

AMAZON.COM'S DIGITAL STRATEGIES

AMAZON.COM CASE STUDY

Introduction

This paper examines and tries to answer of following questions. Firstly, what are the main value propositions of Amazon.com to its customers? Secondly, how does Amazon.com propose these values by using digital technology? Finally, how does technology shape Amazon.com’s business strategy and contribute experience curve on the way to become online retail giant? Furthermore, this paper also employees top to bottom approach to clarify above the questions starting from company overview, Amazon.com’s development through the years, services and product portfolio to key technologies behind its major value propositions to Amazon.com’s customers.

Amazon.com Overview

Amazon.com, Inc. is founded in 1994 in Seattle, USA by Jeff Bezos. Amazon.com is the world's biggest bookstore and presently the most successful online company. Moreover, Amazon.com speedily extended its product portfolio by adding additional products, from fashion, accessories, electronics, to the music, video games, movies/DVDs in 1997. Worldwide and USA retail revenue of Amazon.com in 2017 are shown in Figure 1 (Euromonitor, 2018)

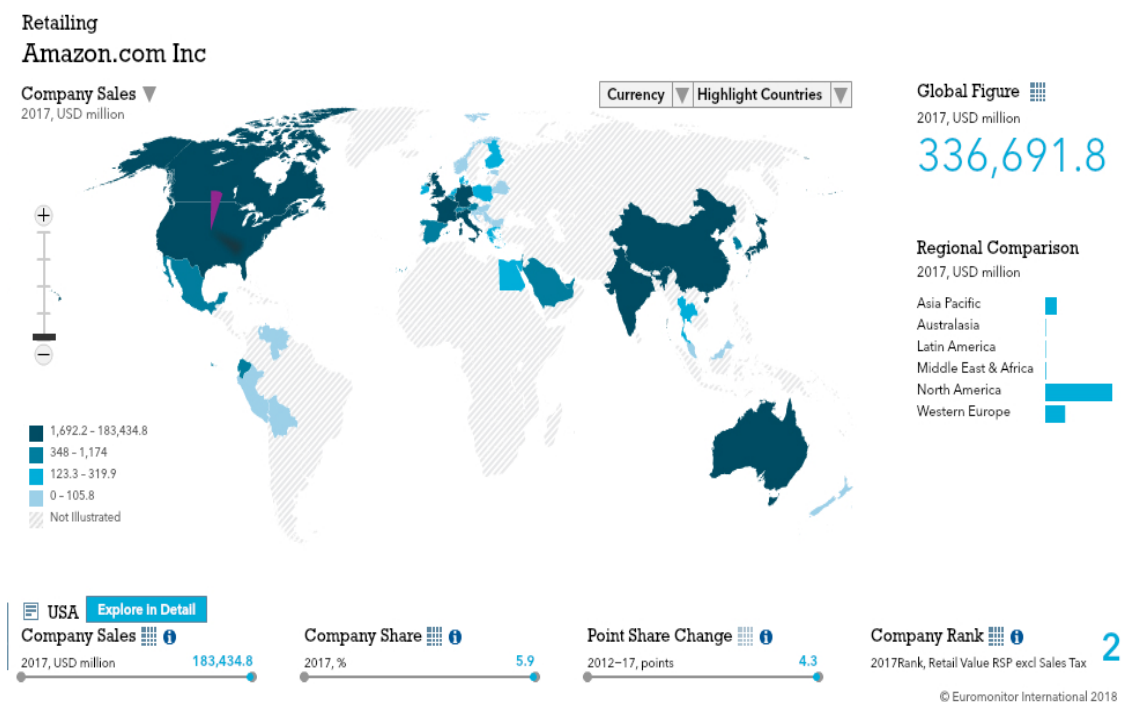


Figure 1 – Worldwide & USA Retailing Sales of Amazon.com, Inc

(Source: Euromonitor,2018)

Amazon.com provides web services, technology, fulfilment, computing, digital storage, and other services, as well as enable sellers to offer products or services through our websites (SEC, 2015).

As Hill & Jones (2010) point out that many of low-technology businesses have been transforming to high-tech business by using leverage effect of technology. Despite retail industry used to be deliberated as low-technology business, along with internet and new online retail business models, retail industry has been moved through to the high-tech business which led by first mover companies such as Amazon.com. Therefore, Amazon.com is distinguished itself as an internet-based book retailer amongst the other conventional book stores. Amazon.com's online platform assisted customers with its easy search and review features to search books easily and to read book reviews by clicking a few buttons instead of traditional methods. In a short-term, Amazon.com transformed its business-model to a marketplace by diversifying its vendors and product portfolio by creating a network effect which encourages the customers to use platform and services which also creates boundaries for the rivals (Halaburda& Oberholzer Gee, 2014).

Business Strategy

A company can follow one or more of three generic strategies: cost leadership, differentiation or focus (Porter,1985). Similarly, Amazon.com has a vision to provide wide variety of products and fulfilment services along with the affordable prices that requires to achieve economy of scope and economy of scale along with customer happiness.

Moreover, Jeff Bezos's famous sketch illustrates Amazon's main business strategy as the growth strategy in Figure 2 based on Amazon.com's virtuous cycle as well as data is the king approach in Figure 3 by building network effect.

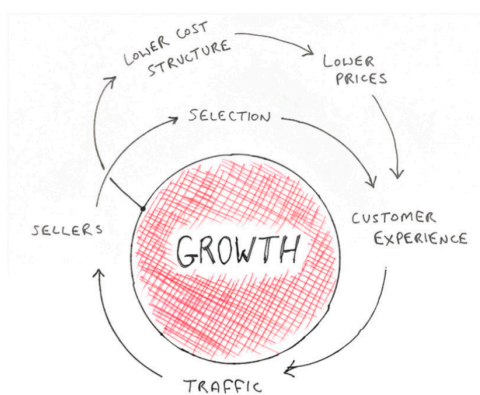


Figure 2 - Amazon's Business Strategy (CBInsights,2018)

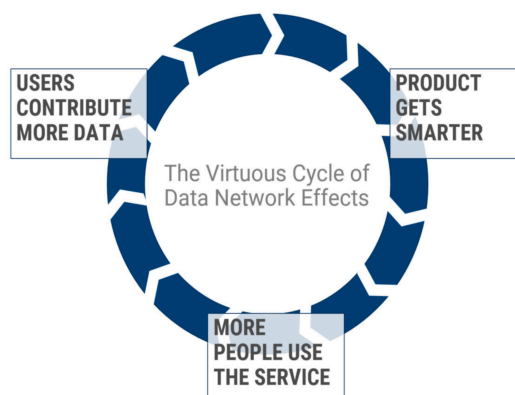


Figure 3 - The Virtuous Cycle (CBInsights,2018)

Additionally, as a part of Amazon.com’s customer centric strategies, its value creation & proposition starts with Amazon.com’s symbol that represents a smile from A-to-Z for the customers and continues with product availability and variety along with lower prices to create and deliver value (Zenger, 2013). Figure 4 is created to show that Amazon.com’s value chain drives to provide low prices and extraordinary customer experience which differentiates Amazon.com by creating loyalty and unique competitive edge amongst the competitors (Porter, 1980;1985). Amazon also boosts customer’s experiences along with its Amazon Prime retention program that also enables personalised services which are extensively valued by all ‘the Amazonians’ (Chaffey,2018).

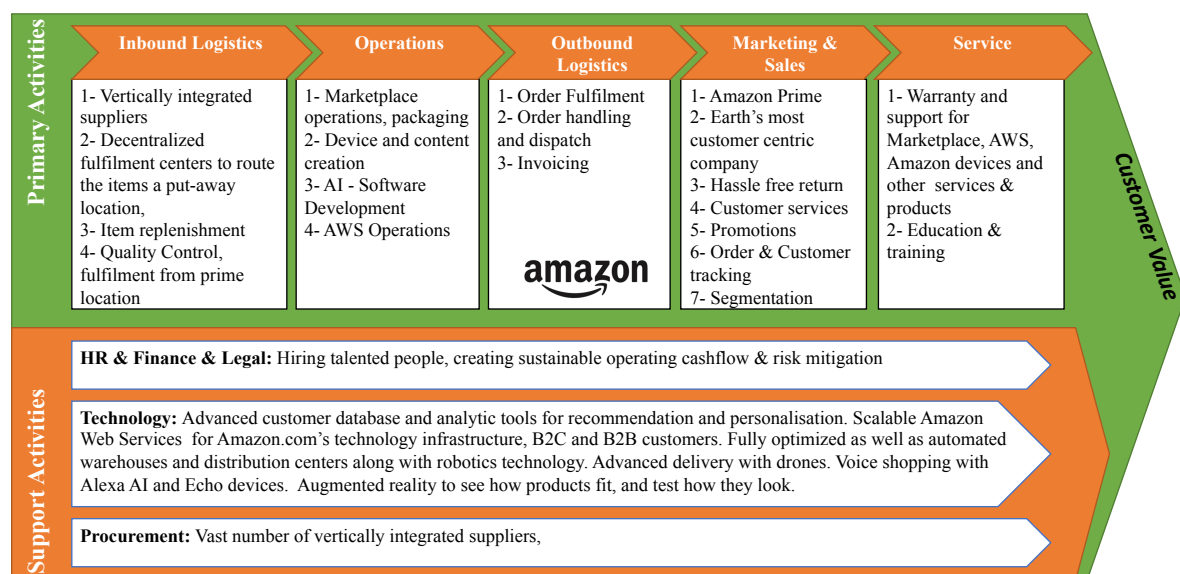


Figure 4 - Amazon.com Value Chain Analysis

In Figure 4, technology stream has important role to drive and enable Amazon.com’s business strategies. For example, Amazon.com’s ‘*efficient in-house computing cloud*’ is initially innovated for the purpose of manage Amazon.com’s own business operations as a cloud service (Schreiber, 2016). In a short term it has been formed as AWS tech stack, smartly shifted out and enhanced to serve through a B2B and B2C customers as a service by optimizing their IT Infrastructure operating costs and by creating new revenue stream. Likewise, Fulfilment by Amazon which mainly uses robotic fulfilment systems to reduce idle time and maximise the operation efficiency by cutting operating costs by circa 20% that would translate to approximately \$22Mn in cost savings for each fulfilment center regarding Amazon exec Dave Clark (Kim,2016). Also, Kindle Direct Publishing ‘KDP’ which helps to authors to publish and sell their books in a minute (Schreiber, 2016).

“Christopher Tholen, the Chief Technology Officer of BandPage. His comments about how AWS helps with the critical need to scale compute capacity quickly and reliably are not hypothetical: BandPage now helps 500,000 bands and artists connect with tens of millions of fans. (Amazon.com Annual Shareholder Letter, 2011)”

As we have seen above the sentences Amazon.com has good sense of technology usage to drive its business strategy by making happy its customers and by achieving economy of scope and scale.

Furthermore, Amazon.com highlights primary competitive factors as selection, price, and convenience, including fast and reliable fulfilment in the retail industry. Therefore, these competitive factors match with the key factors that drive customer to shop from Amazon.com that are highlighted in Figure 5. Evidently, we can say that Amazon.com knows its customers better than them based on its experience curve and knowledge systems which will be detailed following sections.

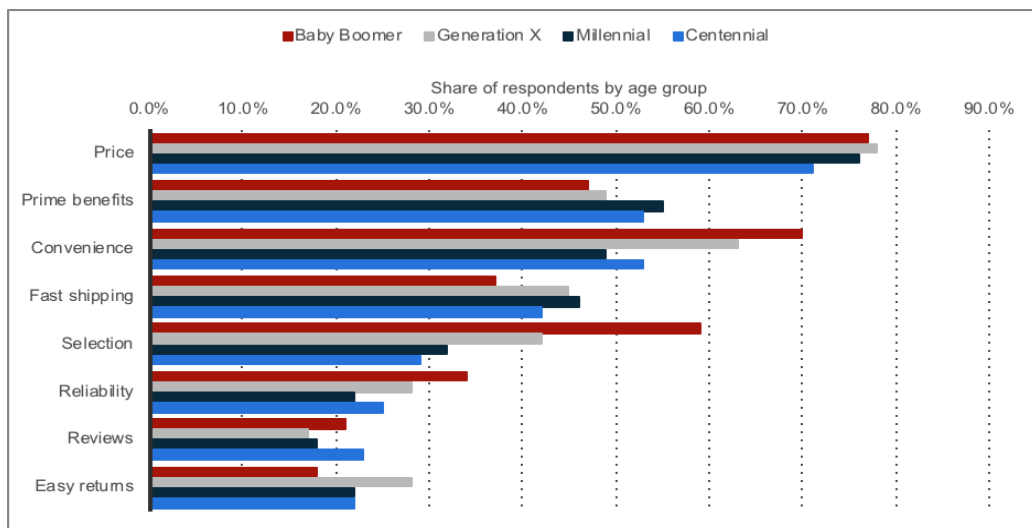


Figure 5 - Factors drive you do purchase on Amazon (Source: Statista, 2017)

Furthermore, in its 2017 Annual Report, Amazon.com (2017) defines its competitors in a very large spectrum from online/offline retailers, fulfilment services providers, telecom and technology producers to digital content, media producers and publishers (SEC, 2015; 2017).

Regarding above the business strategies and competitors statement of Amazon.com, it is very clear, Amazon.com has a strategy about not only become an online and offline retail giant but also become a leader across the industries such as web search, telecom, technology and logistics services & platform provider, electronic devices, digital marketing, digital media and

content producer by beating its competitors such as Wal Mart, Google, Netflix, Microsoft, Apple and so forth.

Organisational Strategy

Amazon.com organisational structure has been carefully designed to execute better than competitors and to achieve a sustainable competitive advantage by using its highly skilled and talented C-Level, management and specialist teams as a valuable and rare resources that are enabled and influenced by internet and information technology stack such as EC2 (compute capacity) and S3 (file storage) (Schreiber, 2016; Agarwal, 2014; Rivet, 2017). Regarding recent McKinsey research technology-enabled solutions let firms to engage vast number of employees across the countries in the restructure effort in real-time, while recognising the budget and other effects of possible modifications (Aronowitz et al., 2015). That is why Amazon.com has mostly operations management, product development, R&D, technology and HR teams which are organised regarding the specific areas and technologies, instead of front office sales teams or cashiers on contrary to classical retailers. Even in its Amazon Go physical store that has been testing and there is no sales staff in it all shelves and check out are controlled by smart systems such as beacons & RFID sensors, smartphones and cameras that sort of technology may affect and shape Amazon.com's WholeFoods store retail operations and sales organisations at the near future as Holland and Lockett (1992) call attention that technology implementation requires organisational change (Rey, 2017). By doing so, Amazon.com maximises efficiency of processes, operations and fulfilment centers, featured services and provides outstanding products along with vertically integrated huge number of supplier ecosystem amongst the world (Izogo and Ozo, 2011).

Euromonitor (2017) highlights "Amazon has never ignored international markets" and it has huge foot print many of the big markets. Since current market is considered by globalisation and raising economic fusion, as Tabares et al. (2015) pointed out that in the highly competitive market, how firms such as Amazon.com begin to operate successfully in the foreign international markets by using leverage of internet, information and communication technologies as well as by building set of distinctive intangible assets along with other key competences. Therefore, these intangible assets later are named intellectual assets and it is divided into human resources (the employees' skills and attitudes for problem solving & management), information assets (organizational '*culture, values, management styles*' and technological assets '*R&D, product technologies, patent & commercial secrets, competitive intel*') and relationship skill (relational) assets (Tabares et al., 2015).

In Table 1, Amazon.com fosters its intellectual asset through the human resources at an individual and organizational level by enabling all employees and entire value chain (see Figure 4) with its information assets like AWS (Amazon Web Services), CRM, automated and optimised supply chain and warehouse processes and equipment (KIVA Robotics) through a strong organizational culture and through the innovation and technological processes, products and services such as 1-Click Payment, Drone shipment, Dash Buttons, Alexa AI.


	Value Creation		Value Sustainability		
	Value	Rarity	Imitation	Substitution	Transfer
Information Asset					
IT Infrastructure	High	High	Difficult	Medium	Medium
Information Repository	High	Medium	Medium	Medium	Medium
Information Capability					
Technical Skills	High	Medium	Easy	Easy	Easy
IT Management Skills	High	Medium	Medium	Easy	Easy
Relationship Skills					
Externally-Focused	High	Medium	Difficult	Medium	Medium
Spanned	High	Medium	Difficult	Medium	Medium

Table 1 - Resource Based View of Amazon.com from technology perspective (Adopted from Wade& Hulland, 2004)

Amazon.com encourages its relationship skills through a strong network relation with the stakeholders will create valuable, unique, rare and non-substitutable products and goods that is likely to secure sustainable competitive advantage in global markets a part of Amazon.com’s internalisation strategy.

In terms of value creation and sustainability segments in Table 1, Value is assessed as high, rarity mostly medium. Imitation, substitution and transferable are assessed as mostly difficult and medium for information assets, capability and relationship skills since Amazon.com has achieved economy of scale & scope and its entire value chain enabled by internet, innovation & technology. Moreover, it seems like every firm has an IT structure and easy to imitate, however it is not as Holland and Lockett (1992) point out that creating massive technology stack is really hard. If we consider Amazon.com’s AWS, machine learning and data processing infrastructure along with its experience curve, building that type IS environment will never be easy except a few big firms such as Google, Apple and Facebook.

Amazon's founding strategy that digital commerce will radically reshape our marketplace based on Jeff Bezos' three ideas and some highlights from their results as follows (Fabernovel, 2013):

- i. Digital enables limitless inventory (Diversification Strategy),
 - o Amazon has a total of 573 million products on sale on its platform in 10+ segment as of Nov 2017
- ii. Digital boosts customer care (Retention Strategy),
 - o For the ninth consecutive year, Customers Rank Amazon #1 in Customer Satisfaction (Foresee Experience Index) (Amazon.com, no date)
- iii. Digital allows high margin, lowest prices
 - o Internet, AWS, KIVA Robotic Fulfilment, Digital Content and Services support to achieve economy scope and scale by reducing cost and increasing selection

These ideas also shape Amazon.com's digital strategies and highlights firm's vision at the meta level. Furthermore, Figure 6 shows strategy triangle of Amazon.com and which digital major strategies complements to the Amazon.com's business and organisational strategies based on previous content in this paper (Holland and Lockett, 1992).

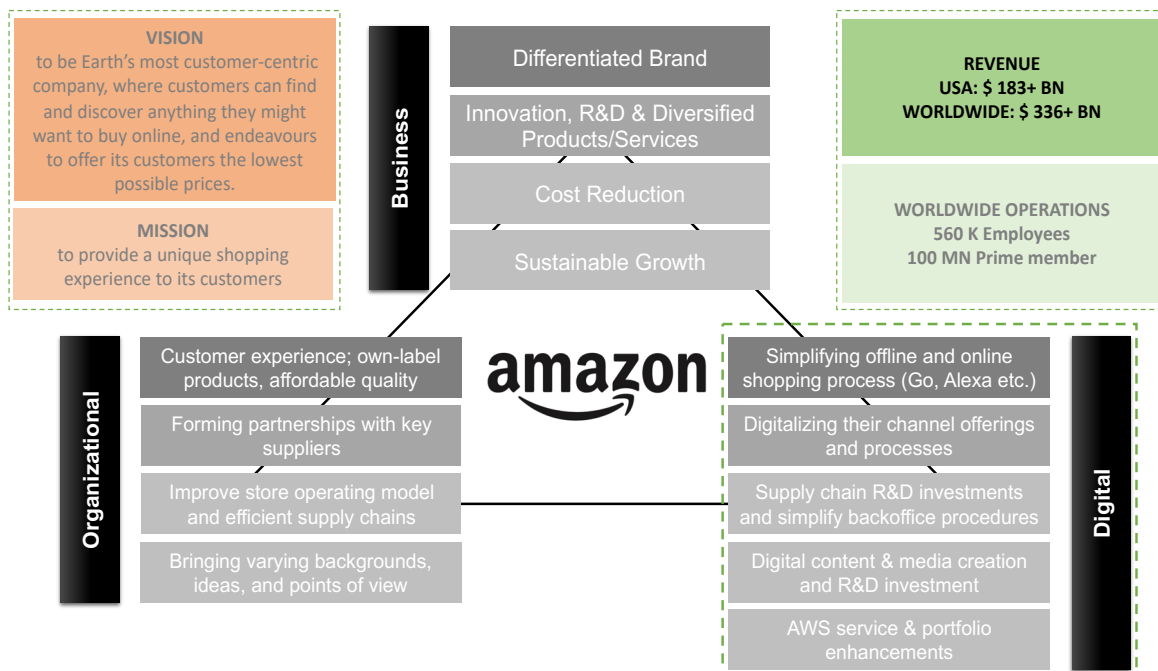
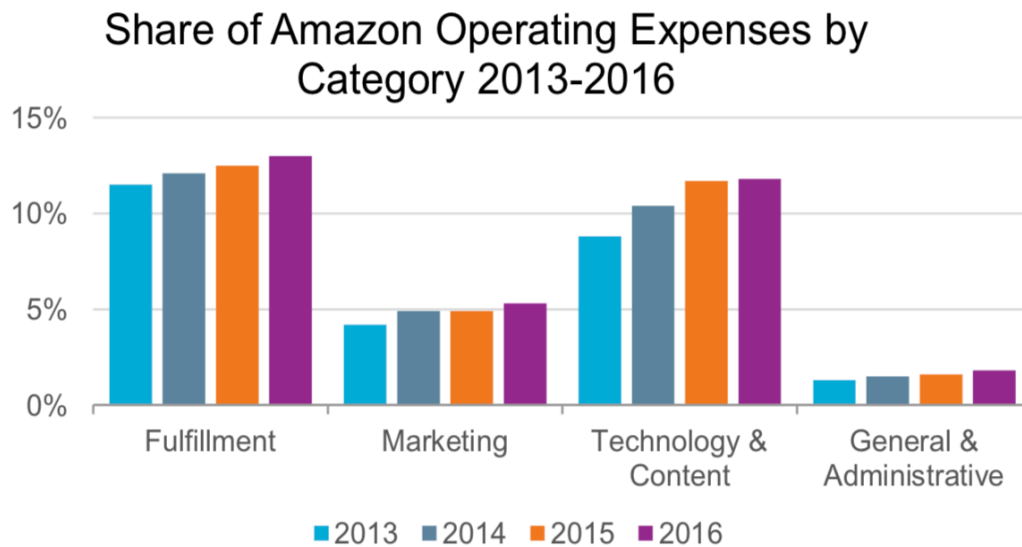


Figure 6 - Amazon.com Strategy Triangle

Elert et al (2017) call attention that firm's sustainable growth differs based on its ability to exploit innovations in its routine. Complementary view of Pisano (2015) emphasizes that

distinctive type of innovations can be complement for existing products that can contribute others. Similarly, innovative technologies help Amazon's growth strategy by designing complementarities amongst to its devices and services that are enabled by technology for instance an Amazon Prime customer can prefer Echo in order to shop from Amazon.com by using Alexa voice assistant or customers can prefer to pay more for a witty delivery by choosing drone shipment. Following Figure 7 shows Amazon.com's share of technology & content expenses compare to other operating expenses.



Source: Amazon annual reports

Figure 7 - Share of Amazon Operating Expenses by Category 2013-2016 (Source: Euromonitor, 2018)

Therefore, its \$16.1B Research & Development and technology investment of Amazon.com has boosted it through at the top of the giants' league amongst the tech giants (Molla, 2017, Fastcompany.com, 2017). That evidence also shows how digital strategies and investments are important. As an industry, retail and supply chain is suitable for technology-driven disruption. And no firm is greater at distributive innovation and technology to spread borders than Amazon.com (Schreiber, 2016).

Furthermore, Table 2 is created to show that how Amazon.com is changing the way of shopping and lock in their customers by using innovative technology and products.



Shopping	Customer lock-in point	Technology as a complement
Online	Fulfilment by Amazon FBA One-hour delivery promise Fast, Transparent and Traceable Order History, Hassle free refund	Drones, 3-D printing-trucks, and self-driving delivery vans, KIVA-robots, Replenishment and automation systems
Experiential	Amazon.com's new generation physical store Amazon Go	Smart checkout without cashier
Replenishment	Order with one click or a voice comment no hassle and place an order by using mobile or web,	DASH button technology, Echo-Alexa, Internet of things, connected devices
DIY (Do-It-Yourself)	As a customer create, sell and distribute your own products through Amazon.com	CreateSpace online platform,
Amazon Prime	Free super saver shipping, free 2 days	Loyalty and customer segmentation capabilities, CRM system
1-Click Check Out	Simplified shopping experience only one click	Secure payment technology
Digital Content	Limitless content, DRM- Digital Rights Management on Kindle which makes enormously hard to read Kindle e-book or medias on another readers.	Kindle, Digital content creation and publishing, DRM
Selection and Search	Smart Recommendations & Personalisation based on customer data, 573+ million products shape the game, customer has started to make their search on Amazon.com instead of Google.	Fuzzy and AI search algorithms, along with 360 customer profile and data.

Table 2 – Examples of use of digital technology to keep customers connected/loyal.

Amazon-as-a-Service Let's move on how this tech investment fosters Amazon.com's growth and competitive digital strategy through the way from outsourced services, internal capability and self-realisation and providing 3rd party services as a platform such as AWS, KDP, Fulfilment by Amazon, Digital Content (Amazon Studios) (see Figure 8). That also classifies maturity of Amazon.com's technology as IT Business Partner which is at the top-level (3rd) maturity regarding the Merlyn's (no date) IT maturity model.

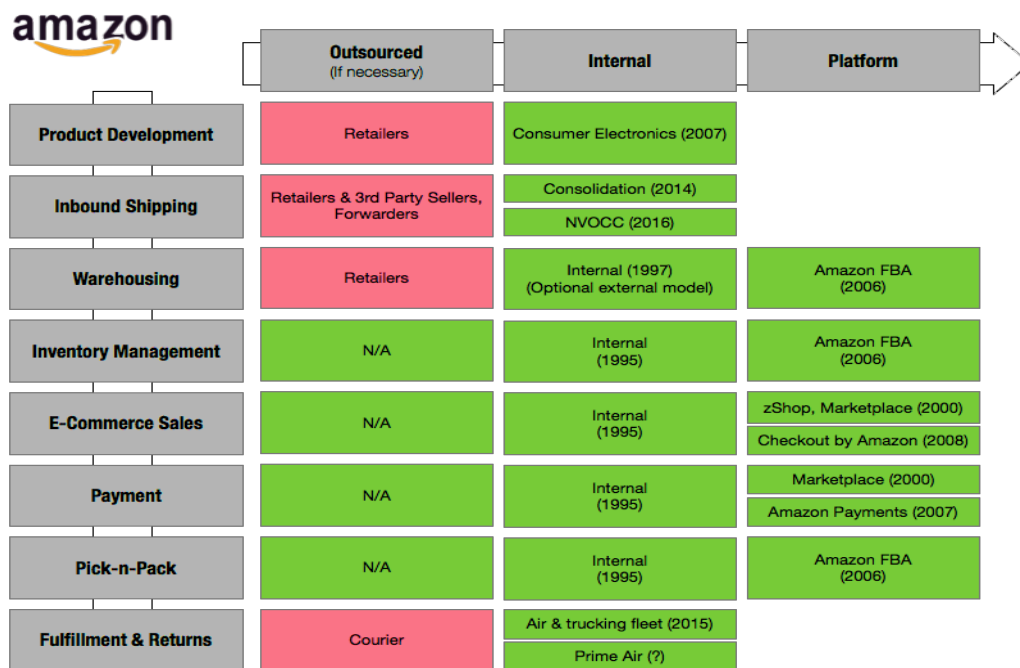


Figure 8 From outsourcing to Amazon as a Service (Source: Schreiber, 2016)

Amazon.com transforms physical retail in exactly the same way how it renovated the In-house IT Infrastructure to AWS (EC2, S3) by inventing new services and products and using technology (Schreiber, 2016; Sarkar, 2016).

Amazon.com has knowledge management (KM) system that provides an advanced level and amount of data to feed its CRM system to connect and understand its customers as a key activity by tracking real-time customers behavioural and transactional data on the site as well as understanding the causes of cart abandonment rate along with the behavioural patterns of customer (Frow et al., 2011; Kotler& Keller, 2016). Consequently, Amazon.com is able to create customised and personalised content and experience for its customers to keep existing customer happy instead of spending too much money to attract new customers by maximizing customer life time value (Kotler& Keller, 2016)

Conclusion& Recommendations

The paper provides some evidence to suggest that the leverage of innovative technology provides advantages that are based on more knowledge of customers and technology, than rivals and effective use of very skilled human capital. Amazon is the model for eliminating waste and improving customer satisfaction simultaneously in every step of its value chain. Constant innovation to disrupt the existing state and traditional ways of doing business,

Amazon.com has been disrupting and dominating the retail and ‘Amazon-as-a-service’ (especially AWS, Fulfilment-by-Amazon) industries by innovating and implementing the new technologies along with services and products way to serve the Amazonians. However, when it comes to brick& mortar retail such as WholeFoods operation may require special care to gather specific information/data from physical and grocery stores to understand customers and to foster revenue by implementing Amazon Go technology and/or Prime loyalty program. Another challenge can come with GDPR ‘General Data Protection Rules’ which brings strict data transparency and protection rules for the firms. GDPR may affect Amazon.com knowledge management process and also make transparent its secret about data processing for its competitors. Lastly, boosting penetration and presence of Alexa voice assistant along with affordable connected devices by integrating it with smart home, car, entertainment systems in the market can be another profitable revenue stream by using technology (Euromonitor, 2017). So, Bricks& Mortar, GDPR and IoT alignment will be crucial to sustain its growth and dynamism to develop new innovations to move one step beyond of its competitors.

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