

Framework for Sustainability in E - commerce Business Models : A Perspective Based Approach

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Abstract

E-commerce businesses in the Indian scenario have lately seen an overwhelming growth and acceptance owing to factors like better Internet penetration and advancement in technology. The E - commerce business models, in particular, have aroused a great interest among researchers and academicians. Majority of the players operating within the e-commerce space in the country have a single-point agenda of driving motivation and creating needs by way of offering lucrative discounts, cash on delivery options, and a wide variety in terms of products and services. In terms of 'value' offered, several rewarding options are made available to the customers, but the point of differentiation for the players is thinning, leading to a visible clutter, and hence, pressures on profitability, indicating a need for innovation to make the business models more sustainable. Integrating secondary data and expert opinion, this paper attempted at proposing a framework by identifying key areas, which can be reinforced by these companies to differentiate themselves and create a sustainable advantage.

Keywords : e-commerce, business model, value, innovation, sustainability

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Over the last 4 -5 years, e-commerce in India has grown at a volatile pace, recording 12.6 billion USD multiplying almost triple its size. Though, even today in India, retail is dominated by the brick and mortar models, with online retail grabbing a minor pie in this segment, a meagre 5% of the Indian retail share. Yet, a PWC - ASSOCHAM report (2014) indicated that logistics and infrastructure, which are the mainstay of online retail, are expected to garner most of the investment flowing into this sector. Retail consultancy Technopak also estimated that the value of Indian e - commerce is expected to grow over 10 times, clocking around \$32 billion by 2020 (Mitra, 2015). One of the prominent reasons for such an optimistic projection could be the versatility of the sector wherein a variety of platforms & business models co-exist offering a wide choice (price & assortment), control (time & spend), and convenience (speed of delivery, mediums like mobile apps, websites, etc.) to the online consumers and the other being a diverse untapped potential. The evolution of technology and widespread Internet penetration coupled with growth in smartphone penetration and thus an increased mobile commerce, has further propelled online business prospects in India.

E - commerce has lent a new dimension to the consumers' buying experience by giving them the freedom of shopping within the comforts of their home, office, or even on the move. Most of the domestic market leaders like Flipkart, Jabong, and Snapdeal etc. have managed to subvert the many intermediaries and layers that have proven

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to be a major burden on the operational cost, for a majority of the traditional brick and mortar companies. While this is an advantage, the unlimited business models and variations in ecommerce pose a challenge in the current context, given the clutter and market dynamism. On the one hand, there are unique platforms like aggregators (Oyo Rooms, Uber Cabs, Paytm) where service takes precedence over inventory or hyper local business models, which thrive on ad sales (Zomato). On the other hand, there is the prevalent market place model (Flipkart, Amazon, Myntra, Snapdeal), a virtual platform where buyers meet sellers and hence, logistics and inventory are strategically crucial for sustenance. Competition, in each of the cases, is defined by differential branding and marketing strategies, and so is customer acquisition. Tangibility being one of the major limiting factors for these models, the most important question that thus needs to be addressed is whether cosmetic planks are unique enough to give a sustainable edge to the players in this domain for long term profitability? The study aims at identifying different aspects in ecommerce business models and the issue of sustainability.

Review of Literature

E-commerce or electronic transactions can be roughly defined as dealing with business through the Internet. It involves an entire gamut of activities ranging from online advertising, order placements, online payments, logistics, customer interface and experience.

Some definitions observe E-business/E-commerce as a “net” business activity fuelled by new rules of the connected economy and aims at transforming both internal and external relationships so as to create value and leverage market opportunities for conducting business under new electronic channels. The definition recognizes the Internet and the web as vital components of an E-business/E commerce strategy (Damanpour & Damanpour, 2001).

Evolution of E-commerce in India can be traced back to the advent of the millennium when active shopping platforms like Asian Sky shop or HomeShop18 and later Naaptol.com using the television medium emerged as a platform to reach out to the consumers closely followed by shopping sites like Rediff and Yahoo that made a foray into the transaction space. This preceded the beginning of the digital revolution fuelled through the line communication, where consumer engagement became the core of the transaction. Available literature delves more into technical aspects reflecting “disruptive innovation” or technology of Ecommerce that has initiated a radical transition in the traditional way of doing business (Lee, 2001).

Few studies acknowledge consumers, governments, and enterprises as the three main bodies for E-commerce transactions. The study focuses on electronic relationships and looks at B2B (business - to - business) between enterprises, B2C (business - to- consumers) between an enterprise and its consumers, C2B (consumer -to - business), C2C (consumer - to consumer), B2A (between an enterprise and the governmental administration as electronic relationships existing for every organization within the value chain (Miniculete & Miniculete, 2013), while Ghosh (1997) observed that the effort in creating a web-based business model over setting up a web presence is much simpler.

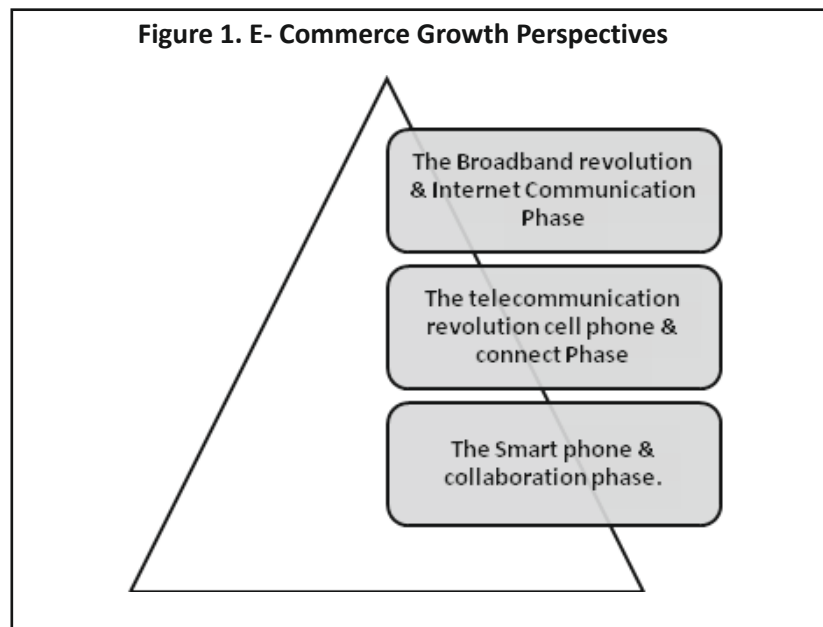
Literature also draws a lot of concepts on evolution of E-commerce like bubble stable evolutionary process conforming with real ecommerce market from an initial network to a scale B2C Ecommerce markets free (Tian, Zhang, & Guan, 2013). It also covers aspects like unfair competition among websites. Quite a few studies reflect on cloud based personalization, audio visual content and its role in changing the dynamics of ecommerce models (Lopez-Nores, Blanco -Fernandez, Pazos - Arias, 2013). The study also focused on technology contribution and various approaches related to e-commerce business models and impact on the different participants like suppliers, intermediaries, producers, and consumers in the eco-commerce ecosystem.

Literature aptly attributes the emergence of E- commerce in India to the growth and penetration of the Internet. It observes that the Internet revolution has empowered businesses to communicate with varied customers across the globe ; thus, resulting in the rise of e-commerce sites having tremendous potential for revenue-generation.

Studies also attributed the change in consumers' decision-making process to the introduction of the Internet as an alternative shopping channel (Joshi, 2013). Wagner, Fillis, and Johansson (2003) mentioned in their study that the mass proliferation of the Internet and its rapid growth has permitted industries to develop into e-based outlets, leading to expansion of their markets and enhanced operations. This clearly indicates that Internet communication has triggered a complete integrated interactive and seamless ecosystem that has not just transformed and revolutionized shopping experiences of consumers, but has also opened up a gamut of cross-industry collaborations.

Another significant contributor in recent times is the evolution and growth of telecommunication, thus giving rise to the cell phone culture. The subsequent evolution of smart phones has popularized the trend of shopping on mobile 'apps' (applications). This trend has further spawned e - commerce prospects in the country, throwing a huge challenge to conventional retail.

Findings of a research by Forrester indicated that 56% of the consumers used a mobile device to explore products at home, 38% used a mobile device while on their way to a store so as to check the inventory availability, and around 34% leveraged a mobile device to study products in a store (Bogaitsky, 2014). This is in addition to the number of people who have actually used a smart phone device for shopping and making purchases. This is also supported by the Gartner Group's market research 2004 findings, which clearly acknowledged that almost 40% of C2B e-commerce was initiated with smart phones using the wireless application protocol (WAP).



As reflected in the Figure 1, the growth of E- commerce in India can be looked at from three broad perspectives wherein each of these three phases have pushed the ecommerce revolution in the country by adding a new dimension. With the evolution of innovative platforms, selling products online has become an extremely profitable proposition. Ranging from vertical focused players transacting in specific categories like apparels, electronics, and baby products to multi-category players handling manifold categories, online retail market displays its own distinctive models (Sardana, 2015).

Though there are quite a few similarities with brick-and-mortar models, yet the biggest advantage that online businesses essentially have by virtue of their versatile platforms (see Figure 2) and virtual nature of transactions is the ability to reach out to a larger customer base, even extending around the globe. Unlike brick and mortar models where physical transactions, tangibility, and store layout are more significant for generating profit and revenues

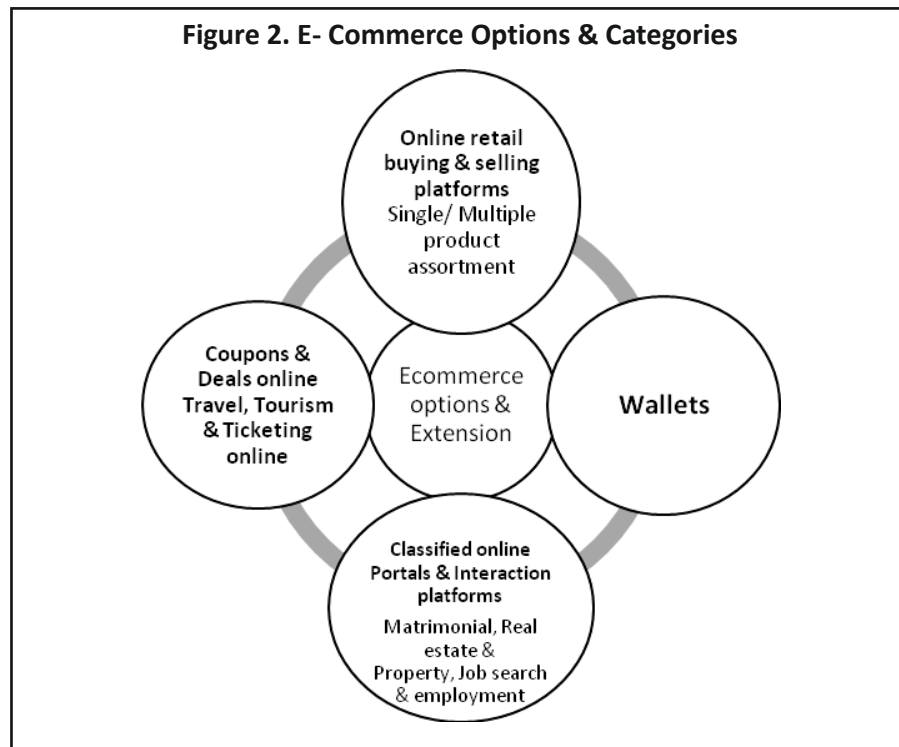


Table 1. Conventional Retail vs. E - Tailing

Conventional Retail (Brick & Mortar models)	Online retail (e-tailing) E - commerce models
Need & segment specific. More planned purchases. Need creates purchase motivation.	More impulsive purchases. Broad based. Motivation creates needs.
Cost Intensive	Technology Intensive
Tangibility, physical transaction, Assortment, & focused attention.	Virtual transaction, wide assortment, & a wide scope for comparison between different competitor sites.
Efficiency & control on inbound logistics & operational cost for more value.	Efficiency & control on operational cost & outbound logistics (marketing & branding) for differential value.
High entry barriers	Low entry barriers
Defined policies and regulatory framework.	Lack of proper policies and regulatory framework.
Local reach	Global reach
Better infrastructure	Web based virtual platform
Customer service & store layout leading to the right experience.	Choice & control for a better experience.

(Table 1), e - commerce, on the other hand, not only offers varied approaches for generating sales, but also makes available several options for revenue-generation. Available studies, though productive, focused majorly on the different business models and revenue generation, more from the technical perspective, however, the sustainability aspect from the competitor perspective is grossly missing. This creates a gap and hence the need to take a critical look at sustainable competitive advantage for ecommerce in the current scenario.

Methodology

The concept of sustainability in E - commerce, outlined in this paper, is established from both primary and

secondary sources. The paper proceeds in phases :

(i) Phase I : The study was initiated with an extensive review of literature from different authentic sources including published research papers in journals, indexed websites, along with statistics from print and electronic media. This included the study of different existing conventional / generic perspectives of sustainability in business and extending them to ecommerce. These included :

- ↳ Business model perspective,
- ↳ Value based perspective,
- ↳ Business sustainability perspective,
- ↳ Sustainable competitive advantage perspective.

(ii) Phase II : Based on the above review in the second phase, an interaction with seven experts in the e-commerce ecosystem was gathered for gaining an expert perspective.

E-Commerce Business Models in India : The Current Scenario

E-commerce is no longer a mere substitute to retail, but it has assumed a dominating presence grabbing market share online and, therefore, putting pressure on brick-and-mortar models to find the correct format for their web operations. A simple prescription or model does not exist for ecommerce (Damanpour & Damanpour, 2001). Amazon and eBay had laid the foundation of the e-commerce industry. However, each started off with a different business model to generate revenue, while Amazon currently follows the marketplace business model for generating revenue. The company had kick started with a two pronged revenue generation strategy.

(i) A Business to Consumer (B2C) model which was an inventory based model where they charged a mark-up from consumers for transactions on their online store.

(ii) Business to Business (B2B), where they offered two options for sellers: they can either list as individuals or as professionals. This allowed listing of items where no access fee was charged to the retailer, however, a commission was charged as percentage on sale. They soon moved to a hybrid model, consolidating with a marketplace model which is replicated by most of the players in India like Flipkart and Snapdeal.

The E-bay model was more like an intermediary between buyers and sellers facilitating transaction - sale through its extensive online network. The model was later replicated by giants like Alibaba. Though E-bay and Amazon business models are globally accepted as profitable business models with a pioneering focused approach on quality rather than assortment, in the Indian context, however, the strategic focus of these global leaders has been on discounts and offers rather than on a clear differential value. The major reasoning would be the concept of cost leadership, which continues to be the focus of Indian e-commerce, where value predominantly is a function of low prices, discount offers, and a huge product assortment.

With the growing influence and might of E-commerce, several leading companies are leveraging collaboration or even exclusive partnerships with existing online marketplaces, and are even launching their own online stores (Table 2). However, though a very popular option, studies related to the future of online businesses described e-commerce in India as a hit and trial method, since currently, there is neither a well-defined government policy nor any proper regulatory framework supporting the business. This has raised several apprehensions on the future of e-commerce business models, especially with reference to long-term sustainability (Bhatia, 2012).

Most of the models have shifted base, from typical inventory-based models to more dynamic and supply options like marketplace and aggregator platforms, where the locus of control is more on the customer rather than

Table 2. Lucrative Online Business Models

Marketplace models	
(Sellers' partner with leading online platforms - the marketplaces with dedicated website and online store.)	Here, a seller plays a crucial role in driving sales and also has a greater control on inventory. Sellers get a benefit of high traffic on the website of these marketplaces and also an easy access to the distribution network. Here, sellers have a restricted call on customer experience & pricing related strategies.
Own inventory models	
(Inventory is self-owned by e-commerce players)	The benefits include a better post purchase experience & contentment. Due to readily available information on the inventory, supply chain, & shipment locations, the operations are efficient and smooth. Players have better control over inventory since it is self-owned. Risks include price cuts, markdowns, & working capital.
Private Labels	
(E-commerce players launch their own branded items and sell them through own website)	Private label model enables a huge flexibility to its target customers in product and pricing and thus the ability to compete with other established labels. Higher margins than third party branded labels.
White label model	
(E-commerce player or third party managed branded online store)	An online branded store set up or managed by either a third party or an e-commerce player. This involves manoeuvres like partnering with payment gateways. The onus of generating website traffic and offering services is on the branded store. Apart from a better control over the band experience, this model aids in enhancing trust, empathy, affinity, & loyalty.

Source: Adapted from Pwc (2014). eCommerce in India : Accelerating growth.

on monitoring inventory.

This paper endeavors to identify and analyze, with the help of existing concepts, perspectives, and expert opinions, some aspects that are significant when it comes to ensuring sustainability of the e-commerce models and presents them in the form of a framework. However, before presenting the framework, it would be useful to understand the business models that these companies are following in order to better appreciate the nature of their business and sources of their revenue.

Perspectives on Business Models

A very important part of this paper is the business models that companies follow. Apart from understanding the various business models adopted by companies in the e-commerce sector, a mention of the pioneering work on disruptive business models is of utmost importance. The business model canvas proposed by Osterwalder (2008) has gained traction, especially for its virtues of explaining the features of nearly all business models and the following perspectives in this model are extremely relevant for this study. The work focuses more on customer encompassing important aspects of business and can be analyzed from the e-commerce perspective as under :

(i) Key Partners : Companies forge partnerships for many reasons, and partnerships are becoming a cornerstone of many e-commerce business models. Companies create alliances through acquisition and other routes to optimize their business models, reduce risk, market development, or to acquire and outsource resources.

(ii) Key Resources : E-commerce business models require some key resources which are leveraged for creating and offering a value proposition, market penetration, building relationships with different customer segments, earning revenues, and gaining profitability.

These models thrive on certain resources, especially technology and finance. Different key resources are needed depending on the type of business model. Key resources can be owned by the company or outsourced and acquired from key partners.

(iii) Key Activities : There are a number of key activities which make e - commerce business models robust. Aimed at optimized revenue streams and strengthening customer retention, these activities differ depending on business model type. It could range from supply chain and vendor management, logistics, branding, to creating customer experience customer interface and problem solving.

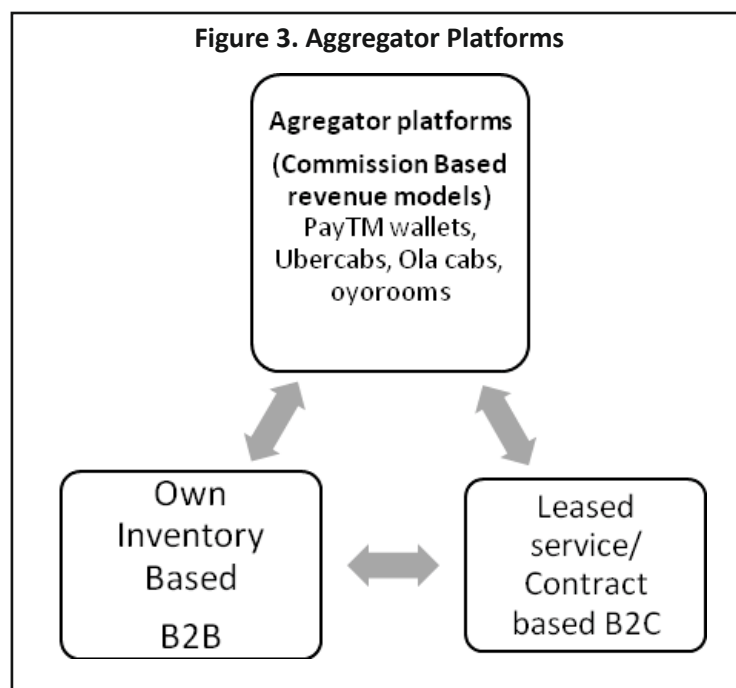
(iv) Revenue Stream : For any business, customers comprise the very core of a business model, and revenue streams are its profitability channels. Osterwalder and Pigneur (2010) identified four main pillars for any business system, namely product innovation, infrastructure management, customer relationship, and financials. Also, two different types of revenue streams, which are :

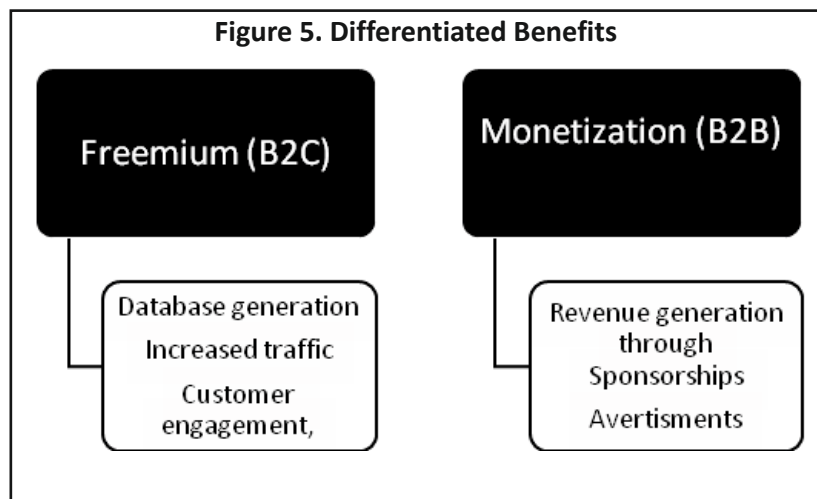
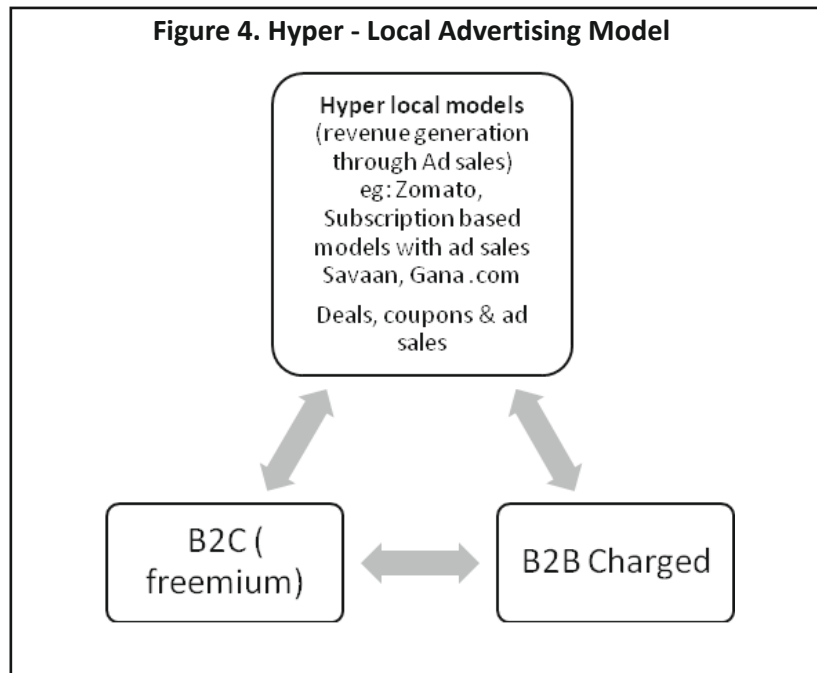
↳ **Transaction Revenues :** Outcome of one-time customer payments.

↳ **Recurring revenues :** On-going payments to either deliver a value proposition or offer post-purchase customer support.

Lee (2001) critically refuted the concept of an established e - commerce business model underlining that there can be “*no simple prescription*” even for companies operating within a similar industry. Petrovic, Kittl, and Teksten (2001) described business logic as a triangle comprising of three layers namely, business model, the strategy, and the business process. While a business model portrays the content, structure, and governance of transactions devised for value creation by leveraging business opportunities, a revenue model, on the other hand, outlines a way in which a business model aids revenue generation, which as per the study, can comprise of advertising fees, subscription fees, and transaction fees.

A critical view in the current scenario typically reflects (Figure 3) three major approaches adopted for revenue

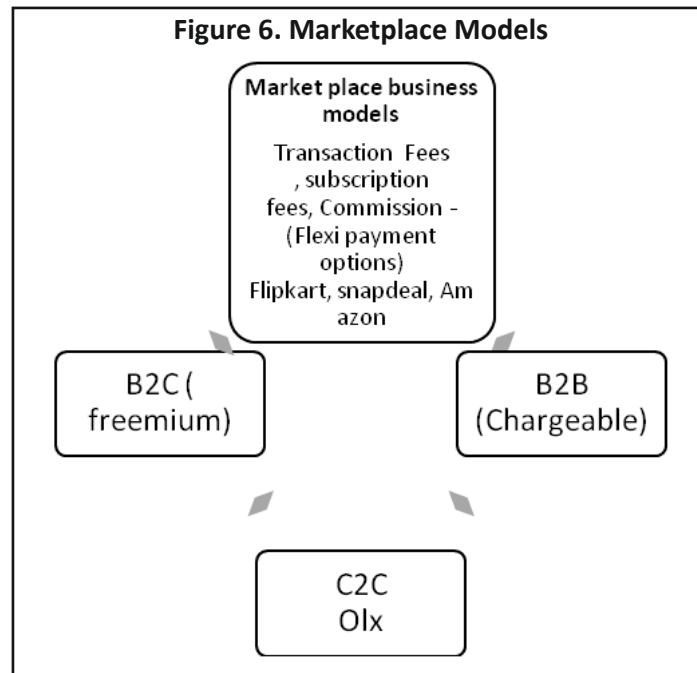




generation in E - business models in practice. The aggregator space is becoming highly competitive essentially due to its scalable nature, flexibility, service quality, and the ability to invest in technology instead of investing in a non-core business. The focus always has been facilitation over owning an inventory. This, however, has posed an impending challenge on the aptitude to retain the uniqueness, thus increasing the possibility of replication.

Lin, Ke, and Whinston (2012) looked at the boom in online services as one of the major causes for wide-spread adoption of ad-supported business models resulting in a predictable swell in online advertising. Typically, the hyper local advertising model (refer Figure 4) generating revenues out of ad sales has gained popularity in the contemporary scenario. One of the reasons could be attributed to the hybrid characteristic of this model that enables it to leverage a differentiated dual benefit (Figure 5) in B2C & B2B situations.

The most popular option in the contemporary scenario is the marketplace model (see Figure 6), which has adopted several innovative ways of customer experience, the most popular being the fluid and easy payment options offered with cash on delivery as the most popular option. However, even this strategy is highly susceptible to imitation.



Merely creating competitive ways of luring the customer, like payment options, is not sufficient. It is also imperative that the strategy is translated into long-term profitability. This again boils down to the aspect of a sustainable competitive advantage. The scenario calls for a continuous shift from conventional practices and hence, a need for more innovation in designing the business models and also in terms of offering value to the consumers. Therefore, it is daunting for the e-commerce business models in the existing scenario to craft a unique value proposition and a differentiating factor which will not only ensure long term revenue flow, making the model distinctive and superior but also that can be leveraged and applied in multiple contexts.

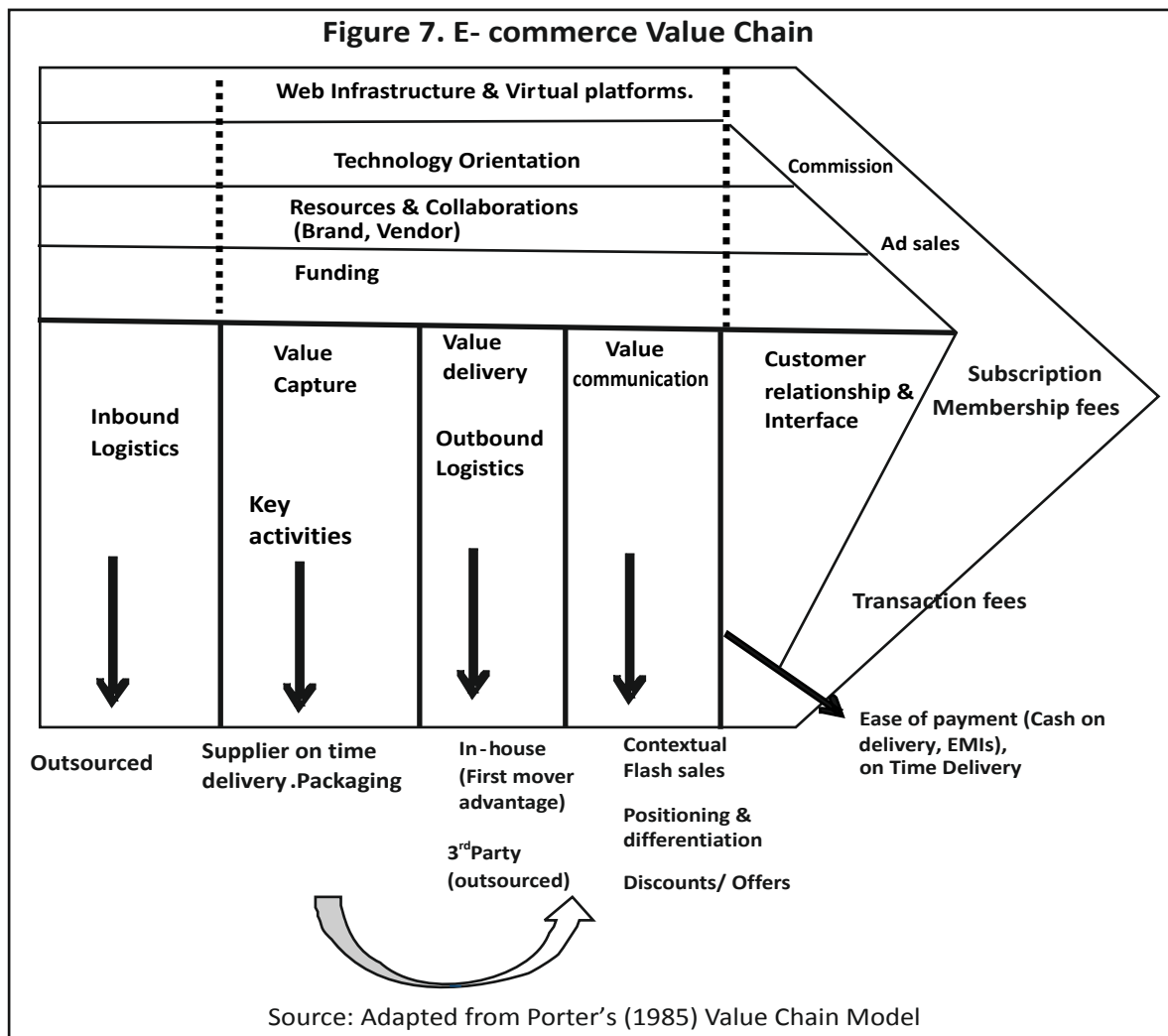
The Value and Value Chain Perspective

The foundation of a business model lies not only about the rationale of a business system for creating value behind the actual processes, but also in the manner an organization creates, delivers, and captures value (Peterovic et al., 2001).

A Value Driver Model proposed for the study comprises of four major aspects - Novelty (uniqueness & innovation in business models) - key to competitive advantage in e-commerce ; Lock-In, Complementarities (enhancing relationship within the ecosystem) - indicative of building strategic partnerships in non-core areas, and Efficiency (Competency in delivering value) - significant for capability building in E-commerce. The value perspective essentially focuses on generating economic value in terms of revenue as one of the core strategies for sustainability of any business model and also provides a framework for players to contend in the market. The other major aspect is the ability of a company to leverage internal and external consumers for an edge.

The most relevant work on value considered for this paper is the one devised by Porter (1985) aimed at creating the right kind of value for gaining a competitive edge in the market. The model reflects analytical tools comprising of five basic or primary activities - that directly contribute in creating and delivering value and four supporting activities for boosting up the efficiency of value creation.

In providing value, E-commerce business models reflect more control on the key activities and value delivery through a strong logistics network unlike conventional retail (Figure 7). However, for really gaining that much



needed sustainable edge, given the current context of clutter, it is vital to create a uniqueness and distinct trait in both the direct as well supporting profitability contributors in the e-commerce value chain. They need to work on vendor development for more control on inbound- logistics and also on lowering operational cost using technology to be able to offer products at the cheapest cost.

Sustainability of Business

Business sustainability is an important issue for companies in the face of today's cut-throat competition and extremely dynamic business environment. As a business start-up, therefore, it is all the more important to imbibe into your company the requisite values in order to ensure that the company survives, and the business remains relevant even through the changing business environment.

Before we start discussing the way e-commerce companies are taking to sustainability, it is of extreme importance to understand the different perspectives of business sustainability itself and ask what exactly sustainability means. To be sustainable in the true sense, a business must sustain not only the vital environmental resources, but also its social resources, including employees, customers (the community), and its reputation.

Researchers and experts have been describing sustainability in terms of eco-friendly business models, especially in industries, which have a direct impact on the ecosystem around them. According to them, sustainable business is an enterprise that has minimal negative impact on the global or local environment, community, society, or economy - a business that strives to meet the triple bottom line.

Yet, others argue that business sustainability has a much wider scope than just being an eco-friendly business organization. According to a study by Hoessle (2013), sustainability in the social sphere is especially important for businesses operating in close-knit communities. However, this school of thought is of utmost interest for this particular research paper, as it deals with business sustainability by virtue of the following strategies :

(i) Innovation and Technology : This introverted method of sustainable corporate practices proposed by Hoessle (2013) focuses on a company's ability to change its products and services towards less waste production and sustainable best practices. Being a technology intensive business, e - commerce business models need to make innovation as a continuous process.

(ii) Collaboration : The formation of networks with similar or partner companies facilitates knowledge sharing and propels innovation. E - commerce companies have found it increasingly important to collaborate with key partners, not necessarily from the same industry, in order to drive their revenues.

(iii) Process Improvement : Continuous process surveying and improvement is essential for waste- reduction. Employee awareness of company-wide sustainability plan further aids the integration of new and improved processes. For a web based business like e - commerce, this is a crucial link.

(iv) Sustainability Reporting : Periodic reporting of company performance in relation to goals often incorporated into the corporate mission. Additionally, this perspective also suggests implementing a sound measurement and management system with readjustment procedures as well as a regular forum for all stakeholders to discuss sustainability issues. An important contribution to this perspective could be the sustainability balanced scorecard, a performance measurement and management system aiming at balancing financial and non-financial as well as short and long-term measures. It explicitly integrates strategically relevant environmental, social, and ethical goals into the overall performance management system and supports strategic sustainability management (Hansen & Schaltegger, 2016).

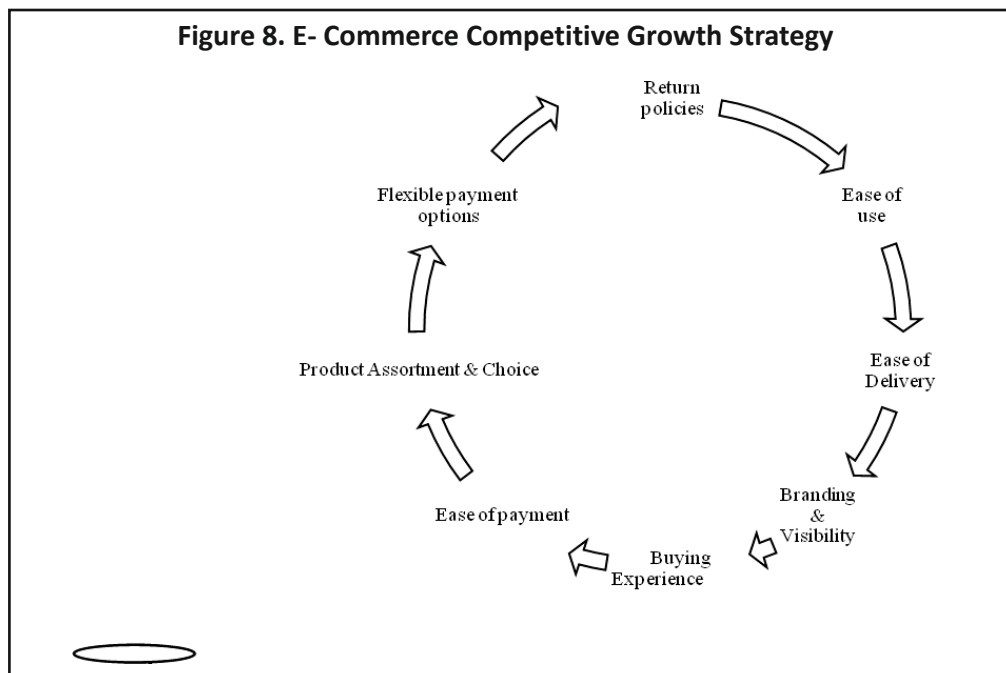
This paper takes a broad view of sustainability and describes it in terms of perpetual value for E - commerce customers, internal and external stakeholders, and the economy as a whole. A framework is thus required to ensure sustainability in this nascent yet competitive industry to ensure long lasting benefits for all the stakeholders.

Sustainable Competitive Advantage

A superior performance is at the core of any business model, and hence, is one of the most prominent indicators of competitive advantage. It not only helps defending, overtaking, and getting an edge over the existing and potential opponents, but also safeguards survival. Gaining a competitive edge in today's digitalized scenario is quite a challenge and calls for the players to consistently hunt for those attributes (Figure 8), which will enable them to execute and compete at a much higher level than its rivals within the same business.

Teece (2010) observed that since imitation or replication is extremely easy, merely developing a successful business model may not be enough to warrant a competitive advantage. Hence, he emphasized on the need for a differentiated yet effective business model which is not just tough to replicate, but is most likely to yield profits.

For existing players as well as new entrants aspiring to enter e-business or the e - commerce space, continuous



innovation can hold the key to long term sustenance and competitive advantage. Therefore, providing a well differentiated business model, which is tough to emulate, is the need.

However, the present scenario of e- commerce indicates heavy competition amongst existing players in terms of cosmetic strategies like branding, pricing, creative packaging, and promotion including special discounts on festivals, flash sales, etc., though there are some examples like Flipkart, who have tried to get a differential edge and outperform its rival to a certain extent by gaining a first mover advantage in building capabilities like introducing in-house logistics along with outsourced partners to ensure speed of delivery and also initiating cash on delivery payment option to ensure more traffic. Exclusive brand collaboration strategies for “go to market” as implemented by Amazon with Micromax or even Flipkart with Xiaomi are rapidly gaining momentum. However, none of these are unique enough to avoid replication by competitors.

Hence, the resource-based perspective devised by Oliver (1997) on long term sustenance is also considered for this study. The concept examines the problem of sustainability as the capability of resources and capabilities of firms to generate rates of return, which are above normal, and thus offer a sustainable competitive advantage. The view proposes that resource selection and accumulation are a function of both within-firm decision making and external strategic factors. Within-firm managerial choices are guided by an economic rationality and by motives of efficiency, effectiveness, and profitability. External influences are strategic industry factors that impact the firm, including buyer and supplier power, intensity of competition and industry, and product market structure. The factors influence what resources are selected as well as how they are selected and deployed (Oliver, 1997).

Another widely appreciated and studied resource-based view of sustainability by Barney (1991) suggested that a firm is said to have a sustainable competitive advantage when its current and potential rivals are not only unable to implement a similar value creating strategy that a firm is executing concurrently, but are also unable to leverage and replicate the advantages of the strategy.

Based on Barney's (1991) argument to be sustainable, the e -commerce business models need to essentially address and build on the following four criteria for measuring their resources :

↳ Their resources need to be *valuable* enough to allow them to develop strategies that improve effectiveness or competency.

- ↳ They must possess resources which are *rare* and not similar to several other firms' resources.
- ↳ Resources that are *inimitable*, and hence, cannot be copied or emulated.
- ↳ Resources that are *non substitutable*.

Insights from Expert Perspective

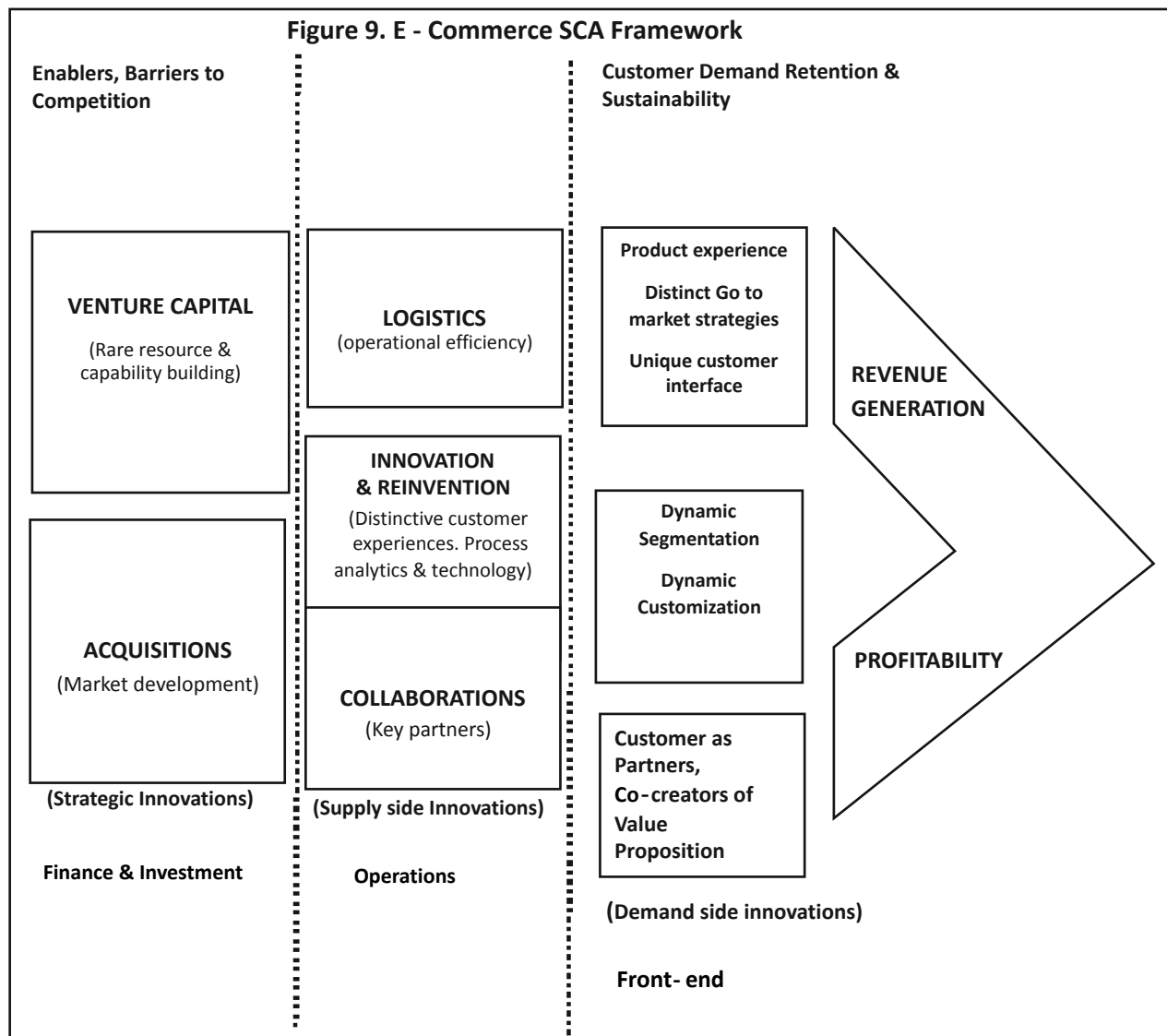
The crucial aspect of this study is to understand if E - commerce business models in the country can actually earn higher gains and have a sustained advantage in the marketplace. However, currently, the cluttered scenario has resulted in similarity. So far, as customer benefits are concerned, most of the players are at par. Despite revenue generation and profitability, there still is a question raised on the sustainability of e - commerce. Based on the various viewpoints established in literature, a set of qualitative questions covering various components to be addressed by e-commerce business models for sustainable competitive advantage were mailed to seven major players in the e - commerce eco-system (refer to Table 3). This aimed at deriving a generic sustainability framework for the existing e-commerce models :

Table 3. Sustainability Components

Key Issues to be Addressed	Leveraging Components for a Sustainable Edge
Elements for gaining a sustainable competitive advantage ?	Collaboration with appropriate partners, logistics, reinvention and innovation, acquisitions, customer interface, venture capital funding, and market development.
Most inimitable/unique aspect for a company?	Positioning and value proposition, Customer Interface, Product experience.
The most "rare" resource for companies?	World-class talent/people, research & analytics, related product/company acquisition.
The most fruitful investment for an e-commerce company?	Building a better experience consistently through technology and analytics. Investment in marketing efforts.
Elements that create maximum "value" for the company?	Process improvement, customer interface.
Strategic aspects for customer satisfaction in exploring "Value" ?	Value based pricing, service quality.
In creating value, inimitable or factors not easily substitutable ?	Brand promise and value proposition, market selection and targeting.
In delivering value, the "substantial" factor that can make a difference in the long run ?	Reliability and trust, customization.
Cosmetic factors that can make a difference in communicating value ?	Visibility, brand image, and positive word of mouth. Assortment and versatility in offerings.
What is most relevant from the perspective of sustainable investment and customer relationship ?	Partnership marketing (Customer as the partner).
Significant factor from the strategic profitability perspective ?	Customer retention.
Significant from the business model consolidation perspective?	Profits and increased revenue.

Proposed Framework for a Sustainable Competitive Edge

Based on the extensive study of literature, subsequent concepts, and expert inputs, a framework for sustainable competitive advantage is designed and proposed (see Figure 9). The framework looks at the E-commerce business



model from three major dimensions, with innovation and reinvention as the core of sustainability at all the three levels.

- (i) **Finance & Investment** : Enablers to build a non-replicable resource, capability, and market development.
- (ii) **Operations** : Creating barriers for potential threats and insulating from existing rivals.
- (iii) **Front End** : Retaining customers for sustained profit and revenue generation.

Managerial Implications

The framework addresses innovation from three major domains : strategy, supply, and demand, especially demand side innovation focusing on customer co-creation. As per a research, while 72% customers in metros still operated on the cash on delivery (COD) payment mode, it is 90% in Tier II cities (Nair, 2016). Demand innovation and customer co-creation is even more relevant in the current context, given the government's revolutionary

demonetization policy, which encourages customer empowerment through digitization and cashless transactions. This is expected to boost e-commerce further and enhance the creation of more barriers to rivals. It brings along prospective avenues of increasing market share through market penetration and market development by stepping into Tier III cities and the rural market pointing towards innovation with key partners to create newer more flexible modes of cashless payment. Especially in rural areas where the Internet penetration is low, even feature phones and wireless can be effectively utilized for payments, with a little more awareness. Incentivizing the consumers for a cashless transaction should be an added benefit.

Conclusion, Limitations of the Study, and Scope for Further Research

The main motive of this paper was to gather insights on the existing business models and competitive scenario of Indian e-commerce and the subsequent scope of sustainability through a perspective based framework. Today's fast changing business models are challenging the traditional approaches of sustainability. In the e-commerce space, given the dynamic technological and business backdrop of their operations, it is important to establish sustainability of business both for individual organizations and for the industry as a whole. The framework is generic and not very demography specific. Consumers are driven by factors like social, cultural, etc., which is not covered in detail. Further possibility of bias cannot be ruled out due to individual inclination of experts interviewed and also views in the referred literature. Further scope of this research would be quantitatively testing the framework with the actual customers of e-commerce and also exploring demand based innovation perspective further.

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