Online Marketplace and Merchant-centric Services as a Driver of the Platform Model

*Part 2 - **PLAYBOOK** for mobile operators to launch an online marketplace*

Acknowledgements

GSMA

The GSMA represents the interests of mobile operators worldwide, uniting more than 750 operators with over 350 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces the industry-leading MWC events held annually in Barcelona, Los Angeles and Shanghai, as well as the Mobile 360 Series of regional conferences.

For more information, please visit the GSMA corporate website at www.gsma.com. Follow the GSMA on Twitter: @GSMA.

GSMA Mobile Money

The GSMA's Mobile Money programme works to accelerate the development of the mobile money ecosystem for the underserved. Our mission is to support our members and industry stakeholders to increase the utility and sustainability of mobile money services and increase financial inclusion. For more information, please contact us:
Web: www.gsma.com/mobilemoney
Twitter: @GSMAMobileMoney
Email: mobilemoney@gsma.com

Authors: Anant Nautiyal, Senior Manager
Gunnar Camner, Director

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Authors: Samer Sadek, Senior Consultant
Santiago Castillo, Local Partner
Kushal Shah, Senior Partner

Executive summary (1/2)

Online marketplace: Doorway for mobile money providers to adopt platform model

- **Mobile money** has witnessed **significant growth** in recent years, and the industry is now poised to adopt a Platform Model, or the **Payments as a Platform (PaaP)** approach.

- In the mobile money context, PaaP could be defined as a model whereby the mobile money value proposition is expanded by enabling third parties to deliver products / services through a digital platform that eventually addresses a broadened user base.

- There are many routes that operators can take into PaaP; an **online marketplace** is one of the most relevant because operators can leverage their **existing assets** (customer base, customer insights, distribution network and payments solutions) to gain an advantage in it.

Logistics, Technology, Analytics: Three crucial pillars for online marketplace

- **Logistics:** Leveraging pickup / drop-off points is key to optimise first last mile solutions; An order management system to integrate logistics with merchant and suppliers is required; Customer touchpoints need to be maintained.

- **Technology:** A "headless" marketplace platform can be used to integrate all the other required systems; Add-ons will be required for all the other business lines (e.g. travel, home services).

- **Analytics:** Analytics is crucial to manage logistics, marketing and performance of the platform. Analytics team need to create a "self-serve UI" tailored for the functions to create a data driven organisation.

Executive summary (1/2)

Operators' assets for online marketplace: A unique advantage

- **E-commerce** is still in its **infancy** in **emerging markets**, largely due to operational challenges entailed in logistics and commercial challenges posed by a lack of customer trust.

- **Mobile money providers** are **uniquely positioned** to **overcome** the **challenges in e-commerce** in **emerging markets** as they can leverage their broad customer base, deep customer insights, extensive distribution network and widespread payment solutions.

Operators must also overcome challenges to offer online marketplace

- To have **success** with a **PaaP-based online marketplace**, mobile money providers need to develop the right skills, deploy state-of-the-art technology, and build an ecosystem of strategic partnerships, in particular in logistics.

Contents

KEY CONSIDERATIONS
when launching online marketplace

0. Why launch an online marketplace?

Mobile money has grown rapidly in recent years and many new uses cases and services have evolved

Evolution of the global mobile money landscape, 2001 to 2016

Legend:
- Europe and Central Asia
- Latin America and Caribbean
- MENA
- South Asia
- East Asia and Pacific
- Sub-Saharan African

Yearly totals: 2001: 1, 2002: 3, 2003: 3, 2004: 4, 2005: 6, 2006: 7, 2007: 7, 2008: 17, 2009: 38, 2010: 69, 2011: 117, 2012: 177, 2013: 230, 2014: 254, 2015: 270, 2016: 277
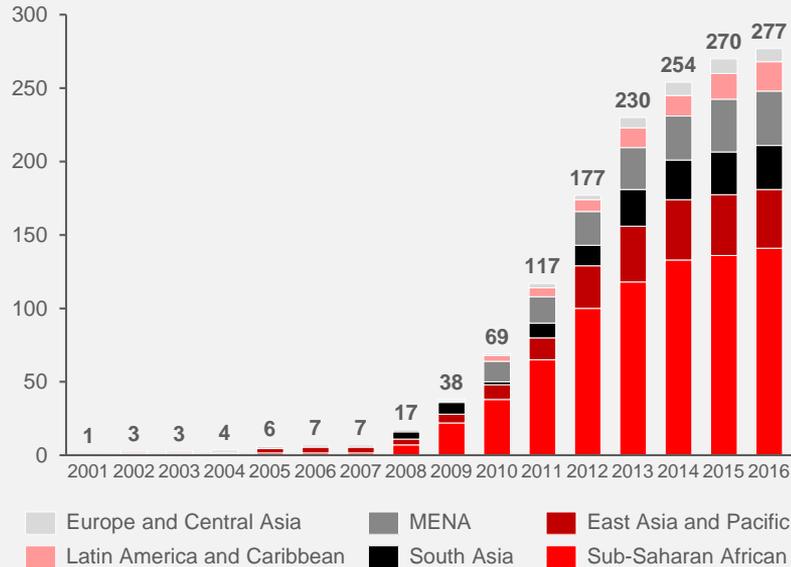
Breakdown of total value transacted per average mobile money customer* (USD)

Average mobile money customer is moving USD 188 per month

Breakdown of total value transacted per average customer

- 57.0 P2P transfers
- 56.4 Cash-in
- 45.9 Cash-out

- 10.7 Bulk disbursement
- 9.5 Bill payments
- 4.3 Merchant payments
- 2.8 Airtime top-ups

* Total USD value transacted per active customer per month. Calculation: Number of transactions per active customer per month x average value transacted per active customer per month. Source: GSMA
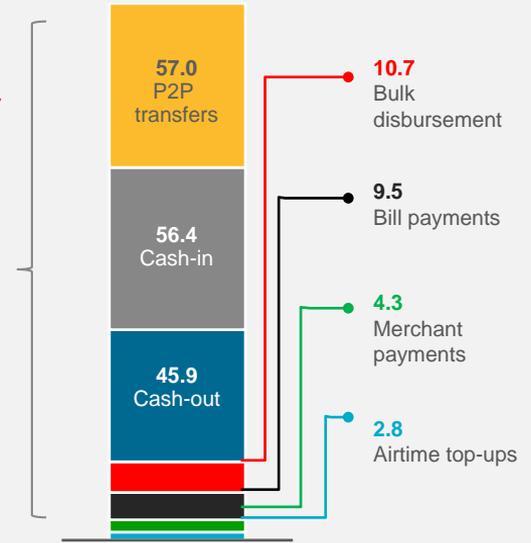
The mobile money industry is poised to evolve to a 'Payments as a Platform' approach

Evolution of Mobile Money

Find a hook → Focus on single use-case → Build agent network → Reach scale (1m+) → Build ecosystem → Allow others to build your ecosystem

Customer centric → Operational excellence → Industry influence

Single-sided business → Multi-sided platforms

MOBILE MONEY INDUSTRY IS HERE
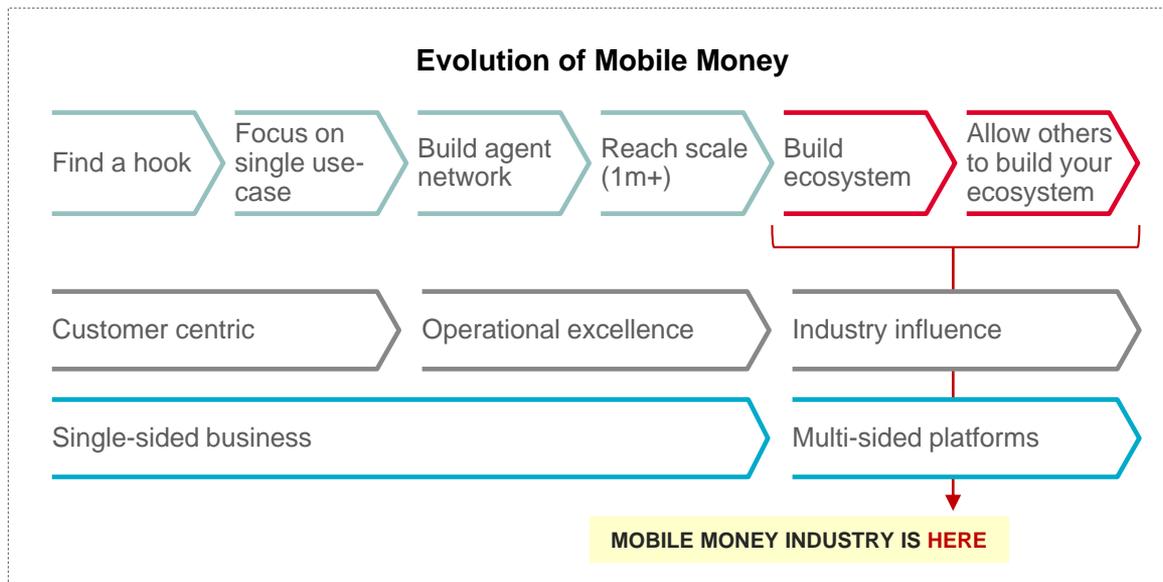
Having successfully offered and **scaled payments** as the initial 'hook' product, operators now in position to offer themselves as a **'platform'** to other providers of products and services i.e. adopt as **Payments as a Platform (PaaP)** approach.

Explanatory Note: *In the mobile money context, a **PaaP model** may be defined as one where a mobile money provider **expands its value proposition** by building **new capabilities** that transform its activity in a **multi-sided model,** enabling **third parties** to deliver products / services through **a digital platform** that eventually addresses a **broadened user base**. (For more details on the PaaP business model, please see GSMA's report and* blog)

Other routes exist, but online marketplace a highly relevant option for mobile money providers to enter platform space

	Marketplace	Specialised solutions	Entertainment	Social media & communication	Search engines
Type of platform	Marketplace	Specialised solutions	Entertainment	Social media & communication	Search engines
Example of players	airbnb, UBER eats, amazon	Uber, coursera	NETFLIX, MUSIC, YouTube	skype, f, WhatsApp	Google, bing, YAHOO!
Payment a reqt for customers?	✔	✔	✔	✘	✘
Types of merchants	Retail, travel, restaurants	Specialised services (e.g. schools)	N/A	All	All
Relationship with merchants	Solution provider (extension to payment)	Solution provider (extension to payment)	N/A	No direct relationship – advertising platform	No direct relationship – advertising platform
Relevance to mobile money	Complimentary	Supporting	Relevant to customers only	Low relevance	Low relevance

Recommended route for mobile money providers into platform space

Moreover, MNOs have a number of assets and capabilities that can be leveraged for an online marketplace

Customer base
- 444m mobile phone subscribers (44% penetration) and 747m SIM connections in SSA (2017)
- 338m registered mobile money users is SSA (2017). Of these, 122m were active on a 90-day basis and 87m were active on a monthly basis

Distribution network
- There are 1.8m registered agents and many other local shops that enable cash-in.
- 95%+ of cash-ins and cash-outs are performed by agents

Channel
- Operators can control USSD channel directly (mobile phones)
- OTT offering likely to be stronger competition to mobile money (smartphones)

Brand
- MTN (#6), Airtel (#14) and Vodafone/Safaricom (#17) are all in the Top 20 most admired brands in Africa. (Orange is #36) in 2017/18
- There are a total of 10 mobile operators in the Top 100

Local market knowledge
- Mobile operators have been active in Africa for many years and have close relationships with various key stakeholders (e.g. government entities, regulatory bodies).
- Also have good knowledge of new market entrants (e.g. FinTech) and other market initiatives

Collaborations/ partnerships
- Mobile operators are involved in a broad range of collaborations and partnerships with FinTechs, banks, local government and other key players, helping them expand the range of services offered
- For example, MTN, Millicom, Vodafone / Safaricom and Airtel have partnerships with WorldRemit to allow customers easy access to international money transfers

Customer / transaction data
- Customer and transaction data is a key asset for operators as they can leverage this data for a variety of use cases, such as tracking spending patterns and identifying fraudulent behavior

Source: GSMA

This playbook provides guidelines on how mobile money providers can launch their own online marketplace

Context

- In the previously published **'Landscape report'**, the opportunities and challenges of launching an online marketplace as a mobile money provider were first introduced
- This document serves as a follow-up to the Landscape report, and aims to provide mobile money providers with **guidance on key strategic, operational, and commercial topics** to launch an online marketplace

Objective

- The aim of this document is to:
  - Communicate the **key enablers of launching an online marketplace**
  - Outline the **critical considerations** relevant to each enabler
  - Define **key risks** and **potential mitigation measures**

Scope

1. Introducing **key enablers** of launching an online marketplace as a mobile money provider

2. Outlining **potential strategies**, **key risks**, and other **considerations** per enabler

3. Providing **selected case studies** and **best practices** to support key findings

4. Providing self diagnostic exercises and Identifying **potential next steps**

Source: GSMA, Roland Berger

When launching an online marketplace, there are three key questions mobile money providers must address

1 What do I offer?

- Market dynamics
- Target customers
- Merchants selection

2 How do I offer it?

- Commercial model
- UX/UI and offering mode
- Value proposition

3 What is my operational / org model?

- Supply chain (incl. logistics)
- Technology
- Analytics
- Customer support
- Commercial / product (per business line)

Source: GSMA, Roland Berger

1. What do I offer?

SELF DIAGNOSTIC section to support planning and test implementation readiness. **GO**

Within an online marketplace, each business line can have distinct and specific requirements

Business Line →

Requirements ↓

	E-commerce	Home services	Travel	Gaming	Restaurant & appt. booking
Logistics	Products delivery	Service providers visits	N/A	N/A	N/A
Technology	Magento	Custom devt / ride hailing	Amadeus	TBD	Magento-add on
Customer support	Logistics/ returns handling	Scheduling change	Flight change / inquiries	Money withdrawal	Cancellation
Revenue model	Item sold	Visit	Booking	Fee per bet and odds	Advertising/ subscription fee
SKUs/ products	• Electronics • Fashion	• Cleaning • Maintenance	• Airline • Accommodation	• Betting • Online gaming	• Restaurants • Beauty salon
Org. structure	Field sales / onboarding team	Field sales/ onboarding team	Loyalty	Loyalty	Merchant relations
Success factors	Strong logistics network, effective pricing strategies	High service quality assurance, cust. service	Aggregation capability, merchant relations	Strong UX/UI	Integration of merchant system, booking flexibility
Best-in-class	amazon	maidsapp	Expedia	bet365	OpenTable

Leading online marketplaces show by example how they started with a specific offering and diversified later

NON-EXHAUSTIVE

Player   **Platform launch**

amazon
E-Commerce — 13 years — Digital Content — 8 years — Home services / Food delivery

Alibaba.com
E-Commerce — 16 years — Digital Content

JUMIA
E-Commerce — 1 year — Food delivery / Travel

m-PESA
Mobile Money — 10 years — E-Commerce — SOKO BY SAFARICOM

SOUQ.com
E-Commerce — 11 years — Home services
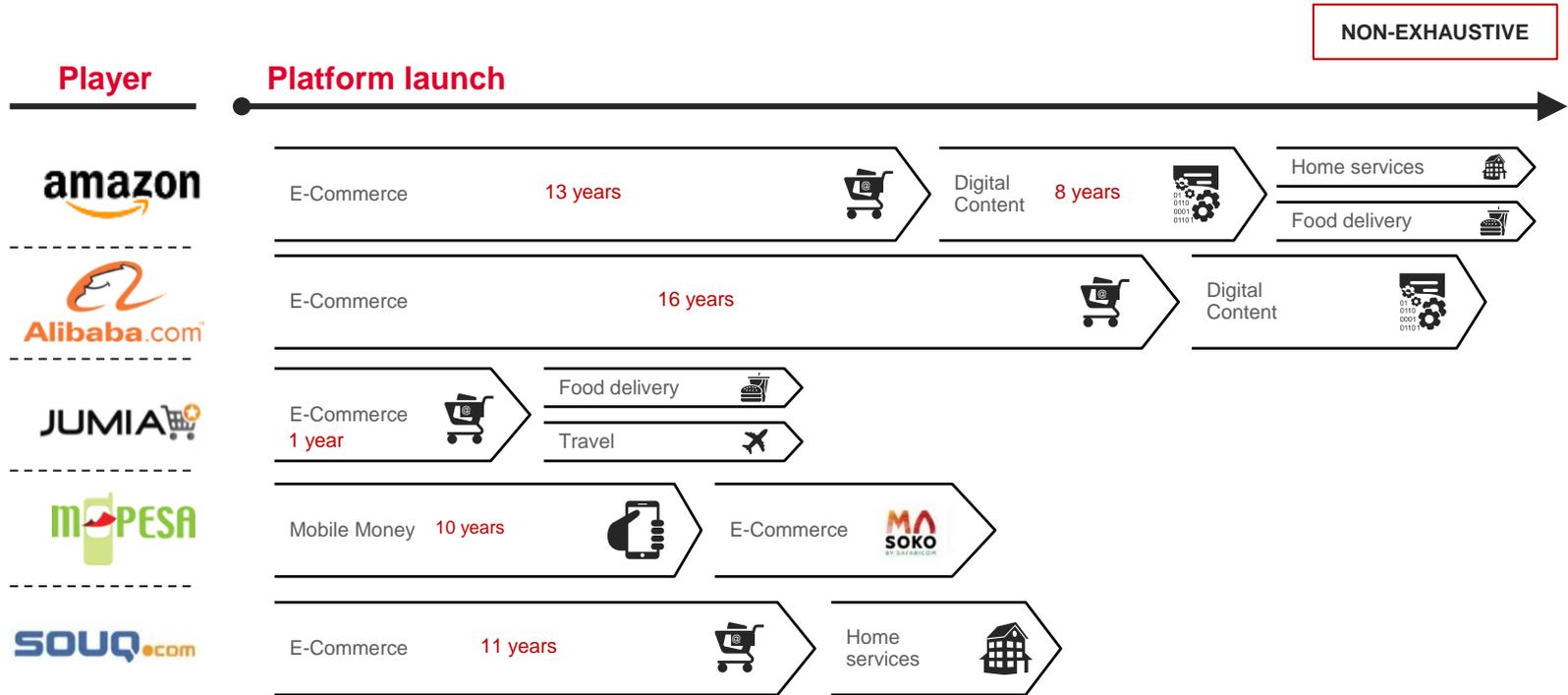
2. How do I offer it?

SELF DIAGNOSTIC section to support planning and test implementation readiness. **GO**

Several channels may be used to provide customers access to an online marketplace

Web

Mostly **commonly used** by **leading marketplaces** globally

App

Often the **counterpart** of a **good website**, also offered by many leading marketplaces

USSD

Limited use cases; however it is the **most widely adopted channel** for mobile money users

A marketplace with multiple products / business lines may be offered either through a 'super app' or a suite of apps

Super App

- Typical approach in SEA and china where platforms expand offering on the same app (e.g. Taobao, GoJek)
- **Main benefit:** High upselling potential and potential synergies
- **Risk:** Complicated UX and technical design and potentially heavy app

Suite of Apps
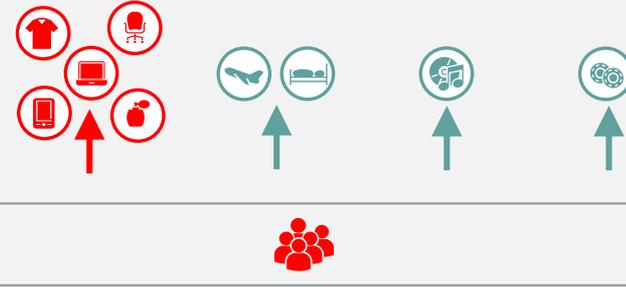
- Typical approach in western countries (e.g. Amazon and Amazon Prime Video, Uber and Uber eats)
- This is also the approach adopted by Jumia (Jumia, Jumia travel, Jumia realestate) (excluding/ Jumia one)
- **Main benefit:** Simple UX, lower brand risk from one product failure

While the concept of a 'super app' is appealing, it has been challenging to replicate outside Asia

Inside Asia

WeChat in China…

'WeChat': the Chinese super app they can't live without

WECHAT: THE FUTURE OF SUPER APPS

China's WeChat: The Power of the Super App

How WeChat became China's everyday mobile app

Tencent has frequently added innovations to WeChat, designed to drive growth and loyalty, the latest being mini programs

…and across Asia

Messaging **Search engine** **Ride-hailing**

Outside Asia

- **Users** tend to **seek for go-to apps**
  - Two different experiences require own platform
- User hesitation for an all-encompassing data collection platform
- Large technology requirements

- **Jumia launched all-in-one** lifestyle app
- However, this was **more a PR campaign** than a unique app experience
  - It is simply a web-browser that has been pre-loaded with bookmarks

Success   Failure

Source: Desk research, Roland Berger

3. What is my operational / org model?

Key roles span across **six broad departments** for marketplace – critical for launch and on-going operations
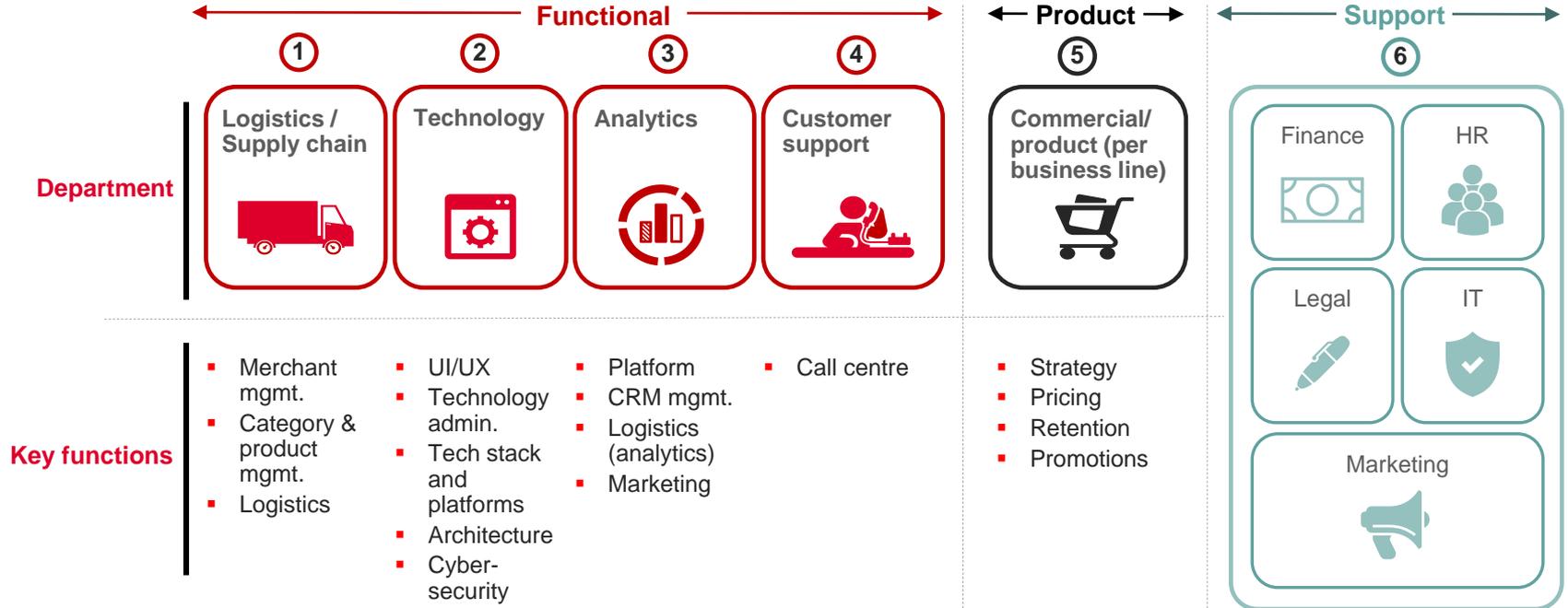
Functional ← → | **Product** ← → | **Support** ← →

| | ① | ② | ③ | ④ | ⑤ | ⑥ |

Department

Logistics / Supply chain	Technology	Analytics	Customer support	Commercial/ product (per business line)	Finance	HR
					Legal	IT
					Marketing	

Key functions

- Merchant mgmt.
- Category & product mgmt.
- Logistics

- UI/UX
- Technology admin.
- Tech stack and platforms
- Architecture
- Cyber-security

- Platform
- CRM mgmt.
- Logistics (analytics)
- Marketing

- Call centre

- Strategy
- Pricing
- Retention
- Promotions

Source: Roland Berger

3.1 Logistics

Your logistics strategy will be defined by the answers to three fundamental questions (and their sub-parts)

1 **HOW** will you manage your logistics?

- Process requirements
  - Delivery options
  - Service level requirements along value chain
- Technology requirements
  - Level of integration required
  - Tracking steps
- Customer experience reqts.
  - Customer touchpoints
  - Customer support
  - Packaging and branding

2 What is the **COST** of your logistics?

- Various decision parameters
  - Speed of delivery
  - Level of guarantee
  - Geographical presence
  - Provider tier

3 **WHO** will manage your logistics?

- Various options
  - Merchants
  - Third parties (hired or acquired)
  - Internal fleet

Source: Roland Berger

Managing logistics is not straightforward as cases and priorities vary by order; flexibility is key

NON-EXHAUSTIVE

Case	Types	Implication
Target customer	**New**	▪ Free shipping ▪ Fast delivery
	Price sensitive	▪ Low price ▪ Less emphasis on speed
	High value	▪ Higher price ▪ High reliability/ strong reputation
Merchant type	**Large business**	▪ Potential to consolidate orders at warehouse
	Small Business	▪ No existing logistics by merchant
	Individual	▪ No existing logistics by merchant
Order value	**Low**	▪ Low cost provider ▪ Fast delivery
	High	▪ Higher price ▪ High reliability/ strong reputation ▪ Fast delivery

Case	Types	Implication
Item type	**Basic**	▪ Strong reverse logistics (ease of return) ▪ Low cost
	Groceries	▪ Same-day delivery capability ▪ Special delivery conditions (e.g.temp-erature control) ▪ Low cost
	Furniture	▪ Large capacity ▪ Special delivery conditions (e.g. installation) ▪ Higher cost
Geography	**International merchant**	▪ International network ▪ Higher cost
	Local merchant	▪ Potential support from merchant logistics
	Rural customer	▪ Strong last-mile logistics
	International customer	▪ International network ▪ Higher cost

Source: Roland Berger

Target logistics process need to be defined by marketplace and negotiated with the logistics providers

NON-EXHAUSTIVE

Logistics process should be **defined by the marketplace** and not the logistics provider

✓ Service consistency

✓ Quality consistency

First mile

Merchant pickup / Customer return

A Pick up orders from merchant (e.g. for large merchants)

OR

B Merchants deliver to logistics warehouse (e.g. for small merchants and returns)

Product verification
Random sampling

High costs for low volume merchants
Low volume merchants to drop off product at warehouse

Waybill & pick up mgnt
For same day or next day pick-up waybill to be printed by logistics providers otherwise to be printed by merchant / returning customer

Logistics provider internal process

(ware-housing, international shipping and customs, fulfilment)

Last mile

Customer delivery / Merchant return

C Last mile to customer's address (e.g. for luxury items in Accra)

OR

D Last mile to pick up point (agent network) (e.g. low value items, unsuccessful deliveries)

Defining delivery address
Delivery address to be defined by geo-coordinates on a map or through technologies such as what3words

Low success rate
Focusing on smaller timeslots to ensure customer presence at delivery location

Safety and security
Ensuring full liability of the customers on what to provide

Smooth integration and strong tracking are two key technical considerations for efficient logistics

1 Order creation integration

- Embedded logistics business rules:
  - Enable and disable options for last mile for customers based on use case
  - Automatically specify first mile selected scenario
- Order is automatically communicated to all stakeholders with required information, including merchant and logistics provider

2 Order tracking

Stages shared with the customers

Additional stage shared with operations

Order process

- Order created
- Pick-up from merchant by logistics provider
- Dispatched for last mile delivery
- Delivered to warehouse
- Order received

3 Reporting and SLA tracking

- Reporting:
  - Operational reporting on overall performance of logistics from a merchant and logistics provider perspective
  - Notifications and alarms for any issues that require immediate attention
  - Embedded escalation process
- SLA and process adherence tracking flexible to the different agreements and scenarios

Source: Expert interviews, Roland Berger

Mismanagement of key customer interfaces with logistics process can have critical implications

	Elements	Implications

Touchpoints	Address confirmation
	
	Delivery scheduling
	
	Delivery tracking / status updates
		▪ Three options:
		  ‾ Logistics provider manages all touchpoints
		  ‾ Marketplace manages all touchpoints
		  ‾ Define strict standards for logistics provider to manage touchpoints
		▪ High level of integration and monitoring is required for third option

Support	Requested changes Delivery status request Complaints	▪ Call centre agents require access to all information relevant to order: ‾ Order details, address, delivery status, provider info etc. ▪ Specific training needs for logistics-related support
Branding	Packaging	▪ Decision to be made concerning own packaging Vs. that of logistics provider (fulfillment) ▪ Own packaging can be necessary once a certain scale is reached, however, at small scale it is high cost and difficult to manage

Source: Roland Berger

There is no 'one size fits all' model. The cost of the logistics model chosen can vary widely depending on several factors

- Low cost
- Fast delivery
- High guarantees

However, delivery and guarantees are the main factors driving cost

Delivery speed → Cost

Level of guarantee → Cost
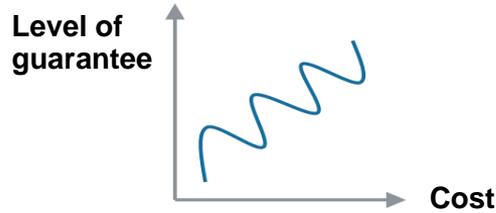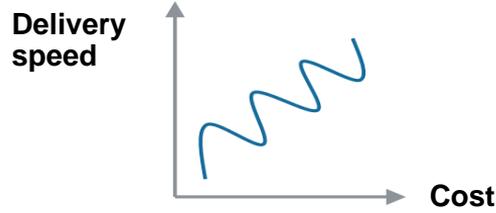
Other cost drivers

Geographical presence – Delivery cost per provider will change based on their presence in a certain geography

Provider tier – Providers' rates also depend on their "tier", as international providers such as DHL and UPS are considered premium brands

Source: Expert interviews, Roland Berger

There can be multiple ways to manage logistics for an online marketplace; TP led or an acquisition most feasible

PRELIMINARY

Merchants delivery

- Play the role of only a marketing and payment platform, with order fulfilment taken care of by the merchant
- **Benefit:**
  - Platform not bearing delivery risks (e.g. stolen items, delivery)
- **Risk:**
  - Brand at risk, dependent on merchant delivery quality
  - Reduced merchant value proposition
  - Limiting potential drivers

Third-party logistics (3PL)

- Fully outsource logistics (pickup, warehousing, fulfilment and delivery) to a logistics provider (e.g. DHL, Fedex)
- **Benefit:**
  - Flexibility to demand fluctuations
  - Lower cost risk
- **Risk:**
  - Defining the right partner and right contract terms is challenging
  - Product verification and fulfillment
  - Lack of control over customer experience

Acquiring a local delivery provider

- Acquire an existing local delivery provider to control the warehousing, fulfilment and last mile delivery, and create the needed interfaces
- **Benefit:**
  - Increased level of integration
  - Ease of integration
  - Control over customer experience
- **Risk:**
  - Defining the right player to acquire
  - High delivery risks (e.g. stolen items, delivery)
  - High investment required

Building own delivery fleet

- Building internally all the logistics capabilities and delivery fleet
- **Benefit:**
  - Control over customer experience
  - High-level of process integration
- **Risk:**
  - Low utilisation during low demand times
  - High investment required
  - Slower launch
  - High delivery risks (e.g. stolen items, delivery)

Source: Roland Berger
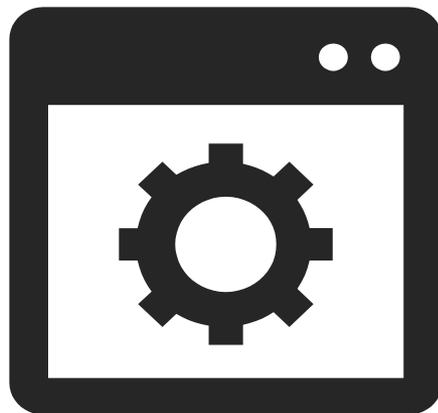
3.2 Technology

SELF DIAGNOSTIC section to support planning and test implementation readiness. **GO**

Marketplace engine connecting all required platforms is at the centre of the technology architecture

NON-EXHAUSTIVE

Product management

- Interface for merchants to upload products
- Product verification engine
- Automation of product upload business rules

Mobile Money platform

Customer interface

- App/Web
- USSD

Services add-ons

- Travel engine (e.g., Amadeus, Expedia, Booking.com)
- Restaurant booking engine (e.g. Magento add-ons, Open table)
- Home services platforms (Simplebook)

Marketplace engine

- Shopping cart
- Search engine
- Registration
- APIs

Order management system

- Track orders
- Communicate with customers
- Integrate with merchant
- Integrate with logistics provider

Source: Expert interviews, Roland Berger

Each business line requires significant customisation, in terms of speed and complexity

	Ecommerce	**Appt. & reservations**	**Travel booking**	**Content streaming**
Supported by Magento?	✔	✔	✘	✘
Example players	Magento, shopify plus, PrestaShop **OR** Custom-built	SimplyBook.me, 10to8, OpenTable **OR** Custom-built	aMADEUS Your technology partner, Travelport, Sabre	Custom built
Rationale	▪ Magento's core capabilities cover key features of ecommerce platform – Key advantage is speed to market ▪ Limitations exist, including: – High complexity in development – Significant latency, especially with increases in scale	▪ Magento extensions for appointments and reservations exist ▪ Performance of add-ons and standard platforms not proven at large scale • Use cases are predominantly for small to medium-sized businesses ▪ Typically, businesses planning to scale (e.g., Groupon)	▪ Magento is far from optimal platform for travel booking • No existing API plug-ins for flights/ travel agency data ▪ Existing travel platforms are well-developed and designed for large-scale searches	▪ While, relying on existing platforms is possible for parts of the technology requirements, the end-to-end journey requires a custom built platform ▪ Another option can be a white label partnership with existing providers (e.g. Netflix and Spotify)

For example, travel booking requires a different technical integration from other business lines

Limitations of ecommerce platform for travel bookings

- Shopping cart and checkout model is not ideal for travel bookings

- No existing API plug-ins for flights/ travel agency data

- No existing extension for multicasting search details to global distribution system (GDS)

- No existing extension for screen scraping

Selection of leading platforms

Travelport

amaDEUS
Your technology partner

Sabre

Features

Real-time inventory of **airlines uploaded** onto **system**

APIs to **accommodate travel plan flexibility**

Sales tracking (extension of stay, flight changes etc.)

Reserve user requests

Storing and **updating** of **huge amounts** of **data**

In addition, two options exist for travel booking – a metasearch engine or an online travel agent

Search 🔍	Results aggregation 📊	Sorting 🔽	Payment 👛

Metasearch engines

Customer is re-directed to booking site

KAYAK   skyscanner

- Travel search engines develop metasearch tools to compile results from various booking providers e.g. airlines, OTA[1]– No own repository / index is held
- Users cannot book directly via metasearch results page – once flight is chosen, user is redirected to source

Online travel agent

Covers full booking process

Expedia   make my trip

- Online booking agents integrate global distribution systems (GDS) like Amadeus, Sabre etc., to serve as intermediate to airlines
- Inventory from airlines is sold to GDS – Online booking agents effectively "hold inventory" of available flight tickets
- Through GDS, users can purchase tickets from multiple airlines directly from travel platform
- Additional costs & high level of development capability required. However, user has convenience of booking directly on travel platform

1) Online travel agent   Source: Expedia, Booking.com, Kayak, Roland Berger

Pros and cons of a ready-made platform Vs a custom-made platform – **Speed to market Vs Scalability**

Fully custom-made

High

Custom made using Magento framework

Scalability

Magento® Enterprise

shopify plus

opencart

Low

Low　　　　Speed to market　　　　High
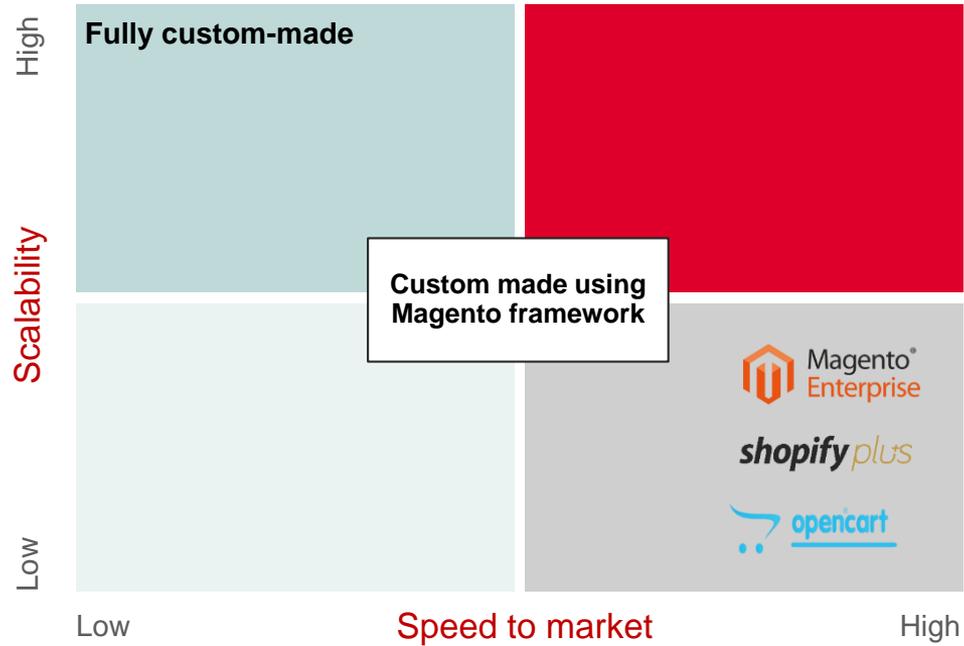
Key points

- Using ecommerce platforms such as **Magento** would support a fast launch

- Most leading players have moved to **fully customised platforms**, with significant advantages in:

  - Website/ app performance

  - Speed of future developments/ modifications
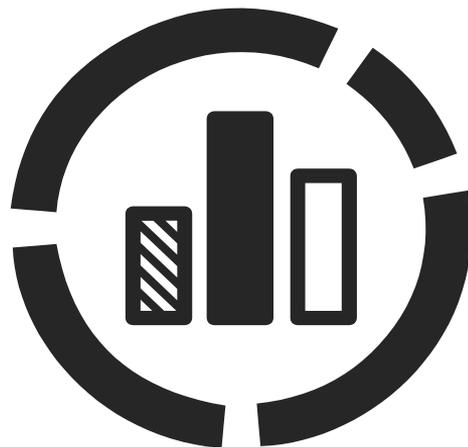
　Source: Expert interviews, Roland Berger

3.3 Analytics

Analytics and data are at the very heart of the online marketplace model

Characteristics of a marketplace

✓ Customer centric

✓ Agile

✓ Tech and data driven

✓ Disruptive operational model

✓ Continuous progress

Analytics is the main driver in supporting all the marketplace characteristics
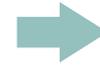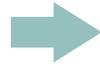
Examples

- Logistics analytics
- Customer behavior analytics
- Product analytics
- Call centre analytics
- Financial analytics

Source: Expert interviews, Roland Berger

Both Amazon and Flipkart demonstrate how ecommerce players can apply analytics to optimise operations

amazon

Anticipatory shipping model

- Patented model predicts products consumers are likely to purchase, and sends items to local distribution centre/warehouse

Personalised recommendation systems

- With comprehensive collaborative filtering engine, Amazon analyses purchase history, wish list, browsing behaviour etc. to create tailored recommendations

Price optimisation

- Prices are set according to user activity, competitors' pricing, order history, product availability etc. – Prices usually change on a 10 min. basis

Flipkart

Personalised recommendation systems

- Flipkart uses a collaborative and content-based filtering system to generate recommendations of users, based on an algorithm built on recommendation scoring

Fraud detection

- Validation of product ratings and customer accounts is done through machine learning, based on trends in reviews, online activity data etc.

Logistics

- Machine learning is used to identify and correct defective addresses
- Delivery data from individual routes, movement data from individual vehicles etc. is used to identify key latencies in last-mile

Key learnings

- ✓ All **analytics "touchpoints" should be identified** – Clearly defining **how and where analytics will be used** is a key part of ensuring data is converted to actionable insights

- ✓ **Internal infrastructure** should follow **agile model** – Analytics applications **and tools** should be **frequently reviewed, improved, and updated**

- ✓ **Data separation approach** is critical e.g. by customers, product, and merchants – This will form **key part of analytics strategy**

Internal data structure and process should support effective capturing, analysis, and reporting of data

Constant loop   **Constant loop**

CRM

Mobile app

Call centre

Website

Logistics system

Data collection

System must be able to handle different types of data ingest:
- Transactional (database reads/writes)
- Files (media files, log files)
- Stream (click-stream logs)

Data storage

Based on type of data captured, data is stored within:
- Database (transactional)
- Cloud storage (files)
- Stream storage (stream)

Data processing

Both processing frameworks need to be supported:

Batch processing
- Large amounts of raw data
- Separate programmes required for input, process, and output

Real-time processing
- For continual input, process, & output
- Data processed in short time period, in small amounts

Data cleaning and visualisation

Once processed, duplicates, incomplete data etc. are removed

Based on processing framework, data is analysed:

Batch processing
- Batch results help to create data sets for specific purpose, to be fed into self-serve UI

Real-time processing
- Real-time results are fed into algorithm for automated results

Self serve UI for operational and commercial teams

E.g. Flipkart created internal data structure to enable various teams to create own reporting format

Flipkart's data architecture
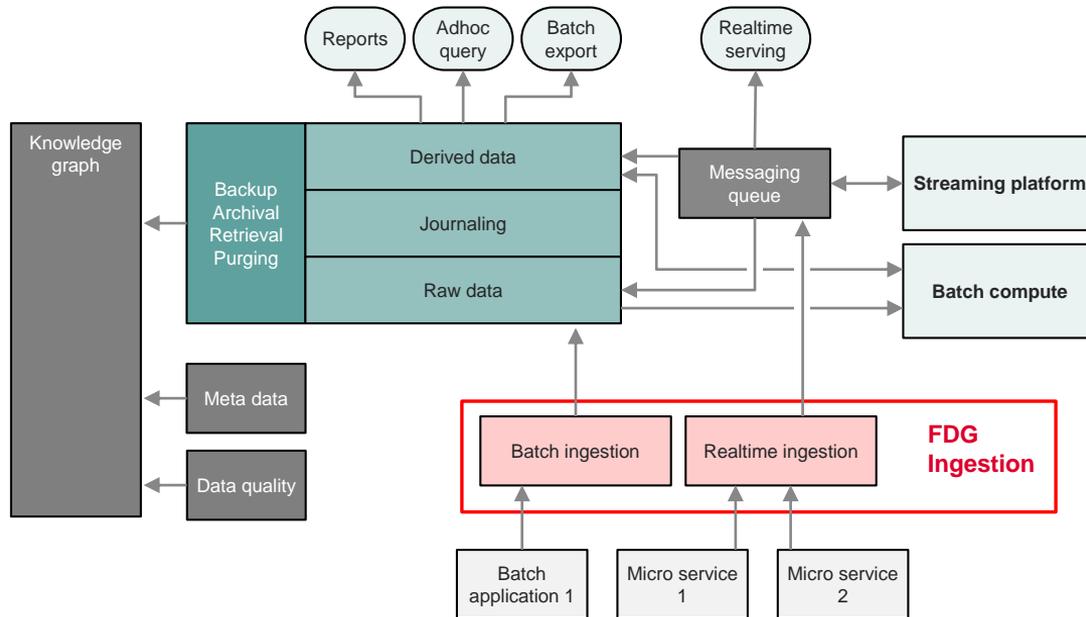
Reporting

The **architecture team** is **responsible** for **designing a data architecture** that focuses on:

- **Self-serve UI**: Each team within the business will have their own interface into which data is fed in raw form, and they can do their own data crunching on the UI itself based on what is required

- **Real-time processing capability**: Capability to process data real-time with built-in algorithms for detecting anomalies

3.4 Other departments

Other key departments include supply chain, customer support and commercial / product

	Function	Role	Example Reporting
Supply chain	Merchant management	▪ Overseeing merchant selection, on-boarding and on-going relationship management	▪ Merchant performance evaluations ▪ Incident reports
	Category and product mgmt.	▪ Assessing performance of current offering; Aligning product offering to market demand	▪ Customer feedback reports ▪ CRM analysis reports ▪ Market & competitive analyses ▪ Other analytical reports
Customer support	Call centre	▪ Serving as main point of contact for customer complaints, inquiries & other requirements	▪ Customer account details ▪ Order specifications ▪ Delivery tracking ▪ Details on logistics providers

Source: Expert interviews, Roland Berger

Other departments (continued)

	Function	Role	Example Reporting
Commercial/ product	Strategy	▪ Identifying target customers and key selling points; Developing marketing strategy & roadmap	▪ CRM analysis reports ▪ Market & competitive analyses ▪ Marketing analysis reports
	Pricing	▪ Setting prices based on thorough assessment of target customer, competition & other market factors	▪ Target customer detailing ▪ Price sensitivity reports ▪ Market & competitive analyses
	Promotions	▪ Developing and managing promotional campaigns and other initiatives	▪ CRM analysis reports ▪ Marketing analysis reports
	Retention	▪ Defining retention strategy; Managing customer loyalty programmes	▪ Retention-specific statistical reports ▪ CRM analysis reports ▪ Marketing analysis reports

Source: Expert interviews, Roland Berger

4. Merchant-centric services

Any marketplace is only as successful as the number of merchants willing to sell on it

① What do I offer?

- Market dynamics
- Target customers
- Merchants selection

② How do I offer it?

- Commercial model
- APPS — UX/UI and offering mode
- APPS — Value proposition

③ What is my operational / org model?

- Supply chain (incl. logistics)
- Technology
- Analytics
- Customer support
- Commercial / product (per business line)
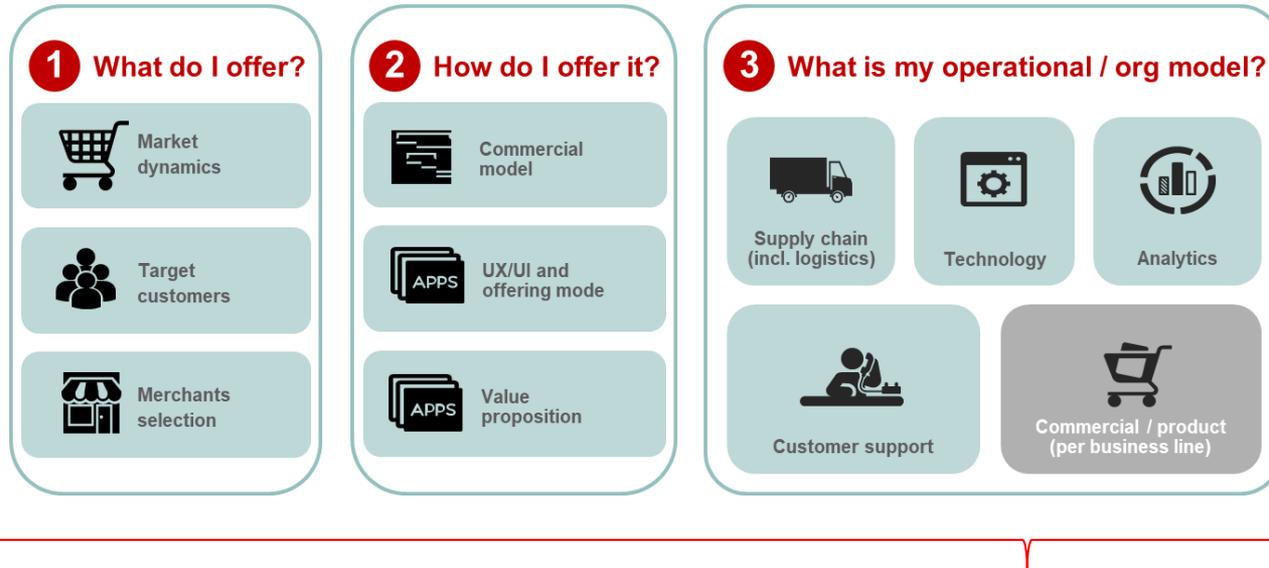
Mobile money providers are **uniquely positioned** to **leverage their assets** along the **entire launch and operational journey** of an online marketplace, particularly by offering a compelling **bundling of services to merchants** to attract them to marketplace

Bundling the offering of telco, mobile money and marketplace can create a **compelling merchant proposition**

Merchant Value Proposition

Mobile money

- Payment & settlement
- Credit services
- Escrow services
- Savings services
- Insurance services
- Systems, accounts and taxation services

Marketplace

- Simple UI/UX
- Inventory management
- Advertising
- Logistics and returns facility
- Promotions tools
- Customer behavior

Telco

- Data services
- Voice plans
- Devices plans
- Data centres
- Geolocation services
- Customer base (marketing access)

Source: GSMA, expert interviews, Roland Berger

For example, offering consumer credit on the marketplace would aid merchants and increase revenue by 15%

Offering description

- Marketplace extends line of credit for consumers, **to pay back purchase value over time**
- Customer is asked series of questions prior to selecting credit option – **Risk assessment and approval is responsibility of marketplace**
- **Merchant receives 100% of purchase price** within few days of purchase
- Credit relationship is between customer & marketplace – Marketplace bears liability

Key benefits

Increase order value

- Customers are able to make larger purchases, especially during e.g. promotional campaigns

Average order value increase by 15%

Increase sales

- Purchasing power is a key inhibitor to online purchasing – Credit option can be a key differentiator to boost sales

17% increase in incremental sales

Example players

Financial providers offering consumer credit

Klarna

PayPal CREDIT

afterpay

Ecommerce players with in-house consumer credit option (No third-party lender)

amazon

Flipkart

Alibaba Group

Providing **escrow service** can also significantly boost merchant and consumer trust, particularly in emerging markets

Escrow process

| Buyer completes purchase at check-out | → | Marketplace verifies funds availability & reserves to escrow | → | Merchant confirms order and initiates delivery | → | Merchant confirms delivery or pick-up | → | Buyer has specific time frame to raise complaint | → | Marketplace disburses funds to merchant |

Key advantages

✓ **Boosting consumer & merchant trust**

- Availability of customer funds is verified by marketplace, providing merchants with extra layer of security
- Customers have chance to approve product before funds are released
- Both merchant and customer are protected from fraud

✓ **Alternative to cash on delivery**

- Predominance of cash on delivery is largely linked to lack of trust
- COD payment method is risky and costly for ecommerce providers
- Escrow service provides alternative – As with COD, no payment is made until customer approves item

Adoption of escrow

|	Third party service	In-house service
Paytm mall	✗	✓
amazon	✓	✗
Alibaba Group	✓	✓
Flipkart	✗	✗

Source: GSMA, expert interviews, Roland Berger

5. Challenges and risks

Cultural change, recruitment planning and partners eco-system will still be key remaining challenges

Cultural change

- The processes and procedures of a telco cannot be applied in ecommerce
- Due to the pace of change in the ecommerce business, a high level of agility and flexibility is required

Recruitment planning

- Due to the large variation in demand in ecommerce, acquiring a team to serve peak and off-peak times is a challenge
- In addition, due to the specific skills needed acquiring the right personnel is key to success

Key challenges

Partners eco-system

- Partners in areas such as logistics play a key role in guaranteeing quality of service
- Each partner will be specialised in a region/market creating a requirement for an eco-system

Source: Expert interviews, Roland Berger

Other elements must also be well-thought through for the success of an online marketplace

Key challenges

- **Managing pricing / discounts:**
  - Discounts are a major part of the proposition of an online marketplace
  - Agreeing on the discount structure and division of the cost between merchants and marketplace is key
- **Legal scenarios / liability / dispute management**
  - With the wide stakeholder ecosystem, clear legal documents to manage the relationship and split liabilities are required (see appendix for details)
- **Detailed business case**
  - To set the commission and discounts plan a detailed business case driven by the gross, revenue is required (see appendix for details)
- **Call centre set-up**
  - Mobile money providers have an existing all centre to support on payment requests
  - An e-commerce platform relies heavily on customer support and setting up the call centre should be well though through (see appendix for details)

Source: GSMA, expert interviews, Roland Berger

Despite these challenge and complexities, the prize offered by an online marketplace is worth pursuing

Conclusion

- Operators well poised to reap the rewards of a Payments as a Platform (PaaP) approach, particularly by setting up an online marketplace to:

  - Improve proposition to customers and merchants

  - Improve competitive positioning with potential upcoming competition from platforms such as Alipay and Paytm

- Launching a marketplace has multiple complexities and requirements including complicated logistics and heavy technology and analytics requirements

- However, mobile money providers are uniquely positioned to leverage their assets (e.g. agent network and existing customer base) to overcome the complexities

6. Appendix
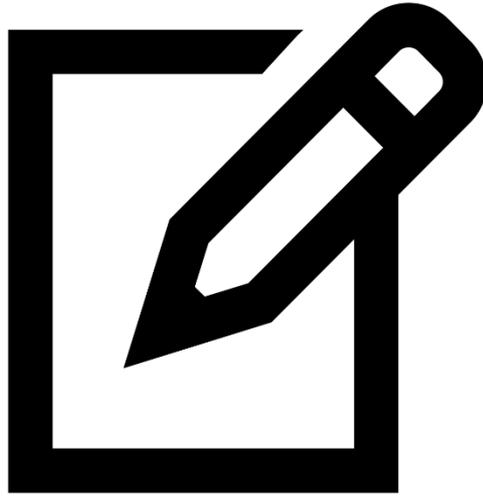
6.1 Self-diagnostic exercises

1. How do I select the right business line(s) to focus on for my online marketplace?

Target customers

- How do you **segment** your **target customers**?
- What **income brackets** are you targeting?
- What key **demographic** is your focus area?
- Are they mainly **smartphone** users?
- What are their **spending** habits? (in mobile money and telco)

Market growth

- What is the current ecommerce **market size** by category?
- How is the **market forecast** to **grow** per category?

Competition

- Who are your **key competitors** in your current and future offering?
- How do you **create** a **USP**?

How do I select business lines?

BACK

2. What channel(s) should I choose to provide customers access to my online marketplace?

What do customers want?

- What is **internet and smartphone penetration** amongst my target customers?
- What **mobile money channels** do they **use today**? and will they likely **use in the future**?

What is the competition doing?

- What **channels do the competitors provide**?
- What channels have the **highest uptake**?
- What are key **success stories** amongst competitors **to be leveraged**?

What is technically feasible?

- What is **implementable without affecting the customer experience** and the platform's stability?
- What are the **key risks** and **challenges** of implementation?

Channels to be deployed by priority

'Super app' Vs 'suite of apps' decision

3. What logistics model (in terms of ownership, cost, process flow) has best fit with my online marketplace?

Who will operate my logistics?

- Should I **build my own logistics arm** with dedicated fleet and warehouses?
- Do **I create a partnership ecosystem or** do I **launch with one partner**?
- Shall I **partner with regional or international logistics providers** for the marketplace?

How do I manage the logistics operations?

- How will I **optimise my first and last mile solution** (e.g., do I leverage pick up points)?
- How will I **structure my technology**?
- What **customer touchpoints should I keep**? Or shall I **find additional ones** to stay relevant?
- What is my **coverage strategy**? i.e. key regions to prioritise, rural vs. cities

What is my cost model?

- Who will **cover my logistics cost** (e.g. merchant or customer)?
- Is **logistics cost integrated to product price** or **separate line item** at checkout?
- What are **best practices** from **competition** towards **cost optimisation**?

4. What kind of technical platform is right for my online marketplace?

What will my architecture look like?

- What **platforms** are **required**?
- Will the **marketplace platform** be the **centre** of my **architecture**?

How to integrate with my existing mobile money platform?

- How do I **leverage** the **existing capabilities** (e.g. analytics tools, CRM)
- How to ensure that my **databases** are **aligned**?

Technology
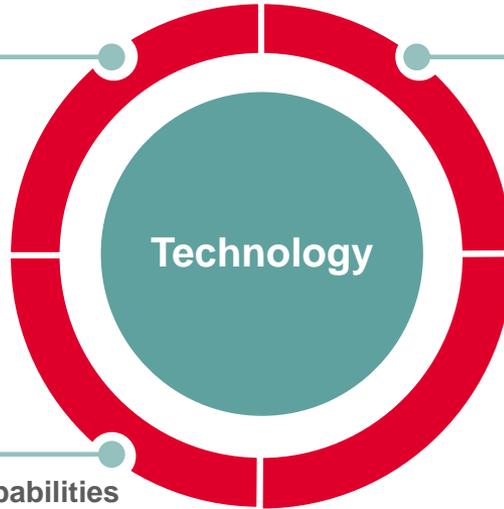
How to select the platform?

- Do I have any **preferred vendors**?
- What are **most critical criteria** when **selecting platform vendor**?
- Do I **prioritise scalability** or **time to market**?
- Do I have the **capabilities to build** a **custom-made platform**?

BACK

5. Do I have the right analytics team, processes and infrastructure in place to support my online marketplace?

Do I have the right analytics capabilities?

1 Are key enablers currently in place?

Team

- Have I **hired** the **right experts** that understand data architecture and e-commerce requirements?
- Do I have a **dedicated team for analytics** to manage the **day-to-day** and **ad-hoc** upgrading requests?

Tools

- Did I provide my team with most appropriate **tools**?
- Did I **ensure specifications** are as **flexible** as possible?
- Did I **align requirements** with **logistics** and **product teams** to ensure they are served as needed?

2 ... and are they being used in the right way?

- Do my financial and operational **KPIs** currently reflect key **components** of my business i.e. :
    - Logistics of my online marketplace e.g. stock, delivery time
    - Product e.g. features, time-to-market
    - User experience e.g. number of touchpoints, satisfaction rate, conversion rate
- Are my **KPIs aligned** with the company's **overall strategy**?
- Are my existing **teams** using their analytics capabilities towards a pre-established **implementation plan**?

BACK

6. Am I ready for all the other relevant topics on the market place?

How can I build the right business case?
- Do I have **estimated revenue**? (Forecast footfall, sales, revenue)
- Do I have **estimated costs**? (Consider merchant acquisition, customer acquisition, marketing, logistics, refunds, HR, IT)
- What is my **output** in terms of **gross margin, EBITDA, cash flow**?

What are the legal frameworks I will require to launch a marketplace? How will I limit liability?
- Do I have **legal contracts** with merchants, customers, vendors and partners covered?
- What **measures** am I taking to **limit liability** and **minimise** future **disputes**?

How do I setup my customer support team?
- How do I **leverage my existing call centre**?
- What **additional systems** do I need to provide my customer support agents?
- What **training** will they need?

BACK
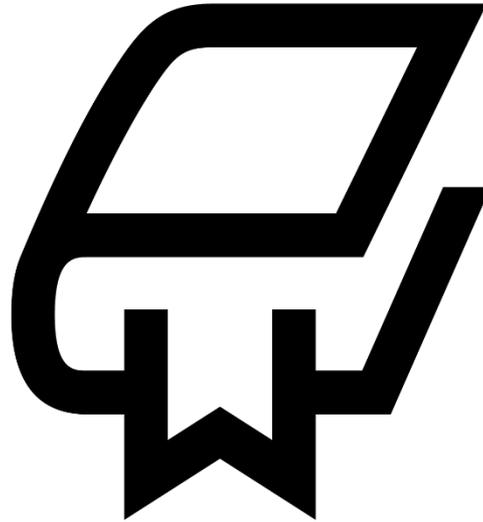
6.2 Department descriptions

Please contact GSMA for detailed departmental profiles and responsibilities