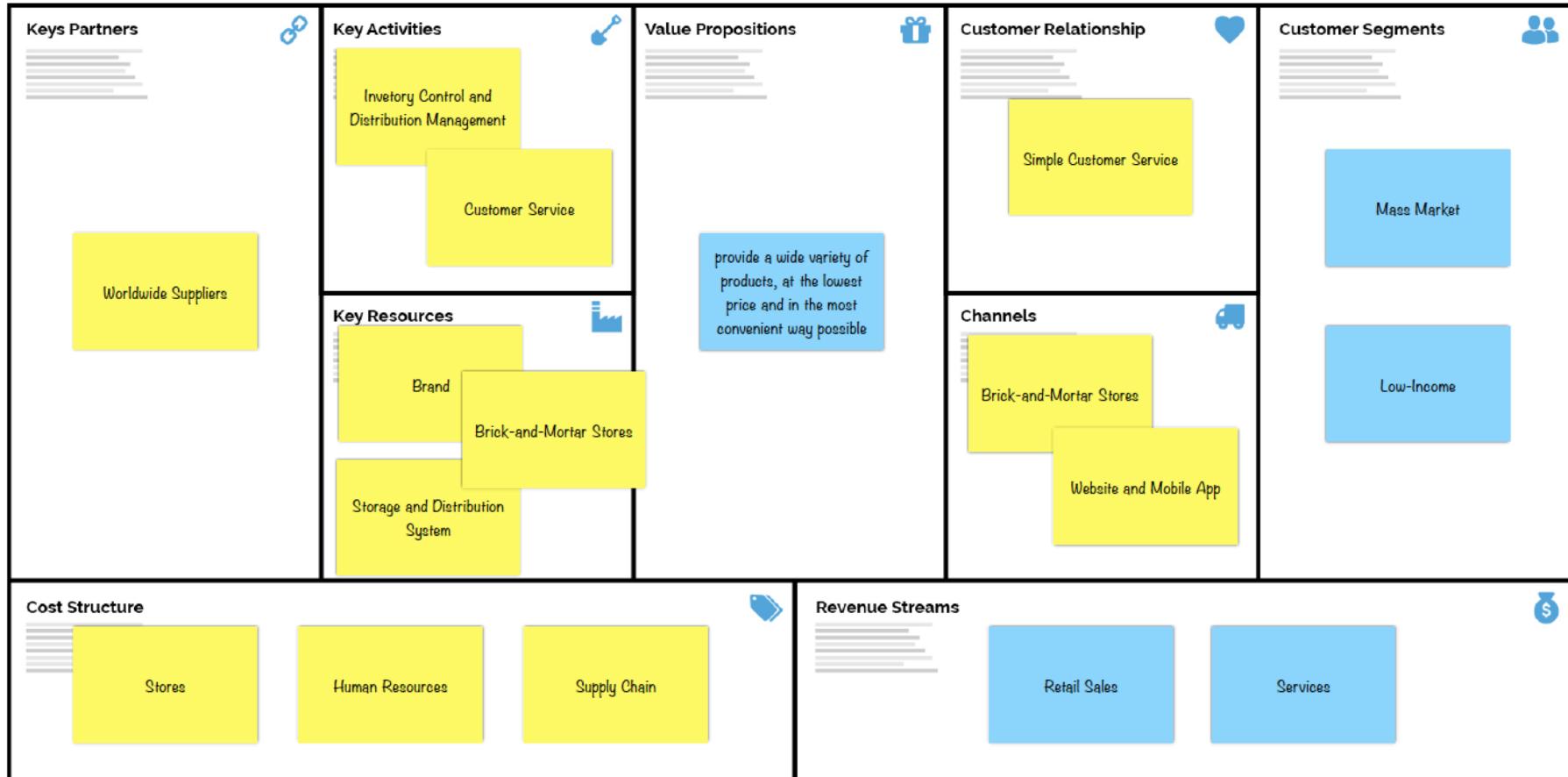
Six key questions and actions for transformation in the digital economy



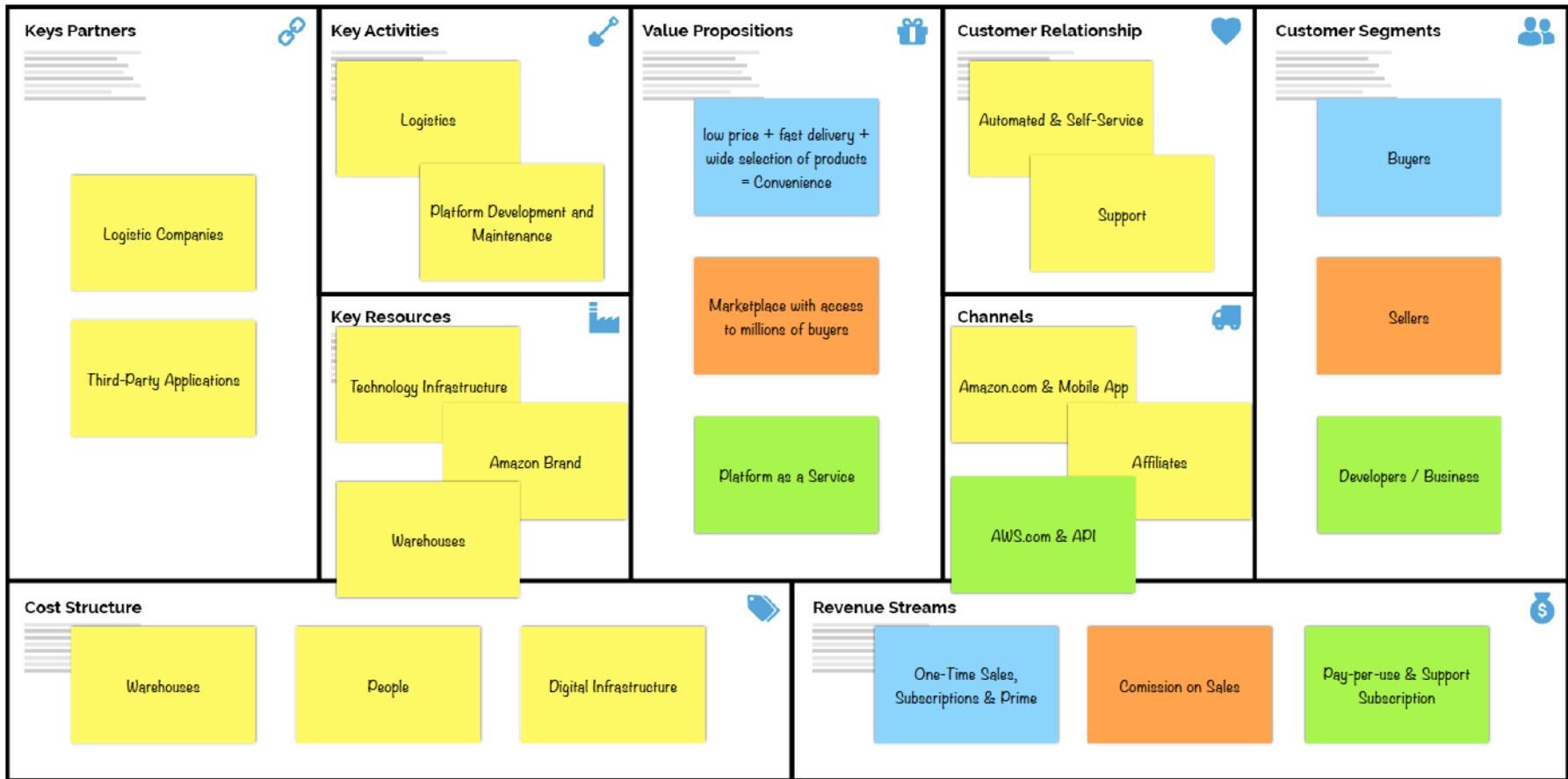
Moving up and right in the DBM framework

- Digitization is the vehicle for enterprises to:
 - Create a strong connection with their end customers (moving up), and
 - with other companies and suppliers that they partner with (moving right), to meet more of the customer's needs.

Walmart - Business Model Canvas



amazon - Business Model Canvas



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