

Basics of Business Model, Emerging Fintech & Case Insights on Gojek Business Model

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ABSTRACT: *AIM: The paper attempts to assess the fundamentals of Business Model and its classification. Also it explores the basics of Financial Innovation, emerging Banking Technologies and enhance rich insights from the Case of Innovative GOJEK Business Model. METHODOLOGY: Qualitative approach is utilized to understand the fundamentals of Business Model from Secondary sources focused on Literature review. Also to explore the various benchmark aspects of Business Model, Innovation, Technology adoption the paper draws secondary data from the various related journals, conference proceedings, news bulletins and similar forums. The various enabling Banking technologies of new age business models are also identified from secondary sources especially technology based journals, Banking Forums and related sources.*

MAJOR FINDINGS: *A BM is comprised of two fundamental elements namely the Value Proposition (“What is Offered and to Whom”) and the Operation Model (“How do we generate Profit by delivering the Offering”). The Hype Cycle and related discussion on Business Processes explains in depth the various aspects of technology adoption in BMs. In the context of discussion on Business Modelling, Financial innovation can be categorized based on innovations in product process and risk-shifting. Hybrid Cloud, API Platforms, Robotic Process Automation (RPA), Blockchain, Instant Payments, Prescriptive Security, Artificial Intelligence (AI), Augmented and Virtual Reality, Smart Machines and Quantum Computing are some of the latest Fintech to mention in the context of Banking and Financial Services Industry. The GOJEK Business Model is explored to comprehend the delicate aspects of Business Model Innovation and understand the Grass roots strategic approach adopted by the model.*

KEYWORDS: *Business Model (BM), Innovation, Technology, Fintech, GOJEK.*

I. INTRODUCTION

With the growing Customer Demands, Competition Pressures, Macro Level, advancements in technology, there are new business models evolving every day and with the startup culture catching up in most of the developing nations too, Business Modelling has undergone revolutionary trends.

Despite generally agreed version of definition of Business Model, the various literature indicate the definition in terms of an organization’s “the market segment, value proposition, value chain needed in fulfilling the proposition, the mechanism of value capture and the architecture that binds all these elements”. (Saebi et al., 2017).

The necessity to adapt to new market demands forces organizations of all sizes starting from the small scale to Large Corporations to continuously innovate their revenue generating mechanism, by way of Product / Service Innovations, Better Strategies and Innovative Business Models. In this context the researcher attempts to assess the fundamentals of Business Modelling, explore specific Benchmark / Innovative Business Models and identify some of the emerging technologies that impacts the Banking Industry.

II. OBJECTIVES

- To assess the fundamentals of Business Model and its classification.
- To explore the basics of Financial Innovation and emerging Banking Technologies.
- To explore the Benchmark Innovative Business Model of GOJEK.

III. RESEARCH APPROACH

In this research study, a qualitative approach is utilized to understand the fundamentals of Business Model from review of Literature. Also to explore the various benchmark aspects of Business Model, Innovation, Technology adoption the paper draws secondary data from the various related journals, conference proceedings, news bulletins and similar forums. The various enabling Banking technologies of new age business models are also identified from secondary sources especially technology based journals, Banking Forums and related sources.

According to van de Ven and Huber, (1990), Conceptual and Empirical studies of innovative Business Models are referred to understand the construct of BM. The paper adopts a process methodology as it attempts to understand the phenomenon of unfolding of new ways of Business, through interlinked choices, events and activities. This approach is totally different from variance analysis research (Langley et al., 2013), where causality and relationship aspects between dependent and independent variables are the focal areas.

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IV. RESULT & DISCUSSION

4.1 Business Model Definitions

The various Business Model Definitions are depicted in **Table 1** below, which reflect different viewpoints at various time frames.

S.No.	BM definition	Literature Source
1	Method by which a firm shapes and uses its resources and offer competitively better value, make better profits by way of sustainable competitive advantage, and strive to achieve a better in the longer horizon	Afuah and Tucci, (2001)
2	Logic of creating, delivering and capturing values and transform cash inflows into profits.	Osterwalder&Pigneur, (2010); Teece, (2010)
4	Business Model is the design of organizational structures (with 3 dimensions including resource structure, transactive structure, and value structure) to seize a commercial opportunity	George & Bock, (2011)
5	Has a different view point from Organizational Perspective of value creation and delivery, linking of factors and product markets, activity systems, etc.	Zott and Amit, (2013)
6	The definition focuses on key decisions that impact governance of an Organization in generating revenue, cost cutting and management, and risk handling	Girotra and Netessine, (2014)

On a Literature based analysis of the various definitions and conceptual notions proposed by the various researchers, it can be realized as the view point of Business models gradually changing its course from Activity / Customer Oriented Theme (Osterwalder et al.2005), followed by

Organization (Resource, Innovation) Theme (George and Bock, et.al.) and finally ending in the Strategy & Technology Oriented Theme (Zott et al., 2011).

4.2 Business Model Frameworks and Elements

Some of the critical Business Model Frameworks are revisited for better clarity on the elements of the various Business Model Frameworks.

Business Model Canvas—According to Osterwalder&Pigneur, (2010), This widely used framework is seen as a cohesive approach to describe, visualize and assess the changing ways of business models

Four-Box Business Model—It revolves around in depth Operational aspects (Rules of Business, Behavioral expectations, success parameters); Financial milestones (Target Unit Margin, Resource Velocity). (Johnson, 2010).

E-business Model Schematics – This model is e-business oriented and provides elements for describing information flows, IT Infrastructure and electronic relationships(Weill and Vitale, 2001)

Technology-market mediation Model –The framework attempts to balance (Chesbrough and Rosenbloom, 2002) between technology and economic value creation.

Entrepreneur’s business model—Focuses on The Entrepreneur’s Personal Factors (Time, Ambition and Scope) and categorizes accordingly the various ventures as Speculative, Subsistence, Income and Growth Models (Morris, Schindehutte, & Allen,2005).

4.3 Business Model Classifications

The major approaches of business model types discussed in the study, stem from that of Osterwalder and Pigneur ontology, and selected e business typologies from Zott et al. (2010).

4.3.1 OsterwalderandPigneur Ontology

Osterwalder and Pigneur, (2010), identify five different categories based on the BM patterns which explains the similarities of the business models, especially in their behavior, characteristics and building blocks. The various classification according to Osterwalder and Pigneur are described in **Table 2**:

Table 2 – Business Model Classification (Source: Osterwalder and Pigneur, 2010)

BM Category	Description	Example
Unbundling	Focuses on preventing bitter Tradeoffs and conflicts by floating separate branches instead of different businesses within a single umbrella	Telecommunication Companies
The Long Tail	Such Models ensure selling small amount of niche product in each segment, but hosts many varieties of niche products catering to different segments as opposed to focusing on best segments only	Online self-publishing Companies
Multi-sided platforms	Focuses on creating a platform for facilitating interactions by bringing in different customer groups	Google
Freemium	A Premium version of the product enables and finances to benefit another customer segment in similar product category with benefits such as free-of-charge offer	Online Music, Video Streaming Companies
Open	Focuses on Collaboration activitiesin the form of utilizing idle assets/ideas of the firm with external partners namely categorized as inside-out (within the firm) and outside in (exploiting ideas from the outside)	P & G



4.3.2 Zott et al. (2010) / Timmers (1998) typology

Based upon the evolution of E-Commerce era, Zott et al. (2010) identified multiple business models as e-Shops (Web marketing and promotion with payment features), e-Procurement (focuses on electronic tendering and procurement), e-Malls (common brand umbrella e-shops), e-Auctions (e bidding), Online communities (enables customer loyalty / feedback), Collaboration platforms (collaboration between enterprises is enabled by specific online tools), Third-party marketplaces (enables marketing of 3rd product catalogues), Value chain integrators (exploits information flow by integration of value chain), Value chain service providers (Focuses on aspecific function of the value chain), Information brokerage, Trust and other third party services (E.g.; Verisign)

4.4 Business Model Innovation

According to IBM (2009), there are 3 main categories of Innovation in Business Models focused on Industry(Value Chain Innovation in Industry), Revenue Generation (attempts innovation in product, service or value) and Enterprise Model Innovation (Change networks, partners and alliances).

The various BMI frameworks mentioned in the section seems to have a lot of differences, and in the process of identifying a specific theme in the evolution of BMI literature, we can see the thematic area gradually expanding from a micro level perspective (Knowledge Management / Internal analysis), to Macro perspective of External analysis, Industry Assessment, Innovation orientation (Value Chain, Pricing, Product / Service, Partners), Networking and Technology.

According to Boston Consulting Group (BCG, 2009), a **BM** consists of two basic aspects namely the **Value Proposition** and the **Operation Model**. In the case of Value Proposition, it deals with “Firm’s Offering and Target Segment” and consists of three dimensions: Target Segment (Customers & Needs), Product / Service Proposition (To Satisfy Customer Demand) and Revenue Model (Income from the Offering). The Operating Model deals with “How do we Profitably deliver the Offering” and consists of three dimensions: Value Chain (How to Configure to meet Customer Demand – In-house Vs Outsourcing), Cost Model (Configuring Assets & Costs profitably) and Organization (Human Resource Development and Organization to achieve Competitive Advantage).

Innovation can be considered as a subset of BMI and in general is narrow in scope as compared to BMI, since Innovation restricts itself to either Product, Service or Technology domains. In this context of discussion, it is inferred that Innovation develops into BMI when 2 or more elements of a Business Model are reinvented to provide Value in a New Way and higher the Multidimensional innovation, imitation of Business Models also gets tougher.

4.5 Business Process Adoption of Technologies & Applications

Business process management (BPM), lies at the intersection of IT and Business, and enables firms to manage digital innovations and transformations. Recently, BPM is a success story in handling both continuous and

radical improvements in many business domains and verticals. Despite the positive impact of changing technology and e-commerce landscape, it also poses specific challenges in the context of BPM. With cutting edge tools like IoT, Big Data Analytics and Social Media that leverage BPM, the IT consultancy Gartner (Gartner, 2018) formulated the Hype Cycle to explain the maturity and adoption of various applications and technologies. (Refer **Figure 1**).

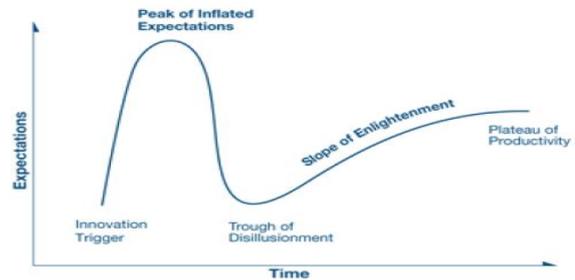


Figure 1 – (Source: Gartner, retrieved 31 Dec 2018, www.gartner.com/technology/research/methodologies/hype-cycle.jsp)

The various stages of the Hype Cycle are discussed in forthcoming section, for better understanding in the context of Business Model Innovation and impact of Technology on Enterprises. (Refer **Table 3**)

Table 3 – Hype Cycle Stages

Stage	Details
Innovation trigger	Kick off of a Potential Technology backed up by publicity of conceptual proof, and yet to evolve a tangible product
Peak of inflated expectations	Publicity Leads to many success and failures leading to activity or inactivity by firms
Trough of disillusionment	Technology takes off or fails and investments sustain only if product improvements are satisfactory to early adopters
Slope of enlightenment	Product Improvements and Sustainable technology leads second and third generation products; More enterprise funding happens cautiously
Plateau of productivity	Payoff from technology becomes stable and brings in mainstream players in to the business. Clear expectations and criteria for assessing technology providers evolves and stabilizes.

4.6 Changing Trends in Financial Innovation

From the various applied definitions and in narrow sense, Financial Innovations pertains to Product based Innovations. (Al-Kaber, 2010, p.135-136). Llewellyn (2009), categorizes conventionally Financial Innovation to be based upon Product Innovation (in terms of techniques, contracts, financial instruments and markets), Process Innovation (in aspects of improvements in transaction payments, securities distribution, assets valuation) and risk-shifting innovations (introducing different combination of instruments with different risk spreads).



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The Bank for International Settlements has categorized financial innovations into 5 groups namely, credit-risk transferring, price-risk transferring, liquidity-generating, equity-generating instruments and credit-generating instruments (Fabozzi and Modigliani, 2003). For better understanding of this classification it can be re described as, risk management function (transferring risk between system participants), pricing function (improved valuation of assets, adopting risk pricing), payment function (enhance liquidity), financing function (increasing the availability to equity or debt capital) and investment function (provide more windows of investment opportunities) respectively.

4.7 Emerging Fintech

Fintech is understood as “financial innovation enabled by technology that impacts in better processes, innovative business models, products and applications with a significant impact on financial institutions, services and Trading Platforms (Financial Stability Board, 2017). According to The Financial Brand (2016), the 10 Technologies That Will Disrupt Financial Services in The Next 5 Years includes Blockchain (for efficient KYC, Loan processing, payments, fraud reduction, inter-bank transfers), Quantum Computing, Artificial Intelligence (Handle structured / unstructured data using cloud technologies and smart applications for efficient product delivery, back office operations, customer experience, risk management, compliance and marketing), Hybrid Cloud (address efficient Governance, data security, and compliance), API Platforms (enables more customer interface), Smart Machines, Instant Payments (enables e-Commerce and m-Commerce), Prescriptive Security (enables to detect potential threats

using advanced analytics, real-time monitoring), Robotic Process Automation – RPA (simplifies compliance by process automation, generate audit reports, capture detailed logs, eliminate human errors), Augmented and Virtual Reality (enables customer autonomy, home banking).

The Basel Committee on Banking Supervision (BCBS), used a categorization of fintech innovations (BIS, 2018). **Figure 2** depicts three product sectors namely, 1) Deposit, Creditand Capital Raising Sector, 2) Clearing and Settlement, Payments /sector, and 3) Investments.

According to Global Finance (Gfmag, 2019), the World's Best Banks for New Financial Technology in 2018, the banks mentioned namely, VTB Capital, Merrill Lynch, CCB International, BBVA, BNP Paribas, GIB Capital, Bank of America and Rand Merchant Bank reserved their spot at the forefront of financial innovation, leveraging AI, Blockchain, Data analytics and the Cloud to change the face of investment banking. Lee, Yen and Hurlburt (2018) have specifically identified the Financial Technologies and Applications that are utilized by startups and have a substantial influence on Business Model Innovations and Finance Sector which includes, Blockchain, Bitcoin, Cryptocurrency, Ethereum (form of blockchain supporting decentralized applications), Initial coin offering (selling startup cryptocurrencies), RegTech (reorganize financial compliance), Disruptive innovation, Smart contracts (Automated contract execution tools), Financial inclusion (Application of Fintech solutions for better Reachability), Open banking, InsurTech, Robo-advisorsand Unbanked/underbankedfocus.

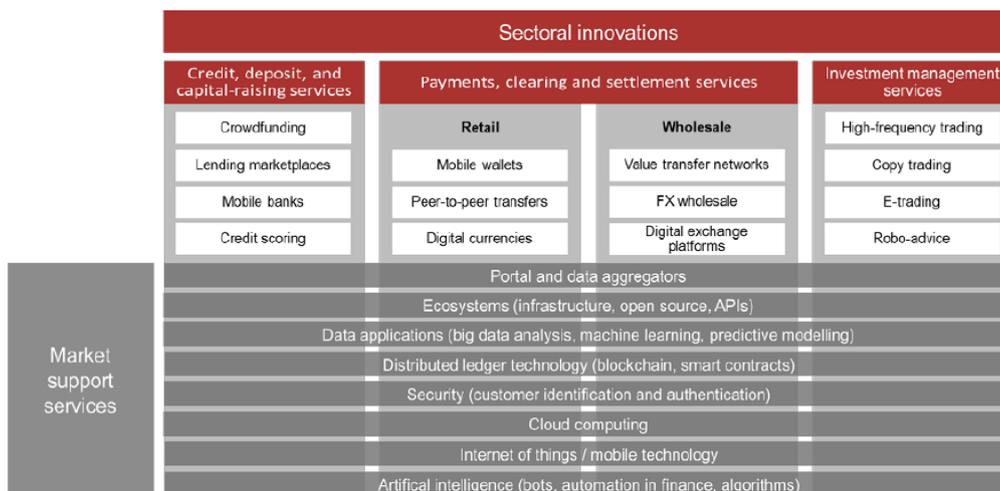


Figure 2 - Sectors of innovative services (Source: BIS, 2018)

4.8 Benchmark Innovative Business Model CASE of GOJEK

Founded in 2010, the GO-JEK Mobile Application has been delivering a variety of on-demand services that includes Transportation, Mobile payments, Logistics, Food Delivery and other services. GO-JEK has envisioned itself as an on-demand technology company with a public mission to improve the livelihoods of Indonesia’s Informal Sector. GO-JEK champions 3 essential values: innovation, speed and social impact. Specifically, from the GO-JEK Business Model

we understand the GO-JEK values each of its stakeholders, as we can infer that even the GO-JEK drivers are treated as partners, and the company as a policy offers them with financial services and insurance, health and accident cover, etc. The various product lines of GO-JEK includes,

Category 1 - GO-JEK - GO-RIDE (Go anywhere easily by 2 wheeler), GO-CAR (easier and more comfortable ride for you and your co-travelers), GO-FOOD



(Ordering and Delivery of Food), GO-SEND (Parcel and Courier service), GO-BOX (convenient way to order pickup trucks, single-axle box trucks and single-axle trucks), GO-TIX (new features make it more convenient for you to buy tickets), GO-MED (connect users with over 1,000 pharmacies), GO-DEALS (provides various best promotions), GO-FOOD Festival (experience eating preferred culinary & thrilling activities)

Category 2 - GO-PAY - GO-PAY (convenience transaction), GO-POINTS (Loyalty & Rewards Program for utilizing GO-PAY transactions) GO-PULSA (top up your cellphone and data allowance), GO-BILLS (Utility Payments)

Category 3 - GO-LIFE - GO-MASSAGE (order massage within your reach), GO-CLEAN (cleaning service), GO-GLAM (Stylist services), GO-AUTO (Automobile care, maintenance and emergency repair work for your vehicle). (Source: Gojek, 2019).

4.8.1 Business Model Innovation, Strategy & Expansion of GO-JEK

According to INSEAD (2018), the Business Gap was identified and inspired by the highly populated, congested lanes and traffic filled city of Jakarta, The Capital of Indonesia and demand for fast and efficient transport during peak traffic / office hours. Despite the efficient public transport system of Indonesian cities, every street had the conventional bike taxi drivers called Ojeks with whom customers were facing issues with price negotiations and timing issues of transport. Go-Jek started its pilot operations in 2010 as a call centre facilitating riders to order an ojek by phone. In 2014, encouraged by the success of ride-sharing platforms like Uber, Makarim, GO-JEK CEO launched Go-Jek as a smartphone app with multiple avenues / products of GO-JEK, GO-PAY and GO-LIFE. The multiple service options in GO-JEK platform ensures the drivers are busy all day generate sufficient network effects to achieve scale of economy to meet out the costs and enable profits for all

stakeholders in the business. In a span of fourteen months the application logged 100 million transactions and became the most downloaded app in the mid of 2015. Additional services were introduced for Grocery Delivery, Housekeeping / cleaning, Massage booking and Spa treatments. With such a huge Indonesian population lacking financial access to basic banking services, GO-JEK expanded into multiple Financial Services and payment gateways.

GO-JEK recognized two important strategic factors. The first one being enhancing the core strength / resource - the driver fleet by way of innovative driver recruitment approaches (organizing events in basketball stadiums, signing on drivers) in comparison to its competitors' strategies of price cuts/ discounts. This enhanced the opportunities of GO-JEK to tap the rising demand for easy, reliable street transport market of Indonesia and at the same time providing job opportunities for 260 million-strong Indonesian population. The GO-JEK campaign to pull in youngsters into the workforce was initiated by providing branded attire and accessories for the drivers.

The second strategy of GOJEK was its Goodwill in Government Circles, previously cultured public profile as a boon to the local economy and a patriotic representation of Indonesian growth. Due to its Goodwill in the market, GOJEK surpassed its Ban by the Government in 2015, as it was revoked within 12hrs by Indonesian president Joko Widodo, who recognized the employment and other services generated by GO-JEK and overturned it.

The similarity in logistical challenges, of South East Asian Countries like Thailand and Philippines with high traffic jams, rising job demands in the younger population motivated GO-JEK to expand based on its learning curve from home turf to capitalize the market entry.

Mapping of GO-JEK Business Model based on Boston Consulting Group proposition / Model (BCG, 2009), it is summarized in **Table 4**.

Table 4 – GOJEK Business Model – BCG Model Mapping

BM Components	Value Proposition (Offer, To Whom)		Operating Model (How to Profitably Deliver)
Target Segment	260 million-strong Indonesian population especially Office Goers, commuters, Utility users,	Value Chain	Outsourced
Product / Service Offering	Category 1 -Delivery / Transport Service, Pick up, Ticket Booking, Pharmaceutical Information, Business Deals, Food Festivals; Category 2 – Digital Payment Services; Category 3 - Daily Personal Services (Auto Maintenance, Massage, Lifestyle)	Cost Model	IT Infrastructure Platform, Service Providers
Revenue Model	Platform Utility Fee from Service Providers / Users, Service Commission.	Organizations	Customer Handling / Complaints, Training, Strengthen relationship with Collaborators,

V. CONCLUSION

From the various discussion on Business Model Innovation, the contributions of Osterwalder and Pigneur ontology, and a few particular typologies from Zott et al., in the context of disruptive technologies and digitally enabled businesses are highly pertinent. In addition to the

innovations in the domain of E-Commerce / Online Sales, many disruptive technologies have equally impacted the transportation / logistics sector and as well as the Finance sector.



The distinction between Business Model and Strategy is very subtle, despite there exists difference of opinion in the literature analysis in considering business model as a relatively new idea within the strategy literature. With Business Process Management and Technology playing a crucial role in new age BMs, the Hype cycle best explains the various stages how technology/ applications is adopted in new BMs.

The various innovations in Banking products added with the technology edge is poised to change the competition scenario in the future. Cloud, AI, Quantum Computing, Block Chain, Automation, Instant Payments and others are some of the latest technologies to mention in the context of Banking and Financial Services Industry. The various technologies provide both opportunities by way of new service model as well as challenges in aspects of security, regulation and financial stability.

The Case of GO-JEK is specifically explored in the research paper to understand and appreciate the Innovation involved in the Business Modelling, followed by the Grass root strategy that emerges from the Organization based on its sound understanding of industry and market factors. The BCG BM mapping gives a clear picture of the various Value Propositions and Operating Model Components of GO-JEK. To conclude, the paper gives rich insights on the fundamentals of Business Modelling, frameworks, Innovation and Technology Enablers in the rapidly evolving Globalized World.

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