



Executive Summary

Digital transformation, already a defining feature of our world, is being accelerated by the COVID-19 pandemic, changing customer demands, expectations of digital inclusion and exponentially evolving technology. Most large companies have made incremental strides in digitizing their core offerings, such as creating a digital sales channel or using digital tools to improve internal operations. However, to compete in markets increasingly dominated by digital native players, organizations need to step up their game as the digital native firms are not about to slow down the pace of their own innovation.

Four digital business model archetypes, which vary in value impact, complexity and time commitment, illuminate a way forward. The four models are:

- Intelligent digital solutions
- Digital capability enablers
- Marketplaces
- Digital ecosystem orchestration

This guidebook provides directional guidance on the value and complexity of digital business models and a deep dive on marketplaces. Some companies have taken a leap forward in expanding their business model to own and operate marketplaces. This allows multiple buyers – including competitors – to connect to several sellers.

These companies are leveraging their unique knowledge and capabilities to solve industry- or market-specific problems while generating broader value for the ecosystem and society.

Yet only a handful of marketplace models initiated by large companies have been able to generate top-line growth so far.

Companies such as Carrefour (Brazil), Ping An (China) and DBS (Singapore) have generated measurable value. Others, such as Jio Mart (India) and CheMondis (Germany), have made significant investments and their full potential is yet to be realized. Starting and successfully operating a marketplace demands significant effort. However, first movers can generate significant economic, ecosystem and societal value given the growing trend of online transactions in a naturally oligopolistic model (that is, when there are few sellers).

The Accelerating Digital Transformation Marketplaces Guidebook aggregates the views of business leaders – chief digital officers, chief operating officers and chief development officers – on the forefront of digital transformation across four key dimensions:

- Value levers of a marketplace model
- A framework to evaluate the adoption of a marketplace model
- Criteria to successfully operate a marketplace
- Future trends that may impact marketplaces

The objective of this guidebook is to provide a framework to help executives assess marketplace fit and better understand characteristics for success.

Insights

Marketplace value levers

A marketplace model can generate value across the company (economic value, future value, core business impact), society (inclusiveness, sharing economy, corporate governance) and ecosystem (efficiency gains, empowerment, economic growth).

Marketplace trends

Practitioners need to be aware of marketplace trends in order to adapt and maximize value captured. These include:

- Increased regulation and intermediate liability where organizations should engage early with regulators and partners to anticipate changes; they should collaboratively mitigate and manage impact to the entire ecosystem while maintaining consumers' interest
- Greater need for collaboration with partners to build trust; for example, via enabling technology solutions that boost trust and credibility among buyers

Success criteria

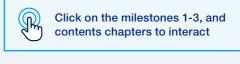
Marketplaces have nine unique success criteria which organizations need to consider to operate:

- External: multi-sided economic value, hyper relevance, stakeholder engagement and success, and inclusion and sustainability
- Internal: commerce enablers, commerce ecosystem, talent and culture, technology and Al alignment, and operating model

A Guide to Marketplaces

The guidebook roadmap

Depending on where you are on your marketplaces journey, use the milestones on the roadmap to view the chapters most relevant to you.



Contents

© 2021 World Economic Forum. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, including photocopying and recording, or by any information storage and retrieval system.

Evolution of digital business models

There is an urgent need to pivot to digital models



The COVID-19 pandemic, along with changing customer demands, digital inclusion expectations and evolving technology, has accelerated the need for companies to adopt digital business models.

Digital transformation is accelerating across all businesses.

Most digital transformations have only been incremental, and primarily applied to digitizing core offerings, technologies and processes.

Examples



Robotic automation to streamline repetitive and predictable tasks



Analytics to generate insights from aggregated data sets

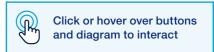


Cloud migration for back-office technologies and processes

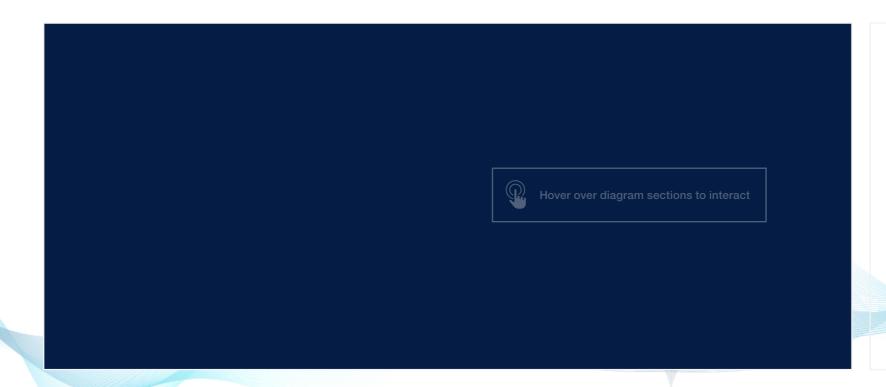
There are four digital business model archetypes that organizations can use to differentiate and provide innovative products and services.

This guidebook provides a framework to evaluate the adoption of a marketplace model, assessment criteria to operate a marketplace and future trends that may impact marketplaces.

Marketplaces can drive value across several dimensions



Marketplaces provide the opportunity to drive value to the firm, society and broader ecosystem. However, only a few organizations have successfully managed to generate substantial value.



Digital natives currently dominate platform models

A handful of organizations have started their own marketplace platforms to compete with digital natives and are beginning to see success

World Economic Forum | A Guide to Marketplaces

Key elements of a marketplace

Digital marketplace definition and roles

Marketplaces facilitate valuable and convenient interactions between any combination of businesses and individuals

Most organizations are directly or indirectly a part of a marketplace.

The consideration to operate a marketplace requires an evaluation of multiple business and societal factors which are addressed in other chapters of this guidebook.

Sellers Value exchange Value exchange Digital marketplace operator Value exchange Walue exchange Enablers Value exchange Enablers

Digital marketplace roles

Sellers

Suppliers/participants
 Provide products and services to marketplace customers and/ or expose part of the business (data, assets, etc.) for other ecosystem players to leverage



Digital marketplace operator

- Own and operate a marketplace platform
- Organize activities/ interactions acting as a liaison with the wider ecosystem

Marketplace

Buyers

People/businesses
 Obtain direct utility from the products/services provided by suppliers



Enablers

 Provide specific capabilities (e.g. fulfilment, buyer/seller financing) to support the interactions in a marketplace



"Design box" - marketplace on a page

There are four key elements in the design of a marketplace



Assets exchanged

Examples of assets being bought and sold

- Goods
- Services
- Data

Operating models

Choices to position a marketplace

- Marketplace becomes the core/entire business
- Part of core business
- New venture



Marketplace routes to market

Interactions marketplaces create or facilitate

- B2B
- B2C
- B2B2C
- C2C

Economic structure

Revenue models applicable to marketplaces

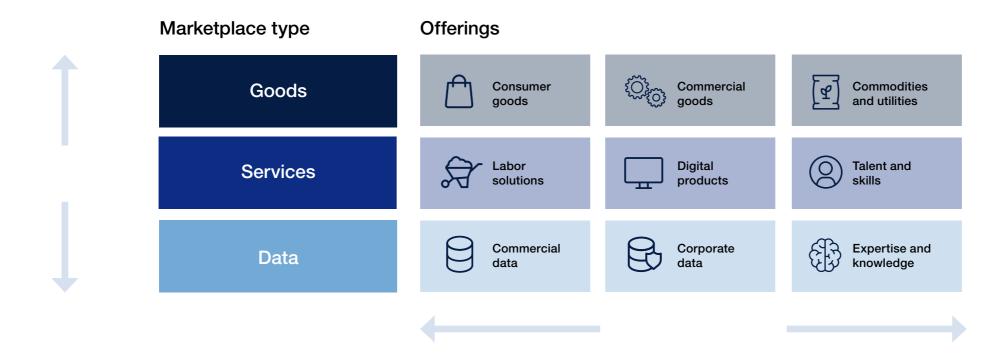
- Direct sales
- Advertising
- Transactions
- Subscription

World Economic Forum | A Guide to Marketplaces

11

Marketplaces allow for exchange of value through multiple offerings and tend to follow one or a combination of growth strategies





Organizations with industry expertise often grow their marketplaces vertically, while digital natives find it easier to pursue horizontal growth.

Example:

DBS

Having a strong digital bank proposition, DBS also launched multiple marketplaces in other industries with end-to-end offerings

Marketplace routes to market

Marketplaces allow for inclusion of several players across the value chain by digitizing interactions between buyers and sellers, thereby reducing friction and removing inefficiencies

B₂C

Business-to-customer

Examples:

Delivery platform matching takeaway eaters with takeaway restaurants

Super app (marketplace of multiple services and offerings), connecting small businesses (e.g. salons, hospitality staff, couriers) with customers

Platform connecting restaurants' soon-to-expire meals with customers to reduce food waste

B₂B

Business-to-business

Examples:

Platform matching spare parts in stock with factories for maintenance of energy production systems

Wholesale marketplace matching SMEs and independent brands

Digital road freight forwarder, linking large commercial shippers with small freight carriers

B2B2C

Business-to-business-to-customer

Examples:

Platform matching bars during COVID-19 with other businesses and individuals to sell beverages

Wholesaler launched online marketplace to match their partner brands with HoReCa (hotel, restaurant and catering) customers

Perks platform selling retailer offers to employers, subsequently offering these to employees

C₂C

Customer-to-customer

Examples:

Hospitality exchange service, matching travellers and spare rooms

Peer-to-peer shopping app, matching customers with sellers of second hand clothes

NGO aiming to boost reuse and cut waste to landfill connecting individuals with unwanted items

World Economic Forum | A Guide to Marketplaces

Marketplace operating models

Organizations can position their digital marketplaces in three different ways



Original core business

MARKETPLACE AS A CORE PART

Digital marketplace becomes a key part of the core business, complementing the initial industry proposition

Points to consider

- Ability to offer an omni-channel experience to customers
- Potential channel cannibalization, with customers moving from physical to digital
- Decisions on funding allocation, talent management and incentives across businesses could impair growth and intended value proposition

Example:

Original core business

MARKETPLACE AS A NEW BUSINESS

Digital marketplace sits outside of the core business, operating as a venture in a new industry

Points to consider

- Enables a refreshed strategy and access to new talent and expertise that can be leveraged into core business or other ventures
- Sharing data across businesses might be a challenge due to regulatory barriers
- An independent entity may give the business more agility to learn and react to changes in the market

Example:

MARKETPLACE AS A NEW CORE Original core business

Digital marketplace is born as or becomes the core business

Points to consider

- More scope for experimentation and better asset utilization due to single channel focus
- Model needs to go through a scaling process before reaching profitability

Example:

Marketplace economic structure

Click on logos to interact

Successful orchestrators experiment with several potential economic levers in a marketplace



Additional sales channel

Opportunity to sell own products

Charge buyers

- Transaction fee
- Premium subscriptions

Charge sellers

- Sales commission
- Fees for value-added tools and services (e.g. dynamic pricing, stock forecasting, etc.)
- Fulfilment services

Utilize data to monetize

Advertising (e.g. content marketing, social media marketing, display advertising, etc.)

Examples:



Value received

- Transparency, safe and trusted transactions
- One-stop-shop with a wider range of products/services to fill their needs
- Optimal prices



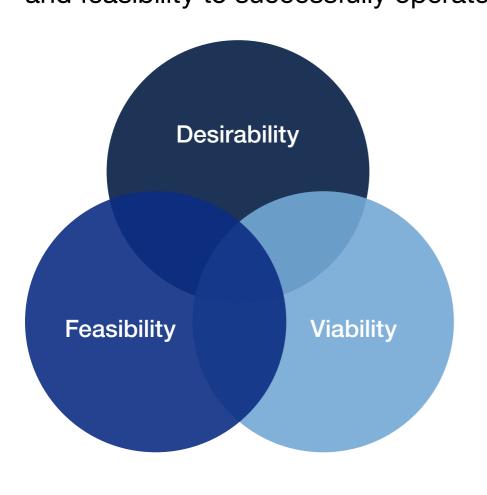
Value received

- Access to more customers
- Sales data to improve offerings for future monetization

Adoption assessment

To evaluate adoption of a marketplace model, organizations need to evaluate its desirability in target industry and market, viability to drive value and feasibility to successfully operate





Desirability: Will a marketplace provide double-sided economic value in the economy and industry I focus on?

- Population socio-economic factors
- Societal factors
- Digital adoption
- Infrastructure/logistics
- Supplier/buyer concentration

- Supply chain fragmentation
- Data maturity
- Existing marketplace maturity
- Regulation

Viability: Is there clear value for my company or for the broader society/industry? What are the implications to my core business?

- Marketplace monetization/profitability •
- Access to adjacent benefits (cross selling, data)
- Environmental, Social and Governance (ESG) impact

- Regulation (monopoly/intermediate liability)
- Brand impact
- Channel cannibalization
- Partner and internal stakeholder conflict

Feasibility: Do I have the capabilities to be the operator of a marketplace?

- Ecosystem partnerships
- Data access (buyer/seller/ supply chain)
- Technology (cloud-based platform, AI, security)
- Digital culture/talent workforce
- Capital availability
- Access to logistics/supply chain

Desirability conditions supporting a marketplace adoption





Desirability

Will a marketplace provide double-sided economic value in the economy and industry I focus on?

QUESTIONS BY CATEGORY

Population socio-economic factors

What are the key socio-economic factors, such as education, employment, income, and public resources in the market in which you operate?

Societal factors

Are there marginalized groups that are being excluded from the broader economy? Is there a digital divide?

Digital adoption

What is the level of digital penetration in the economy? What is the level of internet accessibility and smartphone usage for commerce?

Infrastructure/logistics

How mature is the infrastructure to facilitate the exchange and movement of goods in the broader economy?

Supplier concentration

What is the level of seller concentration in the target market? Is it fragmented or consolidated?

Buyer concentration

What is the level of buyer concentration in the target market? Are there several buyers or is buying concentrated among a few players?

Supply chain fragmentation

What is the level of supply chain complexity? Is the industry value chain integrated with different suppliers, stakeholders and their multiple products?

Data maturity

What is the level and quality of relevant data? Is there prevalent misinformation around product information, pricing, quality, etc.?

Existing marketplace maturity

What is the maturity level of existing marketplaces? Do they solve the industry or market problem effectively? Do they have critical buyer or seller mass?

Regulation

Is there potential for disruptive innovation in your industry? Are there regulatory impediments that would prevent such disruption?

Viability conditions supporting a marketplace adoption





Viability

Is there clear value for my company or for the broader society and/or industry? What are the implications to my core business?

QUESTIONS BY CATEGORY

Monetization/profitability

Does your marketplace have a clear path to profitability? Is there a monetization strategy?

Access to adjacent benefits

Does your marketplace provide adjacent strategic benefits such as expanding internal capabilities, cross-selling, increase in industry size, and access to more data?

ESG impact

Is there an opportunity to create mutually beneficial relationships with wider stakeholder groups (e.g. NGOs, groups from disadvantaged backgrounds) to embed ESG commitments and inclusiveness in your business model?

Regulation

Will the firm be subject to additional regulations if the marketplace is not run independently? Are these material consequences to your core business?

Brand impact

Will your marketplace impact the core business brand?

Channel cannibalization

Does your marketplace provide adjacent strategic benefits such as expanding internal capabilities, cross-selling, increase in industry size, and access to more data?

Partner conflict

Is there clarity on the role each partner will play in which part of the ecosystem to avoid creating direct conflict in the value chain?

Partner and internal stakeholder conflict

Do you have the internal support and commitment at the highest level in the organization to drive the change required?

Feasibility conditions supporting a marketplace adoption





marketplace?

QUESTIONS BY CATEGORY

Ecosystem partnerships

Do you have existing ecosystem relationships that would accelerate the onboarding of sellers or buyers onto the marketplace?

Data access

Does your organization have considerable data and insights into the market that give you an advantage in setting up a marketplace?

Technology

Do you have access to cloud-based technology infrastructure, applications, analytics, data security and integration capabilities to support the development and maintenance of a marketplace?

Digital culture/talent workforce

Does your organization have a digital culture mindset that is fostering innovation? Is your organization able to provide an environment to fail fast? Can you beat the pace of innovation of competitors? Do you have the right talent to drive the changes needed to your core business model?

Capital availability

Do you have the required capital to invest in the foundational capabilities of a marketplace (supply chain, technology infrastructure, marketing capabilities, etc.)?

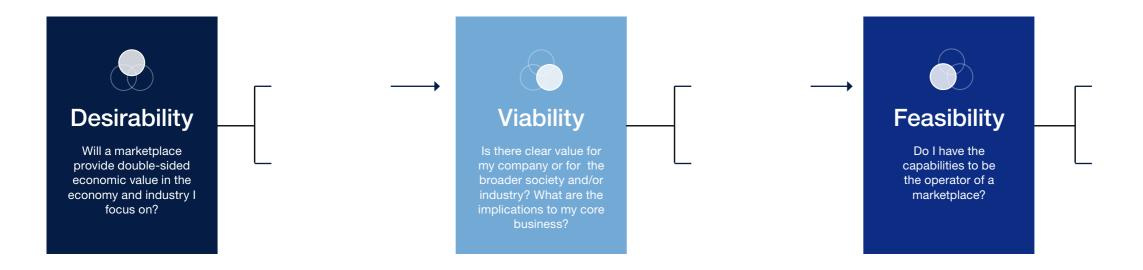
Access to logistics/supply chain

Does your organization have the right capabilities related to logistics and delivery, data-driven stock forecasting and management, last-mile visibility, and overall supply chain management?

World Economic Forum | A Guide to Marketplaces

Example outputs of the assessment to help evaluate the adoption of a marketplace





World Economic Forum | A Guide to Marketplaces

Success criteria

Operating a marketplace successfully requires organizations to apply success criteria across nine dimensions





World Economic Forum | A Guide to Marketplaces

23

Leading marketplaces excel at multiple success criteria



Click on buttons to interact

CARREFOUR

Leveraged its brand positioning and capabilities to launch digital marketplaces tailored to local needs

KEY SUCCESS CRITERIA



Multi-sided economic value



Commerce ecosystem



្នុំក្នុំ Stakeholder engagement & success

CHEMONDIS & LANXESS

Traditional industry player launched an independent marketplace to address a fragmented, non-transparent and complex value chain

KEY SUCCESS CRITERIA



Commerce ecosystem



Hyper relevance



Technology & Al alignment



Page 1

JIOMART

Indian grocery delivery joint venture enabling 'kiranas' and other small retailers to sell on the platform has quickly scaled to 10,000 employees and 100 cities

KEY SUCCESS CRITERIA

Commerce ecosystem

Hyper relevance

Technology & Al alignment



Inclusion & sustainability

MAYKERS & KRAMP

Traditional industry player capitalized on its know-how to solve a siloed approach of doing business

KEY SUCCESS CRITERIA



Multi-sided economic value



Commerce ecosystem



Stakeholder engagement & success

DBS

Set up one-stop integrated travel marketplace providing seamless integration of complementary services

KEY SUCCESS CRITERIA



Commerce ecosystem



Hyper relevance



Commerce enablers

GRAB

On-demand ride-hailing company expanded its platform to provide services across multiple industries

KEY SUCCESS CRITERIA



Multi-sided economic value



Commerce ecosystem



Technology & Al alignment



Talent & culture

Trends

Several growing trends may impact the value levers and success criteria of marketplaces



Conclusion

Executives looking to pivot to digital business models to compete with digital natives and capture new value pools need to select the right model based on their company's current situation and the complexity required to pivot.

Pivoting to a marketplace model requires a solid understanding of the target market and industry, clear value levers for the company and broader impact on society and the ecosystem. Further, companies are well served to conduct an internal and external capability feasibility assessment.

A decision to launch a marketplace is a significant commitment. Operating marketplaces requires a unique set of capabilities that organizations must maximize to increase the chances of success. Capabilities include:

- Having an inclusive mindset to promote participation of marginalized societal groups
- Staying hyper relevant and actively enhancing the user experience to create customer "stickiness"
- Having an independent operating model in order to foster trust among buyers and sellers, increased participation and innovation

Creating a marketplace is a disruptive opportunity with tremendous future economic value, as well as value for ecosystem participants and society at large. Successful first movers will set the new standard that competitors will be forced to meet, potentially limiting competitors' ability to capture value in the future.

Case studies

Case studies



Below is a case study repository for this guidebook. Please click onto the relevant case study logo to view the deep dive.

World Economic Forum | A Guide to Marketplaces

AB In Bev

Created partnerships with Coca-Cola European Partners and Salesforce to develop a marketplace to support the HoReCa (hotel, restaurant and catering) industry during COVID-19

• World's largest brewery, with 98%+ of its European sales in B2B, including off-trade (supermarkets) and on-trade (bars, restaurants and convenience stores)

Challenge

- The COVID-19 pandemic-induced lockdowns rapidly impacted the HoReCa (hotel, restaurant and catering) industry across the world
- Consumer goods companies of all types needed to find alternative channels to reach their consumers

Solution

- Set up HORECA2U, a free platform to support local businesses during COVID-19 lockdowns. to deliver a unique proposition to consumers in the Amsterdam urban area, in the Netherlands
- Leveraged sales expertise from both AB In Bev and Coca-Cola European Partners to create experiential packages containing products from both brands (e.g. cocktails with Coca-Cola signature beverages, AB In Bev with premium beers, and growlers to reproduce the bar experience at home)
- Partnered with Salesforce to build the platform, which was offered for free to suppliers (HoReCa) and consumers
- Local bars prepared the packages and handled last mile delivery
- AB In Bev and Coca-Cola European Partners helped create social media presence for this initiative and for all participants, some of which were at the neighborhood level
- In addition, there was a strong effort to digitally educate and onboard local bars for the initiative

- Three-way value proposition provided: consumers received a hospitality experience at home, the local on-trade industry was supported during the pandemic and demand was generated for suppliers' products (AB In Bev, Coca-Cola European Partners)
- Initial evaluation engaged 12 bars and 400+ consumers through the platform
- AB In Bev orchestrated a network of partners at the global and local level, from building the platform (with Salesforce) to creating the experiential packages (with Coca-Cola European Partners)

Carrefour

Leveraged its brand positioning and capabilities to launch digital marketplaces tailored to local needs

Retail multinational company with 12,000+ stores globally and sales of €80,000+ billion in 2019

Challenge

- Customers want wider choice in more online categories (baby care, pet food, more organic products, personal care, beverage)
- Overall market pressure demanding a clear corporate social responsibility and ESG strategies from all companies across industries and retail is no different
- Digital natives increasingly stepping into food retailers' territory (e.g. Amazon, Alibaba)
- Large number of local sellers available, but with little knowledge of how to work with big traditional food retailers

Solution

Launched a marketplace in Brazil in late 2017 and one in France in summer 2020 with different strategies to match local demands

Brazil:

- Leveraged position as biggest retailer in the market to create multiformat and omnichannel customer experience
- Launched three businesses on the same platform – first-party, third-party and grocery

France:

- Our goal is to become the leading e-commerce site globally; to meet everchanging consumer expectations, the entire Carrefour ecosystem has been adapted and our Mirakl-powered marketplace is central to this strategy
- Local enablement strategy as a differentiator, filling the gap in the market, helping local SMEs digitalize
- Made seller onboarding team available during lockdown to educate local sellers in creating a catalogue of products

- As of March 2018. Carrefour's Brazilian marketplace hosted 85 sellers and 100,000+ products. In 2020 the platform offers 7 million+ catalogued products from more than 8,000 sellers and generates about 30% of Carrefour's overall eCommerce GMV
- In France, the Carrefour's marketplace platform will feature up to 100,000 products from 100+ different retailers by the end of this 2021; these items complement Carrefour's daily product range
- Provides small retailers with an accelerated solution for digitizing their businesses with 52% of partner vendors being SMEs, expanding and embracing the local partner ecosystem
- In France, Carrefour announced that the marketplace was free to use for local and small businesses
- Agility to deploy and adapt new services and categories by opting to buy vs. build the marketplace

CheMondis

Traditional industry player launched an independent marketplace to address a fragmented, non-transparent and complex value chain

Specialty chemicals company, LANXESS, with annual sales of \$8.2 billion set up CheMondis marketplace, an independent cross-manufacturer and cross-dealer B2B platform

Challenge

- Fragmentation and complexity
 - The chemicals industry has several constituents in its value chain, with companies participating in some or all steps of the process; this adds a lot of complexity in the development of products and solutions until they reach end users
- Data/information

Lack of robust data to support the experience for buyers, from catalogues to quote information to document exchange to orderstatus tracking

Solution

- LANXESS founded CheMondis which operates as an independent digital marketplace centralizing and orchestrating all key steps required to facilitate B2B chemicals transactions across spot and contract markets
- Founded in mid-2018, its platform boasts 50,000+ products with more than 5,000 verified companies participating
- Operates in all EU27 European countries (+UK) across a highly fragmented supply chain
- It provides the industry a software platform to deal with all kind of chemical products (e.g. for

- the paints and coatings, sealants, adhesives, plastics industry) to increase efficiency in deal-making and order processing
- High number of products across categories and SKUs targeted to cover the entire market and the high interdependence of chemicals
- Collects and uses real-time market data to streamline and expedite ordering process
- Create value for both customers and suppliers (buyers and sellers)

- CheMondis marketplace had a gross merchandise volume of ~\$1 billion as of 2020
- Signed up about 22% of the 22,500 chemical companies in the European Union for its marketplace
- Shifted a traditional industry with a very complex value chain to a more seamless ordering process and user experience for buyers and sellers

- Progressive CEO of established industry player with courage to fund and allow CheMondis to run as an independent organization
- Openness to innovation, enabling a shift in the operating model to an agile and 'fail fast' approach that delivered success

DBS

DBS set up multiple marketplaces outside of its core business to increase customer reach and offer tailored solutions

- Singaporean bank covering retail, corporate, investment banking, insurance, mortgage and other products
- Largest bank in South-East Asia in assets

Challenge

- Fintechs disrupting the industry
- Pressure to expand customer base and improve share of wallet/ cross-sell

Solution

- DBS capitalized on its outreach, as it provides banking services to most of Singapore
- Leveraged customers data insights to tailor offerings to needs
- Invested SG\$1 billion annually in its tech transformation¹
- Launched four marketplaces in property, travel, cars, utilities to become a "one-stop-shop," e.g.
 - Integrated travel marketplace: in partnership with Singapore Airlines and other vendors,

- providing flexible payments, travel insurance, access to flights, hotels and events booking
- DBS property marketplace is the largest bank-run platform of its kind in South-East Asia, offering around 100,000 listings from agents and owners. It includes Singapore's first home financial planner; end-to-end paperless transactions and documentation, using partner ecosystem to offer help with setting up utilities, internet and TV services, cleaning and moving

- Enabled robust ecosystems in partnership with global companies and SMEs
- 72% of its total profit in 2017 came from digital customers¹

Grab

From a taxi company to an on-demand multi-service platform and digital payment technology group that created economic value and societal impact

- Singaporean multinational ride-hailing company, present in nine countries, 350+ cities and metropolitan areas
- \$2.3 billion in revenue as of 2019.

Challenge

- Congested cities
- Fragmented, inefficient markets in transportation and logistics

Solution

- Started off as ride-hailing company; now expanded to multiple industries, including food delivery, digital payments services, insurance and investments, and others
- In 2019, created a super app to consolidate its online services into one platform, as well as launching hotels and tickets
- It currently operates in the Asian countries of Singapore, Malaysia, Cambodia, Indonesia, Myanmar, Philippines, Thailand, Vietnam and Japan
- Each time the company enters a new market, it buys smartphones for drivers, allowing those drivers to pay daily instalments for the phone to access the platform
- Grab added an in-app instant messaging feature called "GrabChat" to allow simple

- communication between riders and drivers. GrabChat can even translate messages if the set languages of the driver and passenger are different
- Provides over 15+ app-based on-demand services, such as: GrabTaxi, GrabCar, GrabBike, GrabCar+ (more premium cars), GrabHitch (carpooling), GrabExpress (last mile delivery), GrabWheels (scooter), GrabPay, GrabRewards, GrabFood, Grab Financial (insurance, financing services), GrabPet, GrabKitchen (cloud kitchen for its food delivery)
- In collaboration with Mastercard, launched a numberless payment card, the first of its kind in Asia

- South-East Asia's first "decacorn" (start-up valued over \$10 billion")
- Grab has over 2 million driving partners, 68 million mobile app downloads, and 3.5 million daily rides
- During COVID-19, Grab onboarded over 600,000 new merchants across South-East

- Asia, enabling several small businesses and marginalized groups to participate in the economy
- Orchestrated a massive ecosystem of partners to offer value-added services to users

Hewlett Packard Enterprise

Revolutionizing how value is extracted from data by decentralizing (and democratizing) data spaces

 Hewlett Packard Enterprise (HPE) is a global edge-to-cloud platform-as-a-service company that helps organizations accelerate outcomes by unlocking value from all of their data, everywhere

Challenge

- Insights from data must be shared in order to unfold their full value – use cases can be as mundane as information about empty parking lots or as sophisticated as the results of a DNA sequencing
- However, it's often not feasible, not permitted, or not desirable to share data or insights on a centralized platform or marketplace reasons include data privacy, security, data sovereignty, and "data gravity", i.e. it can be costly, difficult and slow to send data to central locations
- As a result, huge portions of data value goes unleveraged. According to a global study by IDC and Seagate,1 organizations only put 32% of the available data to work

Solution

- A decentralized platform and marketplace enables sharing of data insights without sharing the data itself - and without the need for a central intermediary
- The use of automated smart contracting allows immutability of transactions and leads to transparency for all participants in highly efficient manner
- This decentralized platform also serves as a marketplace for aggregated machine learning (ML). Several participants share the learnings of their ML models with each other to accerlerate learning and eliminate ML bias

- Non-repudiation of digital data services is secured with mutual authentication between the parties. Data protection and privacy is enabled by data encryption, ensuring the authenticity of data sources, data access and data transfer
- Transactions between the participants are governed directly by the participants to protect and safeguard their data privacy and sovereignty

- Participants advance their ability to create value from data while preserving data privacy and data sovereignty, and avoiding the cost of moving data back and forth
- Data value generation is democratized, power and opportunities are distributed across participants because there is no central intermediary – you only benefit if you share
- An increased data value creation maturity level of market participants is necessary to obtain

- quantifiable economic and social benefits with this decentralized platform
- Willingness of market participants to collaborate in order to generate value from their data is key
- Standards for data usage and specifications for high quality data will lower the hurdles for wider adoption

JioMart

Indian hyperlocal solution for groceries has quickly scaled to over 35,000 employees (including gig workforce) and 200+ cities

- An initiative of Reliance Retail (RR), which launched the JioMart consumer platform to meet customer requirements for essentials during the COVID-19 lockdown
- The platform offers a variety of items to satisfy customers' daily needs and upholds its customer price promise and service ethos

Challenge

- Disorganized retail market, dense and diverse urban areas and a very high number of small retailers
- High price sensitivity and price competitiveness

Solution

- Prepared significant advertisement campaign and launch rapidly: soft launch in December 2019, pilot launch in 3 cities in April 2020 and full launch of JioMart.com in 200 cities in May 2020
- Leveraged the wide network of Reliance Retail's grocery stores and well-established supply chain infrastructure to quickly become India's largest online grocery retailer
- Offers a market opportunity for 'kiranas' and other small retailers to sell on the platform
 scaling the network quickly and delivering

- a wider selection of SKUs for customers (as opposed to selling from first-party or warehouse locations)
- Embraces liquid workforce practices (including open enlistment of retailers, drivers and customers) to rapidly meet demand
- Offers customer-friendly promotions to scale: free delivery, no minimum basket value, easy returns

- App downloaded more than 1 million times in the first four days after launch of JioMart app (June 2020)
- Over 150,000 orders processed per day by December 2020 with a peak order rate of over 500,000 orders per day
- Growth accelerated by restrictions on shopping during COVID-19
- \$5.7 billion investment received from Facebook and JioMart has begun more closely integrating the platform with WhatsApp for Business and WhatsApp Pay, enabling people to easily track their order and invoice for a seamless online shopping experience

Maisons Du Monde

French home decor and furniture company launched a marketplace, extending product offerings to meet increasing customer demands

• For more than 20 years, Maisons du Monde, has been a European leader in original and accessible home decor and furniture collections with 352 stores in Europe and 17 stores in the US, and sales of €1.18 million in 2020

Challenge

- Consumers were visiting Maisons du Monde's e-commerce, searching for categories and product selection not yet offered
- Increasingly, customers were expecting more environmentally sustainable products that still maintain the high quality, uniquely designed standards of Maisons du Monde
- Maisons du Monde had limited inventory and warehousing capabilities to meet these customer needs

Solution

- Maisons du Monde launched a curated marketplace, selecting brands that are a good fit in terms of style, affordability, quality and social responsibility and which complement its own offering, across categories such as couches, lighting and bedding
- Initially launched in November 2020 in France, the marketplace includes 300+ brands with 33,000 additional SKUs. Drawing on their expertise in the world of interiors, Maisons du
- Monde has carefully selected each partner brand selling on the marketplace, with special attention to young designers, "Made in France" brands, and companies using sustainably sourced materials
- The Maisons du Monde team has a charter to help the brands selling on the marketplace feel connected to the brand and shared mission of social responsibility

- The marketplace is at the heart of Maisons du Monde's strategy, accelerating group's digitization, which already generates 50% of its sales through digital transactions (e-commerce and click-in-store), and has 10 million unique site visitors per month
- Maisons du Monde's marketplace sellers are expected to generate €160-180 million gross merchandise value at the end of 2024
- Strategically designed customer experience where Maisons du Monde and marketplace products are seamlessly integrated on the

- e-commerce site, including personalized recommendations using Al algorithms
- The extension of the product range, offered via the marketplace, has produced strong initial results:
 - eCommerce conversion rate has increased since marketplace launch
 - 40% increase in site traffic
 - 32% increase in product assortment
 - Marketplace NPS in line with Maisons du Monde's own e-commerce orders

Majid Al Futtaim

Building a data trust in Dubai, boosting industry resilience, economic growth, and responsible consumption

- Majid Al Futtaim is the leading shopping mall, communities, retail and leisure pioneer across the Middle East, Africa and Asia
- The company is present in 17 international markets, employs more than 43,000 people, and has the highest credit rating (BBB) among privately held corporates in the region

Challenge

- In Dubai, policy-makers have historically had limited visibility on trends, which has impeded the possibility of faster policy making
- Businesses possess more data but are generally limited to their own data.
 This limits their understanding of customers' behaviors in order to create better products, services or experiences
- Data is a valuable asset but is often kept restricted, preventing wider value creation
- How can data be shared in a safe, fair and easy way to create longterm economic value for all stakeholders? This includes government, businesses, tech providers, educational institutions, media, civic institutions, international organizations and individuals

Solution

- Enabled the exchange and use of data to create economic and social value through a robust data marketplace
- Smart Dubai launched the first "Data Trust"
 where multiple parties could share data that
 would be hosted and aggregated together. In
 this way, participants and wider ecosystem
 could generate more insights than from just
 their own data
- Activities included: data creation and collection, data storage and aggregation, data processing and analysis, data use, and data marketing and distribution
- Work was structured along four strategic themes: transparent governance, operational excellence, commercialization, and people and engagement

- Founding members included telecom players, retailers (Majid Al Futtaim), government entities (e.g. transport authority, economic authority, health authority), and technology players
- The work was organized along different use cases with different data trusts established to serve different objectives such as retail and health and wellness
- Participants agreed on a data governance framework, data sharing mechanisms and initially shared data samples, which were analyzed to allow deeper understanding of shopping and spending trends and to drive more responsible consumption behavior (actions included policy-making, changes in retail offerings and services, etc.)

- The first example of a functioning data trust applied in the retail sector. It collectively achieved a deeper understanding of the catchment area, visitor flow and spending trends in Mall of the Emirates, a super-regional mall established by Majid Al Futtaim
- It has helped generate economic insights for both government and non-government participants and paved the way for more participants to join the trust
- As more participants join, it can evolve into a full-fledged marketplace, with different forms of engagement. The data sharing allows any individual or institutional stakeholder to develop use cases and solutions, with the aim of realizing the economic and societal objectives set by the founding members

Maykers

Traditional industry player capitalized on its know how to solve a siloed approach of doing business

 Kramp Group with over 100 years of agriculture experience launched Maykers, an independent marketplace for farmers dedicated to agricultural supplies and services

Challenge

- Highly fragmented industry with little transparency
- Farmers have a small set of global or locally specialized companies to source supplies, which often creates challenges when negotiating prices every year, prompting them to turn to large digital native players for their needs
- · Lack of overall insight and data to understand customers needs
- Manufacturers are worried they do not have insight into the customer after initial product sale

Solution

- The marketplace offers a one-stop-shop solution, from supplies, machinery parts, services (e.g. crop advice) and to other needs, eliminating the former siloed approach
- The Maykers marketplace is a destination for both farmers to connect with local and global businesses and for suppliers to reach a larger customer base, creating a win-win situation for all
- Beyond the platform, Maykers created a community where farmers and suppliers can

- engage directly with a chat feature, as well as share expertise with Maykers education resources
- Simplified and safe payment methods to minimize risk, with sellers being paid for the order only after the delivery of goods/services
- Leveraged a pre-built marketplace solution with pre-approved merchants

- 150+ partners, 50,000+ products in 70+ categories from 500+ agriculture brands^{1,2}
- A critical solution to a fast-growing sector, which generates over \$2.4 trillion for the global economy each year¹
- Deepen engagement between farmers and suppliers by building a community where they
- exchange expertise and through which Maykers can learn more about farmers' needs to tailor solutions and stay relevant to the ecosystem
- Enabled farmers to be more productive through a one-stop shop solution and greater price transparency

Shopee

Shopee set up a seller university to promote inclusiveness as a key value proposition of its marketplace

- Singaporean multinational tech company focusing on e-commerce, serving South-East Asia, Taiwan and Brazil
- Shopee was first launched in Singapore in 2015

Challenge

 Industry competition from digital natives (AliExpress) and local players: Lazada, Tokopedia

Solution

- Social first, mobile-centric marketplace, starting as a C2C marketplace and has since expanded to B2C
- Marketplace is integrated with logistical (70 courier service providers) and payment support, making online shopping easy and secure for both sellers and buyers
- Unique shopping security feature to build trust (Shopee Guarantee¹), withholding payment to sellers until buyers have received their orders

- Shopee University: equips sellers to start their online businesses, run "Seller Master Classes" twice a month on how to do sales, marketing and operations
- Seller support package: provides tokens and a small commission on future sales for people to educate small shops on how to participate and use the platform, enabling the community in a sustainable manner

- Quickly became Singapore's most visited platform; 82% increase in users using mobile channel for purchase in Q1-Q2 2020
- As of 2019, the platform recorded 200 million downloads² and a GMV of \$17.6 billion³
- Value beyond profitability, by enabling marginalized communities to participate in ecosystem, creating their own marketplaces and selling through Shopee's marketplace

Contributors

We would like to thank members of Accenture, the World Economic Forum, and the World Economic Forum Digital Transformation Leaders Network for their contributions to this paper. We would also like to thank the members of the Digital Transformation CEO Champions Group for their role in inspiring this paper.

Lead contributors

Joe Abi Akl, Chief Corporate Development Officer, Majid Al Futtaim Holding

Hany Fam, Founder and Chief Executive Officer, Markaaz

Piercarlo Gera, Chief Executive Officer, Gera & Partners

Tom Harrington, Marketing Strategy and Operations Manager, Hewlett Packard Enterprise

John Hagel, Founder, Beyond Our Edge

Joerg Hellwig, Chief Digital Officer, LANXESS AG

Carlos Javaroni, Vice President of Business Development, Schneider Electric

Kenneth Kwok, Founder and Chief Executive Officer, Global Citizen Capital

Fanyu Lin, Chief Executive Officer, Fluxus LLC

Carsten Linz, Former Group Chief Digital Officer, BASF SE

Burke Norton, Senior Managing Director; Co-Head, Perennial

Investing, Vista Equity Partners

Dan Toma, Co-Founder, Outcome

Simon Torrance, Senior Adviser, Metaflight

Deepak Sharma, Director of Business Solutions, IT and

Digitalization, Agility

Dickel Sooriah, VP Marketing EMEA, Mirakl

Nicolas Verschelden, Global Innovation Ecosystems Director and Managing Partner Dream Tech Alliance, Anheuser-Busch InBev

Anna Zeiter, Chief Privacy Officer, eBay Inc.

For any enquiries, please contact: Nokuthula.Lukhele@weforum.org



The World Economic
Forum, committed to
improving the state of the
world, is the International
Organization for PublicPrivate Cooperation.
The Forum engages
the foremost political,
business and other leaders
of society to shape global,
regional and industry
agendas.

World Economic Forum 91–93 route de la Capite CH-1223 Cologny/Geneva Switzerland

Tel.: +41 (0) 22 869 1212 Fax:+41 (0) 22 786 2744

contact@weforum.org

www.weforum.org