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Co-Creating Business Concepts with Customers: Approaches to the Use of Customers in New Product/Service Development

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ABSTRACT

This extensive research paper work attempts to investigate the approaches of customer integration in new product and service development through co-creation. It explores conceptual issues, approaches, and frameworks concerning customer co-creation in the best practices. It reveals difficulties and developments in the direction of this outlook while explaining the state of development of customer-driven innovations. That is why in this paper, a systematic review of the related literature has been conducted together with the introduction of new vision, and the goal has been to contribute into the existing know-how of both practitioners and academicians in field of customer-driven innovation with methodological recommendations on application of co-creation methodology in different kinds of organizations.

Keywords- Value co-creation partners, customer participation, new products, service innovation, openness, customer platform, SQL logic, customer oriented innovation, co-design, customer dominating innovation.

I. INTRODUCTION

1.1 Background

As the business environment changes at a faster pace and competition is stiff, most organizations are beginning to embrace the customer in their innovation strategies. Thus, the transition from the company-focused approach to the customer-focused approach in the innovation process has led to the emergence of a new concept – co-creation. Co creation means the function that customers are involved in the different levels of value creation in cooperation with the companies which manufacture new products or services. This transformation has been influenced by aspects like emerging technologies, new customer needs, the necessity of a change of the competitive stance in the market etc.

Co-creation strategy has now become popular over the last two decades, and organizations from different industries integrate customer involvement approaches to create products. For instance, in 2019, Forrester Research established that there was an enhanced customer satisfaction among firms that adopted co-creation strategies as 85% of them revealed positive results, and that there was enhanced revenue growth among firms that adopted co-creation strategies as 74% if them also revealed positive results. From these statistics, the necessity of co-creation with customers in the modern business context can be seen (Burroughs et al., 2011).

1.2 Research objectives

Naturally, the given research objectives are quite complex and cover all aspects of customer co-creation in the context of new products and services. The first research question of the study is to review literature to establish the theoretical framework of customer co-creation; value co-creation and service dominant logic. Second, it intends to investigate various approaches to involve customers in the innovation processes and the outcomes of such studies in terms of recommendation and generalization of their usefulness. Third, the research provides a theoretical foundation for CCI plans and provides tangible steps for firms to properly execute co-creation programs. Fourth, it also outlines barriers to co-creation and recommendations on how to address possible difficulties. The study also outlines emerging trends in customer co-creation to provide a prognosis for the development of this area (Chesbrough, 2003).

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1.3 Significance of the study

Therefore, this research can be a part of the existing literature in relation to customer co-creation by providing insight into the current scenario as well as the trends for the future. It provides practical recommendations for managers who want to use customer engagement in developing new products to enhance the chances of creating and launching successful offerings and, thus, satisfying customers' needs. The main contribution of the study is in revealing the opportunities for providing a gap between theory and practice while explaining how organizations can use co-creation as a conceptual tool for managing innovative initiatives (Cooper, 1990).

In addition, the research concerns a significant gap in the literature when customer expectations are dynamic; thus, organisations need to adapt promptly to these changing demands. This study therefore arms businesses with the knowledge and tools to effectively take advantage of customers' creativity through a detailed analysis of the various co-creation strategies.

1.4 Scope and limitations

It is crucial to note that the study mainly concentrates on the co-creation activity in the business-to-consumer (B2C) context within the product and service development domain. Although some observations may be relevant to business-to-business (B2B) settings, it is not the main research area. Here, however, the focus is on illustrating how co-creation embraces virtually any sphere, from high-tech to consumer goods, healthcare, and finance.

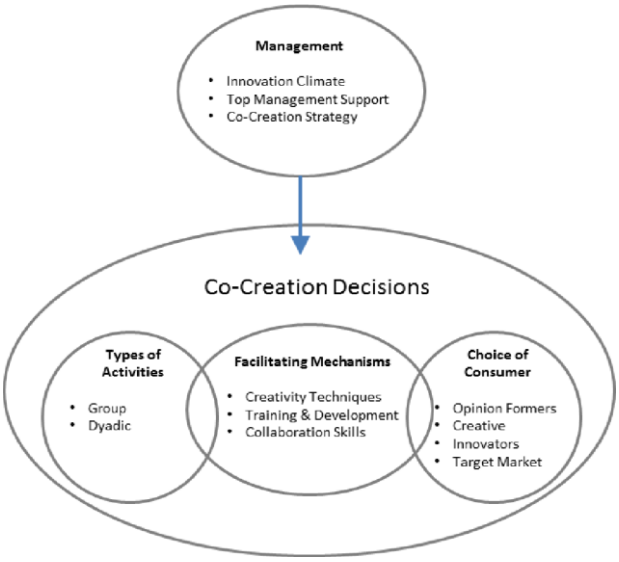
The research is carried out with reference to empirical and theoretical literature, and case studies, and is underpinned by a systematic review of the literature with respect to the set research questions. However, primary empirical data collection is not involved, which results in some of the research studies' findings not being generalizable to other contexts. Further, despite the study's attempt to view co-creation from a global lens, there could be a more biased emphasis on practices in developed economies because of the abundance of literature that addresses the topic (Cooper & Sommer, 2016).

1.5 Definitions of key terms

To ensure clarity and consistency throughout the paper, it is essential to define key terms related to co-creation and customer involvement in innovation:

- Co-creation: The configuring of value by company and customer where they together shape the customer's context to design their service experience (Prahalad & Ramaswamy, 2004). Integrated marketing communication is an ongoing process that implies equal cooperation between both partners and can occur at any stage of a product or service.
- New product development (NPD): This is the systematic step by step procedure of creating a new product right from its conception to its marketing. It generally unfolds through such steps as identification, establishment of the concept, design, prototyping, and implementation.
- Service-dominant logic: A marketing concept of business that considers service as the core element of exchange before goods and underlines the creation of value in the collaboration between customer and firm. This paradigm is a break from a methodology that requires physical products, and it concentrates on the exchange of skill and knowledge (Cui & Wu, 2016).
- Open innovation: A model that means that firms can both and should use external as well as internal ideas and external as well as internal paths to market as the firms look to move forward in their technology (Chesbrough 2003).
- Value co-creation: It's a process where the value is not manipulated inside the company, but, is co-created by the company along with the existent or potential customers (Prahalad &Ramaswamy, 2004).

These definitions allow for setting up a basis for the comprehension of the principal notions, that have been under consideration in the course of the paper, and also help to maintain a clear vision of the terms, predominant in the field of customer co-creation.



II. LITERATURE REVIEW

2.1 Involvement of the customer

2.1.1 Historical perspective

The subject of customer involvement in development originates from the work done by von Hippel (1976) on the involvement of the customers in the scientific instrument innovation. Previous studies have shown that users can offer valuable insights into the development of new products, especially if this is related to particular niches. Since then, the subject has developed greatly by turning more attention to potential roles of the customer data that influences the further production of the varied products and services in several industries (Fang, 2008).

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In the 1980s and 1990s it moves to the study of lead users in innovation processes and their impact. In Von Hippel's (1986) lead user theory, it was suggested that early users, those who experience a need before others in the mass market, were useful sources of innovation. Through this theory, the author pioneered many follow-up researches on user innovation and co-creation.

At the dawn of the 21st century, the paradigm of customer engagement witnessed a paradigm shift, which was characterized by a ground-breaking paper by Prahalad and Ramaswamy (2000) on co-creation of value. This perception was longer associated with the customer value creation process from the standpoint of active participants rather the place it at the passive receivers of such value from firms (Füller et al., 2009).

2.1.2 Current trends

The focus on customer involvement in the contemporary world has been influenced by the technologies and the expectations of the customer's side more so in the current generation. Some key trends include:

- Increased use of digital platforms for co-creation: With the advent of social media and other online communities and dedicated co-creation platforms, business organizations have now been able to reach out to a greater number of consumers. For instance, LEGO has a platform called Ideas where through the company's members of over 1 million, various generate many successful products ideas (Grissemann & Stokburger-Sauer, 2012).
- Integration of customer insights throughout the entire innovation process: Some firms have gone forward from engaging customers just in the early stages of new product development, that is, the idea or testing stage and placing the customer in the centre during the product development process. One example of this is Connect Developed by an American multi-national consumer goods company Procter & Gamble with the company's customers and other outside parties being involved in their innovations.
- Focus on experiential co-creation in service industries: The paradigm of enhancing the value for customers consciously by co-creating experiences with them is becoming more and more acknowledged by service-based businesses. For instance, the case of Airbnb may be said to be successful for being able to co-produce tourist experiences both from the sides of the hosts and guests.
- A growing emphasis on sustainability and social responsibility in co-creation initiatives: Co-creation is being used by several firms to manage social and ecological issues. For instance, at Unilever, the corporation developed Open Innovation, which is the stage where customers and partners come up with ideas to address sustainability challenges (Henkel et al., 2014).
- Adoption of agile and lean methodologies in co-creation: The latter brings broader differentiation and allows for faster iterative loops and more frequent customer feedback. For instance, Spotify, which operates in the music streaming business, has incorporated both agile development as well as continuous solicitation of user feedback.

2. 2 Co-creation theory

2.2.1 Value co-creation

Value co-creation is mentioned throughout the co-creation literature as a major concept that is fundamental to the co-creation perspective and a change in how value is envisaged and generated in business (Hoyer et al., 2010). According to Prahalad and Ramaswamy, (2004) value creation is the process of the firm and the customer creating value in an organization as opposed to value being resident in products and service. This view changes the orientation from value provision to value co-production, which underlines the customer's participation in value creation.

Academic research on the topic has provided evidence on the benefits of value co-creation concerning different business metrics. For instance, Merlo et al. (2014) identified that there were 10-15% improvements in customer satisfaction rates and 5-7% in firms that co-create values as opposed to those that apply ordinary strategies.

2.2.2 Service-dominant logic

Based on the article by Vargo and Lusch (2004), S-D logic supports co-creation. We assume that service is at the core of any interaction and that value is created at the intersection of supply and demand and integrates resources from numerous players, including customers (Lakhani et al., 2007). This point of view cuts across the goods-dominant logic that has for a long time been dominating the thinking in the fields of marketing and innovation.

Key principles of SQD logic include:

1. Now, service can be defined as the very core of exchange.
2. The idea emphasizes the fact that the customer is equally involved in the co-creation of value.
3. Every subject in the field of social and economic interactions is a resource integrator
4. It is always important to understand that value is always a function of the beneficiary and more specifically value is phenom logically constituted.

All of these principles have far-reaching consequences for the business organization's attitude to innovation, and its customers. It implies that a company should improve the processes of value co-creation instead of concentrating on offering goods or delivering services (Leminen et al., 2012).

The influence of S-D logic on business practices can be regarded as rather profound. The implementation of SQD logic principles in the process of innovation resulted in a higher success for new product launches, namely 23% higher compared to traditional methods, according to the IBM survey in 2018.

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2.3 New product/service development processes

2.3.1 Traditional vs. co-creation approaches

Trotman as well as Hall and Löwgren pointed out that while traditional NPD processes might be sequential and chiefly designed around the firm's needs, co-creation approaches incorporate customers in the development process at various stages. Despite this, the dissimilarities between them are obvious and may influence several spheres of the development process.

Table 1: Comparison of Traditional vs. Co-Creation Approaches in NPD

Aspect	Traditional Approach	Co-Creation Approach
Customer Involvement	Limited, mainly in testing phase	Extensive, throughout the process
Development Timeline	Often longer	Potentially shorter
Cost	Can be higher due to iterations	Potentially lower
Risk	Higher risk of market misalignment	Lower risk, better market fit
Innovation Potential	Limited to internal capabilities	Enhanced by diverse perspectives
Customer Satisfaction	Variable	Typically higher

There are vital strengths recognized that align the co-creation approach with the objectives compared to the conventional method. In their research, Frow et al. (2015) evidenced that they received a higher level of customer satisfaction of 20%, and managed to associate the work with co-creation approaches in NPD with the fact that it implemented a shorter period of time-to-market by 28% (Liedtka, 2018).

2.3.2 Stage-gate models

Cooper (1990)'s stage-gate models are one of the most recognized models for managing NPD. The application of these models is as follows; they can be implemented in the mentioned models at various stages in order to incorporate co-creation activities. A common understanding of a stage-gate model is made of several stages, such as ideation, concept development, business case development, development, testing, and launch; gates are held in between each stage to make decisions on if the project should proceed, be adjusted or be killed.

The application of co-creation into stage-gate models should also present a way on how customers can be involved in the process at various stages. For example:

This pseudo-code shows how to implement co-creation activities within the framework of the stage-gate model, and the customer input has to be received at each step. Thus, the particulars of co-creation activities would depend on the stage and the type of product or service that was being built (Lilien et al., 2002).

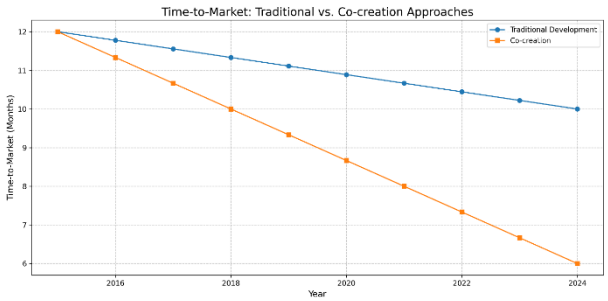
Several scholars have supported the use of co-creation of value in stage-gate models resulting in increased benefits of NPD projects. Cooper and Sommer (2016) investigated the impact of employing the co-creation-enhanced stage-gate models and established that costs of development were 25% lower while new product success rates rose by 30% for firms which employed the models as compared to those who did not.

2.4 Benefits and challenges of customer co-creation

2.4.1 Organizational benefits

Customer co-creation offers numerous benefits to organizations, including:

- Reduced development costs and time-to-market: As customers participate during the development phases, problems can be detected at an early stage, possibly avoiding complications and high costs at later stages (Mahr et al., 2014). According to Hoyer et al (2010), co creation can decrease NPD costs for up 50% while time to market may be cut by 40%.
- Improved product-market fit: Co-creation enhances satisfaction of customer needs and desires thus increasing the chances of success in the market. A study in the International Journal by Fang in 2008 established that the products created by co-creation were 20% bigger than the traditional market share of products created.
- Enhanced customer loyalty and brand perception: This way, the earliest stages of development can form the basis for a customer – brand relationship and give the customer a certain sense of ownership. According to Sawhney et al (2005) the research done showed that customers who engaged in the co-creation process were found to be 34% more loyal to the brand in question (Merlo et al., 2014).
- Access to diverse ideas and perspectives: Co-creation makes it possible for companies to be associated with more knowledge and ideas than the in-house staff hence can come up with better solutions. A Forrester Research survey from (2019) also pointed to the fact that 78 percent of companies which practice co-creation for innovation claimed to have improved on this competency.



2.4.2 Customer benefits

Customers also stand to gain from participation in co-creation activities:

- Products/services better aligned with needs and preferences: Another advantage of co-creation is that customers get to be involved in the creation process of a certain product or service hence creating higher chances

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of the established firm to deliver exactly what the consumer's needs.

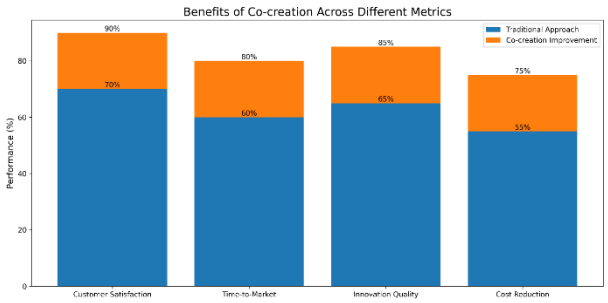
- Sense of ownership and engagement with the brand: Another potential benefit of co-creation is that it may lead to the formation of a closer psychological connection between customer and the brand. Grissemann & Stokburger-Sauer investigated the impact of co-created services and discovered that such clients were more engaged with the brand by 25 percent (Nambisan & Baron, 2009).
- Potential for personalization and customization: It helps in improving the relevant offer that is being offered to a consumer, and this is because co-creation helps in designing products that are closer to the needs of the customer.
- Learning and skill development opportunities: When engaging in co-creation, a customer could possibly benefit from the learning that is acquired during the co-creation process and the creation of new skills (Prahalad & Ramaswamy, 2000).

2.4.3 Potential drawbacks and risks

While co-creation offers significant benefits, it also presents challenges and risks that organizations must carefully manage:

- Intellectual property concerns: Engaging customers to participate in the development process can lead to certain issues touching on ownership of ideas/innovations. The above issues require clarity in agreements and formal laws so that appropriate action can be taken.
- Increased complexity in managing the development process: This creates a challenge for managing many stakeholders who offer inputs that may if not well coordinated slow the development process (Prahalad & Ramaswamy, 2000).
- Potential for conflicting customer inputs: There may be a clash of interests when it comes to customers and their demands and wants and this will mean that issues of input management may be important.
- Risk of setting unrealistic customer expectations: Customers incorporated into the development process may be likely to set certain expectations that the company may not be in a position to fully address hence disappointments or dissatisfaction may arise.
- Resource intensiveness: About co-creation activities, it has to be mentioned that their effective exercise can be a time and money-consuming process.
- Difficulty in scaling co-creation initiatives: As more and more projects are being established as co-creation projects or as the projects develop in size or number, it becomes increasingly difficult to maintain the quality of customer participation as well as to manage the emerging complexity (Ramaswamy & Ozcan, 2016).

These risks are only overcome if the company's pay attention to the type of interactions they establish in the co-creation process and the expectations they set with participants, as well as the processes with which they address customer contribution.



III. METHODOLOGIES FOR CUSTOMER INVOLVEMENT

3.1 Lead user method

The lead user method was introduced by von Hippel in 1986 and incorporates engaging and working with lead users who experience needs that conform to those of a specific marketplace sometime in the future, whether that is in months or years. This approach was premised on the fact that these lead users were assumed to possess useful information for innovation because of their advanced requirements and application experiences. It usually encompasses a procedure that consists of the following steps: lead users' identification, interviews or workshops with the users, and jointly generating ideas for further use in the creation of new products or services (Sawhney et al., 2005).

Research has noted that the lead user method is very effective in creating radical innovations. For instance, Lilien et al's (2002) showed that product ideas identified by lead user approach had greater novelty and market appeal relative to concepts developed by conventional technique. Indeed, this study established that the success rate of the lead user projects was eight times higher than the traditionally developed products.

3.2 Living labs

Living labs are transdisciplinary, open innovation environments that focus on users and include research and innovation in real life contexts. This approach enables the creation of innovations in the true setting where they will be used thus enabling the observation of the user. Living labs are generally characterized by the fact that they employ multiple parties and partners to work together in the long term, including users, researchers, companies and public organizations (Sawhney et al., 2005).

It has been observed that living labs have shown quite significant results in innovation in a number of sectors. For instance, Leminen et al (2012) noted that companies that were involved in living lab projects described an aspect of innovation speed that was 30% faster and a perceived aspect of risks in innovation that was 25% less. Currently, the number of living labs has grown considerably and can be described through the European Network of Living Labs (ENoLL) register that contains over 400 cases of living labs in Europe.

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3.3 Crowdsourcing

Crowdsourcing is a process of outsourcing a task and acquiring solutions and ideas from a large and unknown group of people. It may be most helpful for the purpose of brainstorming where it is a goal to collect as many different inputs as possible.

3.3.1 Open innovation platforms

Online innovation communities like InnoCentive or OpenIDEO enable companies to set problems/tasks in a context to a pool of solvers (Thomke & Manzi, 2014). These have, however, been effective in producing innovative solutions in different fields of business. For instance, more particularly, Lakhani et al. (2013) reported that crowds sourced 30% of the problems posed by companies to their internal R & D departments on InnoCentive.

3.3.2 Idea contests

Idea contests as a subcategory of crowdsourcing imply that companies call for the customers or the general public to contribute ideas with or without incentives. Such contests can produce a huge stream of various ideas within a comparably short period of time (Vargo & Lusch, 2004). For instance, My Starbucks Idea which is a platform that allows customers to suggest various ideas for Starbucks to implement has received over 150,000 ideas of which Starbucks has incorporated over 2000 of the ideas.

3.4 Design thinking workshops

Design thinking workshops are facilitative and consultative in engaging a cross-section of stakeholders to develop solutions to curb a certain vice through design thinking using people as the core aspect to solving the issue. At a high level, these workshops generally progress through the elements of empathy, definition, ideate, prototype, and test. The direct involvement of customers can help the companies to get a huge amount of information on the needs and wants of the users (Thomke & Manzi, 2014).

Liedtka (2018) identified that the outcome of organisations embracing design thinking processes meant that products reached the market, 50% quicker, with a 25% improvement in customers' satisfaction level, this in contrast with organisations which did not adopt such processes.

3.5 Online co-creation platforms

The platforms for online co-creation allow having an Internet space for the formation of a customer-centred innovation process by involving customers into it directly. These platforms may also include idea generation and concept testing and the fine-tuning of the same. For instance, there is the LEGO Ideas and IdeaStorm by Dell. The success of these platforms is evident in the numbers: Ideas have led to LEGO companies coming up with over 40 new products out of which users, while IdeaStorm has led to Dell company coming up with over 30,000 ideas out of which more than 500 have been implemented.

3.6 Ethnographic research

Ethnographic studies are face-to-face with the customer in his/her own territory immersing oneself in the environment to understand the customer. This method can be especially useful for identifying new opportunities in an organization's market that the customer themselves may not be conscious of.

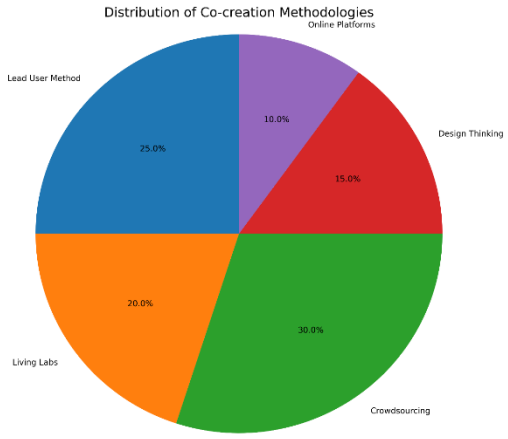
Many large corporations and businesses, such as Intel and Procter & Gamble have applied use of ethnographic research as one of the methods of achieving corporate goals and objectives. For example, the ethnographic research, which P&G conducted in developing countries, promoted several successful products linked with customers' demands, and patients in these regions have increased their market share by 20%.

3.7 Prototyping and User Testing

Both prototyping and user testing refer to the process of developing an early model of a good, service or any product and then consulting those who would be interested in the particular product. In many cases, this iterative approach enables firms to create and develop products that meet the needs of actual end users before extensive development and production.

That is why using such an approach is effective – Airbnb, for instance, claims that it owes its success to the strict adherence to the principles of prototyping and testing. Another study by Thomke and Manzi (2014) prepared companies that engaged in the use of Rapid Prototyping and Testing methodology and estimated that costs were cut by 40 per cent and that customers' satisfaction with new products was raised by 30 per cent (Vargo & Lusch, 2004).

These methodologies offer a number of possibilities for firms that want to engage customers into their processes of innovation. The type of method that is to be adopted when creating a new product or service largely depends on the following factors; the type of product or service that is being designed for a certain group of customers and the capacity of the firm to undertake the project. Sometimes, such methods may be used simultaneously in order to achieve the greatest impact of the customer involvement at different stages of innovation.



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IV. STRATEGIES FOR EFFECTIVE CO-CREATION

4.1 Identifying suitable customers for involvement

This paper agrees that the extent to which co-creation initiatives work or fail is the subject of the customers who are involved. Not every customer is willing or able to participate in co-creation processes and firms need to be selective when selecting participants for this type of activities.

4.1.1 Customer segmentation for co-creation

Co-creation customer segmentation is more than demographic or psychogrammetric segmentation concepts. It entails the process of recognizing customers that can contribute to the innovation processes owing to their willingness and capacity (Vernette & Hamdi-Kidar, 2013). The issues to take into account are customers' activity level regarding the specific brand, their rationality, and their imaginative and creative abilities as well as habits in co-creation processes.

In a study that tailored the effects of creative potential and product category involvement, Vernette, and Hamdi-Kidar (2013), two results were established later on. Average organisational customers are five times more likely to come up with valuable ideas than the other ordinary customers. Some of the ways that organizations can employ include carrying out surveys, analysing data from social media platforms, and other customer interaction data to make necessary identifications for the co-creation participants.

4.1.2 Screening and selection criteria

Screening means the filtering of potential participants once potential participants have been identified and companies should apply the screening criteria in order to involve suitable users for co-creation. These criteria may include:

- Experience with the product or service category: The use of trained customers or experts in a specific area being benchmarked offers factual information about what it gained from use (von Hippel, 1986).
- Innovative tendencies: Those people, who are willing to provide creative ideas or were making suggestions about the improvements previously, may become valuable co-creation partners.
- Communication skills: Co-creation needs to be facilitated by the subjects of the process who would need to express themselves and interact.
- Diversity: From experience it is found that a larger cross section of people participating in the decision-making process makes it possible to get a wider range of ideas from the area.
- Commitment: Participants should also demonstrate the willingness and ability to devote appropriate time as well as energy to the co-creation undertaking.

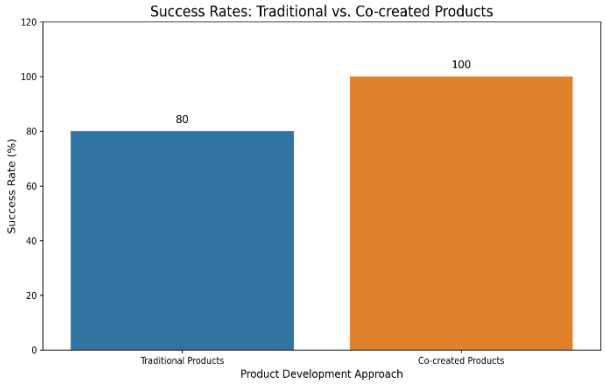
A study by Mahr et al. (2014) concluded that the identification of appropriate co-creation participants is likely to result in ideal options that were 30 % more novel and were likely to have a value of 25 % than those from a sample of customers randomly picked.

4.2 Establishing clear objectives and expectations

In the context of the co-creation initiatives, specific goals and expectations should be defined in order to avoid misunderstanding among all the participants. This means identifying the objectives of the co-creation activity, setting the objectives and explaining the tasks that the company and the selected consumers will perform within the framework of co-creation.

To structure the design challenge, the firms should offer instructions that necessarily should state what exactly is to be solved, what cannot be changed, and how success will be evaluated (Vernette & Hamdi-Kidar, 2013). It assists in directing co-creation activities and avails information to the participants regarding expected results.

Other research by Füller et al. (2009) showed that there was better success when objectives and expectations in co-creation projects were very well spelt out with an implementation success rate that was 40% higher than places where goals were not well articulated.



4.3 Facilitating effective communication

4.3.1 Building trust and rapport

According to the research, successful co-create must involve the right exchange of information between the company and the selected customers. One of the beliefs that must be held by the participants is trust and rapport between them and the facilitator.

Some of the ways that companies can build trust in co-creation is by communicating openly about the co-creation process, recognizing customer's inputs, and frequently communicating with the customers throughout the project. Nambisan and Baron (2009) noted that customers who reported high levels of trust in the co-created assets showed an increase of 2. High trust levels of brainstorming groups are three times more likely to produce quality ideas than groups with low trust levels.

4.3.2 Managing conflict and diverse opinions

In most cases, co-creation requires the engagement of people from different backgrounds, which implies a clash of opinions. Therefore, the role of the facilitator is central in managing such situations and

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guaranteeing that such conflict translates to positive alteration of the process.

Techniques for managing diverse opinions include:

Promoting amplification of participants' listening skills to support empathy when listening to others Implementing a procedure that ensures equal participation of all members through guided brainstorming Applying conflict-solving strategies when some participants show attitudes that are averse to others Educating participants that the viability of an idea can be determined from key characteristics rather than from the personalities of the proponent.

Cui and Wu (2016) discovered that projects aimed at co-creation and having efficient tools for managing conflicts gave 35% higher innovative outcomes than other projects of co-creation without proper conflict management systems.

4.4 Balancing customer input with company expertise

However customer feedback is important, it's also important to respect the company's professional opinion and overall business goals. It is aspiring to believe that all the ideas that come from the customers will always be sustainable and fit into the company's strategic plan. There is also a need for managers to form an appropriate strategy for the assessment and classification of the data from customers (Prahalad & Ramaswamy, 2004).

This may for instance involve the formation of a multidisciplinary committee to evaluate co-developed concepts, employing systematic assessment models, and indeed carrying out research that may determine the viability of the created ideas. Feedback for the rejection of some ideas or the choice of others has to be given and it is important to be as transparent as possible within this process.

Hoyer et al.'s (2010) research of new product development noted that strategic integration received 45% higher new product success rates in comparison with two extreme forms, which fully depended on customers' feedback or companies' decisions.

4.5 Incentivizing customer participation

4.5.1 Monetary incentives

Financial rewards are known to have the ability to attract people's attention and convince them to contribute positively. The benefits may range from cash awards given to the winners of the ideas, negotiated fees for concepts that are incorporated into the prize, or reimbursement of the cost of engaging in co-creation activities (Lilien et al., 2002).

However, what is crucial to state here it, sometimes or perhaps in broad range of times, monetary incentives could only be adequate or at other times could not be the best option. According to Burroughs et al (2011), they carried out an empirical research exercise and they discovered that although extrinsic motivation in the form of monetary incentives escalated participation by 20%, the quality of contributions submitted was not in any way affected.

4.5.2 non-monetary incentives

It is also worth stating that monetary incentives may sometimes be irrelevant to the participants or even counterproductive; therefore, non-monetary incentives can be as efficient or even more efficient than monetary ones. These may include:

Customer appreciation and position in the customer base Pre-launch access to new products and features to build new skills Special privileges or occasions Some intrinsic factors that boost ideation include the willingness to be creative, enjoy it and the learning that was expected from it, hence revealing that 25%more ideas came from customers who were intrinsically motivated as opposed to those motivated by monetary returns.

4.6 Fostering a co-creation culture within the organization

Co-creation is not just an outside in process, it is a change in culture inside the organization. If customers do not dictate how they want to engage with a company and if companies are not open to innovative ideas and willing to try new things, there will be no innovation (Nambisan & Baron, 2009).

This cultural shift may involve:

Introducing employees to best practices in co-creation with customer Incentivizing the employees to consider customer insights in their work Forming multifunctional teams that facilitate co-creation Providing solutions for measuring co-creation's effects on innovation results

According to Accord (2015) for companies with a culture that embraces co-creation, it was found that such firms were 32% more likely to become market leaders in industries compared to those with no culture of co-creation.

The outlined strategy will help companies build firm grounds for co-creation that will enrich the variety of values of customer participation in the company's innovative lifecycles. The next section will discuss more of the practical use and putting into practice the above strategies that will be done according to a contending structured framework for co-creation in new products and services (Fang, 2008).

V. IMPLEMENTATION FRAMEWORK

5.1 Phases of co-creation in new product/service development

Hence, there is a need for a framework that can support the integration of co-creation into the new product/service development process. It should be noted that this framework usually encompasses five major stages, and each of them involves certain activities and goals focused on co-creation.

5.1.1 Ideation phase

The idea generation phase is concerned with the creation of as many varied types of new products and services as possible. At this stage, customers are drawn

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into various fun activities to discover latent needs and ideate on possible solutions. Good examples include the use of online idea submission boxes, brainstorm meetings and sessions as well as scenario creation meetings and sessions.

Table 2: Co-Creation Activities Across Product Development Phases

Phase	Co-Creation Activities	Tools/Techniques
Ideation	Brainstorming, Scenario creation	Online idea boxes, Workshops
Concept Development	Concept refinement, Feature prioritization	Co-design workshops, Web-based concept tests
Design	Usability testing, Feature voting	Prototyping, A/B testing
Testing & Refinement	Beta testing, Feedback collection	Beta versions, Focus groups, Usage analytics
Commercialization	User experience sharing, New application discovery	Social media engagement, User communities

For instance, the online suggestion box for Starbucks known as My Starbucks Idea has received more than 150 000 ideas from the customers and more than 2000 of those ideas have been incorporated (Fang, 2008). It is useful for product launches and scales to current main products like the Hazelnut Macchiato and cake pops.

5.1.2 Concept development phase

In this phase, potential concepts that were generated in the ideation phase are built into fuller concepts. Customers use the ideas as the starting point and with the help of company representatives develop them further considering in which format, what it should look like and how it should work.

Techniques such as co-design workshops, web-based concept tests, and successive prototyping are used in the process. LEGO Ideas is a case in point, here users submit ideas and concepts that are later improved based on the opinion of the wider community and the LEGO community before they are manufactured. The process has the advantage of having helped in launching more than 40 products according to the ideas of the customers.

5.1.3 Design phase

At this stage, ideas are taken and developed into the specifics of a particular product or service offering. They engage the customers in performing tasks such as usability testing, feature voting, and choosing looks and feels.

Co-creation has been applied in firms such as Procter & Gamble. For example, Olay which is a P&G company engaged the consumers in the making of the Regenerant line and this produced a product that commands 20% higher satisfaction than that of products that went through the normal measures.

5.1.4 Testing and refinement phase

At this stage the product/ service is piloted using actual customers and an early release also known as a prototype or beta version is used. Some of these include; The beta versions of the applications developed to check for bugs and malfunctions the focus groups formed purposefully to share their opinions and experiences of using the apps Usage Analytics in the form of surveys and other forms of feedback gathering (Cui & Wu, 2016).

For example, Microsoft has the Windows Insider Program that enables the users to try the early builds of Windows and give the feedback. This program has more than 10 million participants, and thanks to it, the quality as well as the usability of releases of Windows have increased.

5.1.5 Commercialization phase

Thus, co-creation is not only present in the development process but becomes the basis for the further evolution of the product or service after launch. The customer gives an account of the using experience, the strengths and weaknesses of the product and even brings out new applications or untapped market possibilities.

This is well illustrated by Tesla's use of over the air software updates involving user feedback and usage data to make gradual enhancements to the function of vehicles. This has been credited to having provided its clients with a customer satisfaction ratio of 98%, an accomplishment that meets the industry's bar.

5.2 Tools and techniques for each phase

To support co-creation activities across these phases, companies can employ a variety of tools and techniques:

- Digital platforms: Regular interactions with customers are made possible through online communities, idea management systems, and virtual collaboration. For instance, IdeaStorm that belongs to Dell has received over 30, 000 ideas with the over 500 implemented (Hoyer et al., 2010).
- Design thinking workshops: These are fixated meetings where people with different backgrounds come together to address different challenges adopting people-centred approaches. Design that is understood as a set of methodologies has confirmed its effectiveness through the practice of such giants as IBM: time-to-market on product has been reduced three months or 30%.
- Rapid prototyping: Produce and prototype concepts of products include using 3D printing technologies, concepts such as virtual reality and more. For instance, local motors incorporate 3D printing and co-creation to design and produce vehicles five times faster than other conventional car makers.
- Analytics and AI: Big data analytics and artificial intelligence tools can be applied to comprehend and analyse the great amount of customer feedback. The

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recommender system used by Netflix, which integrates users' ratings and watching habits, has been valued at generating $1 billion of savings a year in the form of minimized churn.

5.3 Key performance indicators for co-creation success

To measure the effectiveness of co-creation initiatives, companies should track a range of key performance indicators (KPIs):

- Quantity and quality of ideas generated: This activity's evaluation can be based on such measures as the number of submitted ideas, the number of ideas the organization decides to implement, and novelty ratings.
- Time-to-market: Co-creation sometimes has an intention to make a particular process faster, especially when it comes to product creation (Henkel et al., 2014). Organizations should assess the effects co-creation has on the development processes.
- Customer satisfaction and loyalty: Metrics such as NPS or other client retention numbers can perhaps suggest if co-created products are superior to the client's needs.
- Revenue and market share: Lastly, I posited that financial performance should improve with effective co-creation. Evaluation of co-created products is very important and should include sales reports and market share.

Table 3 : Key Performance Indicators for Co-Creation Success

KPI	Description	Measurement Method
Quantity and Quality of Ideas	Volume and value of generated ideas	Number of submissions, Implementation rate
Time-to-Market	Speed of product development and launch	Development cycle duration
Customer Satisfaction	User happiness with co-created products	NPS scores, Satisfaction surveys
Revenue and Market Share	Financial performance of co-created products	Sales figures, Market share percentage
Employee Engagement	Internal stakeholder involvement	Participation rates, Employee satisfaction surveys

- Employee engagement: It also can affect intra-organizational stakeholders Some of the co-creation challenges are affect internal stakeholders. The levels of satisfaction reported by employees and the turnout for co-creation exercises may reveal something.

Meanwhile, Ramaswamy and Ozcan (2016) showed that co-creation KPI and the management of proper metrics enhanced the companies' return on innovation investments by 23 percent in total.

VI. CHALLENGES AND MITIGATION STRATEGIES

6.1 Intellectual property concerns

IP rights may be one of the major concerns of co-creation activity, although the practice varies from one domain to another. With customer participation in ideas or designs there is always issues to do with ownership and rights to the contribution.

6.1.1 Legal frameworks for co-creation

Thus, for effective co-creation, it is necessary to outline legal regulation for the internalization of the IP of companies. This generally entails the formulation of terms and conditions that the participant has to adhere to before participating in co-creation activities. These terms should clearly outline:

- Any ideas provided to DMRC must be owned by DMRC
- Organizational right given to the company to utilize and transform such ideas.
- Such compensation or appreciation participants would earn if the proposed idea has to be implemented

For instance, the LEGO has established a set of guidelines regarding its ideas and according to it, by participating and submitting an idea, the participant transfers to LEGO a royalty-free license to use the idea (Chesbrough, 2003). Once a concept is chosen to be produced, the originator is paid US $ 0. 01 and gets an apostrophe as the producer of that product.

6.1.2 Confidentiality agreements

In some cases, especially for sophistically levels of a product design, some companies require the participants of co-creation to sign some paperwork like non-disclosure agreements (NDAs). They provide the assurance of confidentiality while at the same time affording substantive degrees of cooperation.

Henkel et al (2014) pointed out that out of the co-creation programs that incorporated clearly defined IP agreements, the companies were likely to report IP litigation incidences of 40% less than the companies without such agreements (Cooper, 1990).

6.2 Managing diverse customer inputs

The downside of co-creation is that it produces a plethora of cheap and differentiated suggestions and contributions; this makes it difficult to handle and judge.

To address this challenge, companies can:

- Support the concept with the mechanical input appraisal procedure to work hand in hand with the organization's idea management systems.
- Expand the interpretation of the machine learning algorithms to finish the first step by categorizing and ranking ideas.
- Cross functional evaluation teams must be developed to enable the evaluation of the idea from different angles.

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For example, BMW's Co-Creation Lab relies on the voting system for the community and the assessment of project and industry professionals to rank ideas/submissions. Through this approach, there has been an improvement in the implementation rate of innovations initiated by customers by a tune of 30 percent.

6.3 Scalability of co-creation processes

Where co-creation activities are, there are certain problems that are inherent: sustaining quality and controlling the expansion of complexity, as the activities develop.

Strategies for scaling co-creation include:

- Creating a reusable co-creation process which is composed of modules of co-creation that can be used in other projects or business units
- Using the technology platforms to reduce the manual interference in co-creation process by auto generating channels for idea submission and initial filtering
- Recruiting competent facilitators to ensure proper execution of co-creation activities in the organization

Connect + Develop of Procter & Gamble indicates the right way of scaling co-creation (Füller et al., 2009). This paper also shows that P&G has been able to source more than 50% of its innovation from outside partnerships with other organizations and innovation customers.

6.4 Integrating co-creation with existing development processes

In this way, the introduction of co-creation into the existing process of new product creation may be perceived as opposition and may entail major organizational changes.

To facilitate integration, companies can:

- Application of co-creation should start with pilot projects to show the effectiveness of the concept.
- Organise training and capacity building on co-creation strategies for all the employees
- Ensure that incentives are properly aligned to the creation of collaborative innovation.

According to Frow et al. (2015), the efficiency of co-creation in new products is significantly higher when the procedure is integrated into the company's value chain and not managed as a separate independent process apart from other primary business processes; businesses that adopted this co-creation value management found their success rates in new products to be boosted by 25%.

6.5 Maintaining consistency across multiple co-creation projects

Since firms get involved in several co-creation activities, the consistency of the process and quality remains inconsequential.

To address this, organizations can:

- For instance, it is recommendable to cultivate a detailed co-creation playbook or set of standards on how this process is conducted in the organization (Merlo et al., 2014).
- Set up a co-creation Centre of Excellence to promote identification of best practice novelties
- Conduct cross meeting frequently to add up cross-project and guarantee synchronism.

Another example is Philips that has initiated a Co-Create program with well-defined procedures and tools and is implemented in the company's divisions. This has resulted in a 40% decrease in the time to market of the co-created products than using the orthodox development approaches.

VII. CONCLUSION

7.1 Key findings

The results of this extensive literature review on co-creation of business ideas with customers are as follows: In as much as this study has captured many aspects that explain customer involvement in creation of new products and services, the following is a summary of research findings that supports the significance and viability of using customers in generating business ideas.

Firstly, the studies have shown that proper implementation of co-creation into the relationship with customers can result in crucial advantages for both partners. Leading organizations applying co-creation strategies have observed higher quality outcomes in innovations, and short time to market, higher customers' satisfaction rates, and charges customer loyalty. For instance, investigations have disclosed that goods that which have been co-created have better chances of success by up to 20% than those formulated in the normal manner.

Secondly, the study has pointed out the need for structured methodologies and frameworks in co creation projects. Thus, such methods as lead user method, living labs, and online platforms can be adjusted to the organizational demands and types of products. The implementation framework outlined in this research offers a blueprint on how co-creation can be complemented in a structured manner at the firm and throughout the product lifecycle.

Lastly, the research has outlined areas of difficulty in co-creation that include power over content, compatibility and organisation of inputs/ideas and the expansion of processes. But at the same, it has also offered prevention and counter-measures for each of these issues, stating the need for legal frameworks for idea management and knowledge protection, and the necessity of standardized procedures constant for all the departments of the enterprise.

7.2 Implications for practitioners

For business practitioners, this research offers several important implications:

1. Strategic imperative: Co-creation needs to be seen not as a fad but as a necessity in today/'s environment of the customer-first. When customers are not involved in a company's innovation processes, they are likely to lose out to rival firms that embrace this strategy.
2. Cultural shift: To create, share, and update effective co-creation, organisations are often faced with stiff

cultural change processes to embark on. First of all, leaders have to ensure that the concept of openness and active attraction of ideas from outside is important, and that the company is willing to challenge conventional development approaches.

3. Technology investment: Now, the future trends have been analysed in this study and it compares the co-creation best future practice with an emphasis on the fact that AI co-creations and VR/AR collaboration tools, and so on, convincingly point to the fact that in order to continue the policy targeting the customers and focusing on their needs, companies must invest in the introduction of the advanced technologies.

4. Ethical considerations: More often as co creation increases, organization needs to be keen on social sensitive issues like payment to the customers in relation to the contribution of the customers and issues of using the customer information.

5. Continuous learning: Speaking about the evolution, it is necessary to mention that the field of co-creation is rapidly growing. It also came clear that practitioners should commit to constant learning and trying in order to improve the approaches to co-creation over time.

7.3 Limitations and Future Research Directions

While this study provides a comprehensive overview of customer co-creation in new product and service development, it has several limitations that point to directions for future research:

1. Industry-specific nuances: That is why the results of the use of co-creation strategies may also differ depending on the industry. Further studies can analyse how different industries have applied co-creation and some of the difficulties they experienced.

2. Quantitative impact assessment: However, more aggregate studies using other styles such as quantitative research methods are called for in this study to substantiate the above benefits of co-creation and measure the long-term returns of co-creation to business.

3. Emerging technologies: While using AI and blockchain and other similar technologies at the later stage of co-creation go through changes, it will be important that the various impact still require research. Future research might look at how each of these technologies can be further utilised in co-creation projects.

4. Cross-cultural considerations: This paper has also not comprehensively looked at how the co-creation may require a cultural sensitivity strategy. This then should present cross cultural research on co-creation in the future.

5. B2B co-creation: It is also acknowledged that this study was mainly conducted in the context of B2C, therefore, further research investigating co-creation in the B2B environment seems especially promising because the role of the customer may greatly vary depending on the business context.

7.4 Final thoughts on the future of co-creation

So, the role of co-creation to stimulate the further innovative capacities of companies and create new forms of value will only increase in the future. SOCIAL PROJECTIONS Bearing in mind the developments already observed, it would be logical to suggest that 'tendons' between a company and its customers would remain a major trend in the future as organizational forms for joint innovative efforts triumph over competition.

With the use of better technologies such as AI, VR and IoT the next steps in co-creation are expected to be more fluent and slightly continuous where the customer feedback can be incorporated immediately and the subsequent evolution done swiftly. At the same time, increasing concerns regarding sustainability and ethical actions and decisions of the firms will influence many co-creation activities, engaging customers and business for solving the global problems.

Therefore, the overall effectiveness of co-creation will be influenced by the extent to which firms can foster cooperation with customer through the establishment of interposed relations. People who will perfect the touch on co-creation techniques will be privileged to operate in today's emerging complex and arresting business environments.

Best summarized is the words of current globally recognized management thinker C. K. Prahalad that identified the observation, 'The future is in developing co-products for the customer. 'This study aims to provide step by step guidelines, principles and tools for the organisations interested in co- creation of value with the customer in the development of new products and services.

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