

KAUNAS UNIVERSITY OF TECHNOLOGY
SCHOOL OF ECONOMICS AND BUSINESS

Binoy Joseph Shivaram

**Development of products co-creation: the case study of construction
services company**

Final Master Thesis

Supervisor

Assoc. prof. dr. Ejidijus Rybakovas

Kaunas, 2017

KAUNAS UNIVERSITY OF TECHNOLOGY
SCHOOL OF ECONOMICS AND BUSINESS

**Development of products co-creation: the case study of construction
services company**

Final Master Thesis

International Business (621N12004)

Supervisor

Assoc. prof. dr. Ejidijus Rybakovas

2017-05-10

Reviewer

Assoc. prof. dr. Name Surname

2017-05-10

Project made by

Binoy Joseph Shivaram

2017-05-10

Kaunas, 2017



KAUNAS UNIVERSITY OF TECHNOLOGY

School of Economics and Business

Binoy Joseph Shivaram

International Business 621N12004

Development of products co-creation: the case study of construction services company

DECLARATION OF ACADEMIC INTEGRITY

10 May 2017

Kaunas

I, **Binoy Joseph Shivaram**, hereby confirm that Master's Thesis entitled Development of products co-creation: the case study of construction services Company is solely my own work and all the data and research findings presented are true and obtained fairly. None of the thesis parts contain plagiarized material from printed or internet sources, all direct or indirect quotes of other sources are fully and properly acknowledged. I have not made illegal payments for this work to anyone.

I understand that in case of dishonesty I will be subject to penalties in accordance with the procedure established by Kaunas University of Technology.

(Write your name and surname by hand)

(Signature)

Shivaram, Binoy Joseph. (2017). Produktų bendrakūros vystymas: statybos paslaugų įmonės atvejo analizė. Master's Final Thesis in International Business Management. (621N12004) Supervisor Assoc. professor dr. Egidijus Rybakovas . Kaunas: School of Economics and Business, Kaunas University of Technology.

Social Science: 03 S Management and Administration

Keywords : Bendrakūra, Smulkus verslas, Statybos verslo sektorius, Indija.

Kaunas, 2017. 68 p.

Santrauka

Statybos paslaugų sektorius yra vienas svarbiausių šalies ekonomikos vystymuisi. Čia įdarbinama didelė dalis gyventojų. Todėl dažnai analizuojamas ir tiriamas statybos paslaugų sektoriaus poveikis šalies ekonomikai. Magistro baigiamajame darbe analizuojamas pietų Indijoje veikiančios statybos paslaugų bendrovės atvejis.

Darbo tikslas: pasiūlyti produktų bendrakūros plėtojimo modelį statybos paslaugų bendrovei. Šis modelis padėtų gerinti paslaugų kokybę, pasirinkti reikalingas inovacijų ir produkto tobulinimo kryptis.

Mokslinės literatūros apžvalga atskleidė pagrindinius bedrakūros proceso elementus, pagal kurios buvo suformuotas teorinis modelis. Interviu metodu surinkti duomenys buvo panaudoti modelio išplėtojimui ir pritaikymui konkrečios tiriamos organizacijos proeikiams.

Darbo rezultatai bus praktiškai naudingi ir pritaikyti statybos sektoriuje veikiančios įmonės veikloje.

Shivaram, Binoy Joseph. (2017). Development of products co-creation: the case study of construction services company. Master's Final Thesis in International Business Management. (621N12004) Supervisor Assoc. professor dr. Egidijus Rybakovas . Kaunas: School of Economics and Business, Kaunas University of Technology.

Social Science: 03 S Management and Administration

Key words: Co-creation, Product co-creation, Small-Scale Industries, Indian Construction businesses

Kaunas, 2017. 68 p.

Summary

Construction becomes the basic input for socio-economic development of any country. The construction industry generates substantial employment. Various research has been carried in order to find out the things that influence the development of product co-creation for the construction services company in Southern part of India.

The aim of this study is mainly focus on proposing a framework for product co-creation between the service provider and client in domestic construction based business services. In which, customers and business parties are connected by co-creation process. Based on the quality of the product, co-creation is correlated.

In order to achieve this aim, the researcher has undertaken the literature sources like articles and journals to find effective theoretical solutions and the practical solutions for a particular problem which has been identified in the company. Research strategy and methods are chosen to collect the data to solve the research question effectively. In the empirical study, data are interpreted using content-analysis method, in that categories are grouped and objectives are accomplished.

At the end of the research, conclusions and recommendations are derived and the research goal has been accomplished and it shows that, the proposed results are suitable for the small-scale construction industries in India and it will help them to attain better growth rate in the future.

Acknowledgements

Finally, the two-year journey is complete and I wouldn't have been here without the succor and support from a list of people who had been with me throughout the journey.

First of all, I would like to thank My Dean For allowing me to graduate on this topic I am profoundly indebted to My Supervisor for taking me under his supervision by allowing me to work on my field of interest of the topic by providing important valuable feedback for every step ahead and keeping it as authentic as possible and providing relentless direction throughout the process of completion of Master Thesis , I also like to extend my gratitude to My Reviewer for providing me the feedback on my Master Thesis.

I would like to thank Mr. Shekar.V.Reddy, Sales Engineer of Four Star Private Limited Bangalore India also The Director Arjun Rai, Sales coordinator Runa Data Sales Manager Sivamani And their customer Mr. Manjunath Project manager at Synergy Property Developers India for the persistence and generosity.

Furthermore. I would like to Thank My University for their generosity for providing me the opportunity to pursue my Master degree in Kaunas. Lithuania at Kaunas University of Technology.

Lastly. My Utmost whole hearted indebtedness goes to my Family and Friends who made all of this possible, I thank My Parent and My Friends who always supported and guided me throughout the journey

Table of Contents

1. PROBLEM ANALYSIS.....	14
2. THEORETICAL ASPECTS OF CO-CREATION	19
2.1 Interpretation of co-creation and its process	19
2.2 Overview of co-creation models	23
2.3 Definition of Customer Co-creation.....	27
2.4. Firms point of view (Businesses co-creation)	30
2.5. Customer product co-creation	32
2.6. Customer perceived value	32
2.7. Customer co-creation edges and costs	36
2.8 Consumer’s point of view (Customer co-creation)	37
2.9. The propose model	37
3. RESEARCH METHODOLOGY	49
3.1. Research Design.....	49
4. EMIPRICAL STUDY OF THE DEVELOPMENT OF PRODUCT CO-CREATION AT THE SELECTED CONSTRUCTION SERVICES COMPANY IN INDIA	55
4.1. Research findings	55
4.2. Research Discussion.....	55
Conclusion	64
Recommendations.....	65
References.....	66
Appendix.....	69

List of Tables

Table 1 Company's Product list.....	16
Table 2 Definitions of co-creation.....	20
Table 3 Concepts of co-creation.....	22
Table 4 Summarized literature review.....	44
Table 5 Interview research questions.....	51
Table 6 Interview transcripts.....	52

List of figures

Figure 1 Growth of Construction Industry in India.....	15
Figure 2 Top-Down approach.....	17
Figure 3 Bottom-Up approach.....	18
Figure 4 DART model.....	23
Figure 5 Value creation diamond model.....	24
Figure 6 Reference Model.....	25
Figure 7 Advanced Reference Model.....	26
Figure 8 Co-creation Taxonomic Model.....	26
Figure 9 Customer perceived value	32
Figure 10 Propose Co-creation Model.....	38

Introduction

A major shift is seen across the industries, according to authors (Prahalad C. K., & Ramaswamy, V, .2004) the traditional firm, product and services fundamentals are being defied by tailored consumer practices. This above stated pattern suggests that the pervious traditional approaches made by the firm to generate value co-creation is perceived as a team work effort between the firm and the consumers. Moreover, the role of consumer has been changed from passive clients to active ones, which empowers consumers to be the co-creators of their own experiences and generating value along with the firm, so both firm and the consumers are the active participants involved together as a team to define the problem and solve the problem in a process. In Co-creation, there are numerous points of collaboration among consumers and the firm which will be perceived as the ball game of value creation, meanwhile the certainty of experience which the consumers will go through the process is incomparable, it is authoritative for the firms to establish a co-creation environment for the robust knowledge which is gained through these interactions. According to authors (Zhang, X., & Chen, R., 2008) in sequence to guarantee an effective co-creation which is necessary for both to get results from the co-creation process and reduce the difficulties and hindrances which the firm managers endure to have a smooth transaction between the firm and the consumers. So, the collaboration between firm and consumers is the key to generate customer value. The vital outcome of customer empowerment is perceived as the yearning to involve in the process of value co-creation of consumers. The engagement of consumers through this process has numerous behaviors or pre-requisites which strengthens their relationship with the product and brand or the firm who is marketing the related products which goes beyond traditional consumer loyalty. Co-creation is important process, which need to be considered in every business. Every business has its own goals to achieve (Jain, A, 2016) Co-creation is the process where brands and consumers work together to create better ideas, products and services. Brands still steer product innovation, but customers have the right to suggest ideas to the business. Co-creation is the best way for a business to capture innovation, speed delivery and drive resource efficiently (Jain, A, 2016).

Based on author (McClelland, J, 2014), the primary business routes provided for co-creation of shared value:

- *Engaging upstream with customers* –opening the design, specification and procurement processes to improve understanding of value generation and refine its delivery together;
- *Working with the supply chain* – sharing information and negotiating optimized solutions, so driving efficiency, encouraging and enabling innovation, to mutual benefit;

In the construction industry, historically co-creation was not existed (McClelland, J, 2014). The construction industry has been portrayed as an adversarial industry, driven by a long tradition of putting self-interest first (McClelland, J, 2014). In such a case, introducing the collaborative approach, results better, faster and cheaper. But recently, Co-creation in the construction industry is in effect already. If we consider the same industry in different markets, then the result varies. In India, the construction industry is a major contributor released by the news magazine "The Hindu, India", both directly and indirectly (Jain, 2014). Any improvements in the construction sector affect several associated industries such as cement, steel, technology, skill-enhancement, etc. Despite many positive signs, activity in the construction sector appears to be quite slow currently. The prolonged real estate market slowdown has resulted in a lot of unsold housing projects across India (Jain, A, 2016).

The problem can be defined as: ***How to develop products co-creation process and how to create value for the customers?*** The purpose of this thesis is to solve a problem that exist in the construction company in India. Where the existing company experiences unsatisfactory feedback from the customer even after involving themselves by providing solutions for the issues of the product by the customer, in order to solve this issue, while studying the internal management procedures of the existing company in effective of co-creation process is been found , the reason behind this is, in India majority of the companies follow the top down anarchy which is followed from the past and still being continued as we see to the present changes happening across the company in the emerging market of India is being up surged by becoming competitive and have its edge between the competitors which leads to the involvement of Cocreation process. The development of product co-creation model helps to provide solutions to the above problem.

Aim of the research

To propose a product co-creation framework between the service provider and client in construction based business services.

Objectives of the research

1. To propose a co-creation frame work for the existing product within the company for their customers, to analyze the interaction by establishing the co-creation experience for the employees of the company and their customers within the company.
2. To analyze the necessity for the firm to indulge in co-creation process of product development along with its consumers.
3. To analyze the variation in scope and intensity of co-creation experiences taking place within the company by the employees and their customers.

Research methodology

The research is grounded on the primary data composed by the material provided from the Small-scale Construction Industry. Where a qualitative research was carefully chosen for the empirical research. Structured interview was done on the selected company which is based in India and mainly, the interview was conducted within the company itself along with 5 employees and a customer who were professional to the related business.

Structure of the Thesis

Firstly, the problem of the research topic is defined and analyzed and it clearly shows the necessity of finding theoretical solutions. Secondly, theoretical aspects of co-creation, value creation and different types of co-creation models are reviewed from the existing literatures, articles, books and journals. Thirdly, the research methodology part, research strategy, methods are described and questionnaire is used to collect the data from interviews. Finally, data are interpreted propositions related to the solution of the analyzed problem are formulated.

Limitations of the Research

At the current situation in the firm as observed the employees collect the data and the information from the consumers and a team is sent for on-site inspection of the consumers where our employees make the cost evaluation of our product required by the consumer and project time evaluation is executed until the completion of the project. The consumer's preferences are put forth to the company-owned architects where they estimate the idea for executing the customer's request and the project will be executed and finished on time. The changes made over here are at the earliest stage are employees of the firm and the consumers are made to interact with each other by disclosing the information, concerns, enquires relating to the product where the firm's employees collect the valuable feedback from the consumers and take this to the next stage by motivating consumers as well as themselves in generating indigenous ideas for the up-coming product where all these information's are organized, examined, evaluated and researched by proper expertise to be executed within the firm. Thus, the firm has started to prioritize the consumers to engage along with the employees of the firm to come up with enhanced product by meeting the all quality standards which the product should have. Consistency is maintained in the product development and transparency is maintained across consumer-employee relationship. These changes in the firm are occurred due to lack in meeting the necessity of the consumers. In the previous situation, it was only determined to receive the company's profits. Currently the competition in this field had rapidly increased and the co-creation process had to be introduced in the firm to compete with its competitors in this business field by increasing customer satisfaction and brand image of the firm. We will briefly discuss about this on the coming sections.

1. PROBLEM ANALYSIS

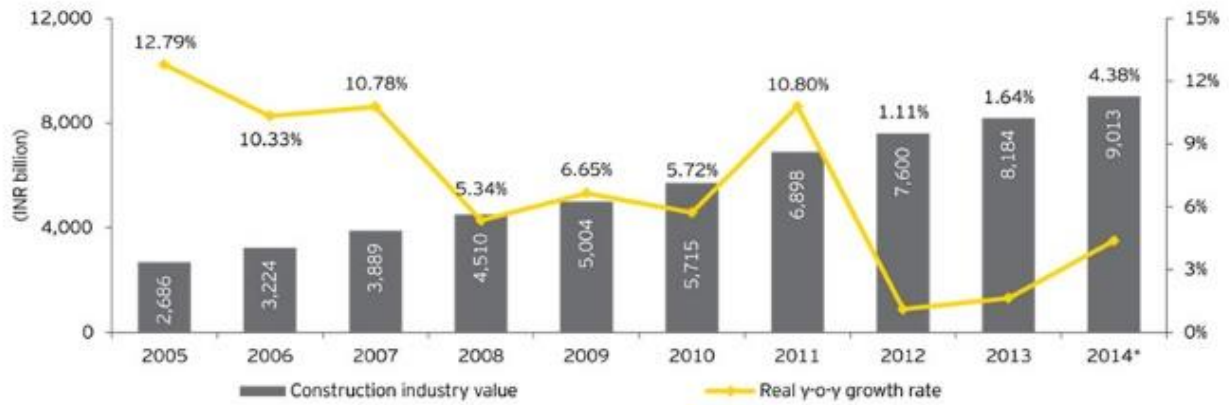
To study about this research, we must understand about small scale firm and how construction service industries play an important in Indian economy. Then, the substantiation of problems and the challenges faced by the firm is explained according to the cultural level of the firm, where the challenges and difficulties limit the development and prospects of the firm's growth beside the competitors within the same field of expertise were the firm should manage to come up the additional resources available within the organization are briefly explained.

The small-scale industry plays a significant role in the Indian economy due to the potential of the employment and contributions to the industry sector. The government of India has taken several steps to promote them such as employment opportunities, organizing good amount of resources such as availability of labor and raw materials, entrepreneurial skills from semi-urban areas which are untouched by large scale industries can be productively used on investment also improve social welfare by harnessing talented individuals across the country, provide opportunity for development of technology to create an environment which facilitates the transfer of technological knowledge from one individual to another and reap technological benefits and promotes the exports of products from small scale industry by increasing the country's foreign exchange reserves by minimizing the pressure on the country's economy. The small-scale industries support the growth of large scale industry by providing semi-finished products required by them to drive the life of large-scale industry in the country. The main characteristics are active management where a small-scale unit is normally owned by a single individual or in partnership where the events are executed by the active person in the field as these units are governed in an individual's personalized manner, small-scale industry are very much dependent on technological equipment because of less capital investment in technology and promoting development for faster and advanced production capabilities by providing infrastructure and assistance along with marketing and entrepreneurs so that changes can be made more flexible by adopting the new approaches of production line in small-scale units.

The construction industry in India is the largest employer in India. The construction sector employs more than 35 million people in India. Worldwide, the construction industry contributes about 7–9% to the global GDP, and is one of the most crucial elements of every economy (HIS Market, 2013). The following chart shows last 10 years' growth rate of construction industry in India. There were ups and downs. If we focus on the past 5 years' rate, it

clearly shows that, from the year 2011, growth rate is decreasing but the industry's value is increasing continuously. In 2012-2013, growth is slightly increased to 2014.

Growth of India's construction industry



* Estimated
Source: Business Monitor International

Figure 1 Growth of Construction Industry in India

Residential and commercial construction was the largest market in the Indian construction sector during 2011-2015, and is anticipated to remain relatively sizeable over the next five years, with a 30.6% share of the industry's total value in 2020. The expectation on the construction activity in both the construction market will be supported by rapid urbanization, population growth, and positive developments in regional economic conditions. Government efforts to clear slum areas by 2022 and reduce the country's housing deficit will also help the growth of the market (Green, J, 2016). Commercial renovation requires experienced and skilled employees who can multi task around the job sites. Individual projects are usually managed by managers who can communicate well with engineers and the architectures to be the part of exciting projects where they can earn the skills and experiences as the part of their work whereas residential renovations are consider to be much lower in terms of project size where this project can range from simple add-on to personalize add-on to an individual.

The firm Four Star India is one of the roofing solution providers and who undertakes turnkey jobs with supply and installation, design, drawing, execution and post installation services. They make detailed shop drawings and get it approved from consultants or architect, make BOQ, check steel structure before and during installation and procurement and logistics of material.

They focus on all the aspects of the sustainability from environmental friendliness to positive business practices and social responsibility. The firm's core values are reliability and commitment to the quality which offers services that are convenient out to reach and reliable.

Four star India is a roofing solution provider that executes the projects on commercial and residential sites who are obligated to count on their workmanship to have a constant flow in the business region. The firm primarily deals with the construction project managers to form the marketing network of members related to this field by maintain long term relationship.

Following is the summary of product range in the firm :

S. No.	Company Name	Brand	Product
1	Kingspan	Rigidal	Aluminum Roof & Wall cladding.
2	Tata BlueScope Steel	LYSAGHT	Zincalume Roof & Wall cladding System.
3	KME, Germany	KME	Copper Roof & Wall cladding.
4	VM Zinc, France	VM ZINC	Zinc Roof & wall cladding System.
5	MN Metal, Germany	MN	Perforated Wall cladding System
6	Bilco-Roof hatch, USA	BILCO®	Roof Hatch & Smoke vents.
7	LATCHWAYS Protection, UK	Fall LATCHWAYS	Fall protection & Walk safe System.
8	Hunter Douglas, Netherlands	LUXALON	False ceiling, Cladding & Sun Louver system.
9	S-5! – The Right Way, USA	S-5!	Seam Clips.
10	JAS	PARS	Rain water harvesting

11	DANPAL, ISRAEL	DANPALON	Daylight panels.
----	----------------	----------	------------------

They are the only Installers of ALUMINIUM & ZINC who has been trained in CORUS-U.K, RIGIDAL-UAE, KME-Germany & VM ZINC-France for design and installation of their roofing systems.

Within the firm the consumers are sharing their requests and concerns about the product to be developed by the firm, at the present stage the firm is only considering about marketing the products within the country to its consumers. This is still continued with following practice which is mentioned below.

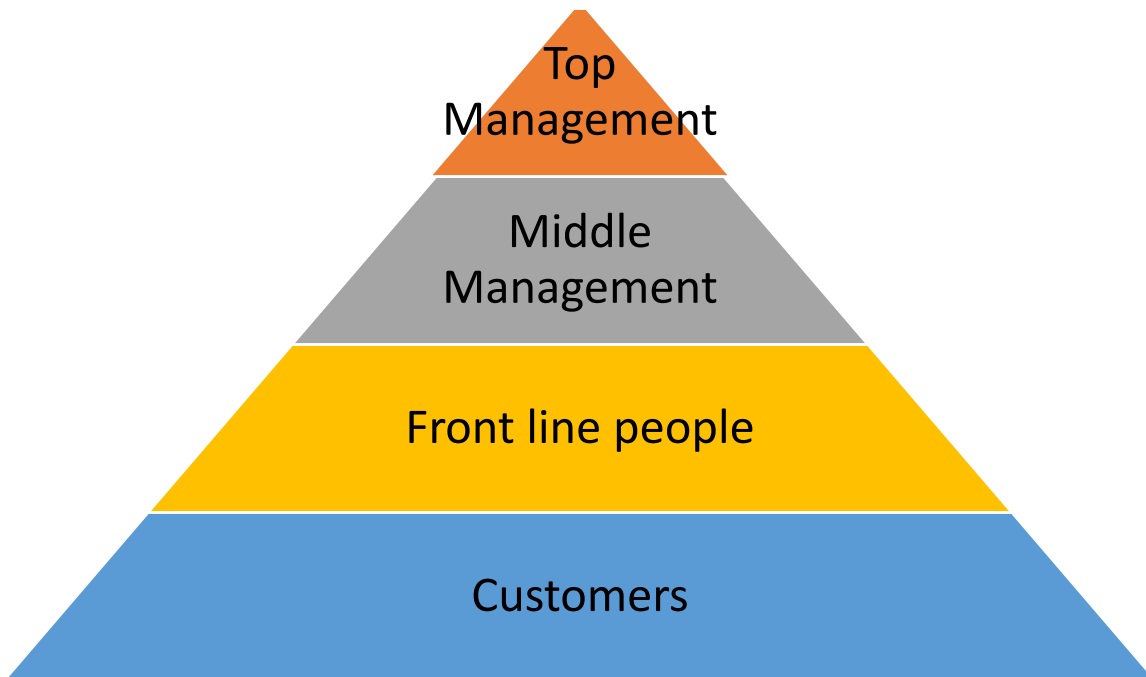


Figure 2 Top- down Approach

Top-down approach characterizes organizational structure of the firm's business hierarchy. This type of hierarchy is fixed and rigid and does not changes under any circumstances. which means that the power to make the decision is only for the top management where employees are segmented into different departments who follows the chain of command from their superiors, each department has its own supervisor and the employee who forms a group and carry out the particular projects and all the actions taken

place is accounted between themselves where the employee has to report and maintain rules and regulations they follow their own strategy to get their desired goal in the annual economic year. The plans and execution strategy are established initially and are restricted to the changes made later. Here the traditional method is still in practice and it will rule out their business if necessary actions aren't being addressed by the firm. As a result, there is no effective collaboration between the firm and the consumers. To keep customer loyalty and the brand image, the firm should take necessary actions to stay competent with the competitors within the business field.

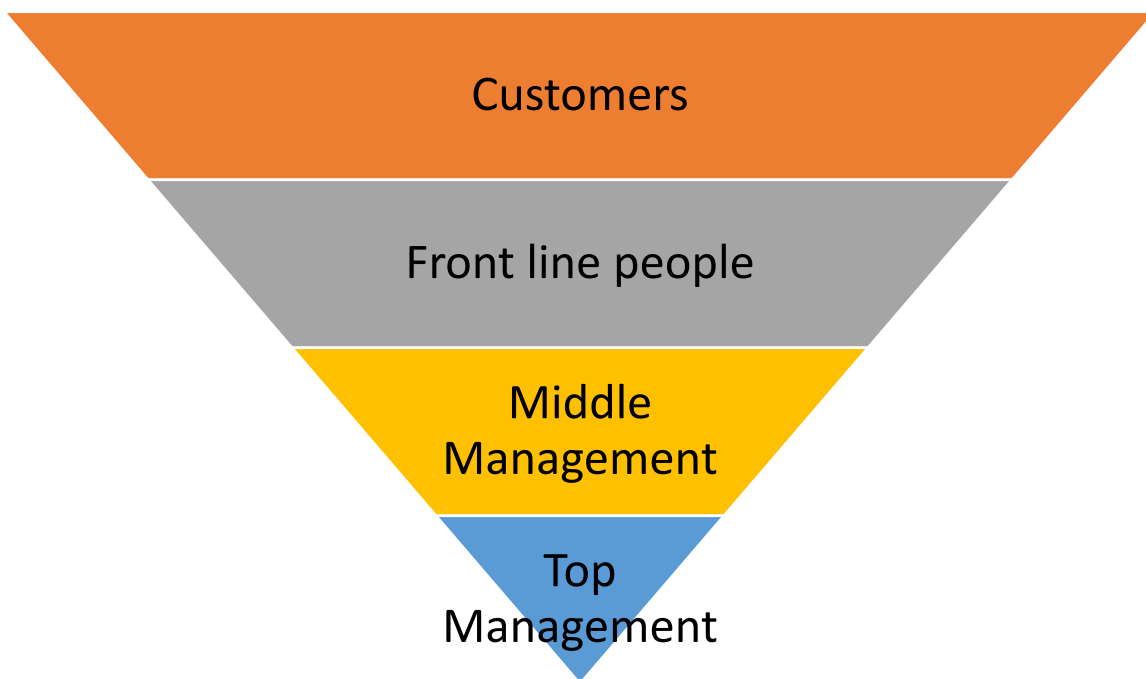


Figure 3 Bottom -Up Approach

In this type of organizational structure where all the participants which includes managers and employees are team oriented and collaborates enthusiastically to create innovation in the technological industry the main concept is the diversity of different activates within the organization where all the members of the firm participate in different environment by accepting new challenges and goals recurrently. this kind of organization culture seek the willingness of every participating personals are committed to take whatever challenges comes ahead and reach the goal intended without dragging any one along.

Several companies preventing the adoption of co-creation practices and strategies on product development by highlighting the factor that when the firm interacts with consumers to create a new development on the existing product, challenges and issues which are faced by the firm are related to the time prolongation, cost and risk involved in the co-creation process.

So, to summarize the small-scale industry have a vital role in the development of country's economy. The article related to product co-creation process includes co-creating ideas on product development in small-scale industry. There are no deeper research insights about the co-creation process in the firm. So, the next session gives the idea about the co-creation process and later analyzed by using the research methodology. Hence, the objectives can be obtained in this way in further research section.

2. THEORETICAL ASPECTS OF CO-CREATION

This section investigates the literature relevant to customer-co-creation process. Firstly, we will discuss about the definitions of co-creation, types of co-creation, the characteristics of the co-creation model, and lately discuss about the relevance of co-creation in the business field. The business field where the theory can be apt for the large scale and small scale industry.

The literature review updates the reader with co-creation models practiced at different organizations where the keenest interest is shown in the co-creation process cycle which is the foundation of the organizations sustain and longevity. As it acts a survival activity in the business competitor's world.

2.1 Interpretation of co-creation and its process

2.1.1. Definition of Co Creation

The concept of Co-Creation refers to the joint value creation during the process of interaction between the firm and the customers. The Co-Creational activity is performed by the actors and the recipients in mutual integrated networks by the means of operant resources for mutual benefits.

From the table (Prahalad, C. K., & Ramaswamy, V, 2004) of definitions, it can be clearly identified as the same concept of co-creation interpreted by the authors in a different manner which means that co-creation acts as process at times as well as gives end-results, so Co-creation is both the alpha and the omega. The concept plays a key role among the marketing scholars

following the evolution of Service- Dominant Logic which primarily focused on the value of co-creation and the role of customers in co-creating value. (Shamim, A. and Ghazali, Z, 2014).

Table 2 Definitions of Co-creation

Brown & Hagel 2005 (24)	"co-creation is a powerful engine for innovation: instead of limiting it to what companies can devise within their own borders, pull systems throw the process open to many diverse participants, whose input can take product and service offerings in unexpected directions that serve a much broader range of needs"
Vargo, 2008 (20)	"..co-creation is the integration of existing resources with those available from a variety of small scale industry that can contribute to system well-being as determined by the system's environmental context"
Payne, 2008 (21)	"...(co-creation) is the relationship between the provider and the customer as a longitudinal, dynamic, interactive set of experiences and activities performed by the provider and the customer, within a context, using tools and practices that are partly overt and deliberate, and partly based on routine and unconscious behavior"
Kristensson et al., 2008	"..co-creation is described as involving a high level of customer participation in customizing the product or service, which requires collaboration with customers for the purpose of innovation"
Kirah, 2009 (22)	"...co-creation as the continual feedback loop and collaboration with all stakeholders in a value network throughout any given process of designing, developing and implementing meaningful products, services, organizational and strategic changes"
Zwass, 2010 (7)	"Co-creation is here treated broadly as the activities of individuals/customers/ users in the production domain, generated independently or at the behest of producer organizations."
Ramaswamy, 2010 (23)	"Co-creation is the process by which products, services, and experiences are developed jointly by companies and their stakeholders, opening a whole new world of value."

Ramaswamy & Gouillart, 2010 (23)	"...co-creation is about putting the human experience at the center of the enterprise's design."
Reay & Seddighi, 2012	"...(co-creation) have enabled a new form of innovation, co-creation, in which value is co-created by the company and customer, and exchanged with the customer."
Ind & Coates, 2013 (25)	"....co-creation (ought to be viewed) as a process that provides an opportunity for on-going interaction, where the organization is willing to share its world with external stakeholders and can generate in return the insight that can be derived from their engagement."
Roser, DeFillippi & Samson, 2013 (10)	"Co-creation is advocated as means to expand the innovation and value creation capability of the firm, while nurturing customer relationships and lowering cost for marketing and research and development (R&D)

2.1.2. Value Creation

Uninterrupted growth and development of Services sectors plays a vital role in today's economic conditions. Authors emphasized that focusing only value creation in a company loses the importance of observing at the present context. Firms alters their tactics towards the existing value creation which suggest that the firm concentrates more on internal process to gain maximum efficiency by guaranteeing outcomes, which are intended to acquire useful information resources from the outside world for the organization and those in specific which are categorized by clients (Zhang, X., & Chen, R, 2008). Moreover, changes in the consumer intellectual has been observed growing more and more intelligent and are actively involved in the participation of trading and consumer services development (Prahalad, C. K., & Ramaswamy, V, 2004). Under such influential conditions to sustain competitive advantage in business turns out to be even more problematic. Hence Consumer Knowledge and skills to solve complex ideas by enhancing product development and its service related problems is one of the corporates current activities by empowering it through practice.

In today world Consumer are the vital part of the small-scale industry, these small-scale industries provide diverse types of services. Some service companies have involved customers

into their internal process to gain noteworthy results in product development. Contributing services to solve complex business problem where consumer’s involvement not only gives meaningful results but also generates value added services which in return offers top-notch expertise and staff dedicated to solving these types of service related problems by providing solutions.

Table 3 The concepts of Co-creation

What Co-creation is not	What Co-creation is
<ol style="list-style-type: none"> 1. Customer focus. 2. Customer is the king or customer is always right. 3. Delivering Good customer service or pampering the customers with lavish customer service. 4. Mass customization of offerings that suits the industry’s supply chain. 5. Transfer of activities from the firm to the customer as in self-service. 6. Customer as product manager or co-designing products and services. 7. Product variety. 8. Segment of one. 9. Meticulous Market research. 10. Staging experiences. 11. Demand-side innovation for new products and services. 	<ol style="list-style-type: none"> 1. Co-creation is about joint creation of the value by the company and the customer. It is not the firm trying to please the customer. 2. Allowing the customer to co-construct the service experience to suit their context. 3. Joint problem definition and problem solving. 4. Creating and experience environment in which consumers can have active dialogue and co-construct personalized experiences; products might be the same but customer can have experience in co-creating it. 5. Experience variety. 6. Experience unique. 7. Experiencing the business taking place as the consumer does in real time. 8. Continuous dialogue. 9. Co-constructing personalized experiences. 10. Innovating experience environments for new co-creation experiences.

2.2 Overview of co-creation models

In the mission of outlining the concepts of co-creation, many researchers proposed models in aim to get the intricacy of co-creation in product development, therefore the models presented here are very significant ones. These models are not comprehensive and are limited to explain the existing models of co-creation.

2.2.1. DART model

According to authors (2) takes a practice based approach on how to build a value creation system This model consists of four parts Dialogue, access, risk benefits and transparency

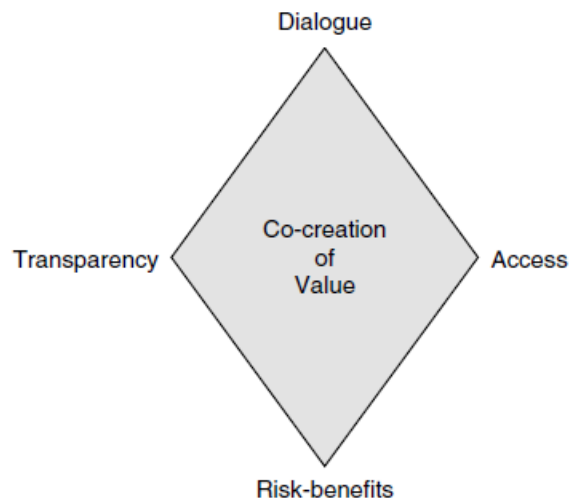


Figure 5 Dart Model

dialogue infers at the activity taking place between the firm and consumer, it is problematic to foresee a dialogue taking place between two unequal partners here the firm as well as consumer engage themselves deeply with the ability to solve the problem by becoming co-joint complex problem solvers but in order to have a dialogue the consumers must have access to the information of the product and there should consist of transparency between them as we can see in the past we were never well informed about the products and services but modernization is taking effect by inform the consumer through the use of internet where passive consumer are being well informed therefore access to the information about the product and firms being transparent towards are two major thing required for a successful dialogue.

- there is a slight drawback in this model that it is unable to determine the risk reimbursements taken in the proceedings and the power to make the decision is evident
- to understand the risk benefits first the consumer should think whether I need the product? what are its uses? whether is it worth for buying? the consumer must have the right tools to back up with the right decision the table below represents what co-creation is and not?

2.2.2. Value creation diamond model

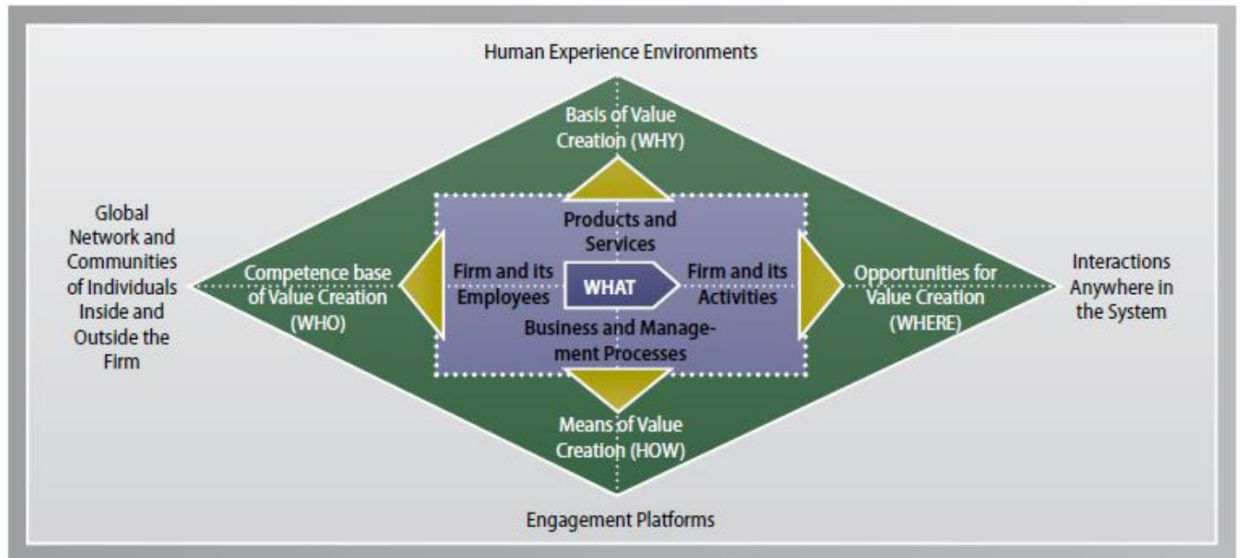


Figure 6 Value Creation Diamond Model

This model is designed by authors (Ramaswamy, V., & Guillard, F, (2010) which represents that co-create along with other individuals within the firm. here co-creation has been contended as gain more approach towards value creation. In contrast, it will give rise to a new maintainable growth where business gains lots of advantages and open the door for innovation. To get the anticipated outcomes the firm must broaden the mindset perception and managerial practice towards value co-creation.

As it can be observed from the figure a pattern shift is required in these places

- (Where) Apart from the activities which are taking place in the firm a suitable environment must be established for interactions between the firm and consumers as it focuses on value creation prospects.
- (Who) Here the competence base including firm, suppliers and all the individuals from departments of the firm and related communities acts as the center of competence of value creation.

- iii. (Why) the products and services marketed by the firm also establish atmospheres for human interaction experiences as the foundation of value to all the participated individuals.
- iv. (How) the assets and activities gained to engaging participants with the firm by creating a platform of experiences as the resources of value creation.

2.2.3. Reference model

This model was proposed by (Roser, T., DeFillippi, R., and Samson, A., 2013) who explained that this type of co-creation model is used to generate value in business process within the co-creation environment where this model consists of six different aspects along with decision backing up questions which were identified for the firm managers to envisage implementation or encompass co-creation resolutions by choosing the appropriate one.

Some of the question included

- Which type of co-creator will be involved in the process?
- What is the purpose for co-creating?
- Where in the process should the center of attraction occur?
- How much of the involvement of consumer should be governed by the firm?
- How long does an individual take part in co-creation process?
- How should a co-creator be rewarded?

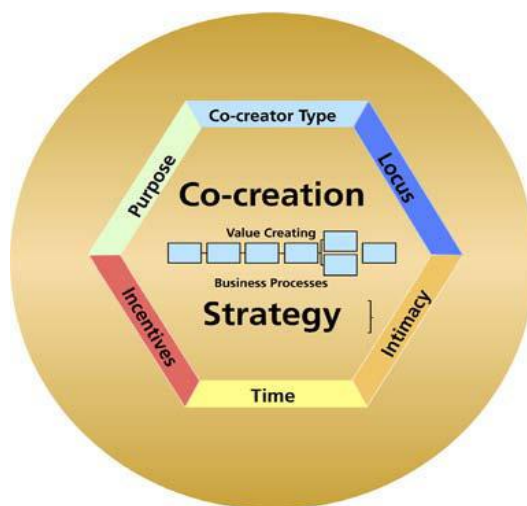


Figure 7 Reference Model

This model shows us that evaluation can be concluded on how firms steadily use the deciding power to bring about the mix of co-creation events within business to business against

business to consumer using crowd sourcing or not. Decisions taken against anyone of the aspects will disturb the implementation and governance of co-creation which emphasises on dealing co-creation environment.

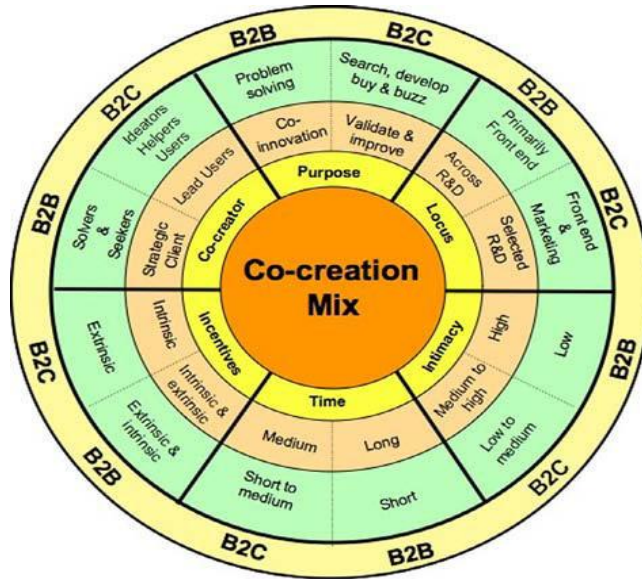


Figure 8 Advanced Reference Model

2.2.4 Co-Creation Taxonomic Model

This model of co-creation was put forward into consideration by (Zwass, V, 2010), which consists of four extents that are Co-creators, task, process and co-created value. S

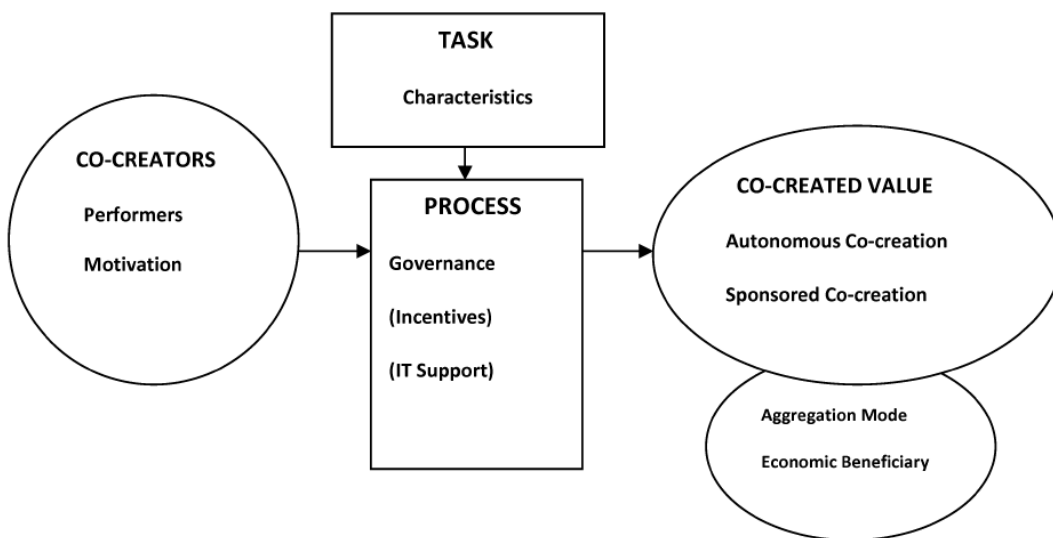


Figure 9 Co-creation Taxonomic Model

This model was later researched intensely by laying out the importance by concluding with its characteristics example: Co-creators was enlightened with the help of the individuals relating to different communities and their motivation

This model became comprehensive when the characteristics did not lay out apart from governance subsequently enticements tailed from the motivation aspects. this co-creation model has salient features which can be tapped in future research by refining the model concluded by cluster investigation.

2.3 Definition of Customer Co-creation

Customer Co-creation is defined as the process of escalating technological developments and creating value for the firm, where the products and services along with the experiences are cooperatively industrialized by the firm and consumer environment by encouraging consumer relationship.

2.3.1 Distinct types of consumer motivators enabling product co-creation process in every business

Co-creators are people who might be stakeholders, consumers or people who are outsourced. by looking at the firm's perspective according (Von Hippel, 1968), the Company must work in partnership with the main users within the company. These lead users are those who can identify different drifts with new commodity products and can obtain solutions for various complex problems associated with the product or services. According to authors (2) companies should engage with legitimate and educated consumers. The unperfected co-creation pattern began to grow when the (Ramaswamy, V, 2009) recommended it where the companies profited by working together with network of global communities and individuals within and external of the firm. The opinions generated are not restricted to the present consumer but also to the dormant consumer where the opinions evolve continuously to generate determined results. So, the several types of co-creators are

- Global population - where anybody across the globe can contribute, and collaborate with them on ability to come up with a problem or solution irrespective of the skills
- Selected qualified individuals - These individuals provide opinions on their experiences of the past dealing with the problem associated also these individuals are authentic which makes it more valuable for the firm along with their contributions

- Members of specific community - These individuals are the people who have similar interests within the community. As they show a mutual respect and trust towards the firm with their contributions
- Skilled worker - an individual who must have a set of skills which are required to complete the task presumed by the company.

2.3.2. Different Types of customer Co-Creators

1. Crowd of people also known as crowd sourcing

Crowd sourcing is defined as the process in which the power of individuals can be used control to resolve complex task and accomplish it which were once done by the experts the advancement in technology within a decade has drastically expanded its horizons with globalization. People's advantage has been utilized in crowd sourcing as it gathers individuals around the world pairing with the internet access becoming a powerful platform.

Corporations have been utilizing this by capitalizing on the value of authorized it connects through introducing a question or problem in front of large audience that are physical or virtually present and propose a reward for the best idea. Crowdsourcing interacts straight with the target audience which not only it is efficient, cost effective and has huge participation of individuals but also rescues from drowning for failure with desired results.

2. Community of kindred spirits also known as open sourcing

It is a concept that drives from the digital world the idea of opening the source or allowing the user to examine, modify, copy and share its source codes.

Numerous volunteers who are energetically involved in the development and sustaining of the product often set some new technical standards they are not rewarded for their participation neither has the rights on intellectual property and distribution. Individuals initiate a request and upon those requests the individuals in community interact

3. Club of experts also known as co-creation workshops

Firms may invite a selection of preferred individuals to take part in the co-creation workshop as lead users this approach gives live understandings guiding the idea and way of thinking. These types of workshops give lead user hands on experience, in these workshops direct collaboration takes place and flow of ideas are quick, invest to organize

the workshops are low and companies can maximize profit and guarantee the ideas are utilized for commercial purpose.

4. Coalition of parties also known as user generated content

these social media platforms where individuals talk about products or services in a simple question and the response accumulated is dynamic as it is cheap and easy where the individuals create product or services of their own, if the content created is on the right platform the response can fetch a brand of its own

5. Mass customization

Mass customization presented by the firms has enormous product diversity and custom personalization of product. Consumers can reengineer their product and services under the predefined framework of the firm. This means that consumers are free to choose their desired products while ready to stash a premium price on the go. The accomplishment which the mass customization can deliver is brand and position in the market it can make your consumer as a part of stakeholders' representatives. People can customize their products under their budget. According to (Prahalad & Ramaswamy, 2002) "Customization eventually is a process that creates a product based on your personal choices and commodity into the market to meet the requirements of the operation within the firm's value chain to run efficiently", it is clearly operated by the company with the set of defined rules. The firm establishes an environment for the co-creation experience to take place between the consumer and the firm, where individuals can tailor their own personalized product without any limitations. A customized co-creation reflects how the consumers utilize the interaction of different individuals with different prerequisites within the environment the experience gained boosts the value for both the firm and the consumer. For example: West coast customs Who is a pioneer in customization in car industry Where the requirements are generated by the consumer and this company has a set of dedicated staff who fulfill their client's wishes so here the consumer is having a customized product and the company is generating brand value. In the upcoming session, we will discuss about the different co-creation models proposed by different researchers and analyze these models in the process in the perspective of the existing company.

2.3.3. Significance of customer co-creation

In today's business world, examining the surge of practices in Co-creation has numerous factors which must be taken into the account, to distinctly outline the pertinence(relevancy) of Co-creation, the factors considered must be interpreted and built on the contradictory view points of the firms and consumers on product development.

2.4.Firms point of view (Businesses co-creation)

In line with the firm's outlook, there are more than a few key drivers which restricts the execution of customer co-creation, these key drivers hail from the external and internal resources relating to the firm. The key drivers are:

1. Cumulative rivalries in the middle of centering businesses

In the period of centering business assisted by new innovations and technological developments, co-rivalry is emerging from the firm within the identical industry sector (Gassman, 2003). While the competitions are surging drastically dwindling the profit margins at higher rates the firms yearn to sustain its competitive edge through innovation. Furthermore, Traditional methods which are cost reduction, redesigning and outsourcing are relatively vital cannot release from the burden of dwindling profit margins. Keeping in the mind the needs of consumers. Firms have introduced a new way of co-creation experiences by welcoming consumers into their organization by taking part in the development process of new innovations or services together and enhancing business experiences generated through this process where the consumers are rewarded (Prahalad, C. K., & Ramaswamy, V, 2004)

2. Monetary swings to emergent market place

The stationary development of industrialized markets has firms deviate from them by spreading its wing into the unindustrialized markets where the annual growth is expected to vary in both the industrialized and unindustrialized markets. The firms tend to lean towards the developing markets as there is a upsurge annual growth. Nonetheless consumer purchasing power is low due to difference in culture and the value perception in the products where the firms are challenged against the existing business model of the market. So, to have a competitive edge in the emerging markets, firms should be more creative in their products and services from the markets of

industrialized countries. Furthermore, a firm dealing with technological innovations encounters a challenge by guaranteeing that their innovation marketed is not a collection of different technological advancements which are made previously, but are reengineered to meet the needs of the consumers

3. Levitating the relevance of collective knowledge of the key stake holder

Collective knowledge which is a form of tacit knowledge is well-thought-out to be one of the key characteristic in sustaining competitive edge. This has however started a long way back when people conceded their collected knowledge and wisdom on to the future generations which revolutionized the way of thinking and sharing tacit knowledge, demanding creative, instinctive and inspiring people who can govern human intellectual by adapting it to useful products and services influencing the inclusive quality of knowledge (Goffee and Jones, 2000). Nevertheless, the collected knowledge is recommended to be influenced and used in different places within the organization with other knowledgeable players such as consumers, suppliers and other units related to the firm to co-create consumer value also stakeholder profoundly rely on these experiences. The imperceptible and vastly unmatched features of knowledge and the outcomes of these communications are contended towards achieving competitive edge.

4. Deteriorating innovation success rates

When the firms lose the market capitalization due to the fall in shares due to no technological advancement because the traditional approach to invent products by the firm did not sustain the anticipated level of development so the firm here takes an initiative to collaborate with a set of lead user to develop innovations projects where half of the capital investment was imposed for innovation. The lead consumer collaborates with the organization to co-create new products and services

5. Declining levels of efficiency of the traditional market

With the surge in co-rivalry, consumers are offered with different promising substitute products and services to choose from. Besides the outpouring substitute products and services isn't conveyed with noteworthy upsurge in consumer gratification. The initiatives taken by the firm to learn the market through listening the consumer which is also known as voice of consumer and entrench that into the results gathered by the focus group and market researchers is insufficient to get the desired results. In order, to

increase the effectiveness of consumer satisfaction some initiatives should be taken besides listening to customer, engaging them into the development process along with expertise within the organization must be taken into the account.

2.5. Customer product co-creation

A vital topic in outlining the co-creation is contributing the consumers by bestowing power to take part or co-operate in the process of product development within the firm. Where according to authors (Prahalad, C. K., & Ramaswamy, V. 2004), the company has all the power and authority to establish the co-creation experience in product development, while the focus is on consumer but are treated as unreceptive consumers, these types of firms encourage out of proportion experience of co-creation, co-creation is not entitled to an experience but also provides positivism for the primary parts such as products and services so co-creation varies from other collaboration approaches in the firm. Here in the past traditional market pattern had only the company's perception and decision to commoditize a product in the market place now at present consumers are also involved within the firm to co-jointly define and solve problems that can enhance the product in the development stage.

2.6. Customer perceived value

To ensure the customer base is intact it isn't easy unless you are a committed marketer to retain the consumer. Customer delivered value is defined as the difference between total customer benefit and total customer cost



Figure 4 Customer perceived value

Total Customer Benefits:

1. Product benefits: it denotes the benefits the customer received by using the product or the services. In other words, the products which is marketed by the company Forces the person to purchase and benefit from the product or services.
2. Services benefits: it is the services of any kind the company are ready to guarantee you, their assistance even when a certain time of years has been passed.
3. Personal Benefits: Personal interaction with the employee is considered as benefit where a sale's person helps the customer in making the right decision based on the necessities of the consumer while the consumer is purchasing his/her product or services
4. Image Benefits: Brand or the Image created by the company for its products or services which has a great impact when it comes to consumer decision in buying the products or services. It is persuaded by the nature of the company by convincing its consumers to purchase which is the outcome of years of dependable and quality products the company must offer.

Total customer cost:

1. Monetary cost: An amount printed on the product or services is the monetary cost of utilizing those products and services by the consumers
2. Time cost: To enquire a product it takes time to situate the place where the product is available, decide which product to choose from so the time spent by the consumer in the process of buying
3. Energy cost: The energy utilized by an individual to lookout for the product decide which product he is going to pick all the details and time spent and the effort taken by the consumer is known as energy cost
4. Psychological cost: the time taken to decide the product the consumer is about to purchase the mental effort undergone by the consumer has invested on a product yet the consumer keep on thinking he/she have made the right decision. It is a cost which can't be measured.

In the end, all the firms pursue to balance the perceived value and cost. If your total customer benefit is better than the total customer cost as a consumer it is worth considering that product.

2.6.1. Business to business and business to consumer marketers

Business to Business (B2B) and Business to Consumer (B2C) are two kinds of commercial transactions in the business field where B2B stands for business to business, it is a process selling distinct kinds of products or services to another kind of business and B2C stands for business to consumers, where in this process selling of diverse kinds of products and services are directly to the consumers. Although B2B and B2C practices similar nomenclature, the approaches and strategy can vary significantly according to the needs by the consumer in the market.

The similarities and difference in marketing in B2B and B2C are given below first we discuss about similarities than differences

SIMILARITIES:

1. Consumers Facades in B2B and B2C have consumer in marketing, although the natures of consumers they keep tabs on have a significant diverse audience in the market so as to identifying and emerging product in the form of development according to consumer has to be understood first which is the key success in marketing.

2. Marketing orientation and sales position.

For the companies to accurately take full advantage of the marketing struggle for their sales and marketing organizations it should be at an earlier orientation when it come to their goals roles and anticipation about each other in addition to standardization by leading generation process where both the sides can come in terms and implement. When marketing and sales work together both the field can expect to achieve more deals with high revenue along with profit growth.

3. Revenue over investment.

The success rate of revenue over investment depends on the data acquired by potential consumers at each stage of its journey everything from the point of interaction to final stage of attribution in addition to consumer behavior and feelings towards marketing achievements. Both the marketing field must acquire data by analyzing and evaluating the data to advance marketing strategy and its executions.

4. Commercialization plans.

When introducing product and its services into the market both B2B and B2C has to execute a plan to endorse and make best use of publicity for post launches which requires a stronger thoughtful of marketing strategies survival and events to endorse the perfect messages and the perfect time both B2B and B2C needs to deploy active approaches to launch the best brand Image along with their products and services.

DIFFERENCES:

1. Decision creators.

Here it varies for both B2B and B2C where in B2C there is one individual decision creator to contemplate where an individual consumer purchases products from them whereas in B2B the journey involves multiple decision from an organization consisting of suppliers, stake holders, employees and top management to be further assorted and dynamic to attract and meet the consumer needs involved in consumer process

2. Consumer capacity.

Here there are fewer consumer options when it comes to B2B marketing compared to B2C where B2C targets a vast range of consumer's preferences here B2B should acquire more targeted consumers to reach those businesses field within the market whereas B2C is a bit extra flexible and experiment can be conducted which can still cover half of B2B business.

3. Diverse natures of consumers.

B2C targets consumer based on their individual preferences such as age, gender hobbies etc. while B2B targets consumers based on their professionals such as company, job title Budget etc.

4. Sales Sequence.

A sales sequence in B2C is quicker when compared to B2B from the time of first awareness till the time of purchase can be done under few hours whereas B2B can take extended period. Companies obligate to estimate the pros and cons of B2B and provide definite solutions in the case of B2c If the consumer goes under complicated tasks or if

the product is not what the consumer decided it can be refunded but in the case of B2B it can take several steps to complete the same task as B2C.

2.7.Customer co-creation edges and costs

The advantages of executing co-creation are not only beneficial for the companies but also for the consumers, Due to its collaborative nature. Some of them include

1. Products are designed to meet the consumer's needs.
2. Effective technique to attribute value the product offering to its consumer.
3. Empowers the companies to mark explicit customer groups.
4. Generating sources of original and valuable ideas and information for the product or services.
5. Forcing barricades which imitate products and services.
6. Anticipated to advance a sustainable competitive growth and have competitive advantage.

Furthermore, co-creation process evades the perilous drawbacks of traditional system. Some of its limitations are as follows

- Uniquely fixated on the business areas of firms and is corresponding industries.
With the co-creation process implemented the companies can cautiously knit the collaboration between its stakeholders and other new entities along with new experiences which lays low of the screen of other traditionalist, these interactions taking place is tough to monitor and imitate process which can often offer competitive edge.
- It flops to co-create an ecosystem where everybody is the winner.
Its focuses on the entire participants involved in the organization to create a new value chain within the firm to prosper all participants with edge.
- Adopting co-creation process with a distinct strategy will be entirely defined in the initial but often due to some unseen situations it becomes impossible to continue.
The co-creation strategy is developed gradually by the encounters of the persons within the firm.

Executing co-creation process in a firm has its own costs, which are not restricted to direct but also indirect costs Direct cost include devoted resources to execute co-creation process whereas indirect costs includes creating an environment that will establish and collaborate to

co-create new experiences which forms a culture of being transparent towards tangible resources such as money, time and humans.

2.8 Consumer's point of view (Customer co-creation)

1. The upsurge of sophisticated and knowledge consumers

The intensification use of internet which is also backed by the pervasiveness of telecommunication through smart phones has given access to consumers to seek information at any moment of the given time. With access to information the purchasing decision power is reducing to cost effective which gives rise to well-informed consumers. The better informed participants the more voiced they are. This lead to the rise of co creation where prime consumers can undoubtedly define what their needs are in a well-defined manner compared to the rest consumers. So, tapping out the sources of knowledge from the consumers gives the occasion for the consumer-firm collaboration

2. Consumers are enthusiastically looking for collaboration methods with the firm

The permitted customer intensifies the strong point of the voice of consumers and mouth to mouth communication to a different level. Consumers willingly participate with diverse inspirations like writing reviews or comparing diverse products over YouTube and numerous platforms. Likewise, it creates a business model for the firm for example Trip advisor who rely on feedback from their travelers that showcases transparency to other fellow travelers in generating value propositions. This measure changes the role of the market, where formerly firms saw market as a target for the firm's contribution but it is changed with expressive communications between the firm and consumers as a voyage towards experiencing value, proposed by the firm in life cycle of products and services.

2.9.The propose model

The propose model is based on the existing two models- DART model and Advanced reference model, where communication between the firm and the consumer takes place along with the transparency to solve deeper problems with access to information on products and services and the risks and benefits factors are concluded from the advanced reference model which is used to generate the value along with the different aspects which makes it easy to identify and take decisions to implement the product co-creation. Here the co-creators are innovators, ideators and lead users who search for the products which can be enhanced by

validating and improving for the front-end consumers and marketing by carefully selecting research and development standards on the existing products to familiarize in medium to high level proximity within the short period by providing intrinsic and extrinsic incentives to consumer's motivators.

When the product co-creation takes place, co-creators based on different categories are taken into considerations who are crowd of people and club of experts. Crowd sourcing as a control where to resolve complex task through the internet platform where people are given a complex task to determine the result by physical or virtual presentation to its target audience which is not only efficient but cost effective which also involves huge crowd of individuals participating in it by recusing the product from drowning from failure.

Club of experts where firm invites them into the co-creation workshop, where lead users are given this approach to understand the idea generated on the product and increases the way of thinking by direct collaboration with the firm and the consumers to maximize the profit of the product and guarantee the idea feasibility used in the production line.

Challenges faced by the consumer: Where the consumers expect the firm to be transparent in their form of work. While the firm cleverly tries to acquire the proprietorship of the intellectual property of the participant. Also during this process the ideas generated are organized and discarded by the firm expertise to undergo utilization of co-creation process to bring out the potential product by the firm to commercialize and post launch the product into the market.

Challenges faced by the firm: The firms have lower tendency to participate in a wide range of co-creation activities within in the organization.

Figure 10 Proposed Co-creation Model

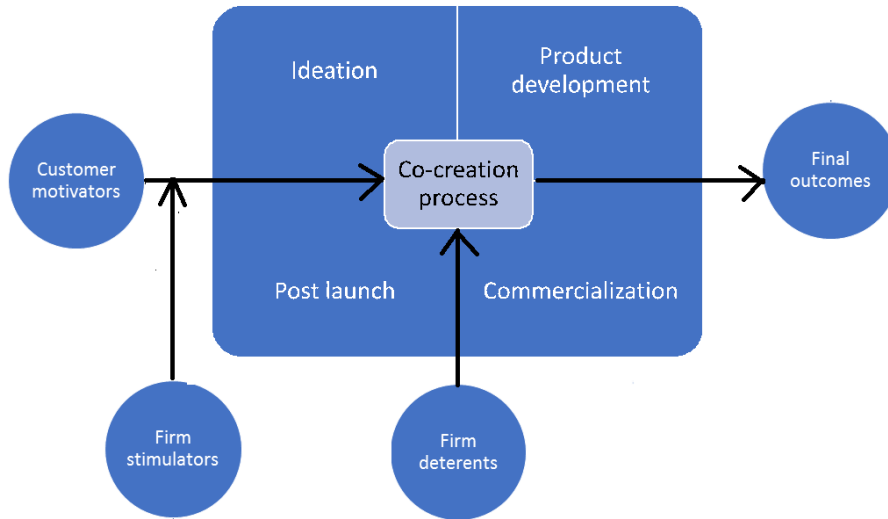


Figure 10 Proposed Co-creation Model

2.9.1 Co-creation process of the proposed model

Co-creation model for the propose model is separated by different segments along with co-creation process which includes customer motivators, firm stimulators, firm deterrents along with the stages of product development which are ideation, product development, commercialization and post launch to receive outcome. Within the firm (Four Star India) the product co-creation process takes place when consumer level of motivators such as crowd sourcing, lead users, club of expertise participates in the process to adopt the products before others gets their hands on it. By evaluating the product to enhance its life for a better use then there are market mavens who knows exact product information where to look for the product in the market. During this co-creation process the participants generates the idea on the product for its enhancement which is shared with the firm expertise to get the desired result. Those ideas which are infeasible are discarded and the feasible ideas are sent to the production line. After this product development also takes part in the process of co-creation to provide enhance products by improving and evaluating the product, so the firm here limits the consumer participation at this

stage where focused groups and lead users are involved to narrow down the qualities of the enhanced product, firm use social media platform to indorse the product by sending the perfect message to the target audience at the perfect time and also by establishing the promotion events of the product. To create positive word of mouth among the audience to increase the sales of the product with profit margins.

2.9.2. Consumer motivators

Consumer frequently vary in their interest and ability to participate effectively in the co-creation experiences, few in a million of consumer around the globe will be enthusiastic to engage with the set of skills which may vary on the individuals participating some the motivators include Innovators, Lead users, Up-coming consumers and Market experts.

Innovators are those consumers who are the first individuals to get their hands on any product available in the market; lead users are the consumer that requires their product to meet the general needs in their daily lives. Up-coming consumers are the consumer who applies intuition and judgment for improving the products. Market experts are those types of consumers who knows any kind of information based on the products as to where the products can be purchased etc. also they initiate discussions related to the products and retorts to the demand of requests from other consumers. However, co-creation is a process which involves consumer motivators, cost of time, resources, physical and physiological determination to learn and engage in the experience of co-creation. Even though motivation can take place by financial rewards such as monetary rewards or profit sharing rewards, some might even get rewards in the form of social benefits like titles, status, Social esteem, good ties with others esteemed individuals creating a symbol of uniqueness, others might even get motivated to gain new technology advancement by gaining knowledge on a product or concept.

2.9.3. Firm stimulator

In the co-creation process firm can inspire consumer by increasing the reimbursements that the consumers obtain by engaging in the participation of co-creation making it a creativity approach where all the consumer and participant engaging are being motivated which targets all the factors such as Technological, Financial, social and physiological.

Another kind of stimulation is by plummeting the costs of all the participant involved in the co-creation process, this kind of approach is used to offer the essential toolkit for the

participants giving them an upper-hand of creating new concept ideas and marketing these concepts to potential buyers, also another kind of stimulation is allow the participants by letting them choose or allocate the co-creation task which concentrates on a particular product or component in the product development which will be effective and efficient in completion of the co-creation task.

2.9.4. Firm deterrents

Firm deterrents in the co-creation process can be characterized into four major sections

1. Transparency
2. Ownership of intellectual property
3. Information overload
4. Infeasible

2.9.4.1. Transparency

Fair amount of transparency between the firm and the consumer is required by the co-creation process since the information on the products can be exposed intentionally or unintentionally through consumers or employees of the firm it can be beneficial for the competitors. Firms which rely greatly on the secrecy of information on the product developments are less likely to engage in the co-creation process since secrecy is at the highest priority in product development.

2.9.4.2. Ownership of intellectual property

Even though individuals participating in the co-creation experience might hand over their skills to the firms without any acknowledgement, there are some who might restrain it from passing over their set of skills to the firm in this case the firm create policies which might affect the contributions of the individuals in engaging in the co-creation experiences which is unfair also might create legal formalities on the intellectual property , there are less chances of co-creation taking place at this point.

2.9.4.3. Data overload

In the co-creation process huge volumes of consumers ideas are being generated which can lead to information overload, it can become a problem for the firm to screen all the generated ideas instead firm ask for other individuals participating in the co-creation to rate the idea example: Lego, which uses voting method for the product to go to the production where someone post a product on the lego official website and if the product receives 10,000

votes then the product is sent to the production line assembly for it to be commercialized quickly.

2.9.4.4. Infeasible

Firm faces another challenge in the co-creation process that is even if the ideas and novelty of the participants can be infeasible when it comes to producing the product at the company production line this is a major drawback behind the lack of utilizing the co-creation experiences, therefore the company interact with the consumer at the level of post launching or proto testing the product.

2.9.5. Ideation

Conventionally, Companies engaged with consumers in co-creating value at the initial phases of product development using recognized research techniques such as Focus group members and lead user to develop the product and confine to its concept Moreover these research techniques were expensive and engagement of consumer's participation was less focused. Introduction of the new technology such as World wide web has open a vast co-creation landscape which will engage the consumer -firm and consumer to consumer interactions radically. Firm utilizes the power of social media sites by influencing the consumers to co-create value in more effective and efficient method by gaining deeper insights of the products it can receive from the consumer's feedback which will decrease the production expenses. Moreover, firm can engage consumers even at the concept stage of development of product. It is a cyclic process where creative ideas are being generated by the consumers with the help of the qualified professionals to be implemented in the product development. During this process, some of the ideas generated can be infeasible in the product development which will be later be discarded. Later, the generated ideas are carefully examined and evaluated by the professional expertise who will later use these indigenous ideas at the later stage of product development. Here the firm will shell out the minimum expenditure while providing the deeper insights of the product and educating the customers about their products. Here the consumer-employee interaction takes place which opens the new experience for the firm employees to interact with their consumers, where information can be obtained in a huge amount. During this process the qualified professionals who interact with the consumers will collect the personal data of the consumers to interact with them at the later stage of the product development. Later, the firm establishes the

events where they welcome every individual to share their ideas and the experiences as well as their concerns about the products. This will take place periodically.

2.9.6. Product Development

Product improvement is achieved when the interaction takes place between the expertise and the consumer who carefully organizes all the ideas obtained from the consumer which is examined to determine infeasible ideas in the production and discarded. Where at the later stage the ideas, which are valid is put to the test to enhance the products life duct ability and durability.

2.9.7. Commercialization

The introduction of social technology platforms like the online customer community, social networking websites instant messaging app such as Facebook, WhatsApp etc. have become the alpha and omega for the companies to manage commercialization the technology provides three step approach which includes product awareness, product trial, recurrence purchase.

1. Product awareness

Creating product awareness within the consumer is a crucial success factor for the product development which is accomplished through advertisements and promotion approach, moreover this can also be accomplished by sharing the information on social websites, customer community bases, and other tools to create buzz for the product in this process the product creates a hype or can destroy its reputation itself during the process.

2. Product trial

Once the awareness of the product is being recognized by the consumers , product trail is to be initiated in order to reduce the risk associated with the product that can depress the mindset of potential buyers of the product so proactive participation by encouraging a consumer to consumer interaction can clear the doubts of the product as what the product is and what is has to offer in the market for the potential buyers, in this process the firm can get the negative feedback and improving those negative before entering the products in the assembly line of production. This type of interaction helps to build relationship between the firm and the consumer also improving the product on the go by providing tactical market strategy with back up of advertisement and support.

3. Recurrence purchase

This occurs when the firm seeks for review of their products entering the market by actively monitoring the feedbacks received for the product it can help firms analyze the reasons of low purchase point or increase the point of sale of the product depending on the market , in the past it was unable to get these types of information using the traditional market system, during this process the firm can carefully analyze what the consumers are review and commenting on the products and change the negatives side of the product without being detected through consumers interactions.

2.9.8. Post launch

Post launch activities use basic ideology which is affordable and has the wide spread distribution cost during the new product development process. The system is nimble and can be flexible depending on the activities executed. Screening the idea means the new innovations considered by reaping out its benefits which consumers are concerned about. Testing the concept product is done after the screening process which involves queue design diligence which is an important part of the product development. Technical aspects of the products can be perfected and marketed to the consumers by increasing the awareness about the products sustainability. By reviewing the new products efficiency of the products can be improved by increasing its performance in the initial stage of product development and making sure that customer defecate these products as a superior product.

2.9.9. Outcomes

Production expansions through increasing efficiency and improving effectiveness in the process. Minimizing the operational costs and enhancing product value to meet the consumer needs. Where the employee's feedback can be substituted along with the customer's feedback for the product development, cost saving upsurge when this process takes place which couldn't have been done in the past using traditional system, it also helps in reducing the risk of product failure and firm inventorying stocks, this might result directly on the efficiency of the firm operation undertaken to develop product by providing satisfaction to the employees and generating high profitable revenues. Moreover, Co-creating product to meet the desired reviews from the consumer where the products meet the need of the individual thus increasing the value of the firm and its consumers.

Outcomes are obtained by increasing efficiency and effectiveness in production expansion by minimizing operational costs and enhancing product which meets the customer expectations. Customer's feedback and employee's feedbacks are taken into consideration to produce better products by eliminating failure ideas in the co-creation process. Thus, the desired reviews of the products are met and marketed to the individual who increases the value of the firm and benefit for the consumers.

We are going to relate consumer motivators, firm stimulators, firm deterrents that are affect in the product development stages such as ideation, product development, commercialization and post launch with its outcome in the last stage of the product co-creation.

Consumer motivators interact with the firm expertise at the ideation stage where ideas are generated and are carefully organized. These generated ideas are discarded and then those selected ideas are sent to for the further research in the product development stage, where the ideas generated is evaluated and examined and will be approved by the firm expertise to carry out for the further development of the product. Firm at this stage involves firm stimulators to use the preferred tools for the co-creation process. To reduce the consumer costs and increase the consumer benefits by making here firm deterrents also takes place an important role in co-creation process where secrecy concerns are well maintained by the firm and sharing of intellectual property is owned by the firm under circumstances from the motivators. Ideas generated in the ideation stage where tons off the ideas are being organized and discarded are make sure that only feasible ideas are implemented to the co-creation. Stages of product development where ideation, commercialization, product development and post launch.

Table 1 Summarized Literature review

<p>Pertinence of customer co-creation</p>	<ul style="list-style-type: none"> • Product co-creation is applicable for both the firm and customers. • Product co-creation from firm perspective is applicable, since <ol style="list-style-type: none"> 1)The upsurge of competitions is day by day revolutionizing in the time of various business convergence.
---	--

<p>Definitions of product co-creation</p>	<ul style="list-style-type: none"> 2) Levitating the awareness of the significance of increasing knowledge of the stake holder for successive results. 3) Monetary swings in the emergent markets. 4) Failing Innovation success rates 5) Declining levels of the effectiveness of traditional markets. <ul style="list-style-type: none"> • Product co-creation from customer point of view is applicable since <ul style="list-style-type: none"> 1) The upsurge of active customers who are educated and has knowledge about the changes happening around the business markets. 2) Customers are finding ways to collaborate with the firm by actively participating with the employees for the product co-creation development • Co-creation term is being used in various data streams of literature, journals etc. extending from Technological innovations to internet commerce. • Product co-creation is a firm management ingenuity where the development of intensifying innovation and value competence of the firm by jointly collaborating to develop products and services by the firm and customer while cultivating relationship among themselves. • Product co-creation and co-creation are being used by interchanging as they represent the same concept.
<p>Conceptualizing Product Co-</p>	<ul style="list-style-type: none"> • There are various models which leads to product

creation	<p>co-creation.</p> <ul style="list-style-type: none"> • These variety of models suggests absence of harmony as they emphases on varies features of product cocreation
Magnitudes of co-creation	<p>As we observe in the literature review the proposed magnitudes are enlisted below</p> <ol style="list-style-type: none"> 1. Types of cocreators 2. Types of co-creation 3. Traditional organization and Modern organization 4. Co-created values for the company
Customer perceived value	<p>Customer perceived value is the variance between what the customer evaluates on the benefits of what the product or services should offer to meet their needs against what the firm's total cost offered on the product.</p> <ul style="list-style-type: none"> • Total customer benefit is the perceived value of the bundle where economic, functional and physiological benefits of using the products and services are achieved. • This could be achieved if the company deals with improving the products and services offered by reducing the price and improving their communication within the market.
Benefits and cost of product co-creation	<p>Advantages of product co-creation from numerous literature reviews is</p> <ol style="list-style-type: none"> 1. The products and services co-created within the firm by the employees and customer are intended to match the needs of customers. 2. When these products are services which are co-created within the firm it will add value to the firm as well as to the customers. 3. The co-created products and service created by the

	<p>firm exactly target customer in a group of kindred spirits</p> <ol style="list-style-type: none"> 4. Source of feedbacks and ideas which are more in originality and valuable is preserved. 5. Stopping the imitation process. 6. Co-creation leads a justifiable competitive edge in the market. <p>Costs involved in product co-creation are fraught by both the firm and customers are these costs which is presented in the form of resources costs by the firms and opportunity costs by the customer</p>
<p>Risks of executing product cocreation</p> <p>Value co-destruction</p>	<ul style="list-style-type: none"> • Product co-creation has the risk of obliterating the value created between the firm and the customer one of the situation leads to this destruction that is the misuse of valuable resources, which could be from anyone the firm or the customer where unintentional or deliberately the resources could be misused. • Unintentional misuse might be due to certain scenarios such as the firm or the customer is unaware of the technology advancements, varies commitments by both the entities in production process or even maybe due to varies contest expectations from either side. • Purposely misuse of resources takes place for the one's own personal benefit where suppose if an employee or customer is addressed to certain advantages from a different third party company where either of them seeks their own benefit which tends to be a disadvantage for the company where the employee or the customer is within that

	organization.
--	---------------

To summarize the propose model it is obtained by infusing wo co-creation models which are DART model and Advanced reference model. It contains three stages, in stage 1 it includes consumer motivators, firm stimulators and firm deterrents, in second stage includes the stages of product development is been observed with ideation product development, commercialization and post launch and the final stage is concluded with its outcome of product co-creation process

3. RESEARCH METHODOLOGY

In this research, the researcher follows the emphases on the methodology to fulfill the aim and objective of the research.

Product co-creation is about developing the co-creation between the firm and consumer to evaluate and enhance the product in the product development stage within the firm to gain and sustain a competitive edge among its competitors. Individual ideas are generated and shared with the professionals, where interaction within the firm actively takes place to co-create product from the ideas generated within the short period at the co-creation workshop conducted by the firm.

3.1. Research Design

In today’s view of business marketplaces firms are faced with new encounters which is occurred due to globalization, advancement of technologies and outsourcing that has altered the competitive atmosphere in the market. To faces these challenges firms are forces to consider innovative ways to pioneer themselves from their competitors and satisfy the pre-requisites of consumer’s demand. How to establish a co-creation environment within the company where consumers and the firms actively participate to generate customer value?

3.3.1. Research Questions

The main determination of this research is to get the desired results for the research questions which are listed below the following.

1. What are the steps involved in the product co-creation process and how to determine Co-creation process within the firm?
2. How company designs and implies a co-creation process within the firm and how would it co-create products?

3. What are the draw backs of co-creation process in a company and their results on customer involvement during the development of product co-creation and services?

3.3.2. Objectives of the Empirical Research

The Empirical Section of the Research aims at the specific objectives

1. To propose a co-creation frame work for the existing product within the company for their customers by analyzing the interaction of the employees of the company and their customers in an established environment where the co-creation experience takes place within the company.
2. To find the necessities for the firm to indulge in co-creation process along with consumers in product co-creation development.
3. To analyze the variation in scope and intensity of co-creation experiences taking place within the company by the employees and their customers.

The Empirical research validates all these points that are most important in developing co-creation and implementing it within the firm.

3.3.3. Research method and strategy

Research methods are divided into two segments Qualitative and Quantitative segments. In Quantitative research, Statistical approach in collecting numerical data is analyzed and derived.

Qualitative research tries to find answer by thoroughly using predefined set of procedures by collecting evidences which produces verdict that were not predetermined. It is clearly evident that the research is approaching through qualitative data collection method.

As per Lewis, Thornhill and Saunders, Research approach are done according to the kind of research strategies applied for these types of research, the strategies included in these are Action oriented, grounded theory, case study, archival research etc. out of which survey research strategy is prevalent in these types of research. Interview is conducted when the Empirical research requires to investigate with Specific Situation. Some of the qualitative research methods are

- Contestant observation: This is suitable for gathering data on logically occurring behavior in their normal settings.
- Comprehensive interviews: which is ideal for accumulating data on an individual's personal experiences mainly sensitive information which are being discovered.

- Focus group: are effective for producing data on the social norms of a group, a comprehensive overview of issues.
- The different types which consist in these three methods are field notes, audio or video recordings and transcripts.

The advantages of qualitative research are that they use open-minded questions by encouraging participants to respond in their own words rather than enforcing them which gives meaningful rich results and sometimes unanticipated results from the researchers

3.3.4. Collection of data

The data collected by the survey where structured question is evaluated from the findings and problem stated and the collected data are examined through interview the primary data is through email attachments from the company and the secondary data collection is through skype conversation which is free way for communication for face to face interaction. The advantage is data is examined and the desired answers are reviewed for the question.

3.3.5. Sample size and grounding used in the research

It's rare for the possibility to collect and analyze the data across the globe So some data sample will be required to simplify the data collected it would be unreasonable to collect the data from individual, in my research the construction companies are the population, the company is the sample size and sample representatives are the individuals.

Target defendants

To get rich text in thoughtful of the required data of Co-creation process, the qualitative data are the seeking results from the participants. 5 participants from different departments of the company so data collected from 5 interviewees. A set of structured interview questions used to collect information by email and skype interviews between the researcher situated Lithuania and the company which are in India. The interview is organized around a set of 10 to 15 questions for which the respondents individually should provide answers.

Qualitative interview research begins with a question. The questions generally seek to uncover the perspectives of an individual, a group or a different group. The qualitative interview research questions have been formulated to focus on the main aspects of the research.

So, here the ways the research questions are formulated obviously are not structured interview. The questions are semi-structured questions. It can be called semi-standardized (Rossmann and

Rallis 1998: 124). Table below shows the main stages of the interview and the questions will be discussed during the research.

3.3.6. Limitation of the research methodology

In the interview method, with Emails and with videoconferencing interviews and because the researcher and interviewee cannot make face-to-face interviews due to distance between researcher and participants. But, face-to-face interview is better than telephonic interview. We have many alternative social sites like Facebook calls, Viber and WhatsApp calls etc., which could help us to continue our interview if have any problem with selected data collection applications. So, less participants are interviewed from the sample. Thus, sample size generally not large. These are the disadvantages of using interview-qualitative research.

Table 6 Interview Research Questions

Model element	Criteria	Interview questions
1. Co-creation process	1. Scope and intensity	<ul style="list-style-type: none"> • What is the scope and intensity of product cocreation in the firm?
2. Consumer motivators	1. Financial motivators 2. Social technology and psychology	<ul style="list-style-type: none"> • How does the costs and benefits of co creation process in the product development change over the period within the firm of consumer relationship? • Why some consumers are willing and able to encourage in co-creation?
3. Firm deterrents	1. Concerns about secrecy 2. Proprietorship of intellectual property 3. Information overload 4. Production feasibility	<ul style="list-style-type: none"> • How does the trade secret be detrimental to the co-creation process? • How the firm succeeds

		bargaining the Proprietorship of intellectual property in the co creation process along with the consumers?
4. Firm stimulators	<ol style="list-style-type: none"> 1. Increase in customer benefits 2. Reducing the costs (time,effort,opportunity) 	<ul style="list-style-type: none"> • What are the need, preferences and motivation of segments of co creating customers?
5. Product co-creation at different stages of product development	<ol style="list-style-type: none"> 1. Ideation and Product development <ul style="list-style-type: none"> • Cost reduction • Strengthen the bond between customer and the firm • Increasing the effectiveness of the products and services 2. Commercialization and post launch <ul style="list-style-type: none"> • Potential awareness of the products at the earlier stage • Increasing the success rate and diffusion of the product • Reduction in marketing expenses <p>Risks and costs</p> <ul style="list-style-type: none"> • Incentives for better indigenous ideas • Challenges in acquiring potential ideas from various consumers • Managing up to customer expectations and maintain relationships • Maintaining negative word of mouth 	<ul style="list-style-type: none"> • How does the company enhance the process of product co-creation to gain its benefits? • How does the company encourage consumer's enthusiasm of the product co-creation process and helps in maintaining the process? • How does the company choses and acknowledges propitious ideas from the huge set of consumer's information?
6. Outcomes	<ol style="list-style-type: none"> 1. Reduced cost while increasing effectiveness of products by maintaining the 	<ul style="list-style-type: none"> • How the short-term and long-term does

	<p>relationship between the firm and the consumer.</p> <ol style="list-style-type: none"> 2. Reduced control over strategic planning 3. Complexity of firms' objectives is increased 4. Complexity of managing mis-performance and the selection of the ideas 	<p>effect the co-creation process on firm's revenues and profitability?</p> <ul style="list-style-type: none"> • Explain the role of co-creation in customer relationship building in your firm? • How does competition for cocreators affect success of cocreation? • How does the effect of co-creation process make up for brand image and positioning of our firm? • Does the firm think that co-creation hampers radical innovation?
--	--	---

4. EMIPRICAL STUDY OF THE DEVELOPMENT OF PRODUCT CO-CREATION AT THE SELECTED CONSTRUCTION SERVICES COMPANY IN INDIA

This chapter of research is an empirical part; there are two sub-chapters of this part derived from it. Firstly, the findings from the qualitative interview data are described and presented then secondly, in the discussion part, based on the content - analysis method, the respondent's reflection from the interview, that is the transcripts of interview have been analyzed and the data categorized.

In the research discussion part, the empirical research results will be provided. This investigation will provide the view of realistic research at the end. From the discussion of this study, the research will provide recommendations to the future research.

4.1. Research findings

Researcher taken notes during the interviews also the results from participants by recording the interview as transcripts. This research has been conducted in the context of PRODUCT CO-CREATION at the construction services company. The author of the present research, as an Indian native and originally from Karnataka, Southern part of India has used his personal network of contacts to reach the respondents.

The author has not done any sampling for at least two reasons. This research did not seek for quantitative data. The research has targeted construction services employees dealing with product co-creation with customers. Therefore, the only criterion used for selecting the participants to the study was that they will be working in Construction Service Company from India. Within the context of selected construction services company ten of the participants working on the small and medium enterprises occupy a management position. Those ten participants are Human Resources Manager, 3 directors, Regional Manager, Marketing Manager Sales engineers. These two engineers deal with the solving of issues are assisted by two employees each. In total, these 6 participants have composed the only sources of data collected in the framework of this theoretic.

4.2. Research Discussion

In this area data's are being collected and later it will be discussed by analyzing them using content analysis method.

According to Saunders, Lewis And Thornhill (2009) There are three types of nature of research which are classified created on the objectives of the given problem they are Exploratory research, Descriptive research and Explanatory research, Here Explanatory research is conducted for the Empirical research as it is argued by the authors that this research frequently accomplishes that a distinguished problem absolutely does not exist. It depends on the secondary data such as informal discussions with consumers', employees etc. Indeed, the research explains how the co-creation process developed and implemented between the firm and consumer within the firm.

4.2.1. Interpretation of result

The research is aimed to explore the factors of product co-creation within the firm. To be defined as the co-creation process in which the consumers interact with the firm in the product development. To make sure that the product co-creation which is available within the firm can contributes its efforts. Also by identifying how co-creation is used within the firm along with the consumers as a part of it.

The following table shows the results of content analysis method, creating codes from the transcripts.

Table 7 Interview transcripts

Model element	Criteria	Interview questions
1. Co-creation process	Scope and intensity	<ul style="list-style-type: none"> • Scope refers to the implementation of the new techniques of the products and different approaches to attract the consumers • Intensity is the degree of co-creation activity taking place within the firm between the expertise and the consumers to solely to meet the requirements and enhance products

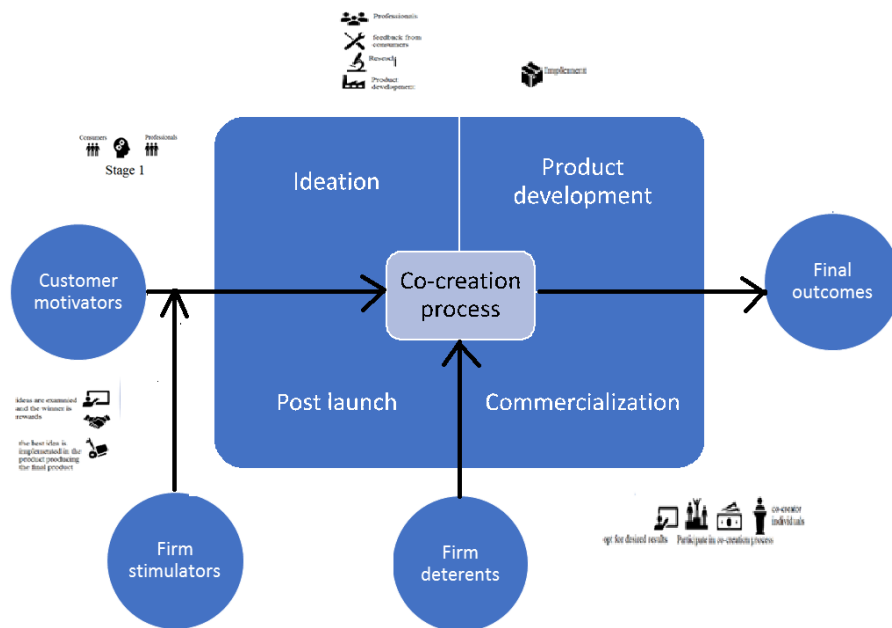
<p>2. Consumer motivators</p>	<p>1. Financial motivators 2. Social technology and psychology</p>	<ul style="list-style-type: none"> • The cost involved in the process is minimal. • Ideas are organized to enhance the product in the development stage by reducing the manufacturing cost and creating economical products • Firm is benefited by getting deeper insights of the products within the market where consumers can share their experiences on any social platforms which will increase the creation of the enhanced products which will be benefited by brand loyalty in product improvements
<p>3. Firm deterrents</p>	<p>1. Concerns about secrecy 2. proprietorship of intellectual property 3. Information overload 4. Production feasibility</p>	<ul style="list-style-type: none"> • Secrecy is some crucial dates that cannot be shared to anyone outside of the firm. Due to the risk of tampering the data. So, the company acquires proprietorship of intellectual property by providing incentives for the participants • Information overload is organized and discarded on various reasons when the idea is generated. The firm expertise determined the use of this stage to

		<p>differentiate between the indigenous ideas and the discarded ones which can later being implemented in production line due to its feasibility.</p>
<p>4. Firm stimulators</p>	<ol style="list-style-type: none"> 1. Increase in customer benefits 2. Reducing the costs (time,effort,opportunity) 	<ul style="list-style-type: none"> • The consumer demands certain preferences when it comes to choosing the products where the products are being evaluated and if any improvement must be done. It will be implemented to enhance the products. • Motivators such as lead users, club expertise, and general consumer are considered by emphasizing the role of product co-creation to enhance the product in the development stage.
<p>5. Product co-creation at different stages of product development</p>	<ol style="list-style-type: none"> 1. Ideation and Product development <ul style="list-style-type: none"> • Cost reduction • Strengthen the bond between customer and the firm • Increasing the effectiveness of the products and services 2. Commercialization and post launch <ul style="list-style-type: none"> • Potential awareness of the products at the earlier stage • Increasing the success rate and diffusion of the 	<ul style="list-style-type: none"> • Creative ideas are obtained by cutting off the cost • Intensified effectiveness of products is recognized by achieving and enhancing the products in the development stage. • Establishing stronger bond between the consumer and expertise of the firm. • There will be an up search in the success

	<p style="text-align: center;">product</p> <ul style="list-style-type: none"> • Reduction in marketing expenses <p>Risks and costs</p> <ul style="list-style-type: none"> • Incentives for better indigenous ideas • Challenges in acquiring potential ideas from various consumers • Managing up to customer expectations and maintain relationships • Maintaining negative word of mouth 	<p>of products and services meeting the customer preferences which are achieved by enhancing the existing products.</p> <ul style="list-style-type: none"> • Reduction in marketing expenditure by enhancing the positive word of mouth through social platforms. • Reserving consumer knowledge by giving access to product information which has deeper insights. • Encounters and recognizing indigenous ideas from the consumer. • Managing customer expectations on the product. • Managing negative word of mouth.
<p>3. Outcomes</p>	<ol style="list-style-type: none"> 1. Reduced cost while increasing effectiveness of products by maintaining the relationship between the firm and the consumer. 2. Reduced control over strategic planning 3. Complexity of firms' objectives is increased 4. Complexity of managing mis-match and the selection of the ideas 	<ul style="list-style-type: none"> • Short term effects have greater advantage over long term effects in the co-creation process by focusing on the segment in product development. • The firm takes extreme measures in reducing cost of products by making sure that the effectiveness in creating enhanced products is obtained by having a stronger relationship with the firm.

		<ul style="list-style-type: none"> • Overall reducing the complexity of the strategic planning in by increasing the firm's objective which leads to mismatch performances of the product.
--	--	--

Based on the interview the main factors are observed in the table are discussed, which shows how product co-creation process affect the outcome of the organization performance by satisfying their consumers. The interview reflects the results of the qualitative data which are categorized into categories and sub-categories. The categories mentioned in this table can evaluate production co-creation process where the intention is to co-create products based on the consumer preferences. The empirical study shows that the participants want to indulge into the co-creation practice to gain deeper insights of the product. The primary qualitative data collected from the managers, team leaders and the other individual's gets to know how co-creation process can be initiated where the process is analyzed this category influences co-creation process in small-scale industry. Communication factors which take place between the interaction of the expertise and the consumer tends to share the ideas and information in this co-creation event. Motivational factor where an individual is motivated to share their ideas with the expertise for intrinsic or extrinsic motivational rewards are considered for the analyzing the co-creation process in the small-scale firm.



Here we are going to analyze between the proposed model and interviewed questions and the detailed analysis is provided.

In our firm when consumers come up with their ideas and suggestions to us, company's professionals collect the entire data of the consumer's request and if our professionals can come up with the solution for their request the project will be sanctioned. There are situations where the consumers bring the complex creative ideas which should be discussed among our professional individuals who later examine and evaluate the project time expectation and cost expectations.

After all the requests and suggestion are being noted by our professionals about our product, our firm address valuable feedback from the consumers where the concerns are addressed by making the product which has more efficient quality by reducing marketing expenditure and educating consumers on our products. The risks and costs involved in this are -potential sustainable ideas from the consumers are processed to provide enhanced consumer products where this can be only achieved by motivating our consumers in a proper manner which can lead to an effective interaction between our professionals and consumers. We also make sure that consistent pattern of our products is manufactured to make it easy to be used by a consumer. Later on if any new

products are being in development we call upon our existing customers by inviting them to participate in co-creation events and provide them the valuable feedback. This takes place in our firm where we establish a co-creation platform in which our professionals and consumers interact and builds stronger bond with them. At this stage, we try to educate our consumers about our product and provide them with the recommendable suggestions, if a consumer has his own ideas about the product it can be shared with our professionals to see that it is available in the next generation of our product. Our professionals carefully listen to our consumer concerns and motivate them to come-up with indigenous ideas which can enhance the quality of the product. Here we can see how the information is shared in depth trying to meet the requirement criteria of our consumers by examining their valuable feedbacks to build new products in our firm and meet the needs of consumers.

In the product development stage, company professionals examines and evaluate the ideas and feedbacks shared from our consumers is organized. In this stage the information shared from our consumers are researched by our professionals to implement those ideas into the new line products to meet the consumer needs. Before we put the ideas and requests in the research development we make sure that product awareness is being infused in our consumers to meet their satisfactions. At the later stage the implementations of new techniques are applied on the creating model of the product is later promoted through product trials to our potential customers where we receive valuable feedback in a short span of time. By repeating the process until the desired product is obtained and when these products are marketed to the consumers we see to that the customer received the desired products which in return will increase the profitability of our business.

When product development is in the process, our firm takes extreme measures not to reveal any source of information about the new product which is in the development stage. Here months of research, information's, data are collected from every individuals are processed and sent to the researching stage where we finally come out with the solutions on our products. During this process the data, information collected which are invalid to our firm are discarded. If a valuable idea is presented in front of us we make sure that we get proprietorship rights of the product from those individuals by providing him/her with incentives. We also make sure that transparency is

kept between us and the consumers throughout the development stage and make sure that the idea generated is infeasible in product production.

Firm stimulators are encouraged along with our professionals to organize their ideas where the ideas are examined and evaluated bearing in the mind of the cost investment which should be minimal but the outcome of the idea should be indigenous. Potential customers are encouraged to design an idea based on the economic benefits and the cost reduction. Also, we outsource the complex ideas to different individuals across the country to meet the requirements put forth from our consumers. The outcome of this for our firm is increased efficiency and the effectiveness of enhanced products produced and marketed across the country which can be only obtained by stronger relationship between the professionals of our firm and the consumers. This results in satisfaction among the customers and the employees when the desired result is obtained. Products which are marketed will be put forth on the digital media for its promotion. This can only take place when we put our trust, honest and commitment toward the customers and vice versa. Rewards will be greater for our consumers when they receive desired products and it will reward us with the brand image profitability.

Conclusion

The overall aim of the research was to propose the product co-creation process at the construction services company and influence the product development at the small-scale construction business services company in the Southern part of India, Four-star India, located in Karnataka State Bangalore. It has been investigated thoroughly and explored. The empirical study has been proposed the effective solutions to the identified research problem.

To achieve the following aim specific objectives were set:

1. The task was to propose a co-creation frame work for the existing product within the company for their customers, by analyzing the interaction between consumer-employee relationship by establishing the co-creation process within the company.

The task to propose a framework for the company based on its existing product was analyzed and proposed by the definitions of co-creation and the co-creation models were carefully examined.

2. By analyzing the necessity required for the firm to indulge in co-creation process of the product development along with its consumers. Where first, in the literature review, the definitions of co-creation are explained, co-creation models have been identified from different authors. And as a summary the model has been proposed as a result of the theory part. The model shows the effectiveness of the theoretical solutions. Research was focusing Firms and consumers who were analyzed and the task objective was completed.
3. By analyzing the variation in scope and intensity of co-creation experiences taking place within the company by the employee's and their customer's interactions it has been proven that the Firm's participation along with consumers is also important for the development of products co-creation. In the realistic social research, the structured interview questions were formulated to find the answers from the and the opinions were identified, analyzed to see the variation happening in the scope and intensity at which level the company is willing to encourage co-creation in product development

Recommendations

In this research for the generated problem, theoretical explanations were originated from the sources by the literature review, the empirical analyzes was designed based on the questionnaire interview method the progress has been made where Co-creation is an attitude that strongly believes that clients are knowledgeable and can be pro- active during the co-creation process.

. Limitations of this research were explained in the research methodology part. Because of the time constraints, just small-scale industry was analyzed in this research paper. In the Construction service industry, Indian economy has more directions from this research. The research recommendations are organized according to the objectives proposed in the beginning of the research.

References

1. Zhang, X., & Chen, R. (2008). Examining the mechanism of the value co-creation with customers. *International Journal of Production Economics*, 116(2), 242-250.
2. Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5-14. doi: 10.1002/dir.20015
3. Goffee, R. and Jones, G. (2000), ``Why should anyone be led by you?``, *Harvard Business Review*, September- October, pp. 62-70.
4. Roser, T., DeFillippi, R., & Samson, A. (2013). Managing your co-creation mix: Co-creation ventures in distinctive contexts. *European Business Review*, 25(1), 20-41.
5. Prahalad, C. K., & Ramaswamy, V. (2003). The New Frontier of Experience Innovation. *MIT SLOAN MANAGEMENT REVIEW*, 44, 12-18. doi: citeulike-article-id:11764653
6. Ramaswamy, V. (2009). Co-creation of value — towards an expanded paradigm of value creation. *Marketing Review St. Gallen*, 26(6), 11-17. doi: 10.1007/s11621-009-0085-7
7. Zwass, V. (2010). Co-Creation: Toward a Taxonomy and an Integrated Research Perspective. *International Journal of Electronic Commerce*, 15(1), 11–48.
8. Murnane, J.A., (2008). Valuing stakeholder knowledge: An interpretive study of knowledge cultivation and enablement in a nonprofit human services organization, Iowa State University.
9. Howe, J. (2006). The Rise of Crowdsourcing, *Magazine*. (https://www.wired.com/2006/06/crowds/?pg=1&topic=crowds&topic_set=)
10. Roser, T., DeFillippi, R., and Samson, A. (2013). "Managing your co-creation mix: co-creation ventures in distinctive contexts", *European Business Review*, Vol. 25 Iss: 1, pp.20 - 41. doi: <http://dx.doi.org/10.1108/09555341311287727>
11. Jain, A. (2016). India's construction sector to boom, *Magazine*. (<http://www.thehindu.com/features/homes-and-gardens/indias-construction-sector-to-boom/article8314034.ece>)
12. McClelland, J. (2014), C0-creation and Construction: It's good to share. Link: (<http://sustmeme.com/2014/03/co-creation-and-construction-its-good-to-share/>)
13. Chung, Y.M. (2009). Co-creation with the customer: a strategy for organization learning and innovation. *International Journal of Learning and Intellectual Capital*, 6 (1/2), p. 19-30
14. Alam, I. (2006). Process of customer interaction in new service development.

15. Edvardsson, B., Gustafsson, A., Magnusson, P. and Kristensson, P. (red.) (2006), *Involving Customers in New Service Development*, Imperial College Press, London.
16. Durugbo, C., Hutabarat, W., Tiwari, A., & Alcock, J. R. (2011). *Modelling Collaboration using Complex Networks*. *Information Sciences*, 181(15), p. 3143-3161.
17. Durugbo, C., Riedel, J., & Pawar, K. (2011). *Towards a unified model of co-creation*. Paper presented at the Concurrent Enterprising (ICE), 17th International Conference on.
18. Füller J, Mühlbacher H, Matzler K, Jawecki G. (2009). *Consumer empowerment through Internet-based Co-creation*. *Journal of Management Information Systems*, 26(3), P.71–102.
19. Gassmann, O. (2006). *Opening the innovation process: towards an agenda*. *R&D Management*, 36(3), p. 223-228.
20. Vargo, S. L., & Lusch, R. F. (2008). *Service-dominant logic: Continuing the evolution*. *Journal of the Academy of Marketing Science*, 36(1), p. 1-10.
21. Payne, A. F., Storbacka, K., & Frow, P. (2008). *Managing the co-creation of value*. *Journal of the Academy of Marketing Science*, 36(1), p. 83-96.
22. Kirah, A. (2009, November). *Co-creation: a New Way of Doing Business in an Age of Uncertainty*. Retrieved 2010, from Open Source Business Resource: <http://www.osbr.ca>
23. Ramaswamy, V., & Gouillart, F. (2010). *Building the co-creative enterprise*. *Harvard Business Review*, 88(10), p. 4.
24. Brown, J. S. and Hagel, J. (2005). *From push to pull: The next frontier of innovation*, available on:
http://www.mckinseyquarterly.com/Strategy/Strategic_Thinking/From_push_to_pull_The_next_frontier_of_innovation_1642?gp=1
25. Nicholas Ind and Nick Coates. (2013). "The meanings of co-creation". *European Business Review*, 25(1), p.86 – 95.
26. Paul Reay, Hamid R. Seddighi. (2012) "An empirical evaluation of management and operational capabilities for innovation via co-creation". *European Journal of Innovation Management*, 15(2), p.259-275.
27. Shamim, A. and Ghazali, Z. (2014). *A Conceptual Model for Developing Customer Value Co-Creation Behavior in Retailing*. *Global Business and Management Research*, 6(3), 185-196.
28. Zwass, V. (2010). *Co-Creation: Toward a Taxonomy and an Integrated Research Perspective*. *International Journal of Electronic Commerce*, 15(1), p. 27-28.
29. Prahalad, C., & Ramaswamy, V. (2004). *Co-Creation experiences: The next Practice in Value Creation*. *Journal of Interactive Marketing*, 18(3), P. 4
30. Green, J. (2016). *Bright prospects for construction industry in India*, *World Cement*
31. *Construction chemicals*, (2013). link: <https://www.ihs.com/products/chemical-construction-scup.html>
32. Raghavan, V.S., and Kumar, V.K. (2015). *Problems faced by Small Scale Construction contractors in India*. *International Research Journal of Engineering and Technology (IRJET)*, 2(2).

33. Top down and bottom up images, <http://www.tuw.edu/business/top-down-vs-bottom-up-management/>, 15 May 2017.
34. Kotler, P, 2003, *Marketing Insights from A to Z*, John Wiley & Sons, Inc.
35. Levine, Rick, Christopher Locke, Doc Searls, and David Weinberger. "The cluetrain manifesto: The end of business as usual." *New York times book review* 105, no. 13 (2000): 17-18.
36. Ramaswamy, V., & Gouillart, F. (2010). Building the co-creative enterprise. *Harvard business review*, 88(10), 100-109.
37. Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M., & Singh, S. S. (2010). Consumer cocreation in new product development. *Journal of service research*, 13(3), 283-296.
38. Zwass, Vladimir. "Co-creation: Toward a taxonomy and an integrated research perspective." *International Journal of Electronic Commerce* 15.1 (2010): 11-48.

Appendix

Dear Management,

First, I would like to thank you very sincerely for participating in this interview

The interview questions have been investigated from the employee's perspective on how the development of product co-creation with customers be collaborated in the construction services company along with the company's customer views, the answers are analyzed and presented collectively in the Master Thesis.



Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

I express my deepest thanks and opportunity I had with Four Star India was a great chance for learning and insights professional development within the firm . Therefore, I consider myself as a very lucky individual as I was provided with an opportunity to be a part of it. I am also grateful for having a chance to meet so many wonderful people and professionals who led me through this period.

Bearing in mind previous I am using this opportunity to express my deepest gratitude and special thanks to the Managing Director- Mr. Karthik Gowda of Four Star India who in spite of being extraordinarily busy with his duties, took time out to hear, guide and keep me on the correct path and allowing me to carry out my thesis project at their esteemed organization.

I express my deepest thanks to Shekar.V. Reddy, General Manager for taking part in useful decision & giving necessary advices and guidance and arranged all the meetings to make life easier. I choose this moment to acknowledge his contribution gratefully.

It is my radiant sentiment to place on record my best regards, deepest sense of gratitude to MrShekar.V. Reddy- General Manager, Mr. Prajval- Sales engineer,Suresh- Marketing manager- Mr. Sivamani- Sales manager, Mr. Manjunath- Project Manager, Ms. Runa data- Sales Co-ordinator- for their careful and precious guidance which were extremely valuable for my study both theoretically and practically.

I perceive as this opportunity as a big milestone in my career development. I will strive to use gained skills and knowledge in the best possible way, and I will continue to work on their improvement, in order to attain desired career objectives. Hope to continue cooperation with all of you in the future,
Sincerely,

Name Surname : BINOY JOSEPH SHIVARAM
Date : 09-05-2017


(Karthik.Gowda)




Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

The following question presented are my interview question for the company

1. What is the scope and intensity of product co-creation in the firm?

Being in construction industry, we always look forward to implement new techniques on products and different approaches to attract the consumers across the country which helps us in growing our business. Co-creation helps us in implementing modern designs and product development based on our customer's preferences. during this process, the consumers shares a lot of their ideas along with our dedicated professionals which are being assessed and implemented for our customer's satisfaction the assessment takes place by checking the challenges, budget feasibility, meeting the quality needs. Our firm rely on commercialization of their products by promotions and advertisements which are digital online marketing and Paper advertisement. Also post launch activities can the follow up of commercialization of the product through marketing exhibitions and seminars are also conducted for individuals, who is in the architecture field which are being conducted every year across the country. Intensity of co-creation on new product development depend on certain stage where the firm and the consumer interacts with each other within the firm to obtain the desired new product where are the necessities are solely met to produce the desired product.

2. How consumer's participation is effecting the product co-creation process in the firm?

For the complete co-operation of the consumers in the co creation process, we motivate them with various rewards and intellectual regards which can be as mentioned below,

We provide the consumer with rewards for the participators in developing the new product at the development stage of the product at our company. The ideas or suggestions given by the consumers and participant when it turns out to be a successful result we take the responsibility to honor the consumer with rewards

There are two types of consumer can be taken into consideration

a. **Analytical consumer:** These types of consumers are the most prominent member within our firm like the Architects, Structural Consultants, Project Management Consultants (PMC) and Regional Contractors who help in development of our product based on their previous experience and promote our products by completely understanding the product. (E.g. for a complicated metal roof design the architect will create a roof design, PMC will analyze the time incurred, cost involved, etc. to complete the project and the contractor will execute the project)

b. **Amiable consumer:** These consumers are the end client directly who will approach the company to execute the standard roofing requirements (e.g. The consumer who needs to erect an industrial shed with a normal slope and economical sheeting to serve the purpose of preventing the environmental factors like sunshine and rain)

c. the consumer as well as the participants can be incentivized to develop more and better ideas

- We are specific to the consumers or participant requests, and we make it clear as to what exactly the company is looking for or the things which are to be accomplished so they are clear and the targets to be reached.
- Co-creation program which is conduct by the firm strives to reach the goal, the professionals within the firm motivates majority of individuals to collaborate with each other to reach the goal where full commitment between the professionals and participants are achieved.
- The competition which are the part of the co-creation process ensure that the challenges presented to the competitors with the program meet the requirements as the rules are established according to the standards of the firm, where all the participants have to follow.



Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

- When establishing a co-creation process in the firm, the firm is aware of the leverage risk involved in it as there will be more valuable input from the consumers or participants which increases the number of winners within the competition which also increase the value of the rewards so the more neutral risk approach here, the winner takes the final reward.
3. How does the costs and benefits of co-creation process of product development change over the period within a firm-consumer relationship?

The costs involved in the co-creation process by the firm is a minimal according to the firm. Here we establish a co-creation program for our product to be developed by the consumers or participants, in this co-creation process the ideas shared to our participants and consumers to our professionals are countless which are to organized and these ideas shared by the participants or consumers have to be infeasible in the development stage of the product. The foremost approach to engage the co-creation is to create economical products, even though consumers reduce the manufacturing costs of the products either through our firm or any retailers dealing with our products reflect the price reduction which will be imposed on the co-creating competitors. The cost reduction will occur when the firm outsources the initial product to be developed by its participants or crowdsourcing it.

The firm is benefitted by getting deeper insights of their products which is obtained unlike the market research, the products are being discussed in the internet platforms and vlogs or media such as YouTube where the firm or any individuals will speak their review about the products that we produce the sole intension is to obtain deeper information of our products from the consumer's point of view which are later be developed with better product results also when the participants or consumers own our products after the introduction of the products the firm will be able to build strong ties with the participants as well as consumers by creating a community to solely focus on creating better products later these consumer loyalist will be the building block of the firm's brand image as they spread positive feedback of our products.

The participants or consumers are benefitted by brand loyalty where the consumers procures the same product repetitively perceiving it as a superior product over the other product available in the market this takes place when the firm listen to its customers review about their product and cocraetes the same product or different one better than the existing one is where the consumers starts to bond with the company through the product offered by the firm. Consumer can also benefit when the firm welcomes its existing and new consumers by offering interactive prices on the products as well as certain bonus accessories will be offered by the firm to its potential consumers which in return brings consumer closer towards the company consumers are being entertain by the firm by launching post launch events on the new or existing products offered by the firm.



Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

4. How does the trade secrets be detrimental to the co-creation process and how should the firm succeed the proprietorship of intellectual property in the co-creation process along with consumers?

Trade secrets can be detrimental to the co-creation process since our firm rely on trade secrecy theses crucial data cannot be disclosed even to the co-creation participants as these information are accessed by the professional of our firm due to which deeper insights of the product cannot be shared with the consumer or co-creators this causes reduction in people motivation towards co-creation process so our firm allows our co-creators and consumer to access certain stages of product development even though consumers participation is restricted our qualified team ensure that we listen to our customers through a feedback form and a mutual agreement is made between the two parties not to disclose any information about the product .

Our firm can get access over the copyright or patent issues which is shared from our consumers and participants where we initially sign a contract of intellectual proprietorship of intellectual property where it states that any info or upgrades shared between two parties is confidential as well as the shared idea if it is validated will the first party claim its ownership from the shared party in a mutual understanding, if the second party demands ownership of the patent idea then he would be rewarded incentive and a mutual agreement will be signed by partial ownership from both the sides this will build customer -firm relational and the consumer or co-creators will be rewarded

5. What are the firm level impediments to co-creation within the company?

[
The firm level deterrents within our company are listed below

1. Confidentiality

In today emerging economy confidentiality at a competitive office is highly regarded as a crucial element in the business world, failure to secure the confidential business details can lead to loss of business and clients which defames the firm name and status in the wrong had it can lead to forgery and fraudulent activities by disclosing sensitive informant of the firm or and individual within the firm there are three levels of confidentiality Employee info confidentiality, Management info confidentiality, Business info confidentiality

a) Employee info confidentiality



Om Shree MNV Towers ,
#150, 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

Within our firm, qualified professionals have their own individual identity information about their SS number also known as social security number employee's address and contact information and personal data of an individual employee which are kept confidential and only individuals who has administrative privilege access can review and disclose information in the case of emergency

b) Management info confidentiality

Our firm within its organization organizes meeting with their respective employees about the challenges face by the employee within the organization and discussion about employee's relation with the company this info again is controlled by an administrative person who is an active member in human resource management within our firm who constantly keeps check on the employee's disciplinary actions

c) Business info confidentiality

Here our firms trade secrets are generally not disclosed to common people as these information's can be accessed secretly by the competitors and can be misused if the information is fallen into the wrong hands these trade secrets include information such as manufacturing process, business plan, financial data client list etc.

So to preserve these crucial data separate locker are being utilized, electronic data are overwritten with encrypted passwords and top firewall protection all these information care careful maintained and disposed access to these file are only to the top level managers.

2. intellectual property proprietorship rights

Also, known as patent/copy right ownership can be obtained and maintained by top level managers as our firms makes sure that any information that are crucial and valid are kept under the ownership of our firm for example a co-creator or an individual contributors share his /her ideas on the product the firm makes sure that the idea shared with the firm from the customer will be acquired by signing an intellectual proprietorship rights state that the contributor and the firm are in mutual respect with the valid information shared by the contributors can gain proprietorship rights by our firm where the contributors will



Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

be rewarded with incentives with builds a stronger bond between the contributor and the firm.

3. Shared ideation info surplus

Also, known as data overload can be managed by our firm with well qualified professionals who can detect the shared information valid or not with a checklist which address the benefits of the idea, risks involved, implemented ideas, evaluation, costs involved etc. all the ideas shared are organized in this way and the infeasible ideas are discarded.

4. Production practicality.

Production practicality can be determined by the check used to address the benefits, implementation, evaluation, costs and risks involved examining all these tasks through a qualified professional perspective which lets us know what is important and fill the gaps where it creates logic and can be implemented correctly here ideas have to be taken seriously at the product development stage.

6. What are the needs, preferences and motivation of different segments of co-creating consumers?

Our consumer demand certain basic needs from our products such as durability of our sheets products better insulation service etc. some co-creators or consumers demand artistic design patent with rigidity to meet all these requirements we initial communicate with our consumers about his needs and preferences then we evaluate and determine where the consumer's preference are met though these preference's might be basic or advanced which is depended on the consumer.

Motivation is emphasized by close interaction of the professional and consumers where the professional analyses the consumers interest or flied of expertise are based on those, the frim expertise determines where the person will be suited for in the co-creation process.

7. How does the company enhance the process of product co-creation to gain its benefits?

The firm enhances the process of product co-creation through the following steps mentioned below

1. Creative ideation and development of product



Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

- Cost cut-off is experienced when inexpensive ideas are obtained from the consumers or participant which can be imposed on co-creators as the general consumers can gain the benefits
 - Intensified effectiveness of products is achieved by enhancing the-product and services requirements based on the consumer as the consumer perceives these product superiors when compared to the other subtitles available within the market
 - Establishing stronger bond between the consumer and firm relationship enhances customer loyalty and brand loyalty this takes place when the firm listen to its consumers and meet the requirements requested by the consumer and the participant in the co-creation process.
2. Merchandising and launching of products
- Upsurge probability of triumph of the products and services meeting the customer preferences are achieved by upgrading the existing products and providing quality services where the requirements are meet as requested by the consumer of our products
 - Reserve on marketing expenditure is enhances by spreading positive word of mouth through consumer socialization and in media which increases the brand image
 - Reserve on educating customer where the consumer is well informed and has deeper insights about the product that we produce and also supporting in other activities which will help us in producing quality products and services related to them
 - Precaution on the prospective issues in upcoming products can be determined by close interaction of our professionals and our consumers where different perceptive comments flow unintentionally and any fault in the product can be detected either buy our professional or consumers.
3. Risks and costs
- Motivation is regarded as the primary driver to enhance consumer's enthusiasm by providing value feedback on the product related enquires when close interaction between the consumer and our professional experiences as share their perception of our products better upgrades are expected to come with our existing product in post launch
 - Encounters in recognizing potential successful ideas from the numerous customers can be a very difficult task at the same time successful ideas should be cost effective. Ideas that are shared by the consumers and participants are presented in the conference conducted by the professionals who evaluates the ideas with a reasonable time frame which will be later documented and rewarded for the winner. If the idea is excluded it can be due to cost ineffective and infeasible
 - Managing customer expectation and relationship can be achieved and enhanced by prioritizing consumer requirements which must be delivered from our firm effective interaction between our professionals and consumers ensure that our firm along with the consumers which are systematized and are on the identical ideation. Consistency should be maintained as it can be overcome by listening to consumers concerns and complaints and by making a promise to provide excellent products and services
 - Challenges in managing negative word of mouth can be overcome by responding to the conversations that are of worth and the response time should be quick in proper



Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

mannerism if our firm has an error with the products a strong and directly confession is done and the products are rectified by keeping it in open discussion meeting or forums.

8. How does the company encourage consumer's enthusiasm of the product co-creation process and helps in maintaining the process?

Our firm encourages consumer's enthusiasm for production by organizing co-creation events where all types of contributors, consumer and co-creators are welcomed to submit the ideas and exhibit the co-created products here everyone one interact with our qualified professionals where they entertain people by providing resourceful information also the individuals try to gain more in-depth of the products at the same time we gather information on how can we upgrades our products to meet the criteria of the consumers our firm conduct these events on a regular basis every 2 months in order to receive useful feedback from the consumers also these event carry out competitions where the best will be rewarded with incentive.

9. How does the company chooses and acknowledges propitious ideas from the huge set of consumer's information?

Our firm gathers all the shared ideas and valuable suggestions from the consumer often it is hard to find which idea can be feasible and which are not, these collected ideas are then organized according to its complexity and patent design initially it might be hard to understand and communicate , propitious ideas have benefits over costs and this cannot be analyzed in a long run nether you have the time to for year depriving your development although better ideas a good for the long run in the firm development we need to get it done as quick as possible before the others make a patent rights of the same idea. These issues can be addressed by a checklist as to what the best idea should crucially address, what could be the benefits? What are the risk of implementation of propitious ideas any similar kind of ideas executed previously here the firm professional examines and evaluates the gather ideas and determine the best idea by understanding what is important for the company to upgrade its product better to suit the needs of consumers then these ideas will be organized to clear the thoughts revolving within the minds if the professional and express their ideas along with the best ideas by providing sound reasoning accompanied by a group of evaluators which would be comfortable.



Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

10. How will the short-term and long-term does effects the co-creation process on firm's revenues and profitability?

Short term effect on co-creation process are the effective ways to get the professionals and consumers interact by focusing on a particular segment on new product development this can be achieved by increasing the sales goals reach at its peak with the help of our employees within the firm at the same time engaging consumers to highlight new features on the new product here consumers are encouraged by our firm through commission base incentive or offering intellectual property rewards for the top performers. Short term effect is used where a critical development is required within the business field in short when the company want to reach a certain goal with a short duration short term effect is used, during this period the revenue and profitability is seen a steep upsurge.

Long term effects of co-creation process is infused into making our company policy making which would focus on branding or culture within the firm's organization so a carefully organized set of decisions are governed by the firm in implementing it with our vision as where we would like our firms growth to reach its desired goal

11. Explain the role of co-creation in customer relationship building in your firm?

Our firm takes steps in caring and making a strong relationship bond between the consumers and the employees is our key for a successful business deal often we also encounter with dissatisfied customers where we take care of them one step ahead by proving potential time and valuable responses take into consideration as these customers expect more from our products and services. Even though we have a stronger tie with our consumer it doesn't often mean that these consumers will be there in our business for a long term, possible chances that they are spreading word of mouth in a positive manner which built the reputation of our company.

The role played by our firm in the co-creation process are

a) Getting to know your consumer in person (self-experience)

Here our firm's employees will interact with the consumers and gets to know about the interests and concerns over our products as well as take their valuable feedback about the cons and pros of our product during this process consumer's personal data are being collected and later are welcomed to participate in events organized by us which expose us to the consumers in a broad manner by getting suggestion and valuable recommendation.



Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

- b) Utilization of feedback preferences through surveys polls and questionnaires' as our consumers find it easier to voice their concerns about our products where we carefully also examine our consumer's personal information.
- c) Establishing communication is also building relationship with them through any means of communication. Our firm is engaging them to participate actively which helps us in building a business establishment by emphasizing on two-way communication.
- d) Our firm sent out through our e. newsletters on latest production information along with upcoming sales and events where even socialization through social websites such as Facebook and encourage customers to provide the feedback where you can solve the requirements and concerns put forth by our consumers.
- e) Maintaining this relationship takes a great step in our firm to be honest in our business and whenever we make commitment we see to that it is fulfilled, our firm see that all the business under by our employees is as transparent as possible. Our firm recognize and rectifies the errors and delays occurs during the installation of our products at the consumer place.

12. How does competition for co-creators affect success of co-creation?

Competition of co-creators motivates individuals participating in the co-creation process to come up with a best product update due to this motivation occurring the co-creation process different outcomes of the same product this can be achieved within our firm by encouraging our participants to interact with our professionals to get the desired product while this takes place judges will be spread across the co-creation platform evaluating each individuals co-created products here not only the involvement of participant are seen but also our suppliers and producers of raw materials also take place proving their ability in co-creating products as these co-created products gets assessed the final winner will be rewards also not letting the other participants down we offer them to incentives for their valuable feedback competition in this process is quiet steep and challenging because we get to see what changes and upgrades can be implemented to get a much desired result

13. How does the effect of co-creation process make up for brand image and positioning of our firm?

Our firm strives to acquire brand image as the products are marketed will receive good reputation since we listen to our consumer's concerns and recommendation the updated new product will commercialize with positive word of mouth which in return build reputation on brand image and positioning of our firm stand point will upsurge eventually the effect of co-creation process will give a better upgrade to the products which is sold in the market consumer feels more bonded with the co-created products thus in the short term the positioning of the firm will see a potential growth



Om Shree MNV Towers ,
#150 , 3 rd floor , AECS Layout
D.RajgopalRoad , Sanjay Nagar Main Road,
Bangalore - 560 094
Email: - admin@fourstarindia.com
Info@fourstarindia.com

14. Does the firm think that co-creation hampers radical innovation?

Well our firm truly believes that co-creation definitely hampers radical innovation because not all the ideas generated from the consumers can be applied in radical innovation for this a carefully understanding of new product has to be examined and evaluated to undergo disruptive innovation for example Ford pick-up trucks are famous in America but not all countries utilizes them with their full potential to simplify ford listen to its customers and went on radical innovation by introducing 3 new engines mated to 10 speed auto gear box now this configuration can only been done by a expert team who has done tons of research and also potential motivators such as race car drivers feedback which could be limited so here also our product to go under a radical innovation will definitely clash with the co-creation process where we have to limit the feedback of customers and hand it over to the experts to produce new product


(Karthik Gowda)

