

Digital Business

Digital Transformation Strategy

Learning Objectives

- ▶ Recap: Digital Enablement vs Digital Optimisation vs Digital Transformation
- ▶ Define what is a Digital Strategy
- ▶ Describe the considerations and risks in choosing a wrong Digital Strategy
- ▶ Describe the key focus areas of Digital Transformation
- ▶ Describe the criteria for successful Digital Transformations

Recap

▶ **Digital Enablement**

- ▶ Process that focuses on implementing new technologies such as cloud services, mobile computing, etc. that digital **business often uses**

▶ **Digital Optimisation**

- ▶ Process that focuses on implementing new technologies to **optimise the core processes without changing the business model**.

▶ **Digital Transformation**

- ▶ Process that focuses on implementing new technologies to **launch net-new digitally enabled products and services or pursue new business model**.

Digital Strategy

Digital Strategy specifies the **direction (ultimate goal)** an organization will take to create new competitive advantages with technology, as well as the **tactics (plan)** it will use to achieve these changes.

Digital Strategy (**Goal**)

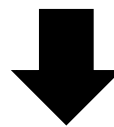
What is my Digital Strategy (Goal)?



Enablement

- Implement technologies business often uses

* Usually occurs when IT wants to push new technologies forward, but is not supported by the rest of the organisation



Optimisation

- Improve Productivity & Existing Revenue
- Better customer experience



Transformation

- Net-New Revenue Product & Services
- New Business Models

Digital Strategy (**Goal**)

Should the digital business aim to **optimize** the existing business model and/or introduce **new** business models and revenue sources?

How to choose?

Considerations:

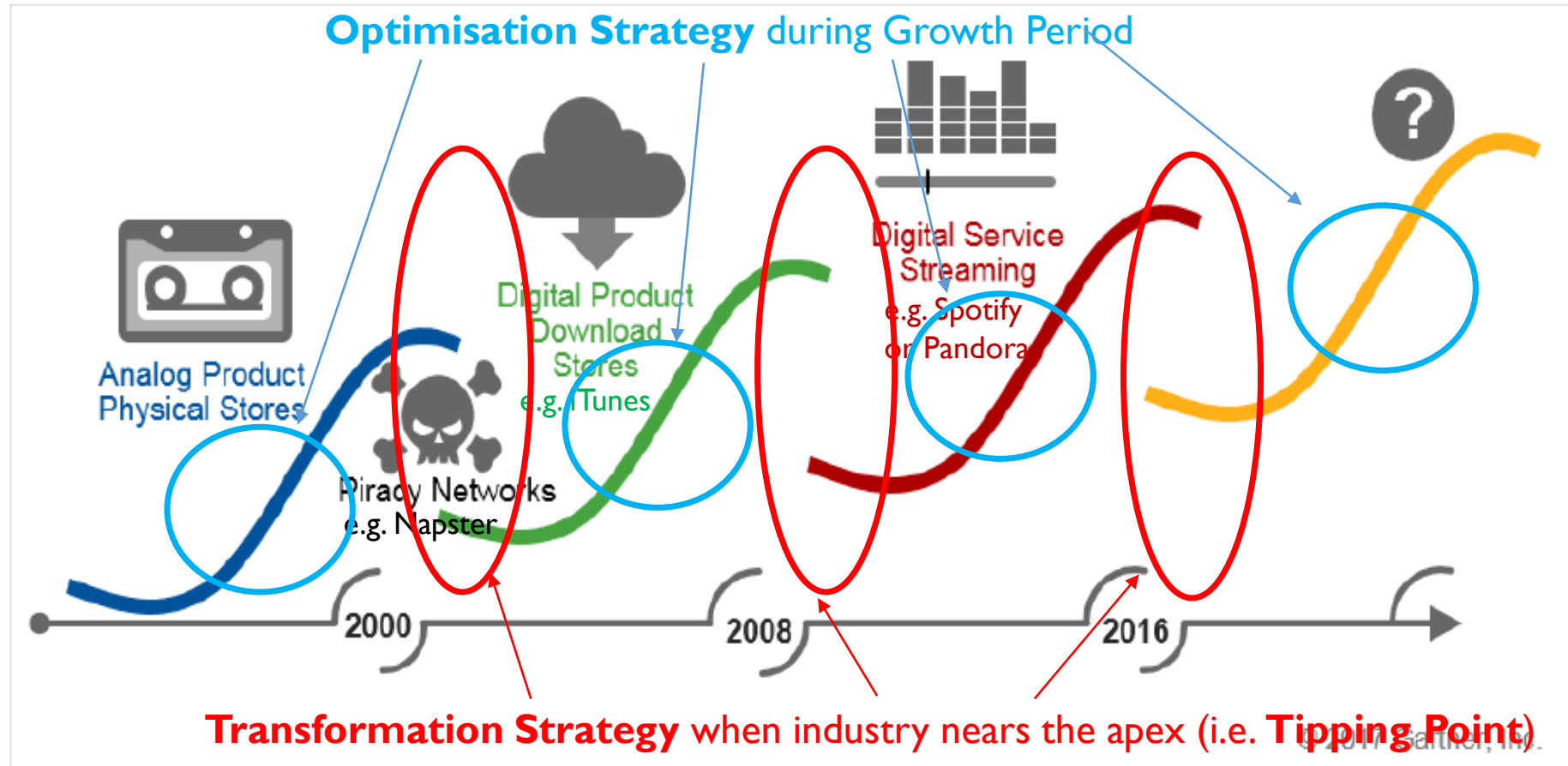
1. Timing of transformation in your industry and adjacent industries (**External Factor**) – Triple Tipping Points
2. Competitive stance (**Internal Factor**) – aggressive vs defensive

Consideration 1: Timing of Transformation in the Industry (**External** Factor)

- ▶ If your industry (or an adjacent industry) is going through disruptive changes (**tipping point**), then you will have no choice but to set a **transformation** course yourselves.
- ▶ If your industry is not undergoing a transformation, you have the option of pursuing a **business optimization** course — unless you want to be the disruptor and force the industry to transform (i.e. competitive stance)
- ▶ The cadence of transformation will vary, depending on the nature of the industry and technology developments. An optimization strategy can work for a long time, but even the most stable industry is liable to transform at some point.

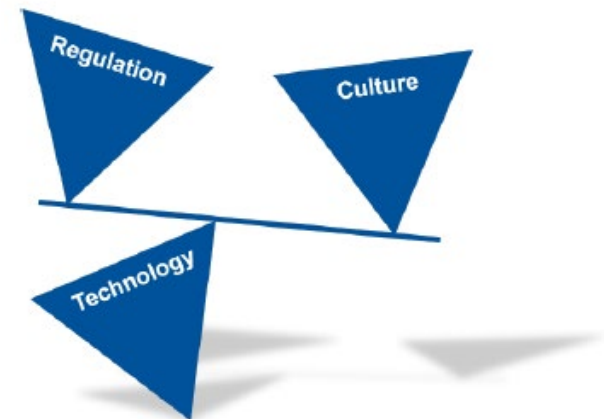
Example: Transformation in the Music Industry

Figure 4. Technology-Driven Transformation in the Music Industry



Triple Tipping Points

1. **Technology** – consider whether there are new technologies mature enough to support the change
2. **Regulation** – consider whether laws and regulations permit it
3. **Culture** – consider whether society is ready for the new paradigm (i.e. cultural acceptance)



Source: Gartner (February 2016)

Consideration 2: Competitive Stance (**Internal** Factor)

- ▶ The organisation's **competitive/ enterprise culture** profile determines whether the company will take an aggressive or defensive stance
- ▶ More **aggressive** companies often choose to follow a digital transformation path no matter how far the tipping point is — they want to be early adopters. Some even plan on being the **disruptor** that will cause the rest of the industry to tip
- ▶ Companies can use **SWOT analysis** to identify their potential **threats and opportunities** to help in their consideration

S

STRENGTHS

- Things your company does well
- Qualities that separate you from your competitors
- Internal resources such as skilled, knowledgeable staff
- Tangible assets such as intellectual property, capital, proprietary technologies etc.

W

WEAKNESSES

- Things your company lacks
- Things your competitors do better than you
- Resource limitations
- Unclear unique selling proposition

O

OPPORTUNITIES

- Underserved markets for specific products
- Few competitors in your area
- Emerging need for your products or services
- Press/media coverage of your company

T

THREATS

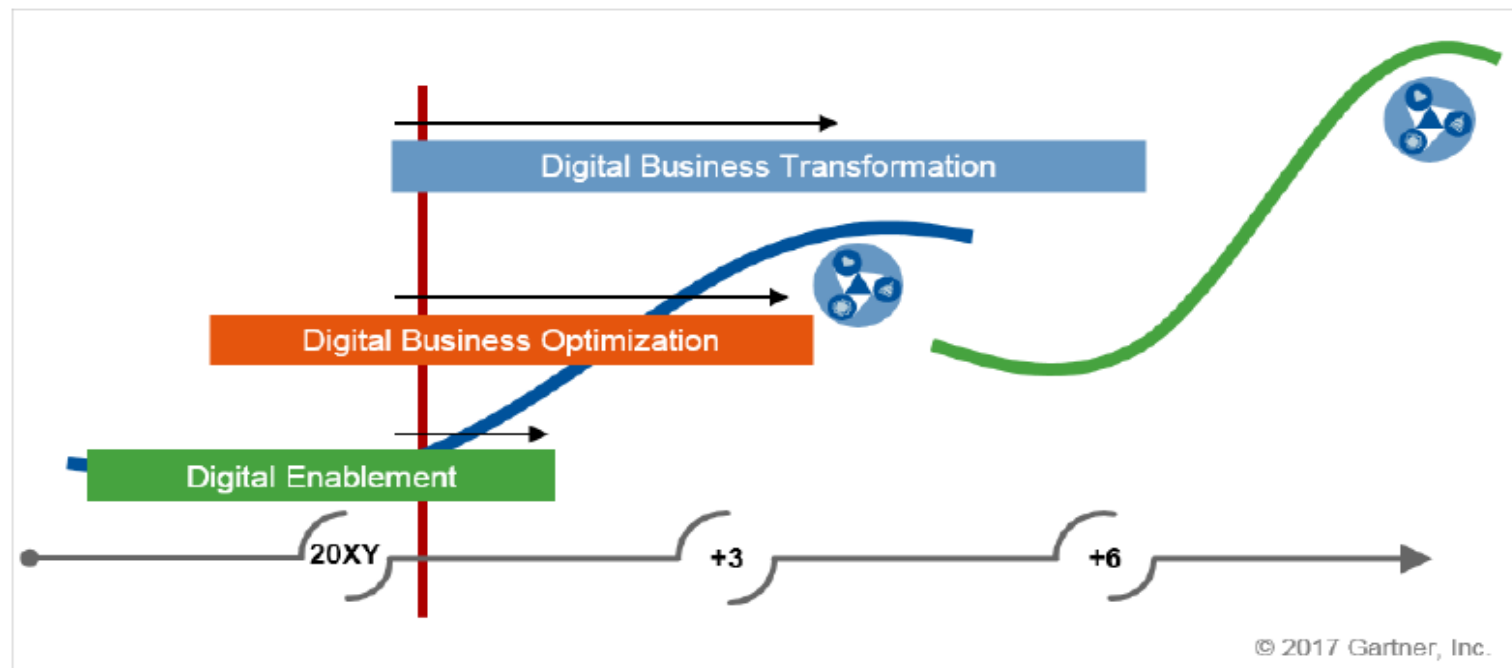
- Emerging competitors
- Changing regulatory environment
- Negative press/media coverage
- Changing customer attitudes toward your company

 WordStream

Path to Becoming a Digital Business - Sequential

- ▶ An organisation may be less ambitious & decide to pursue Digital Enablement then Optimisation then Transformation in a sequential order.

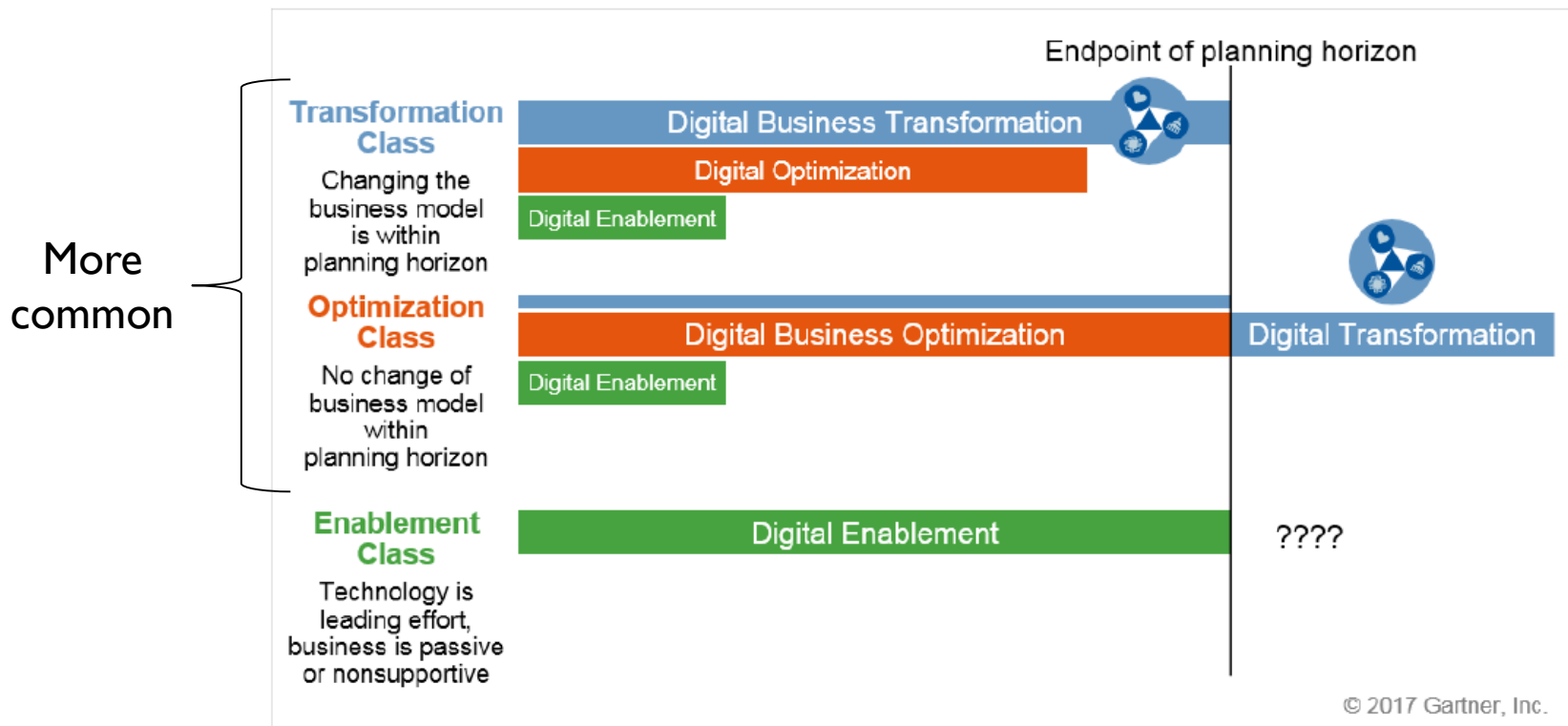
Figure 5. When to Transform, Optimize or Enable?



Path to Becoming a Digital Business - Non-Sequential

- ▶ However, most organisations tend to pursue a combination of these paths in **parallel**.

Figure 6. Planning Your Digital Journey



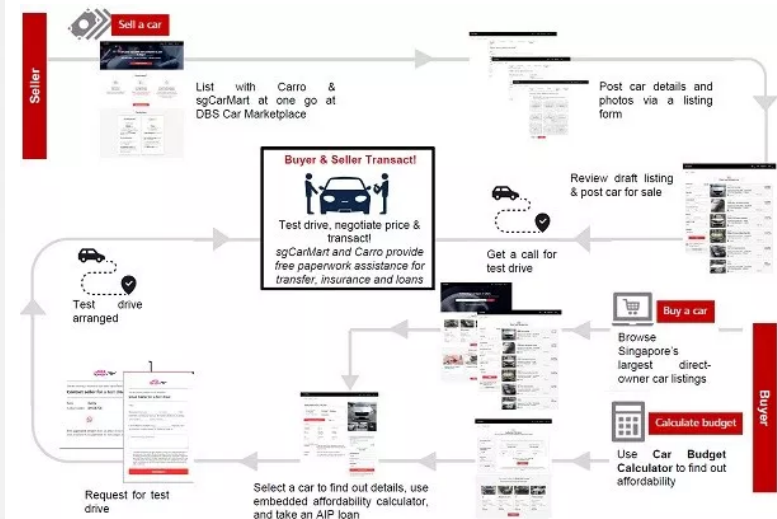
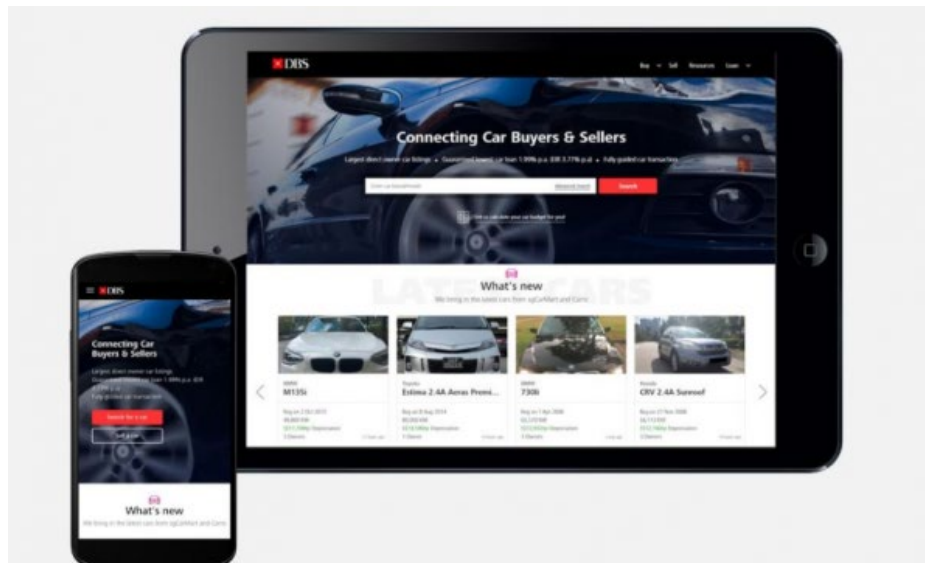
Recap: Example of Digital **Optimisation**: DBS

- ▶ Online/ Mobile application for opening of accounts, credit cards, personal loans, housing loans, etc...

The image displays three screenshots of the DBS digital banking interface. The top-left screenshot shows the 'Apply for DBS Business Loans Online' page, which includes a 'Get In Touch' sidebar with links like 'Open Business Account Online' and 'Apply for a Loan Online'. The bottom-left screenshot shows the 'Submit Documents' page, featuring a 'Document List' with fields for file upload and a 'Get In Touch' sidebar. The rightmost screenshot shows the mobile app's 'Application Information' form, which includes fields for personal details such as 'Salutation', 'Surname', 'Given Name', 'Nationality', 'HK Permanent Resident', 'HKID Card No.', 'Date of Birth', 'Marital Status', 'No. of Dependents', 'Education Level', 'Home Address', 'Building/Estate', and 'Street/Road'.

Recap: Example of Digital Transformation: DBS

- ▶ DBS launched a **car-matching marketplace** in 2017 that connects car buyers and sellers. It is a digital business because it could charge a **matching fee, in addition to providing auto loans**, so that the bank diversifies its revenue stream beyond fee income and interest income.

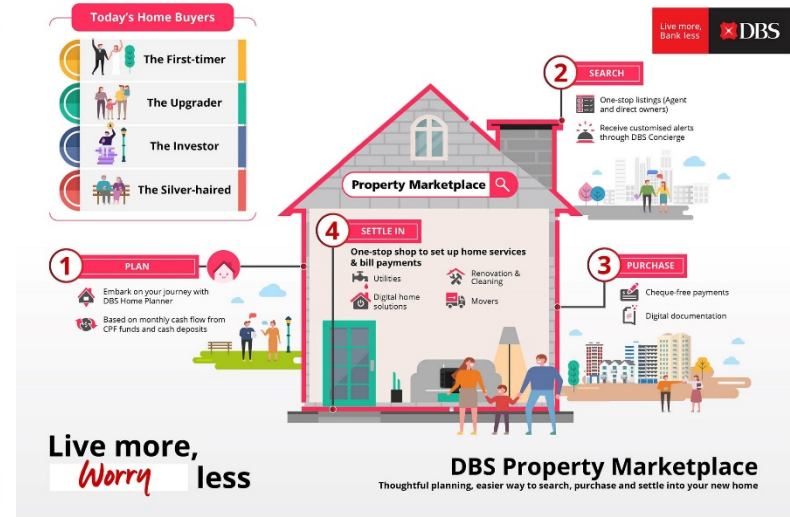
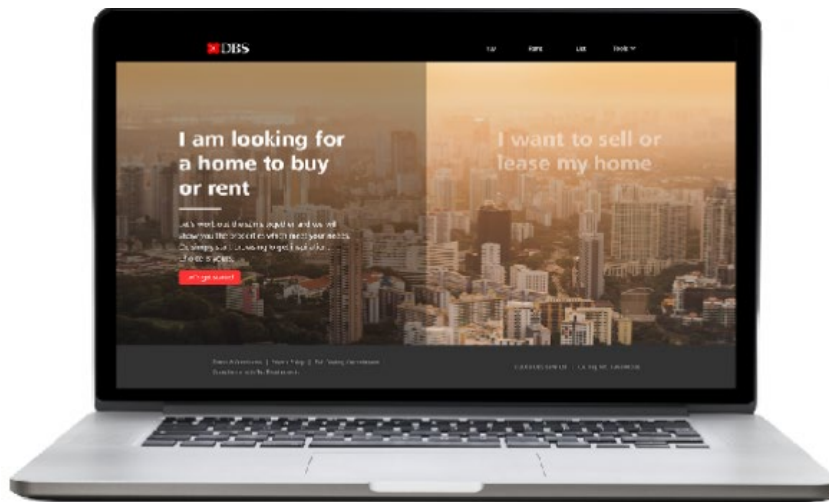


Source:

https://www.dbs.com/newsroom/DBS_partners_sgCarMart_and_Carro_to_create_Singapores_largest_direct_buyer_to_seller_car_marketplace

Recap: Example of Digital Transformation: DBS

- ▶ DBS has also started a **property-matching marketplace** in 2018 to connect property buyers and sellers. The DBS Property Marketplace is intended as a one-stop shop where home buyers can browse listings and link up with utilities providers, as well as renovation, cleaning and moving services.



Source: <https://www.straitstimes.com/business/banking/dbs-launches-online-property-marketplace>

Recap: Example of Digital Transformation: DBS

- ▶ Many companies are using chatbots (voice-activated software that is capable of engaging in conversation) to make customer service more efficient or to reduce costs in existing channels.
- ▶ DBS took it a step further. Building on the knowledge and systems in Singapore, plus chatbots and other technologies, DBS launched **digibank, a mobile-phone-based banking model that requires no human intervention**, in India in 2016 & Indonesia in 2017. This model can **make money from small accounts that other banks would never find profitable enough to accept**.
- ▶ DBS's focus on developing a model for low-cost new markets made chatbots, along with other technologies and significant organizational rethinking, into a much greater opportunity.

Source: https://www.dbs.com/newsroom/DBS_launches_digibank_an_entire_bank_in_the_phone_in_Indonesia

Risks of Choosing the Wrong Digital Strategy (Goal)

Transformation Class:

- ▶ These organisations adopt emerging technologies and approaches rapidly in order to gain a competitive advantage. They will invest significant funding and head count early on in digital business transformation. They also look for ways to accelerate it, such as by lobbying the government for favourable regulations and launching marketing campaigns to get people used to a new technology.
- ▶ Can waste a lot of time and money on a transformation that doesn't materialize.

Risks of Choosing the Wrong Digital Strategy (Goal)

Optimisation Class:

- ▶ These organisations invest most of their funding and headcount into optimising their core processes. Most efforts go into areas such as productivity improvements, better customer & employee experiences, better utilisation of assets & inventory, etc.
- ▶ Might deny themselves the chance to change the competitive dynamics in their market. Might be disrupted (& taken by surprise), especially in industries that have a fast pace of change.

Risks of Choosing the Wrong Digital Strategy (Goal)

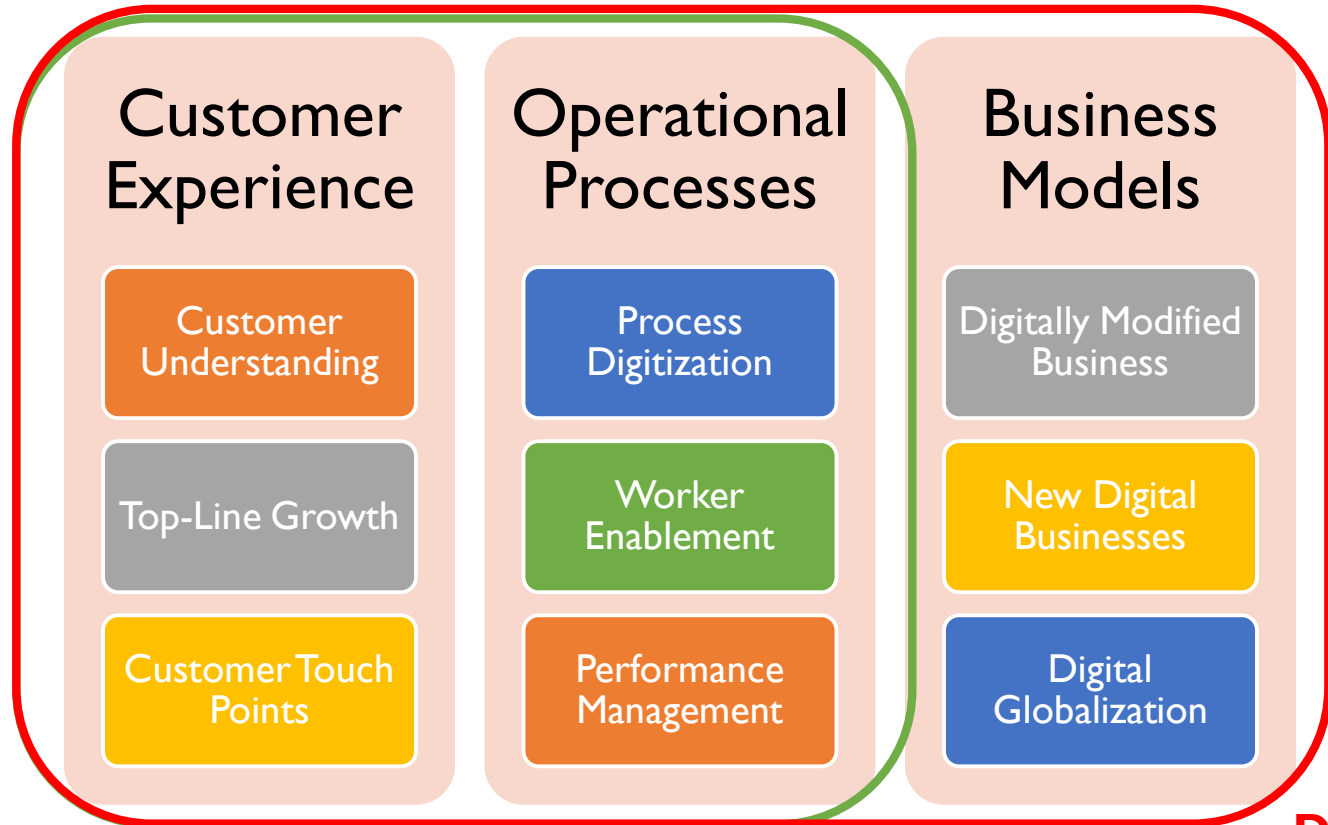
Enablement Class:

- ▶ These organisations may invest into enabling technologies such as cloud services, mobile, etc that digital business often use, but will hold off pursuing optimisation or transformation due to a lack of support from the rest of the organisation.
- ▶ If a transformation does occur, they may be so far behind that they cannot compete anymore.

Digital Strategy (**Tactics**)

Key Elements (Focus Areas) of Digital Transformation

**Digital
Optimisation**



Source: <https://sloanreview.mit.edu/article/the-nine-elements-of-digital-transformation/>

**Digital
Transformation**

Transforming Customer Experience (Front-end)

1. Customer Understanding

- ▶ E.g. Use analytics capabilities to understand customers, market segments & geographical segments in more detail or drive customer behaviour, etc.

2. Top-Line (Sales) Growth

- ▶ E.g. Use mobile tools for more effective selling, Use analytics capabilities to provide personalised/customised products/services & targeted marketing, etc.

3. Customer Touch Points

- ▶ E.g. Easy, seamless & personalised customer experience across multichannel/ touch points, etc.

Transforming Operational Processes (Back-end)

1. Process Digitisation

- ▶ E.g. Automate processes or manual & routine work, Digitise work artefacts (eliminate hardcopy), etc.

2. Worker Enablement

- ▶ E.g. Virtualise work (separate work process from location of work), Collaboration & Knowledge-sharing platforms, etc.

3. Performance Management

- ▶ E.g. Strategic decision-making based on real data with increasing levels of detail, etc.

Transforming Business Models

1. Digitally Modified Businesses

- ▶ Augment physical with digital offerings, e.g. traditional supermarket providing e-commerce platform as well, etc.

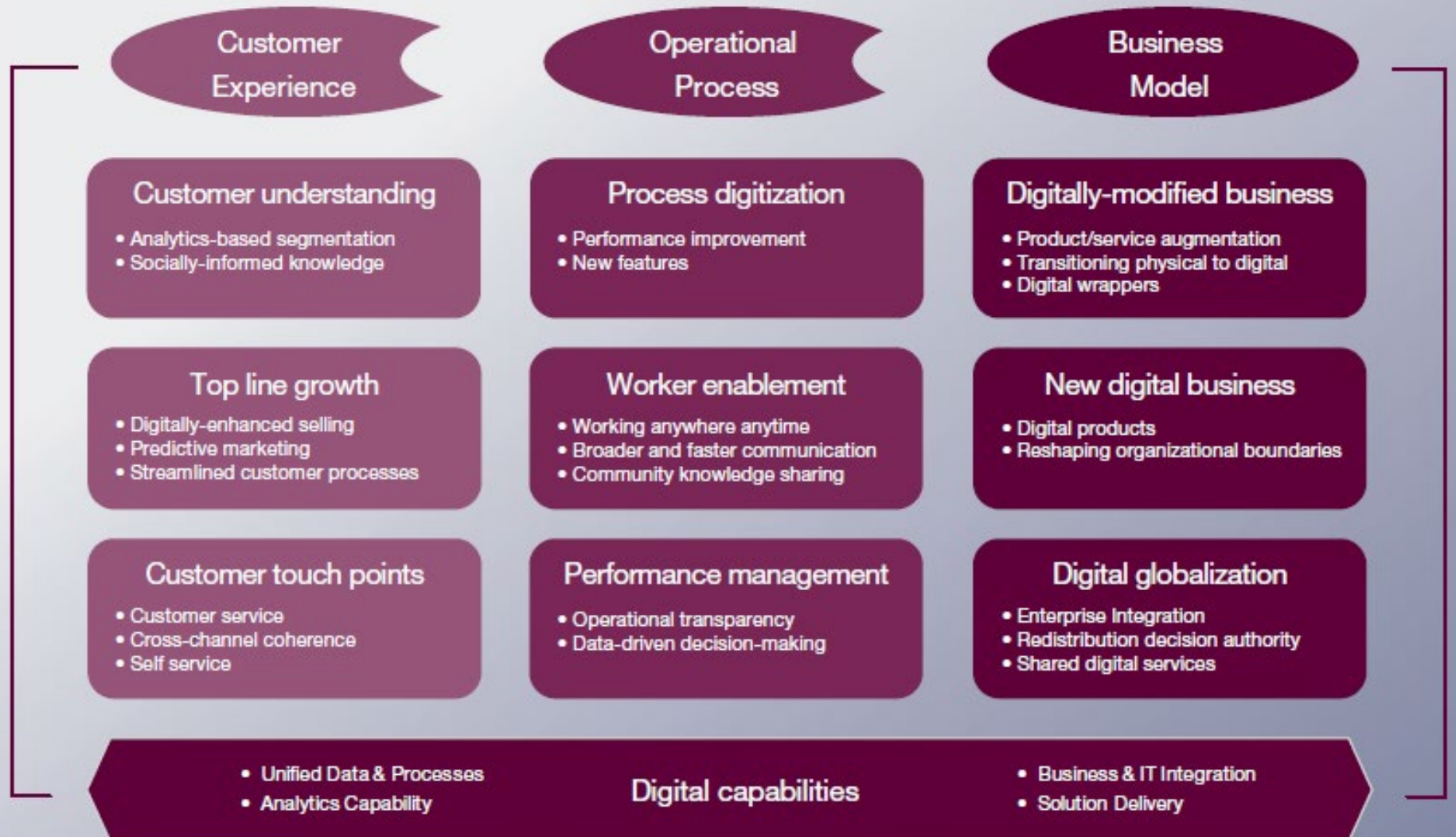
2. New Digital Businesses

- ▶ Offer new digital offerings to complement traditional offerings, e.g. a sports shoe manufacturer selling GPS devices/watches that can track & report on a customer's workout, etc.

3. Digital Globalisation

- ▶ Use global shared services/ integrated systems to share information globally. Companies can shift production around the globe quickly.

Figure 3: Building blocks of the digital transformation



Criteria for Successful Digital Transformations

1. Leadership

- ▶ Lead the change from the top
- ▶ Top-down communication & governance
 - ▶ Consistent engagement, backed with appropriate coordination, KPIs, and incentives

2. Cultural Changes

- ▶ The true value of transformation comes from seeing value across the silos & then helping everyone else see that value

3. Invest in Technology & Skillsets

- ▶ Budget & resources have to be set aside for digital transformation initiatives

Summary

- ▶ **Digital Strategy** specifies the **direction (ultimate goal)** an organization will take to create new competitive advantages with technology, as well as the **tactics (plan)** it will use to achieve these changes.

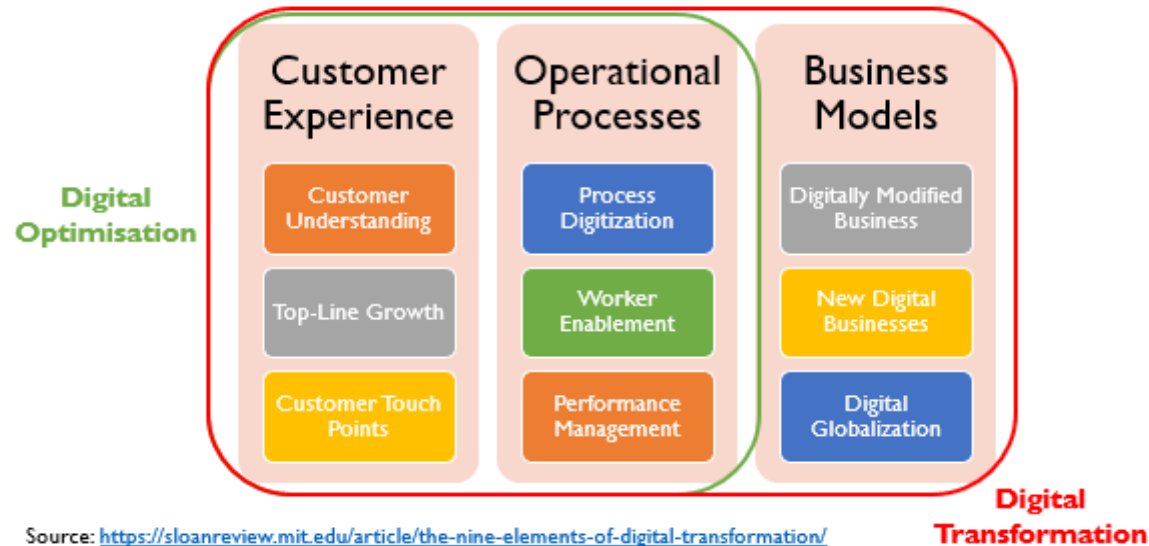
- ▶ Considerations for Choosing a Digital Strategy (Goal)
 - 1. Timing of transformation in your industry and adjacent industries (**External Factor**)
 - ▶ Triple Tipping Points:
 - 1. Technology
 - 2. Regulation
 - 3. Culture
 - 2. Competitive stance (**Internal Factor**) – aggressive vs defensive

Summary

- ▶ **Risks for Choosing a Wrong Digital Strategy**
 - ▶ **Transformation Class:** Can waste a lot of time and money on a transformation that doesn't materialize.
 - ▶ **Optimisation Class:** Might deny themselves the chance to change the competitive dynamics in their market. Might be disrupted (& taken by surprise), especially in industries that have a fast pace of change
 - ▶ **Enablement Class:** If a transformation does occur, they may be so far behind that they cannot compete anymore.

Summary

▶ Key Elements (Focus Areas) of Digital Transformation



▶ Criteria for Successful Digital Transformations

1. Leadership
2. Cultural Changes
3. Invest in Technology & Skillsets

Case Study: Apple Inc's Transformation

The History of Apple



40 years: 1976-2016

Source: <https://www.youtube.com/watch?v=mUleUOD8sFc>

Case Study: Apple Inc's Transformation



Source: <https://www.youtube.com/watch?v=OUTIUYXDkew>

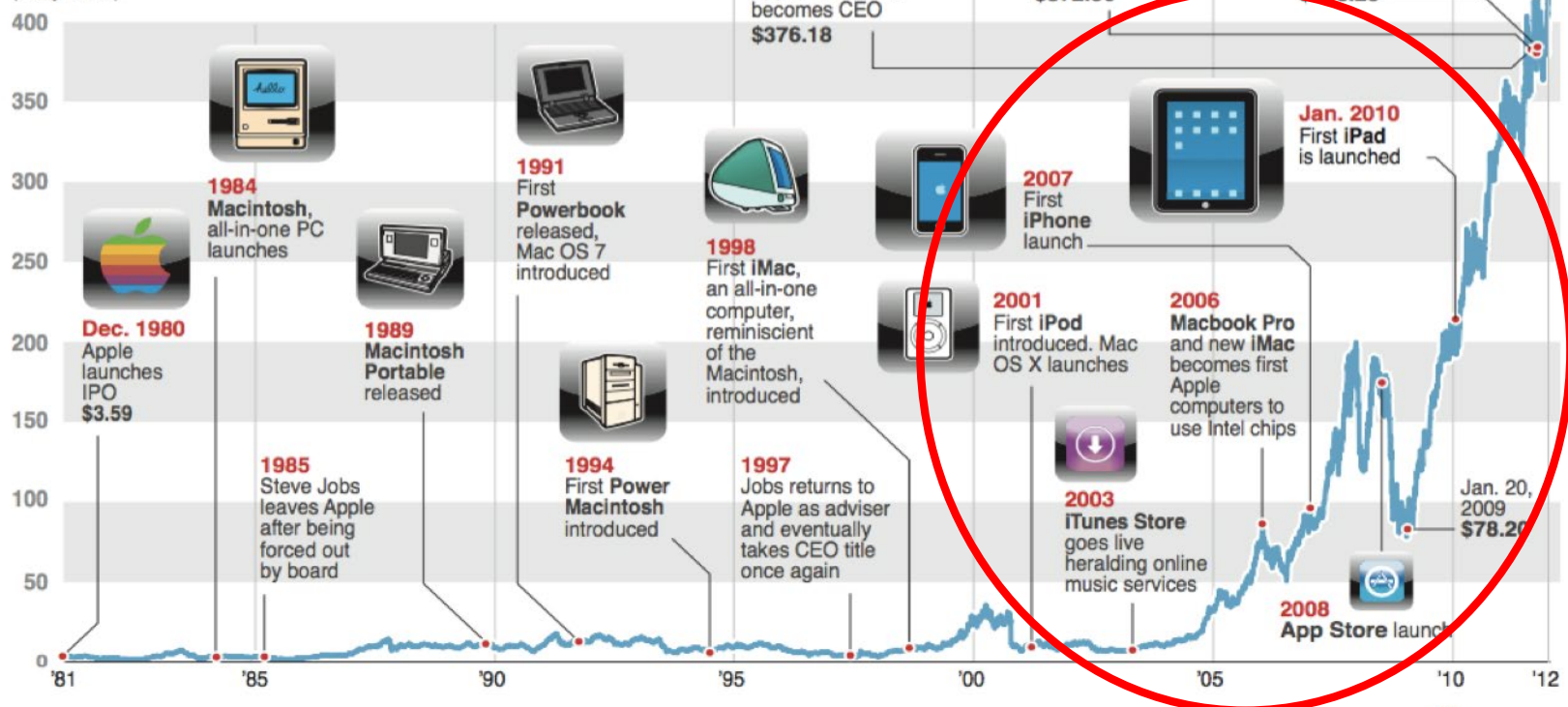
Case Study: Apple Inc's Transformation

APPLE TIMELINE

Apple Inc took the wraps off a faster 4G-equipped iPad starting at \$629, hoping the latest version of its tablet can safeguard its dominance over rivals

SHARE PRICES AND KEY PRODUCT RELEASES

(Daily close)



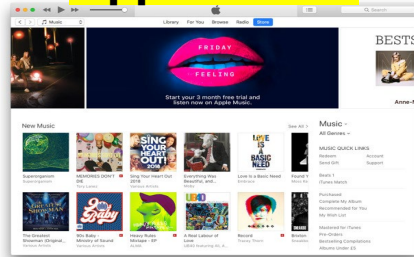
Source: <https://blogs.thomsonreuters.com/answeron/apple-timeline-product-releases-impact-share-price/>

Case Study: Apple Inc's Transformation

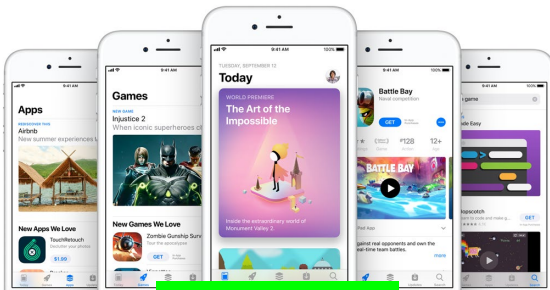
Apple iPods



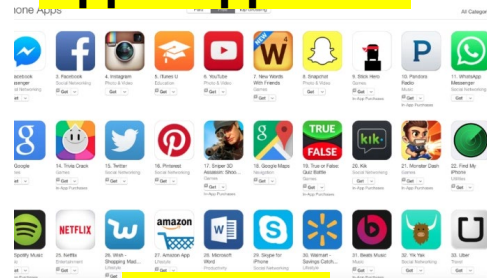
Apple iTunes



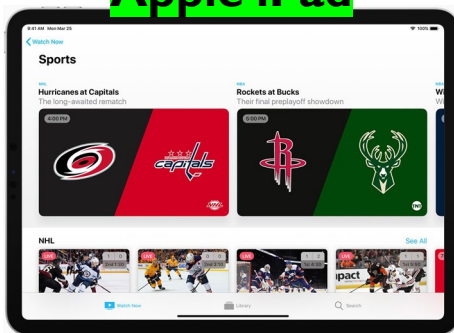
Apple iPhone



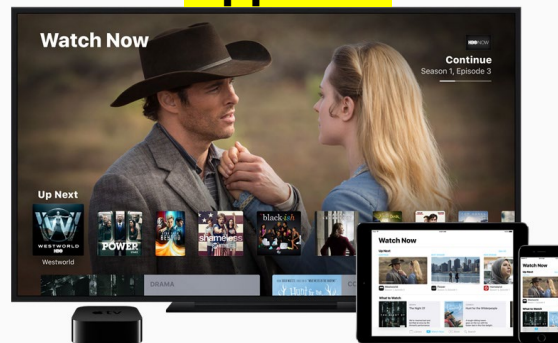
Apple App Store



Apple iPad



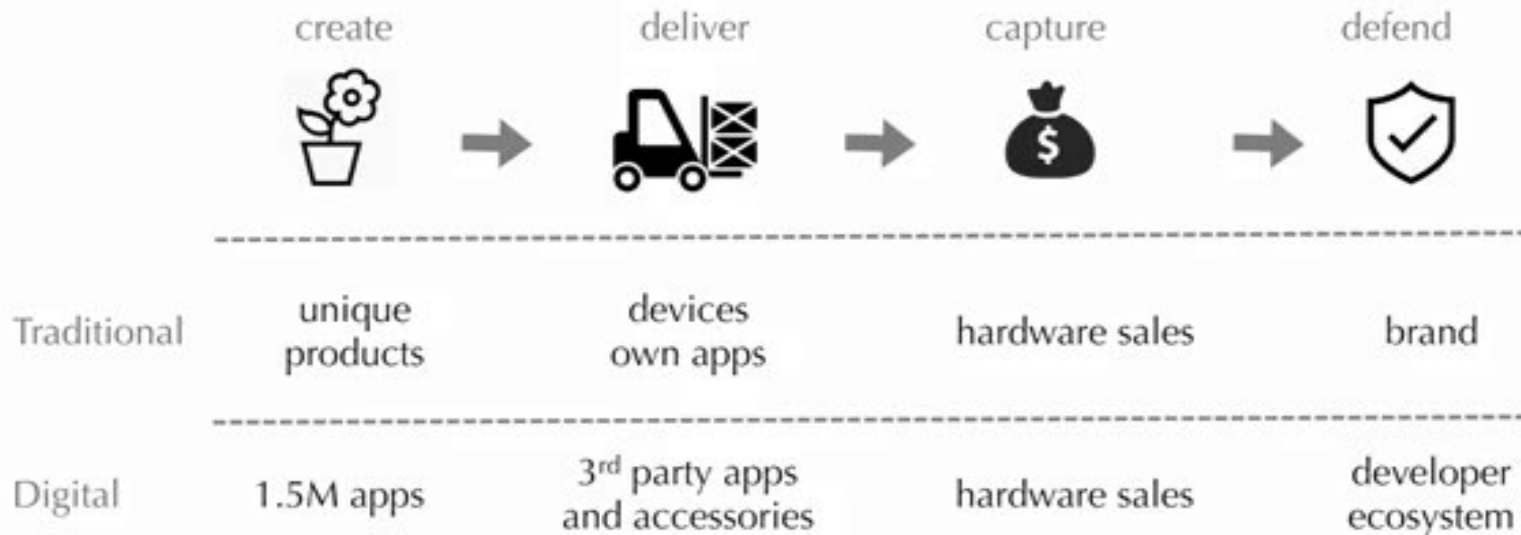
Apple TV



A combination of **product innovation** and **business model innovation** transformed Apple from a traditional computer manufacturer into a digital business.

Case Study: Apple Inc's Transformation

Apple iOS traditional + digital business model



Besides the sale of its hardware products, Apple monetises its app platform through:

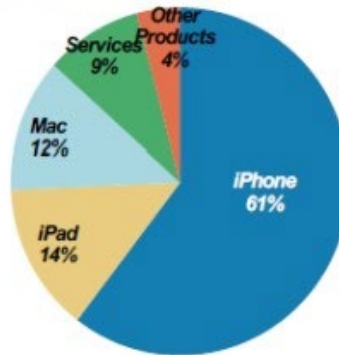
1. Subscription fee for Apple's Developer Program
2. Commission on app revenues
3. Search Ads program, a Google-style ad service for developers wanting to surface their apps on the App Store

Case Study: Apple Inc's Transformation

Apple's services (including App Store, iTunes, Apple TV, iCloud, Apple Pay, etc.) continues to grow in the future as the demand for smartphone/hardware falls.

Exhibit 15: While the iPhone has accounted for close to ⅔ of Apple revenue mix over the last 3 years...

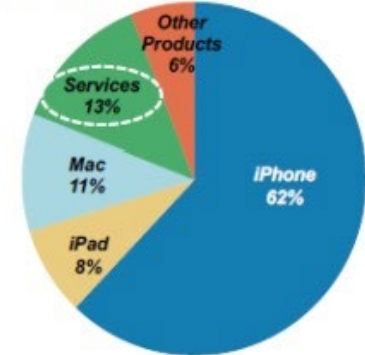
Apple Revenue Mix (CY2014)



Source: Company Data, Morgan Stanley Research

Exhibit 16: ...Services is becoming a bigger piece of the pie, growing share 4 points over the last 3 years.

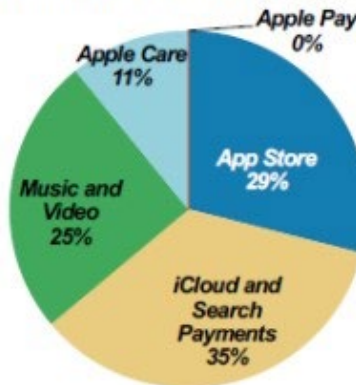
Apple Revenue Mix (CY2017)



Source: Company Data, Morgan Stanley Research

Exhibit 17: Apple Services revenue mix est (C4Q14)

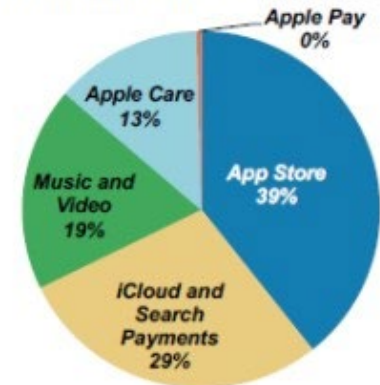
Apple Services Revenue Mix (Est; C4Q14)



Source: Company Data, Morgan Stanley Research

Exhibit 18: Apple Services revenue mix est (C4Q17)

Apple Services Revenue Mix (Est; C4Q17)



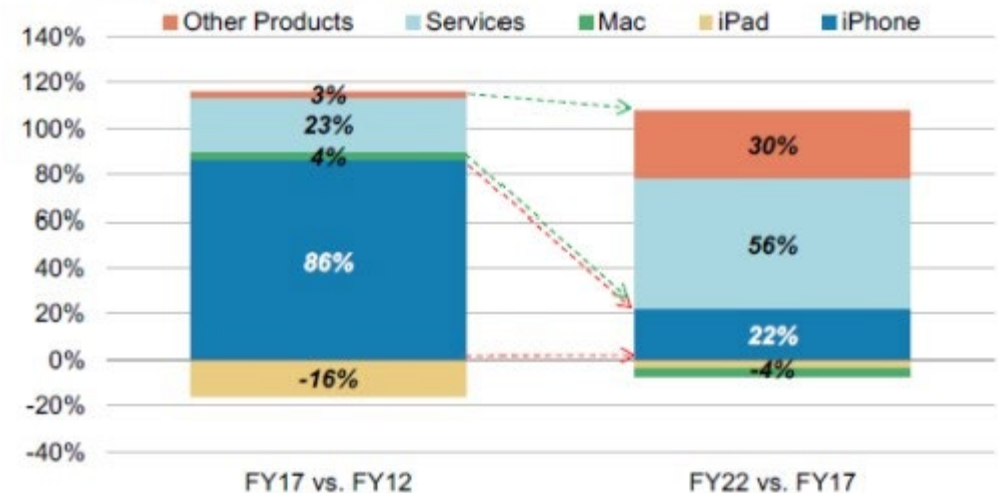
Source: Company Data, Morgan Stanley Research

Case Study: Apple Inc's Transformation

Apple's services (including App Store, iTunes, Apple TV, iCloud, Apple Pay, etc.) continues to grow in the future as the demand for smartphone/ hardware falls.

Exhibit 1: While iPhone historically drove the vast majority of Apple revenue growth, Services becomes the primary revenue driver going forward

Contribution to Apple Revenue Growth



Source: Company Data, Morgan Stanley Research

Source: <https://digit.hbs.org/submission/the-app-store-apples-move-to-services/>