

Digital Business

Digital Transformation

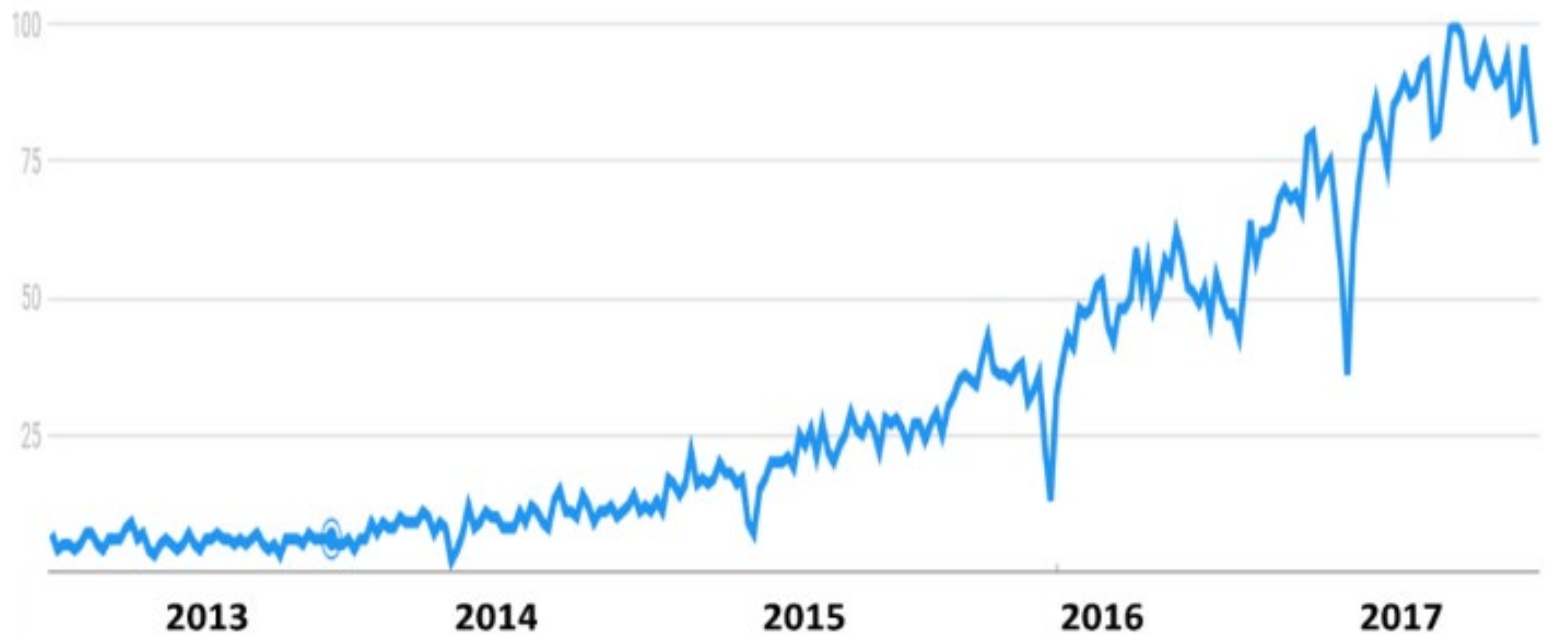
Learning Objectives

- ▶ Recap: What is Digital?
- ▶ Describe the reasons for “Going Digital”
- ▶ Describe and distinguish the different phases of “Going Digital”
 - ▶ Digital Enablement
 - ▶ Digital Optimisation
 - ▶ Digital Transformation
- ▶ Identify examples of digital optimisation and digital transformation

What is Digital Transformation?

Searches for “Digital Transformation” on Google

Source: Google Trends



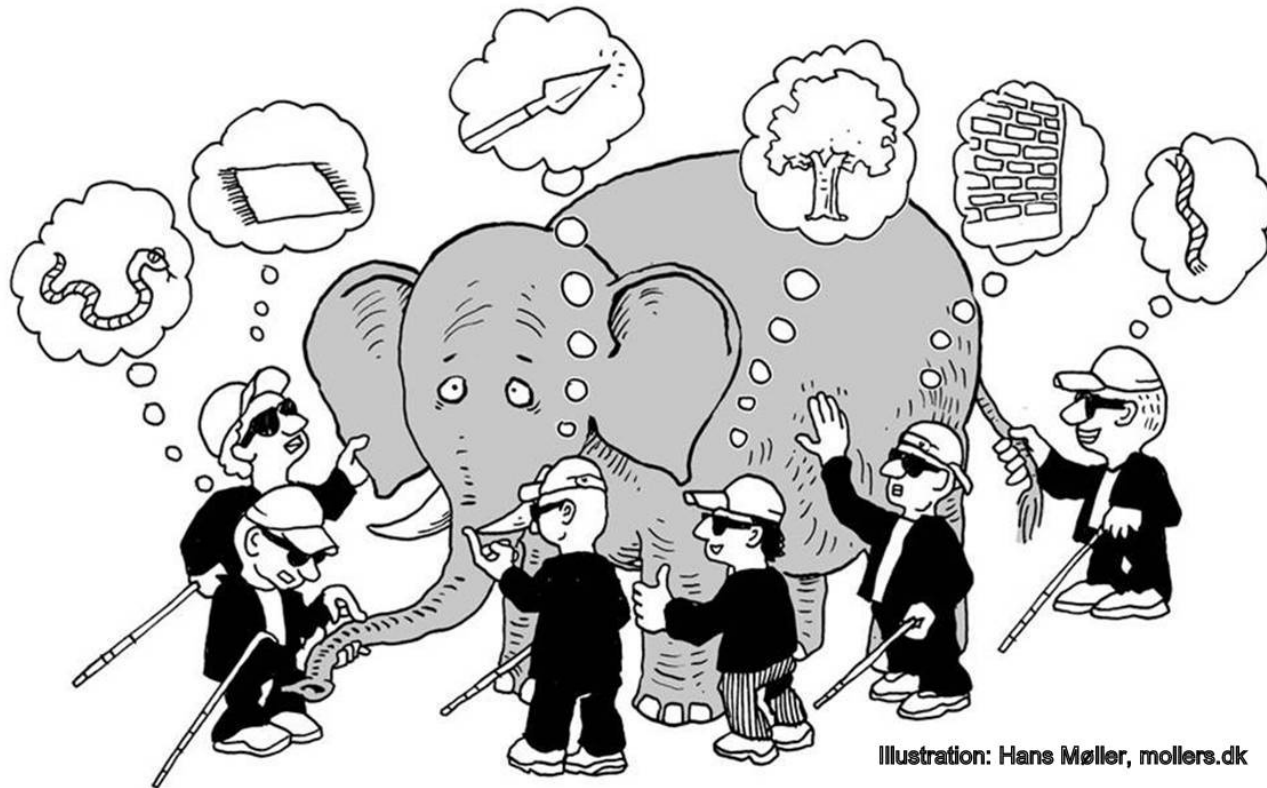
What is Digital Transformation?



Source: <https://youtu.be/QyGGjVTwc5U>

What is Digital Transformation?

- ▶ Conclusion: Digital Transformation can mean different things to different people!



Recap: What is **Digital**?

"Digital" refers to the **use of technologies** to improve organizational processes, to improve interactions between people, organizations and things, or to make new business models possible.

- Gartner

Recap: Examples of Digital

Non-Digital

Physical Mail



Physical Parking Coupon



Traditional marketing channels, e.g. Radio, TV, Newspapers, etc.



Traditional retail, e.g. Shopping at physical shops

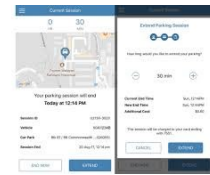


Digital

Email



Parking mobile application



Digital marketing channels, e.g. web, mobile/ social media applications, digital signage and kiosks



E-commerce, e.g. Amazon, Tmall, etc.



Reasons for “Going Digital”



Source: <https://youtu.be/xQXWq4C32EM>

Reasons for “Going Digital”

1. Increasing Pace of Technology Change & Adoption
 - ▶ Pace of digital change & adoption is rising exponentially
2. Increasing Competition within the Industry & Adjacent Industries
 - ▶ Companies are under ever increasing pressure to compete digitally
 - ▶ Long established business models are being disrupted by “born digital” start-ups
3. Increasing Customer Expectations
 - ▶ Customers expect a good experience across all touch points, you must ensure their interactions are seamless and exceptional

Digital is the main reason just over half of the **companies** on the Fortune 500 have **disappeared** since the year 2000

Pierre Nanterme
CEO of Accenture



"Disruption" is the new normal

Winners



Innovation: Pioneered streaming video services

Result: \$6B revenue (2014)



U B E R

Innovation: Pioneered digital ride-sharing

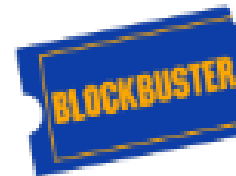
Result: \$10B revenue (2015)



Innovation: Pioneered eCommerce platforms

Result: \$89B revenue (2014)

Losers



Mistake: Didn't adapt to streaming video

Result: bankrupt (2010)



Mistake: Didn't adapt to digital photography

Result: bankrupt (2012)



Mistake: Didn't adapt to eCommerce

Result: bankrupt (2011)

Case Study: Kodak vs Fujifilm

Kodak vs Fuji Film



Read more:

<https://petapixel.com/2018/10/19/why-kodak-died-and-fujifilm-thrived-a-tale-of-two-film-companies/>

<https://www.digitaltransformationbook.com/fujifilm-a-successful-digital-transformation/>

Case Study: Kodak vs Fujifilm

Kodak innovates



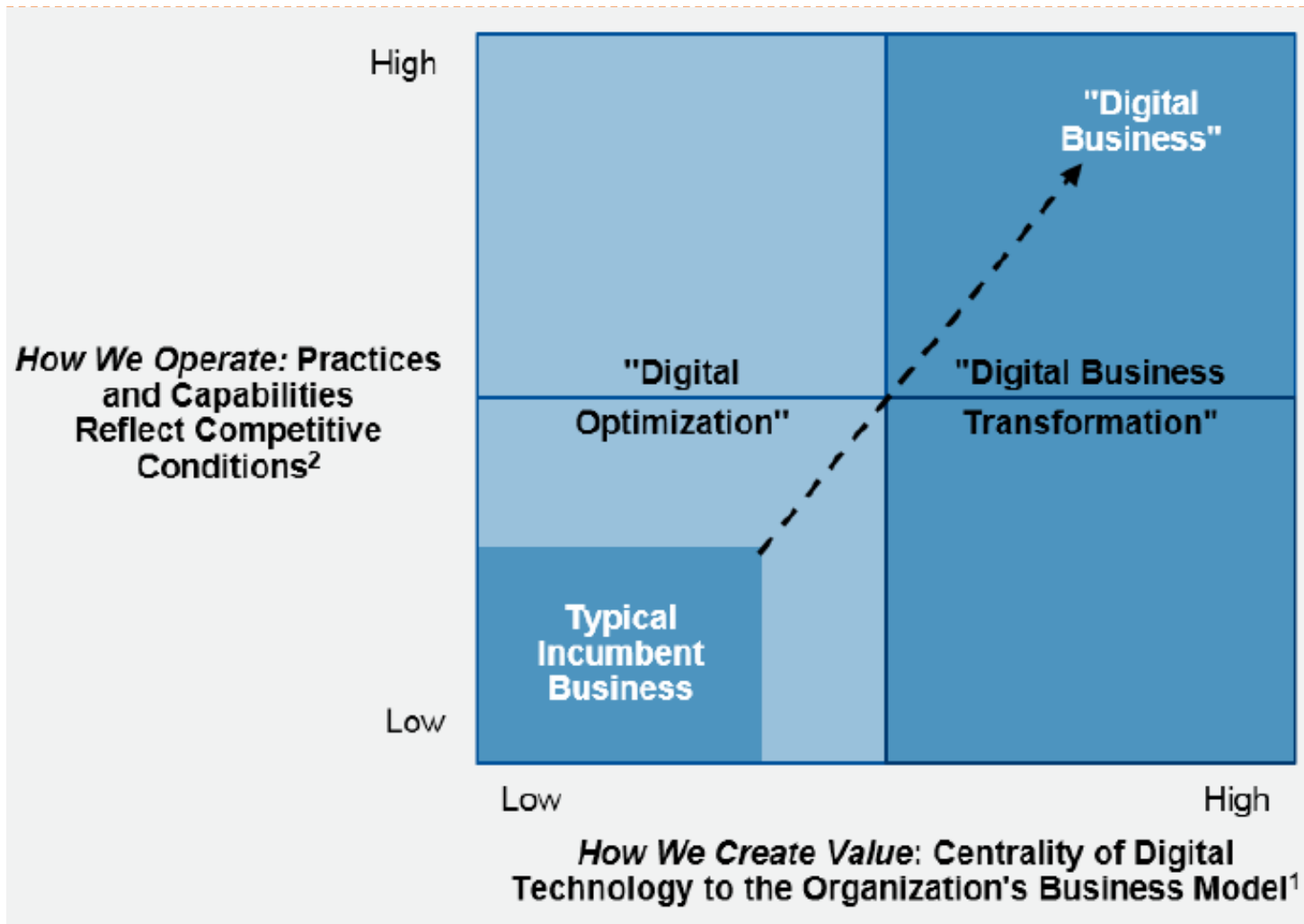
Source: <https://www.youtube.com/watch?v=dqwAZKrc6vw>

Case Study: Kodak vs Fujifilm

**CHANGE
OR DIE.**

Source: https://www.youtube.com/watch?v=7yuudKKoC5o&list=PLshVTbYjkaYzS_ygmT9LLQiYnIpgKChYF

Goal of “Going Digital”

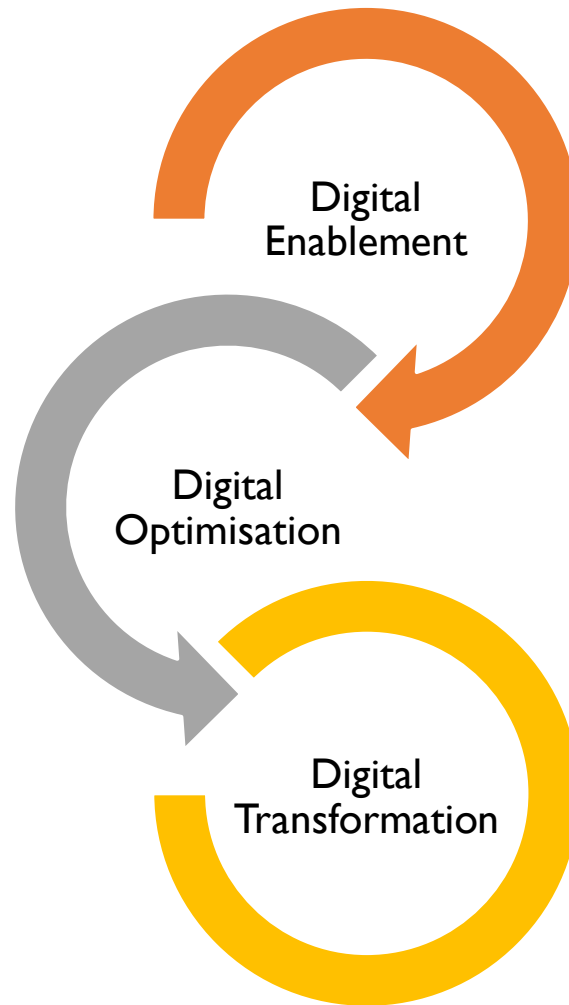


What is Digital Transformation?



Source: <https://youtu.be/8Rb6fSaHmjU>

Phases of “Going Digital”



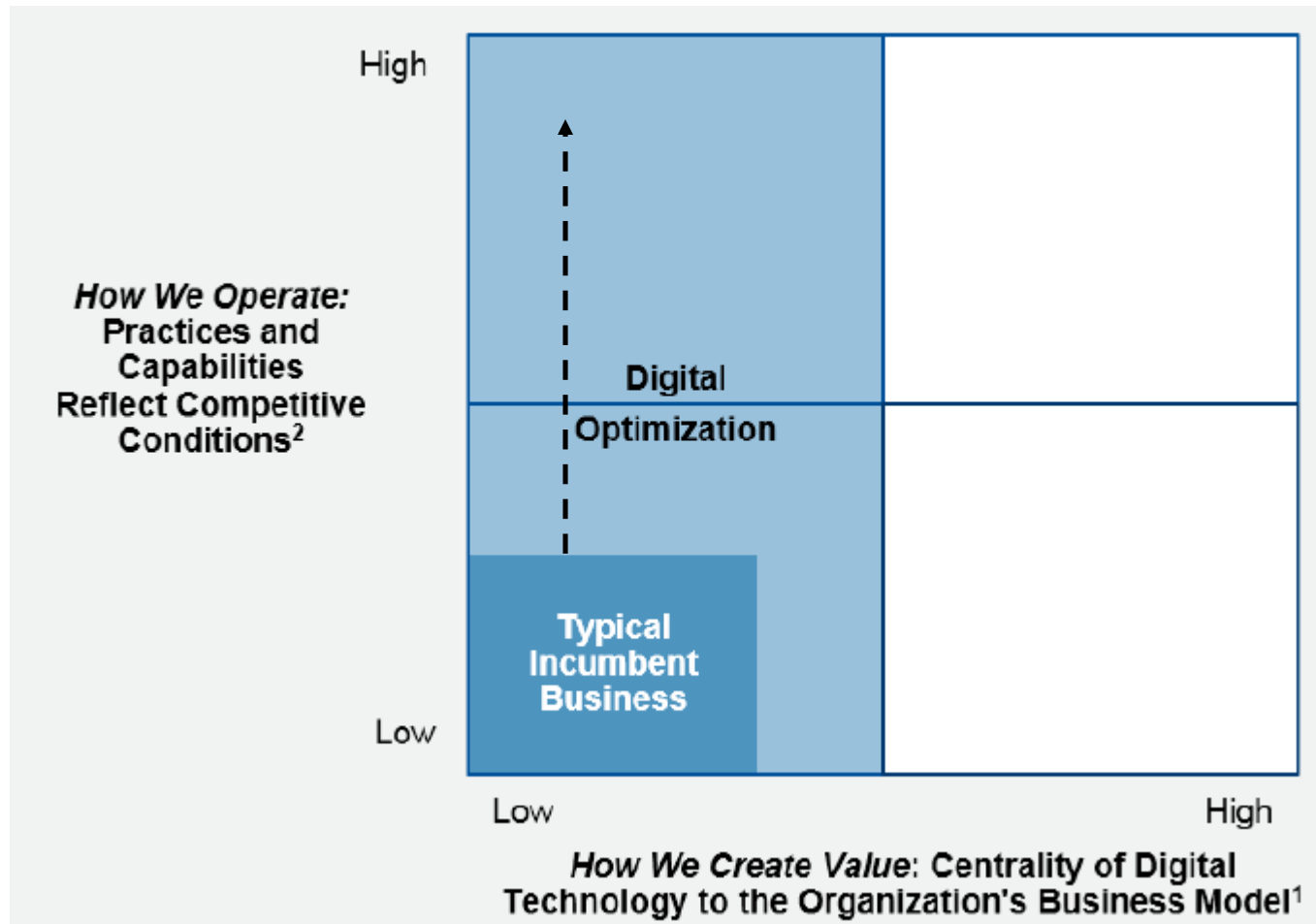
(1) Digital Enablement

- ▶ Process of **implementing new technologies** such as cloud services, mobile computing, etc. that digital **business often uses**
- ▶ End up with a **more digitally capable IT**, but **NOT** a digitally optimised or transformed business
- ▶ Usually occurs when IT wants to push new technologies forward, but is not supported by the rest of the organisation

(2) Digital Optimization

- ▶ Process of implementing new technologies to **optimise existing core processes without changing the business model**
- ▶ Involves doing **old things in new digitally centred ways**
- ▶ The **value proposition of the business does not change**; it is **delivered more efficiently**

Goal of Digital Optimisation



(2) Digital Optimization

▶ Example:

- ▶ Improve productivity by reducing costs and increasing the efficiency of machines and employees
- ▶ Improve customer engagement by using digital sales & marketing technologies (e.g. mobile, analytics, chatbots) to deliver more frictionless & relevant experiences
- ▶ Improve existing revenue by using analytics & artificial intelligence (AI) to better forecast demand & supply, and to optimise process & promotions

(2) Digital Optimization

Figure 2. Digital Business Optimization Adds Significant Value Without Changing Business Model



COGS* : Cost of goods sold

SG&A* : Selling, General & Administrative Expenses

Example of Digital Optimisation: DBS - THEN

- ▶ Hardcopy application forms needed for opening of accounts, credit cards, personal loans, car loan, housing loans, etc...

This is a screenshot of a DBS Personal Loan application form. The form is titled 'Personal Loan' and includes sections for 'Personal Information', 'Loan Information', and 'Declaration'. It contains various fields for personal details, loan amount, and terms, along with checkboxes for agreement and declaration.

This is a screenshot of a DBS Credit Card application form. The form is titled 'Credit Card' and includes sections for 'Personal Information', 'Credit Card Information', and 'Declaration'. It contains various fields for personal details, credit card type, and terms, along with checkboxes for agreement and declaration.

This is a screenshot of a DBS Housing Loan application form. The form is titled 'Housing Loan' and includes sections for 'Personal Information', 'Housing Loan Information', and 'Declaration'. It contains various fields for personal details, housing loan amount, and terms, along with checkboxes for agreement and declaration.

Example of Digital Optimisation: DBS - NOW

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

The image displays three screenshots of the DBS NOW digital optimisation interface for business loans.

Top Left Screenshot: Apply for DBS Business Loans Online

- Section: **Get In Touch**
- Options: Open Business Account Online, Apply for a Loan Online, Apply for Banker's Guarantee, Apply for Request Letter Off Credit, Contact DBS BusinessCare.
- Section: **Loan Calculator**
- Section: **Why apply online?**

 - No waiting
 - No hidden fees
 - Largest loan periods

Bottom Left Screenshot: Submit Documents

- Section: **Submit Documents**
- Application Reference Number: 1100207000000000
- Document List (Max file size per file should not exceed 4mb):

 - File: CHRC or Return? (Upload)
 - Latest 2 years Income Tax Assessment (ACG) (Upload)
 - Previous payments support (Upload)
 - Spouse or Partner on Self (Upload)
 - Latest business and Company Aging (Upload)

- Other supporting documents

Right Screenshot: Application Information

- Section: **Application Information**
- Salutation: Please select
- Surname: [Text Field]
- Given Name: [Text Field]
- Nationality: Please select
- HK Permanent Resident: Please select
- HKID Card No.: [Text Field]
- Date of Birth: DD / MM / YYYY
- Marital Status: Please select
- No. of Dependents: (including parents and children)
- Education Level: Please select
- Home Address: Rm/Flat / Floor / Block
- Building/Estate: [Text Field]
- Street/Road: [Text Field]

Example of Digital Optimisation: **SingPost** - THEN

- ▶ Buying of stamps, sending/collection of parcels, payment of bills, etc. have to be done at the Post Office – Fixed Opening Hours & Long Queues!
- ▶ Parcel deliveries are usually done during office hours when nobody is home.



Example of Digital Optimisation: **SingPost - NOW**

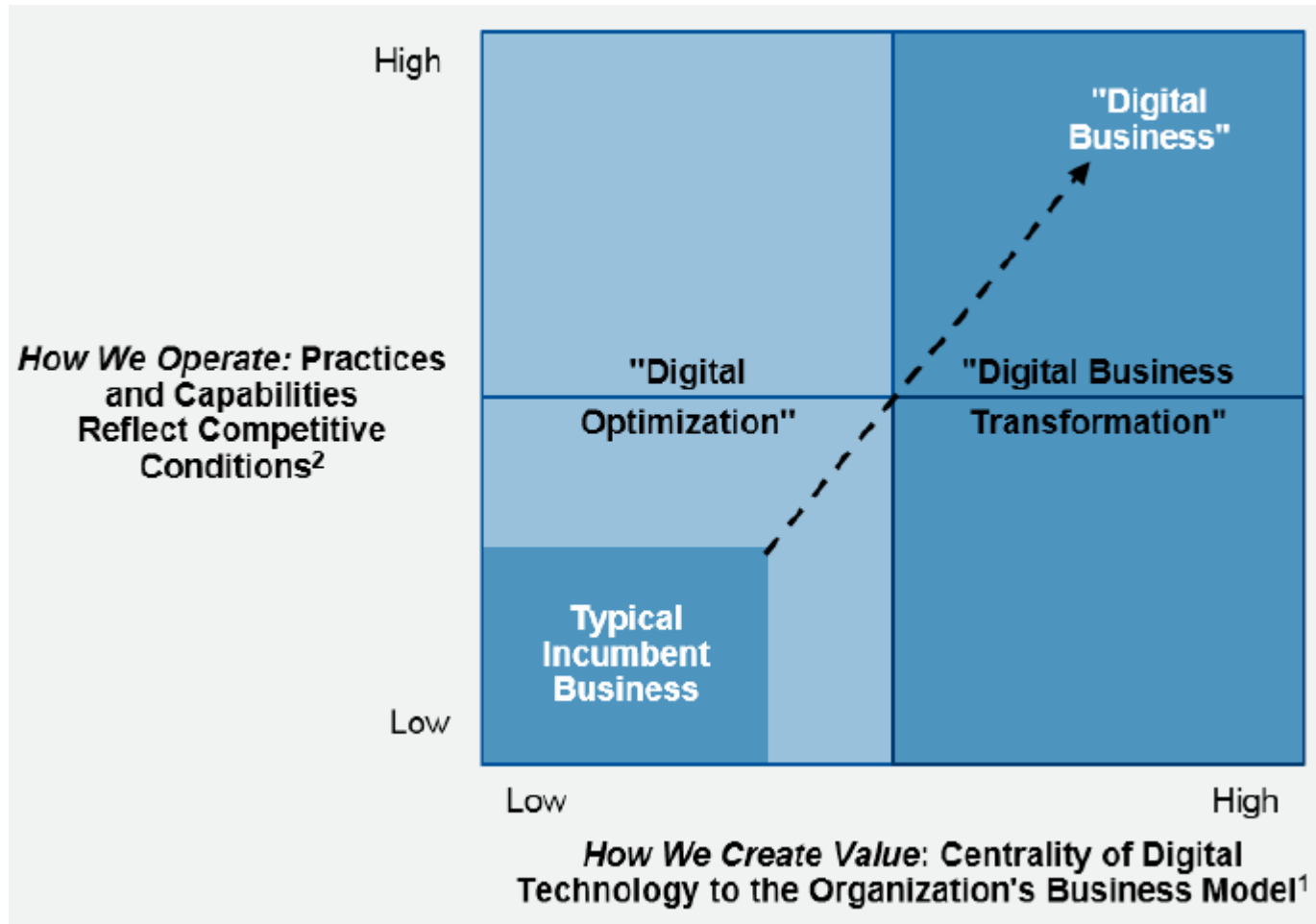
- ▶ SAM Kiosks allow users to buy stamps, pay bills, make ticket bookings, as well as top-up on a variety of pre-paid services 24/7.
- ▶ POPStations allow online shoppers to have goods delivered to a collection point accessible 24/7, circumventing the need to be at home or workplace to receive parcel deliveries.



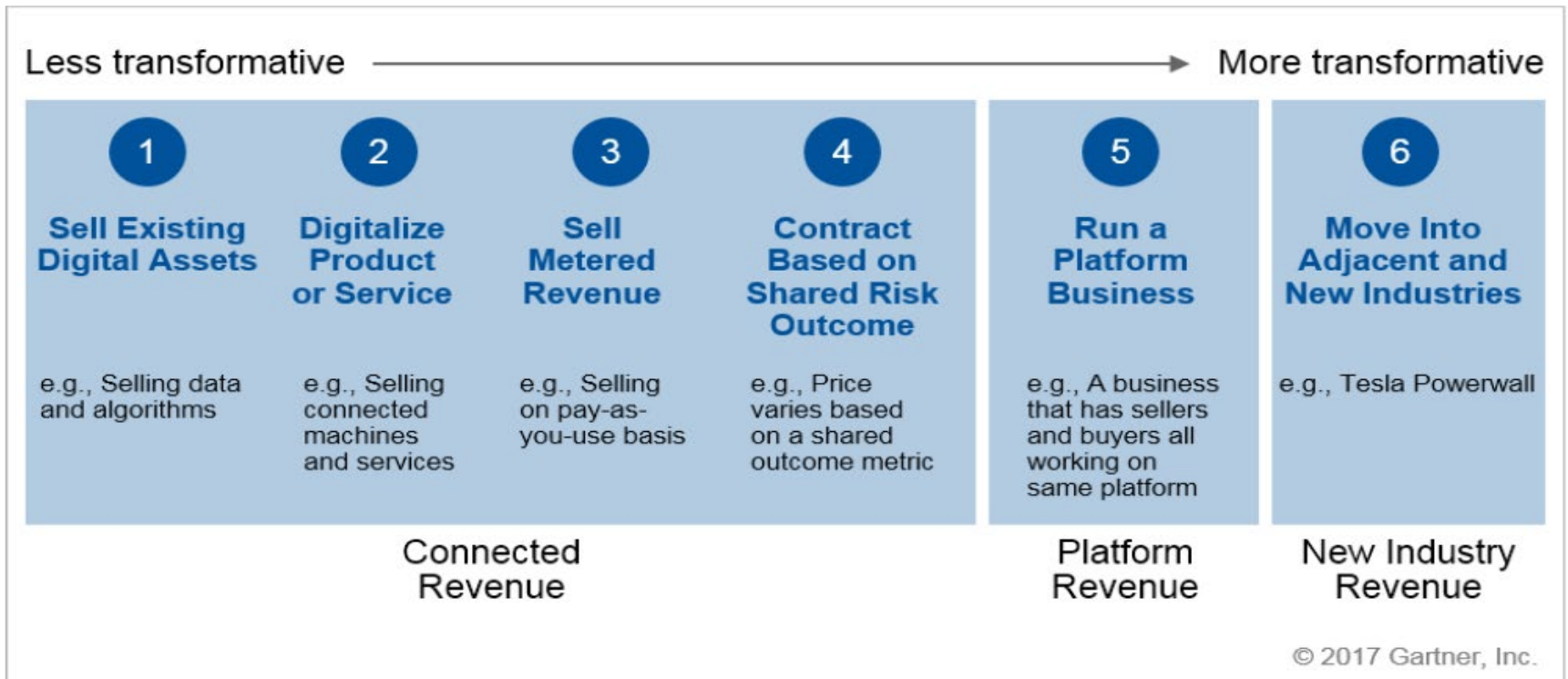
(3) Digital Transformation

- ▶ Process of implementing new technologies to **launch net-new digitally enabled products and services or pursue new business model**.
- ▶ Involves doing **new things in new ways**, e.g. offer new product/services in new ways, make money in new ways, etc.
- ▶ Create new value for itself & its customers with the intention **to cause or adapt to an industry disruption**.

Goal of Digital Transformation

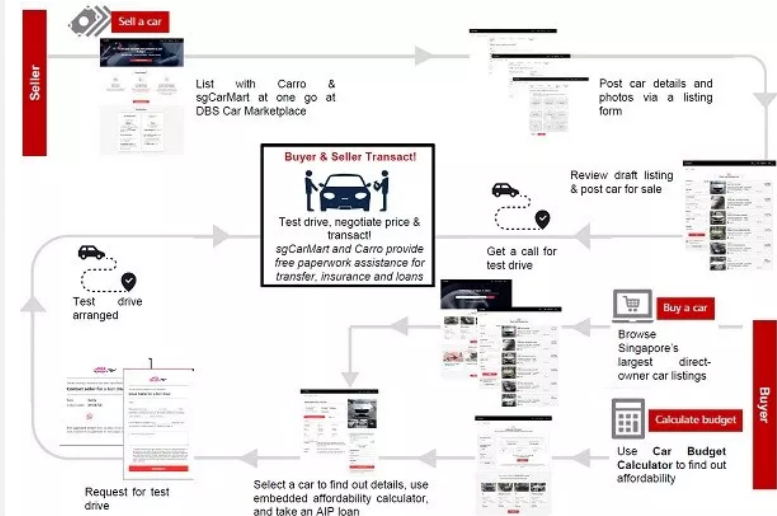
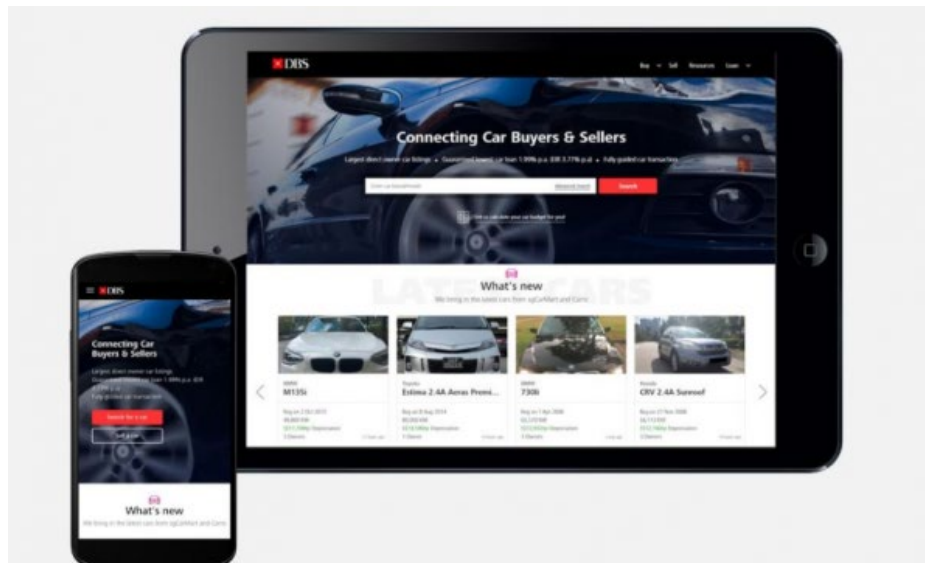


(3) Digital Transformation



Example of Digital Transformation: DBS

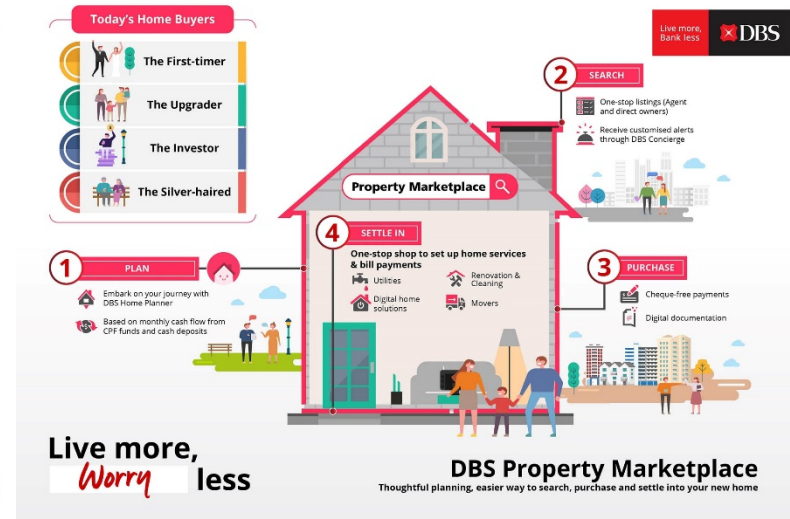
- ▶ DBS launched a **car-matching marketplace** in 2017 that connects car buyers and sellers. It is a digital business because it could charge a **matching fee, in addition to providing auto loans**, so that the bank diversifies its revenue stream beyond fee income and interest income.



Source:

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

- ▶ 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.



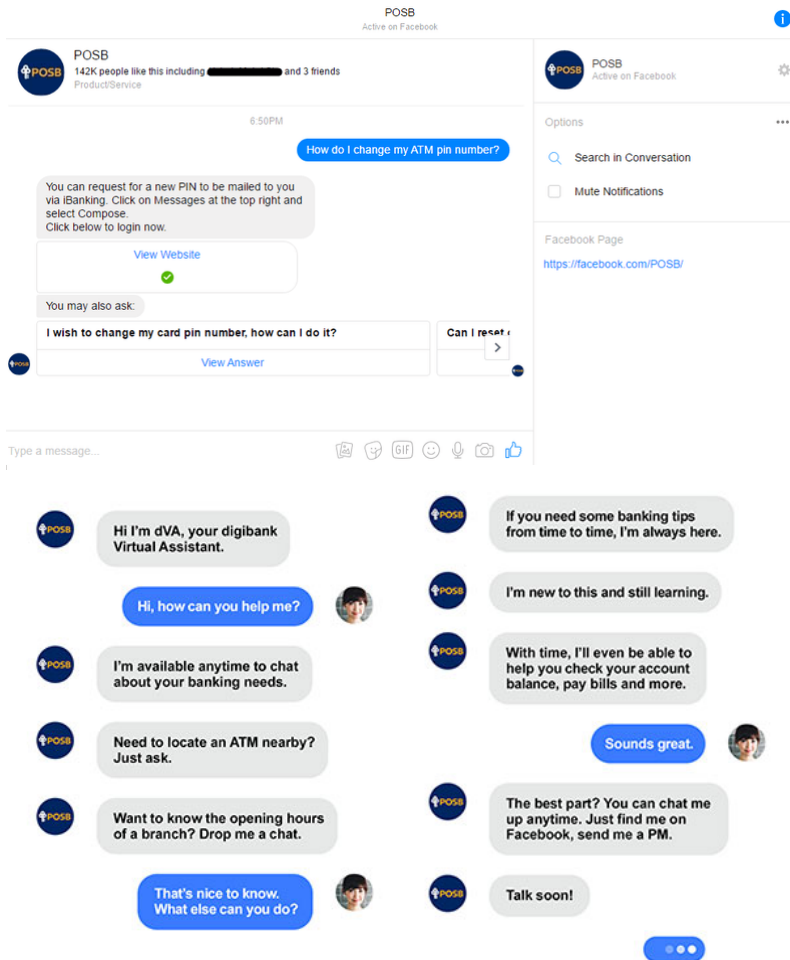
NYP **NANYANG**
POLYTECHNIC

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

Example of Digital Transformation: DBS



POWERED BY
Kasisto

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

Example of Digital Transformation: **SingPost**

- ▶ SingPost is redefining the role of the letter carrier, by creating a one-stop shop for retailers' **e-commerce** needs in Asia.
- ▶ Besides its regular postal duties, SingPost is offering a basket of services for companies, including **website development, online marketing, customer service and, of course, package delivery**. It is also building a network of 24 **warehouses** in 12 countries to stockpile goods for companies.
- ▶ In Malaysia, SingPost is helping to sell Triumph's lingerie & delivering Adidas sneakers. In South Korea, it is helping to sell Levi's jeans. In Singapore, it is helping to stock Toshiba laptops.

Source:

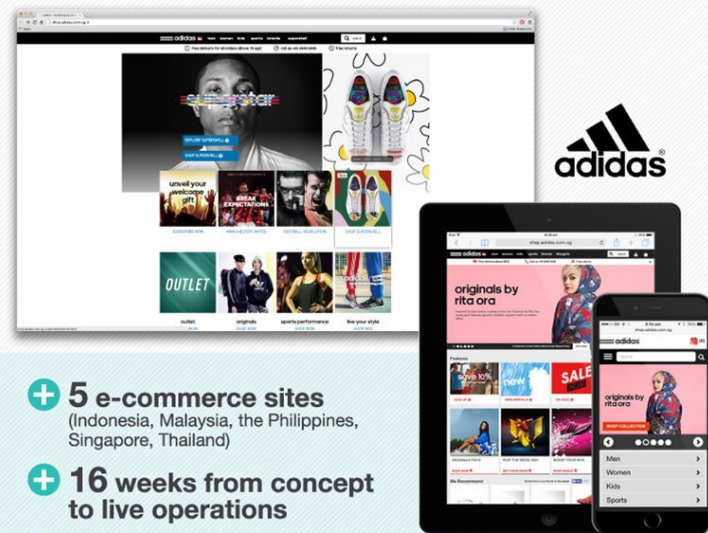
<https://www.nytimes.com/2015/05/19/business/international/singpost-reinvents-for-digital-age-of-ecommerce.html>

<https://ie.enterprisesg.gov.sg/venture-overseas/Sggoesglobal/SingPost>

Example of Digital Transformation: SingPost



SP eCommerce launches adidas' Southeast Asia e-commerce business



- + 5 e-commerce sites (Indonesia, Malaysia, the Philippines, Singapore, Thailand)
- + 16 weeks from concept to live operations
- + 99.9% stable uptime

Images courtesy of Singpost and adidas

End-to-end e-commerce solution:

E-commerce Technology ➤ Performance Marketing ➤ Warehousing Solutions ➤
Delivery & Returns ➤ Regional Customer Care ➤ Store Operations

Source:

<https://www.nytimes.com/2015/05/19/business/international/singpost-reinvents-for-digital-age-of-ecommerce.html>

<https://ie.enterprisesg.gov.sg/venture-overseas/Sggoesglobal/SingPost>

Example of Digital Transformation: Ford

- ▶ Ford is traditionally an auto manufacturer.



- ▶ Ford has said it will become a **"Smart Mobility"** company, **mass producing fully autonomous vehicles** for use in **ride hailing and sharing** models by 2022.

Source: <https://media.ford.com/content/fordmedia/fna/us/en/news/2016/08/16/ford-targets-fully-autonomous-vehicle-for-ride-sharing-in-2021.html>

Example of Digital Transformation: **Caterpillar**

- ▶ Caterpillar is traditionally a construction equipment/ machinery manufacturer.
- ▶ Caterpillar acquired Yard Club Rental, a **digital marketplace**, that **matches owners and renters of idle construction equipment**.
- ▶ It has also developed a manufacturer-agnostic **fleet management system**, Yard Club Fleet.



Summary

► Reasons for “Going Digital”

1. Increasing Pace of Technology Changes
2. Increasing Competition within the Industry & Adjacent Industries
3. Increasing Customer Expectations

► Phases of “Going Digital”

1. Digital Enablement

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

2. Digital Optimisation

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

3. Digital Transformation

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