Gamification in E- Commerce:
A Comprehensive Review of Literature

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ABSTRACT

With the advent of technology and with growing occupancy of the people towards it, online shopping has become the need of the hour. With heavy discounts floating over the e-commerce websites, customers find that online shopping allows them to save both time and money. The e-commerce websites on the other hand seek to avail the early advantage of the frequently visited customers through the recommendation engines by using gamification techniques. This tends to make their products highly attractive with the least cost paid by them along with facilities of extra discounts given to debit/ credit card holders. This article provides a coherent picture in the research that has taken place in the area of gamification by comprehensively reviewing 1073 research studies extracted from the SCOPUS database and mostly validates the findings on the effectiveness of gamification in the various fields. This article also peer reviews the various motivating factors that makes customers prefer gamified online shopping over market retailers. The review points out the effects of gamification in e commerce websites in gaining customer retention. The article would also suggest the future of research directions in the field of research of gamification and further research that can be explored in the field.

KEYWORDS

E-commerce, Gamification, Literature Review, Scopus, Systematic

INTRODUCTION

In recent times, the technological world has witnessed the fusion of utilitarian systems and hedonic systems. We are witnessing an increasing application of fun and entertainment-oriented technologies in productive use. This phenomenon is termed as gamification, and this has become one of the most prominent development in the field of information systems in the technological world (Koivisto & Humari, 2019).

Gamification is the art of applying game thinking and game mechanics in the non-game contexts to influence behaviour. According to Zichermann and Cunningham (2011), Gamification helps in motivating the users to perform the tasks of engaging customers. Using of gaming elements in the e commerce set ups had helped savvy business owners and online marketers to build loyalty and

consumer participation into the system. It has also helped them to grab attention of game players by using the gamified methods of interaction. The most common example of gamification in e commerce set ups are 'spin the wheel' contests, wherein the e commerce businesses uses a spinner app to make their customers spin the wheel to avail certain discounts. The spinner just engages their customers to be a part of the game so that they are incentivized to make a purchase of their products. Understanding the success of various games like Candy Crush, Angry Bird, etc., online businesses have applied the gamified elements into their business to encourage the users to keep visiting their sites to promote sales. It is important to understand the consumer behaviour in online business to maintain relationship marketing amongst its users. Since e-commerce is just a click away, many applications are designed to produce desired behaviour change by facilitating the users in getting involved into it in such a way that makes them form habits out of it. It does so by inclining them to quick rewards and recognition.

Customer retention is one of the biggest challenge of e commerce businesses and hence they come up with multiple well linked motivating programs including customer loyalty programs — rewarding points on every purchase which can be redeemed in future and rewards in return for frequent visits and purchases; social loyalty program — rewarding points to customers for posting reviews and comments on the product as well as engaging in suggestive conversations concerning the brand on social media; expanding customer base program — rewarding customers for referrals and recommendations; participatory competitions — organize alluring campaigns with exciting and appealing prizes for winners; conferring badges — encouraging users to complete certain tasks and give them badges indicative of their customer group (e.g. VIP users);digital wallet — loading money into the digital wallet of the customer for high amount purchases, which can be redeemed during the course of future purchases; etc (Harwood & Gary, 2015).

According to Fogg (2002), gamification is a social activity which promotes interaction with people around to trigger a certain behaviour, creating loyalty, brand awareness and effective marketing engagement (Foursquare, Stack Overflow) (Daniels, 2010).

Although every gamified application wishes to serve different purpose, the common purpose of all the e commerce businesses is to create sustainable and prospective customers that can address customers' key needs. Another popular example of Gamification is Health applications like 'healthify or loselt' which keeps a daily calorie track, setting goals for us, creating badges and a healthy competition. If the users stay within the calorie limits, they are rewarded with badges, which incentivize them to work more. Starbucks is another popular example of Gamification where the users get stars with each check ins, along with bonus stars on the menu challenges. Google Pay is yet another big example of gamification which is helping millions of people go cashless along with rewarding e-scratch cards or coupons of cashback is transferred from one account to another. Thus, gamification has created a huge change in the way users interact and encourage desirable website usage.

The e-commerce businesses are well aware of their target customers and they design the gamified elements which strikes the human psychology making them compete against one another. It entices the end users to achieve the desired action, triggering them to demand for more. It encourages social sharing, leading to customer retention, customer loyalty and repeat purchasing and customer satisfaction of winning the game. Gamification only aims at making their customers engaged onto their gamified system, who share a common interest, making them stay connected to the brand (Bunchball Inc., 2010). Once the potential customers start getting obsessed with the gamified system, they achieve their ultimate goal. This obsession is accompanied with repetition of desired outcomes which evokes a behavioural loop, which later require less cognitive efforts as the obsession gets repeatedly reinforced (Duhigg, 2012).

The objective of the study is firstly, to critically examine the extant literature on the topic of gamification and synthesize the existing knowledge on the topic and present the same in a structured manner. Secondly, suggest future research agenda in the area of gamification. Thirdly, to understand the motivational factors that helps in understanding the behaviour of the users against the game mechanics used in different online business. It also studies the effect of the game mechanics on

the user's engagement in different e commerce business. Firstly, the paper introduces the topic of gamification. The second section discusses the past literature and various motivational factors in relation to gamification. Third section discusses the research methodology employed in the paper and content analysis performed. Fourth section deliberates on the various principles and effects of gamification. Lastly, in the fifth section, the study concludes the paper along with future scope of research.

LITERATURE REVIEW AND MOTIVATIONAL FACTORS

Gamification as a phenomenon has witnessed tremendous increase in attention and the literature on the subject has been rapidly increasing and branching out in various directions, which is evident in any development that has the potential to be extremely utilitarian and something that has been getting a lot of traction from both Industry and academia (Koivisto & Humari, 2019). So as to better gauge this development one needs to properly understand and synthesize the literature to comprehend the current work done on the topic and, also suggest the future scope of research. Gamification as a concept is still in its nascent stage and majority of the understanding of this phenomenon majorly originates from scattered bits of knowledge from various perspectives. Given that Gamification has its major building blocks in the information technology field and is basically an Information technology spurred phenomenon, the literature review would focus on the elements of gamification in the information technology literature.

A considerable amount of literature and knowledge has pointed out to the fact that, traditionally, information system has been majorly designed to pursue the knowledge in order to achieve higher levels of productivity and efficiency (Hirsccheim & Klein, 2012). However, over a period of time, information system also started witnessing its uses in the non-utilitarian aspects, which countered the premise that information systems utility driven lens of information systems. The emergence of information systems aimed at fulfilling entertainment needs, opened a lot of new avenues of research in the field of information systems, which was earlier dominated by utilitarian/rational aspects of the same (van der Heijden, 2004). Hence, eventually, the scope in the field of information systems was further expanded by the introduction of hedonic information systems which were different from the utilitarian/rational discipline of the information field (Webster & Martocchio, 1992).

Information systems could be distinguished in two different types of systems which address specific and different needs, either hedonic or utilitarian. Utilitarian information systems majorly attempt to increase the efficiency and productivity of given tasks, while hedonic based information systems are designed to address entertainment needs, and satisfy the recreational purposes of the users, which also makes hedonic systems intrinsically motivated (Ryan and Deci, 2000).Social media, entertainment driven websites, online video games and blogs, are all examples of hedonic based information systems. Over the recent years, information-based systems are increasingly being used to motivate various users (Gerow et al., 2013; Sun & Zhang, 2006).

In this regard, gamification as a phenomenon stands out in this field, as it combines both the aspects and intends to satisfy both utilitarian and hedonic needs. Hamari and Keronen (2017) identified that many information systems are designed in such a manner that they take into consideration both utilitarian and hedonic needs of users, these systems are also called 'mixed systems.' Gamification is an example of a mixed system. These systems have an interesting mix of utilitarian and hedonic aspects. The major aim of these systems is to achieve the goal of productivity and efficiency, however, the manner in which it is achieved is hedonic in nature (Davis, 1989). These systems differ from the traditional information systems, as they aim to achieve productivity with an entertainment driven process. One of the most effective ways of tackling motivational challenges is by employing the use of digital games, referred to as 'gamification' (Morschheuser et al., 2017). Any system that is enjoyable is bound to enhance long term engagement with users and also tackle the motivational

issues pertaining to various users. The innovativeness of gamification lies in the redesigning of tasks in an enjoyable and an entertaining manner (Hamari & Koivisto, 2015; Mäntymäki & Salo, 2015).

The current study has implemented a detailed survey of literature on the theme of gamification. The survey of papers can be witnessed from the below table 1.

Gamification is an effective strategy to motivate their customers, which makes them continuously doodle the online websites, keeping them busy and aware about the latest trends in the markets. In ecommerce, it motivates the customers to behave in a certain way in exchange for additional benefits. This technique is an increasingly popular marketing tactic used to increase conversions and customer engagement. The probable reason is the gamified elements applied to e commerce sites which helps them in building their brand name and image, building trust among its customers, helping them to know their user's experiences and creating a social value of the goods and services (Rodrigues et al., 2016).On the other hand, the customers get motivated due to reward points offered to them on continuous purchase of products and also redeeming them in future. This instills a sense of belongingness amongst the customers that their choices are taken care of, whether it is about keeping them informed about the price drops, special schemes for their customers, special discounts offered to them, or loading them with the cashback schemes. It indirectly helps in understanding the behavior pattern of their customers, creating easy and simplified ways of keeping the customers engaged with the latest products and services. For example, Shopping cards of brands helps us to register our shopping to the online sites, which provides an extra discount on the reward points added to our account. Thus, Gamification plays the most important role in relationship building with its customers. There are various ways via which gamified applications can better the relationships with customers, like various cashbacks or free reward points that can be redeemed later on via the use of applications. Similarly, VIP tiers or levels also hook customers to a particular application by providing incentives or discounts to customers who repeatedly make purchases on the application or a particular website. Free gifts, badges to customers and promotional discounts are also effective ways to build better relationships with existing customers. Leaderboard system in application acts as a gamified mechanism to motivate customers to continuously use a particular application or website.All these motivational factors are discussed in detail subsequently.

Reward Points

Gamified applications create registration of customers to their e commerce websites by making them answer a series of questions. This lists the customer's preferences and interests in a quantified form. In return, the customers are benefitted with the first-time cashbacks or free reward points to be used later. It also provides entertainment to the users, making them frequent visitors of the websites. This is sensed by the recommendation engines in creating value to the customers. It also introduces a system of gifts to the users and makes them actively answering the questions being asked to them. The users are also motivated to invite their friends to be a part of the system as they are tempted to gain reward points or certain cashbacks on doing so (Seufert & Burger, 2016).

VIP Tiers/Levels

VIP tiers also encourage their customers by providing them incentives for repeat and continuous purchases. The gamified system understands the purchase habits of their customers by offering them incentives to customers spending the maximum on their online sites. This attracts the customers who keep unlocking more such incentives with each successive purchase. The online sites try to create such benefits exclusively for special customers, trying to make them feel the importance of reaching to the next level of exclusivity, i.e. to the next VIP level. Hence, Customers keep logging into their reward account to find the opportunities to reach to the next level. Hence the gamified system has very high customer acceptance (Smith, 2007).

The customer acceptance has also been encouraged to the extent the customers perceive that the online sites are providing them an innovative social experience. The gamified business applications

Table 1. A detailed survey of literature

Source	Purpose	Research Model/ Methodology used	Gamified elements	Findings
Cramer et al. (2011)	Encourage location- sharing	Used Foursquare, allocation-sharing app known for its use of status in the form of "mayorships" earned by frequent customers.	Points, Badges, Status	Gamification elements could engage but also demotivate
Bista et al. (2012)	Track behavior in a system; encourage honest participation	Outlined the design of a government- sponsored online community for individuals receiving welfare interested in returning to the workforce	Points, Badges	Badge allocation allowed behaviour tracking; potential increase in engagement and collaboration
Frith (2013)	Encourage mobility	Investigated the ways in which game elements in Foursquare motivated certain behavior	Points, Badges, Status, Leader Board	Encouraged mobility but some gamification elements are demotivational
Thom et al. (2012)	Explore the effect of removing gamification	Investigated the effect of removing gamification features in a gamified social network for a large multinational organization after 10 months of use	Points, Badges, Leader Board	Negative results support use of gamification; participation decreased on removal
Forde et al. (2015)	Evaluate the impact of gamification on intrinsic motivation and Need satisfaction	Theory based Instrument- the intrinsic motivation inventory 4 x 2 between-subject Online experiment	Points, Levels And Leader Boards	Points, levels and leader boards seem to be an effective means for promoting performance quantity
Rodrigues et al. (2016)	Explore the role of gamification, socialness, and other four well-known variables (ease-of-use, usefulness, enjoyment, and intention to use) in a gamified business application and corresponding business	Technology Acceptance Model, new conceptual model to predict behavioural intention towards gamified e-banking	Gamification, Socialness, Ease-Of-Use, Usefulness, Enjoyment, Intention to Use, And Business Impact	--Gamification and socialness are beneficial for e-banking, since they have an impact on customer intention to use a business software --motivate customers to increase their use of the website, thus increasing their financial activity --application's perceived greater the perception of ease-of-use, usefulness, and the intention to use the website --the user's perceptions of ease-of-use have a relevant impact on intention to use the gamified business application, indicating also a strong influence on usefulness and enjoyment.
Siswanto et al. (2016)	To find out the relation between application of gamification strategy and customer satisfaction and loyalty in e-commerce; to introduce new innovation type on e-commerce area by using gamification strategy	Conceptual Research e-Loyalty Model	Points, Membership Level	Positive relationship between innovation orientation and e-satisfaction innovation orientation indirectly affected to e-loyalty
Seufert et al. (2016)	The app, which is called "My Secret Insights", was launched for a subjective assessment of influence and trust	Flexible framework for personalized surveys on relationships in OSNs	Points, Rankings, Scores, And Leaderboards, Unlocking Gifts	Provides the basis for a deeper understanding of psychological aspects in online social networks
Yang et al. (2017)	Examines the effects of gamification on customers' intention to engage in the gamification process and their attitudes toward the brand	Technology acceptance model (TAM)	Points, Badges, Gifts	The intention to engage with a gamified brand is likely to lead to positive attitudes towards that brand importance of enjoyment in predicting the intention of engagement
Iida et al. (2018)	Evaluated the application of gamification to the business model of the Dota 2 Compendium.	Business model of Dota 2, a Free-to-Play game; Game Refinement Theory; Force-in-mind theory	Scores, Rewards, Leader Boards, Quests, And Achievements	Gamification elements are continually improved by Valve over the years to ensure that the customers will be satisfied and purchase more compendium level, increasing the revenue of the business.

Table 1. Continued

Source	Purpose	Research Model/ Methodology used	Gamified elements	Findings
Hall et al. (2018)	Investigate the effects of gamification on online trust, testing the impact through the use of an e-commerce website, eBay; to dis-cover how a certain type of visual design element implemented on websites impacts users' extent of online trust	Online trust model was used, that was created based on a trust model designed by other researchers	Points, Badges, Leaderboard	Gamified elements implemented on websites have the potential to enhance users' confidence in an online seller; gamification indeed has a significant positive impact on generating online trust
Shang et al. (2013)	Understand the impact of gamification design on consumer purchase intentions and to Encourage further analyses into how different types of consumers may react to different design elements	Planned behavior model, Means-End Chain Model	Coping, Fantasy, Skill Development, Escape, Recreation, Competition, Social	Research-in-Progress
Insley et al. (Year)	Explore the role of gamification, the use of game mechanics, in enabling consumer engagement with online retailers.	Qualitative methodology carrying out 16 in-depth interviews with individuals who are frequent online shoppers	Flash Sales and Leader Boards, Prizes, Competition, Status	Without appropriate management customers can subvert gamification strategies to create their own 'games', increasing competitive pressure between retailers.

Source: Various Sources

influence their customers in the financial operations and these creates a huge impact on the business. (Delone& McLean, 2003). For example, Sephora's beauty insider program aims at breaking customers into distinct groups and challenges each shopper to see if they can reach the milestone. With each tier comes the points which they can redeem to buy more beauty products at their store.

Free Gifts

Contest Promotional schemes such as free giveaway also turns out to be a major motivating factor in the realm of gamification. Several contests are held on the e commerce websites, who offer their customers a chance to win a free product if they exchange any kind of contact information with them. By getting the contact information, e commerce businesses try to be in touch with their customers, informing and compelling them to buy online. This encourages potential sales with e mail marketing, which doesn't hurt their advertisement expenses. On the other hand, the retailers might consider these giveaways as an additional expense and would not like to continue with it if it doesn't outweigh their initial cost. To give a boost to the marketing campaigns, the e commerce businesses also encourages their customers to share about these contests into their social media accounts. With this, more and more people participate in several schemes launched by them through the contests, helping them in enlisting the potential customers. Many online sites launch 'sign up to win' promotional schemes which capture thousands of emails together. This has resulted into giving a big boost to the digital market, by providing them great returns with least investments. Thus, gamification increases the sales of the e commerce businesses, and it thereby persuades them in working over towards improving their quality of service, which is very important for marketing and business metrics. (Hamari & Koivisto, 2013). Although, the system of getting reward points sometimes doesn't work successfully as users answer the questions wrongly in a haste to earn them. To prevent the users from doing so, certain studies and measures has been integrated into this system. It includes observing certain clicking patters of answering may be the option lying in between or may be clicking the same options in a row. Hence, a test was conducted on these users of continuously making them answer the same questions over and over again to understand the behaviour pattern of the customers (Hoßfeldet al., 2014).

Badges

In the gamified e commerce business, reward system of awarding badges becomes a powerful tool in engagement of the customers. This helps the e commerce set ups in accomplishing their short-term goals and objectives, thus leading the customers keep coming back to them. It is found by Hamari (2013) that in e commerce set ups, that users who have been benefitted from the accumulation of badges had increased the customer retention and customer engagement. According to Van de Ven et al., (2011), people benefitted from the badges system has depicted their positive behavioural patterns from the social cues. According to Bandura (1993), badges provide clear goals for analysing customer's behaviour towards certain products. He demonstrates the relation between clear goals and behaviour, which means increasing customer satisfaction with the accomplishment of goals. Unlocking of badges is yet another clear goal of gamification. As a part of customer engagement, badges as a reward system provides the e commerce business with the necessary feedbacks to work over. This helps them to develop their business financially and economically. For example, Payment Badges, i.e. showing logos for already established big companies which boost trust or Money back guarantee badges, etc.

Special Discounts

Running discounted schemes on specific days or probably holidays also helps gamification in outreaching the customers who believe retail marketing is way better than online marketing. This helps in creating brand loyalty which is an integral part of firm's strategy and survival. For example, Amazon runs big billion days where it puts a discount on certain products, thus attracting the customers to switch to online shopping. Every description of the product is mentioned as specifications which gives an insight to the customers about the same and getting attracted towards schemes like free home delivery, customer star rankings, etc. thus creating e loyalty to the business. Value propositions, brand building, trust and security, website and technology and customer service have been shown to be the main drivers of e-loyalty (Bilgihan & Bujisic, 2015).

Leaderboards

Leaderboards are another motivating gamified element, which shows the users where they rank in the gamified system. The simple goal of achieving a top rank makes the gamified elements a powerful motivator. A mere increment in their ranks encourages them to engage themselves into it. It is the most cost-effective motivating tool of gamification. For example, Candy Crush, which makes the players become so addictive because of aiming to achieve more as compared to other players' scores. It facilitates healthy competition and continuous engagement amongst the users. But sometimes it is the most troublesome tool when used in the wrong context and when the actual content of the game is neglected. (Werbach and Hunter, 2012).

The subsequent section of the study would comprehensively analyse the existing literature in the realm of gamification and its various themes. In order to ensure there is a proper synthesize of literature, it is utmost important that review of existing literature should be a thorough and fair process. Therefore, a systematic review of literature ensures that the process of refining and searching of literature is done with a defined search strategy and hence making the process fair and thorough.

RESEARCH METHODOLOGY AND CONTENT ANALYSIS

The literature review aims to frame and assess the existing body of vast literature that has been in place over the past years in a systematic manner and point out the potential research gaps and directions that can stem from this exercise(Tranfield et al., 2003).For the current study the literature was searched in a structured manner of iterative searches with appropriate keywords related to the topic, Rowley and Slack (2004) recommended a well-defined and structured method of filtering

literature, mapping the literature review and writing the study. The current study also adopted a similar approach. Firstly, relevant keywords were defined which would be used to filter the research studies from the SCOPUS data base. For the purpose of the study, "Gamification" and "E-commerce" were majorly used to search for relevant papers pertinent to the topic. Secondly, after filtering out book chapters, books and conference papers, only journal articles were stored. All vital information related to journal paper such as, author names, paper title, affiliations, abstracts, keywords, etc., were saved in an excel file. Thirdly, there was further refinement in search results by filtering out journal articles that were extraneous to the topic of the study on the basis of their abstracts, further filtering was also done to remove duplication of papers and finally 1072 papers published over a seven-year period from 2011 to 2018.

The year-wise distribution is shown in Table 2. It highlights the trend in quantity of research papers published in the field. As its evident, publications focusing on gamification and e-commerce have steadily increased over the years highlighting the popularity and growth of the topic among academicians. While in the year 2011 there was only one publication, the uptrend has shown that 2018 had 313 publications in the area. The number of publications has witnessed a huge upsurge.

The current study also categorized the top organizations with the highest number of publications in the area. Table 3 highlights the university-wise distribution of publications. As it can be seen, Queensland University of Technology and Tampereen Yliopisto have contributed the highest number of publications among all the universities. Also, among the top contributing universities, most universities are tilted towards the field of engineering and technology. Also, geographically also the universities are also well spread out highlighting the widespread prevalence of the topic of the study.

The current study has also computed the author-wise distribution of publications. Figure 1 highlight the top-authors in terms of the number of publications contributed by them towards the topic of the study. As it can be witnessed from the table, Juho Hamari has contributed the greatest number of publications among the top contributing authors. At a count of 14, Hamari is followed by Landers, Su, Rapp & Vinichenko with publications count of 8,7,6 and 6, respectively.

The study has also found statistics pertaining to country wise distribution of publications. Figure 2 highlights the top contributing countries in terms of number of publications in the given field. United States has massively contributed to the number of publications among the top contributing countries with a total number of 267 publications, which is much higher than the other countries. United Kingdom is the second most contributing country with 98 publications followed by the others.

The Journal wise contribution of Publication is highlighted in Table 5. The study has determined statistics which show the top contributing journals with highest number of publications in the pertinent field of study. The top 10 journals with highest number of publications are highlighted in Table 4. Computers in Human Behavior has the highest number of publications of 52 followed by Journal of Medical Internet Research and Computers and Education with 25 and 21 publications respectively.

The current section has comprehensively synthesized the existing literature in a systematic manner with a define set of search strategy. The outcome of the same is the emergence of various themes pertinent to gamification. These specific themes are discussed in the next section.

PRINCIPLES AND EFFECTS OF GAMIFICATION

The process of gamifying systems creates a lot of impact on the customers that make use of these systems. For example, a lot of e-commerce websites keep a track of customer preferences and needs so as to send them tailor-made notification on upcoming discounts and various cashback schemes. Custom made notifications are also a source of intrinsic enjoyment to various customers. Along with that, customer experience is also enhanced which helps in customer retention as well. The current section discusses in detail various principles and effects of gamification in detail.

Table 2. Year-wise publications

Year	Number of Publications
2011	1
2012	9
2013	49
2014	91
2015	134
2016	206
2017	269
2018	313
Grand Total	**1072**

Table 3. University-wise distribution of publications

Affiliation	Number of Publications
Queensland University of Technology QUT	13
Tampereen Yliopisto	13
University of Toronto	11
The University of Hong Kong	10
Old Dominion University	10
Universidad Carlos III de Madrid	9
Universitã degli Studi di Torino	9
Aarhus Universitet	9
Turun yliopisto	8
Oulun Yliopisto	8
Kaunas University of Technology	8
Aalto University	8

Sense of Belongingness

The e commerce business creates brand awareness and a sense of belongingness of the customers to them. The e businesses keep a check on the customer's preferences and respects their needs by sending them a notification on the upcoming discounts or about the engagement into the cashback schemes, special reward points on their birthdays, recommending them of the similar products and building brand loyalty amongst them. As and when the customers start getting into the flow of experience, the e businesses take an advantage of influencing them to buy more from the same sites. (Park et al., 2008). Thus, it serves as a feedback to the brand equity making the users frequently visit their sites. Successful e-commerce website is one that magnetizes customers, making them feel the site is trustworthy, dependable, and reliable (Liu & Arnett, 2000).

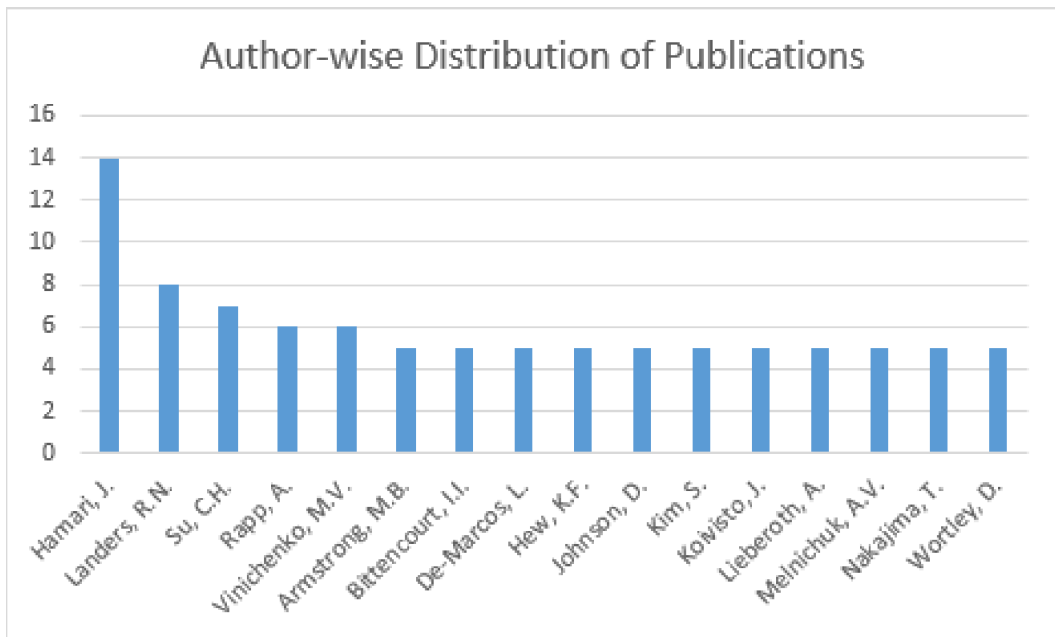**Figure 1. Author-wise distribution of publications. Source: Authors compilation from Scopus.**

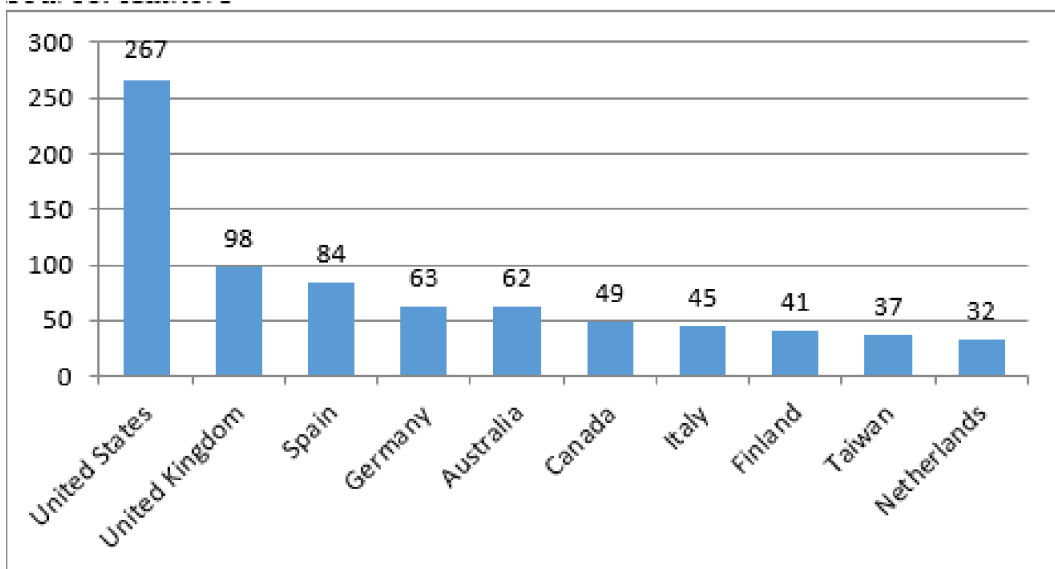**Figure 2. Country/territory wise distribution of publications. Source: Authors.**

Table 4. Source/Journal-wise distribution of publications

Source Title	Number of Publications
Computers in Human Behavior	52
Journal of Medical Internet Research	25
Computers and Education	21
Simulation and Gaming	15
International Journal of Game Based Learning	14
Games for Health Journal	13
International Journal of Emerging Technologies in Learning	11
International Journal of Engineering and Technology UAE	10
Multimedia Tools and Applications	10
Sustainability Switzerland	10

Source: Authors Compilation from Scopus

Intrinsic Enjoyment

The intrinsic enjoyment users derive from shopping online at discounted rates also depicts the consumer behaviour (Blakney & Sekely,1994). Customers seek several benefits while checking one commerce websites, whether it is the price, the quality, the delivery charges or the discount available to them. These can be the utilitarian benefits, the hedonic benefits, or may be just the entertainment benefits of checking new stuff on the websites. According to Okumus et al. (2014), both the benefits of Utilitarian and hedonic brings experience of purchase to the customers, along with providing them the customer satisfaction. The e commerce businesses thus utilise these check ins to understand the customer's perceptions and likings towards certain products, so as to provide them a strong experience of enjoyment. On the contrary, there are some websites who display their advertisements on social networking sites such as Facebook, Instagram but doesn't allow the users to check their products from their mobile phones. A proper registration to the sites or downloading their application only gives the access to view their products. This is how e commerce websites helps in maintaining a record of its customers, and hence they keep rewarding their customers with the cashback schemes or the first user benefit schemes.

Customer Retention and Customer Experience

The e commerce businesses are also trying to understand the customer behaviour by using social cues technologies. As explained by Rodrigues (2016), the e business applications provide a software in to assess the usage of social features in increasing the online sales by gamifying the social networking sites with such game elements. Just like playing games provides the users a sense of satisfaction and enjoyment, these elements when applied to social sites brings the much-needed attention and free marketing. It also improves the customer retention and customer experience when they are magnetized with additional rewards of economic savings.

The reciprocal benefits which customers derive are also a form of social usefulness of the service. (Preece, 2001; Lin, 2008). This creates a circle of receiving and contributing in such a manner which creates interdependency in the market. It encourages the customers to be a part of the gamification system.

Perceived Usefulness

The perceived ease of use is another factor of gamified e commerce business. It refers to the extent to which a user gets the information easily without much efforts being put to it. (Davis, 1989) Perceived ease-of-use has a significant effect on perceived usefulness, perceived enjoyment (playfulness), and intention to adopt the use of a specific information system (Van der Heijden, 2003).

CONCLUSION

Gamification is an emerging concept in every field of e commerce for facilitating customer retention, motivation, engagement and enjoyment. The study suggests that there is a relation between gamified elements such as reward points, badges, leaderboards, status, levels, etc. in customer engagement and maintaining of performance quality. Gamification is a useful strategy for e commerce websites to motivate the customers to keep coming back to their websites, thus growing their business financially. Socialness, ease-of-use, usefulness, enjoyment, intention to use, also creates a positive impact on e commerce businesses. The study also concludes that the gamified elements had helped in creating and maintaining e loyalty amongst the users as there are several models that validates this fact. It has created positive attitudes towards several brands, which had led to increase the revenue of the business. Most importantly, it has helped in creating customer satisfaction and judging the purchase intentions of its customers. Gamified elements implemented on websites have the potential to enhance users' confidence in an online seller and has a positive impact on generating online trust.

This article contributes to the understanding of several gamified elements and its applications and benefits to e commerce business. It also directs future research into diversifying its business into new areas. It helps the e commerce websites in raising their profit margins and relationship building with their customers at the same time. In addition to this, the reward systems help in motivating the customers for using their brand more often than usual as they find gamified elements to be cost saving. Customers also get an exposure to extra benefits of the products purchased online while the e commerce tries to understand the purchase intentions of their buyers. This work contributes to the success/failure of new launched products into the market.

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