

# Innovation Activities by Co-creation Process

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The conventional value delivery business is based on a relationship between a manufacturer and a customer, or service provider and service receiver. As a break from that framework, Fujitsu has focused attention on co-creation processes, in which sharing of social values and new discoveries and recognitions are incorporated into development for innovation that creates new possibilities of utilization of information and communications technology (ICT). In such processes, development of new products and services are practiced by involving not only customer companies, local governments and users but also the administration and NPOs. In practicing the processes, we have a real feeling of some benefits and effects including empathy-driven consensus building, a faster generation of ideas by collective intelligence and building of relationships with society. In addition, we also have an eye on the formation of open communities such as a future center as the basis of enterprise activities for continuous innovation creation. As an approach to innovation creation, this paper presents a co-creation process making use of design thinking that has emerged through the practice, together with its effect. It also describes the basis of activities believed to be necessary as a system for continuously generating innovation.

## 1. Introduction

Recently, the need for business creation called innovation and business to provide new values has been talked about in society and enterprises. For enterprises, the need for activities that go beyond organizational and enterprise barriers has long been a subject of talk. This trend is characteristically a movement shared by the entire society regardless of the sector and whether public or private, as in the manufacturing and service industries and resident services in local governments, for example. That is, this sense of stagnation seems to be shared as a common issue of society.

Up to now, information and communications technology (ICT) enterprises have used a value delivery-based scheme, which has relatively clear demand and problems/challenges, to provide ICT services and solutions. This can be said to be a proposal-based business scheme with more or less clear concepts and uses for customers including public institutions and private enterprises and end users and relatively specific demands for specifications and products.

Meanwhile, when innovation (a value previously unheard of) is required, what is needed is to build a co-creation-based scheme for generating values involving not only enterprise and local government customers and product users but also social stakeholders such as NPOs, the administration and residents. Based on that idea, Fujitsu has practiced a dialog-based design process.

As a business approach that makes use of design thinking, this paper first classifies co-creation processes and presents their effects that have emerged in the course of practice. Subsequently, in addition to processes, the foundation of enterprise activities believed to be necessary for continuously creating innovation is explained by presenting a discussion on the use of a future center to describe future developments.

## 2. Why co-creation processes?

First, there are apparently roughly three fields that require innovation centered on enterprises:

- 1) Innovation in an enterprise: generation of new

- values across departments
- 2) Innovation of existing business: innovation by discovering themes on new businesses, products and services with existing customers including enterprise cooperation
- 3) Creation of future business: creation of products and services in new business domains

In these domains, a point of contact with society is regarded as being required when finding a solution is difficult only with knowledge or assumed needs of a single enterprise or organization or in order to identify an essential value, and an approach to clearing this hurdle is important. When innovation (a value previously unheard of) is required, or for creating new values from conditions in which even senses of value, problems and challenges that provide the foundation are unclear, what we think is needed is not the conventional antipodal relationship, such as one between departments and between a manufacturer and a customer, but relationship with the parties looking to the future together to combine each other's resources for co-creation of things.

The same can be said about the recent movements that have been seen prominently in the fields of community revitalization and social problem solving called social innovation and community design. In other words, a process for sharing a sense of value

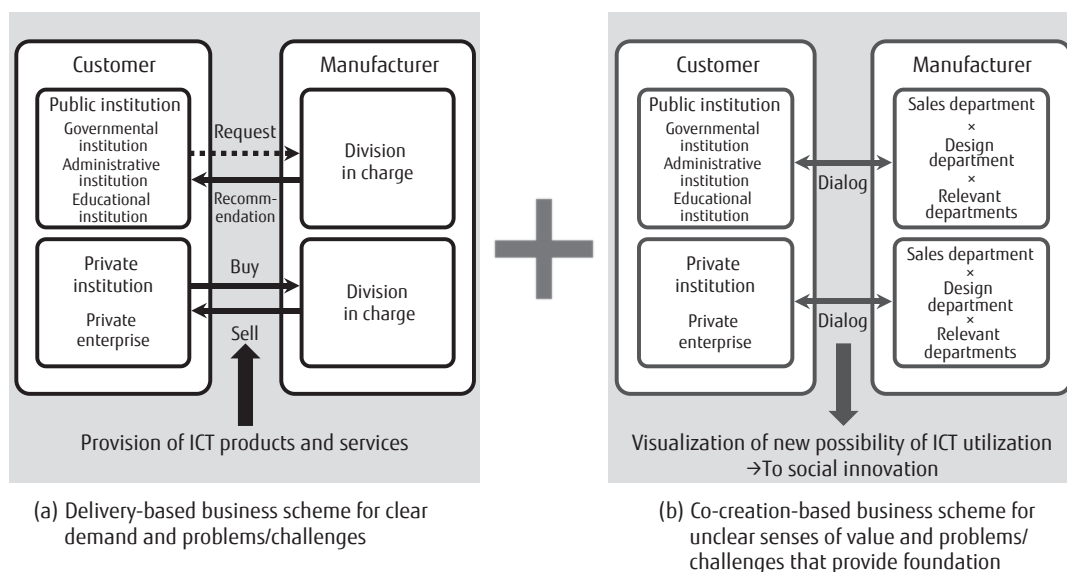
based on social significance as a point in common is what we think is necessary also in the actual development of products and services.

In this way, for creating products that are valuable for users in a real sense and innovation that leads to solutions to social issues, the hurdle should be lowered in these domains. It means that co-creation processes in which the relevant parties stand face to face with each other and go beyond their relationships such as between society and an enterprise, between enterprises, and between an individual user and an enterprise will provide one breakthrough and a measure for future business (Figure 1).

### 3. Practice by design thinking

One effective method/concept of practicing co-creation for innovation generation is design thinking. This is one method/concept for the achievement of not only product design but also service design and innovation for business and social change, and it is an innovation technique proposed by IDEO, a design consulting firm.<sup>1)</sup>

This approach itself is not particularly new but has been familiar to designers as an approach to human-oriented design to provide a process of product design or such like. Design thinking enhances this approach to allow people in general to participate in addition to



**Figure 1**  
Business schemes of innovation activities.

designers, beyond the job categories or positions in activities such as “service development” and “business planning,” which are subjects of innovation. This is exactly a process of open innovation based on co-creation and empathy.

We have applied design thinking through trial and error to the actual project activities and classified co-creation processes as described below (Figure 2).

#### 1) Question (value) sharing

This is the team building phase in which a method with a focus on dialog is used to share “why,” or the goal and sense of value, rather than how to move forward, for broadening the themes. Based on the ideal, the goal and direction are visualized to create empathy such as by having a more personal sense of value and reality in the background. In this phase,

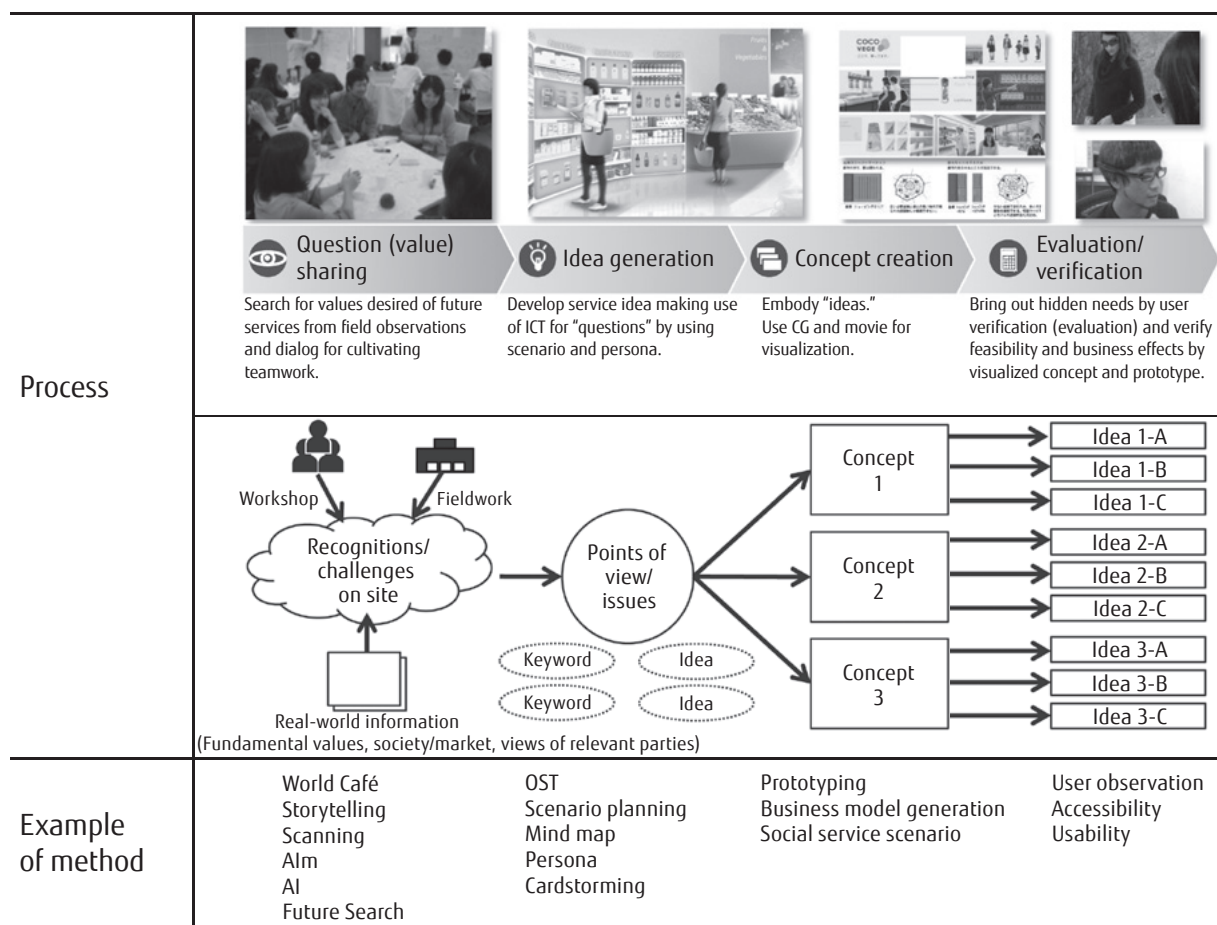
as diverse a range of people concerned as possible, beyond the positions and organizations, should gather for open dialog about challenges and the future to aim for. Methods such as Appreciative Inquiry (AI), which is called a whole system approach, Future Search and World Café, which is suited for freer dialog, are used.<sup>2)</sup>

#### 2) Idea generation

Experiences and recognitions in fieldwork with a focus on the sense of value that can be empathized with and direct observation are used to expand ideas. Thanks to collective intelligence in addition to expert viewpoints, speedy expansion can be expected and sociality and various views can be incorporated beyond the framework of enterprise and department.

#### 3) Concept creation

A concept and specific scene are visualized to



Alm: Appreciative & Imaginative  
OST: Open Space Technology

**Figure 2**  
Co-creation processes and methods.

make a prototype and improvements are made repeatedly. At the same time, methods such as business model generation<sup>3)</sup> are used to evaluate and test the relationship and feasibility for realizing the concept by model evaluation from a business point of view.

#### 4) Evaluation/verification

A user verification (evaluation) is conducted to bring out hidden needs by comparison with user needs and a visualized concept and prototype are used for verifying feasibility and business effects. The concept may be reconsidered in some cases, thereby making the idea more sophisticated.

### 4. Effects of co-creation processes

We are getting a real feeling of some benefits and effects in the course of practicing co-creation processes. The following are some characteristic points we have recognized regarding what changes are made and what benefits are brought about as compared with the conventional value delivery-based scheme. Nevertheless, we are still in the stage of developing processes and improving their accuracy and they need to be quantitatively evaluated in the future.

#### 1) Redefinition of business domains by empathy

In a design process, the phase of creating ideas generally attracts attention. However, what we find more important is empathy by "question sharing," which corresponds to team building in the initial phase.

There we think it is important to determine how to build an equal partnership (collaboration and cooperation on an equal basis), including essential discussion on an equal footing about an ideal of an individual and why it is necessary.

Here is one example in the educational field. In a case on the use of smart devices at a future elementary school, interactive workshops or other means can be used to share an underlying essential goal of "improvement of academic ability" not just from a viewpoint of how information devices can be used in classes but from extended viewpoints such as "school where teachers can achieve their best performance" and "services that connect the school with the community and households." This leads to the discovery of an essential target that has not been recognized. In addition to determining how to utilize smart devices in classes, the process is developed to include collective consideration of a wider range of utilization.

In this way, the theme of using smart devices can be broadened to a point of contact with community development: from use in a class, which is a situation in a classroom, to use in the entire school and use connecting households and the community.

#### 2) Speedy idea generation and consensus building by collective intelligence

The second benefit is the improvement of quality of ideas and speed-up of project progress.

With an idea generation workshop involving various stakeholders, ideas can be immediately created as collective intelligence with social viewpoints and grounds, not as views of a single department of an enterprise or an individual or opinions only of experts such as designers and engineers. We feel that co-creation allows ideas incorporating multifaceted viewpoints beyond the productivity of individual work can be generated in a very short time.

For example, in the workshop for generating ideas of specific measures for the formulation of a campus master plan (CMP) of the Kyushu Institute of Technology,<sup>4)</sup> about 40 members including those from Fujitsu and university students as well as teachers and other staff participated for about two hours and generated about 300 ideas in a total of three workshops. The ideas reflect the participants' experiences, ideals and senses of value, and this allows the generation of goals based on a common ground and rapid progress with very high intellectual productivity.

In addition, the processes are shared with the participation of the core members of the university for the CMP formulation and exchanges for consensus building are smoother than the scheme based on value delivery (proposal). This has resulted in clearly felt effects leading to a reduction in the period of the entire project processes and improvement of the degree of convincingness. On that point, we intend to attempt quantitative verification.

#### 3) Being a social good

As described up to now, adopting co-creation processes has allowed issues with schools and universities and with the societies and communities that surround them to be incorporated into ideas and measures by having various stakeholders participate in such processes.

Recently, in particular, in the sense of enterprise existence value, the importance of enterprise strategy

has been promoted with the concept of Creating Shared Value (CSV) going beyond the framework of the conventional Corporate Social Responsibility (CSR.) Naturally, its pursuit is an essential point at issue also in products and services and business concepts.<sup>5)</sup> Collaboration with organizations engaged in activities while facing actual issues such as the administration and NPOs and making the processes established for incorporating the relationship with society into the site of development seem essential to accelerate open innovation.

## 5. For continuous creative activities

For an enterprise to work on innovation, it is indispensable to have not only the success of the individual projects but also a system allowing repeated continuation and a space that provides a unifying hub of activities.

Since the age of product-orientedness, showroom-type spaces for “displaying” objects and services for “presentation” have been used among enterprises, particularly in the manufacturing industry, as points of contact with the market and spaces of value delivery. In the age of value creation, a space is necessary that openly offers the dialog process to society while providing a point of contact for opportunity generation with social good at the core.

As the point of contact, a future center may be used.<sup>6)</sup> A future center is a “space” for discussing the future including social issues and a better life in a future-minded manner. With it, new ideas, solutions and business models are found by collective intelligence through dialog between various interested people to bring about changes in a cooperative relationship. It first appeared in Europe in 1996 and is expanding across the world. The national and local governments as well as enterprises are deploying future centers and the network is expanding in Japan as well.

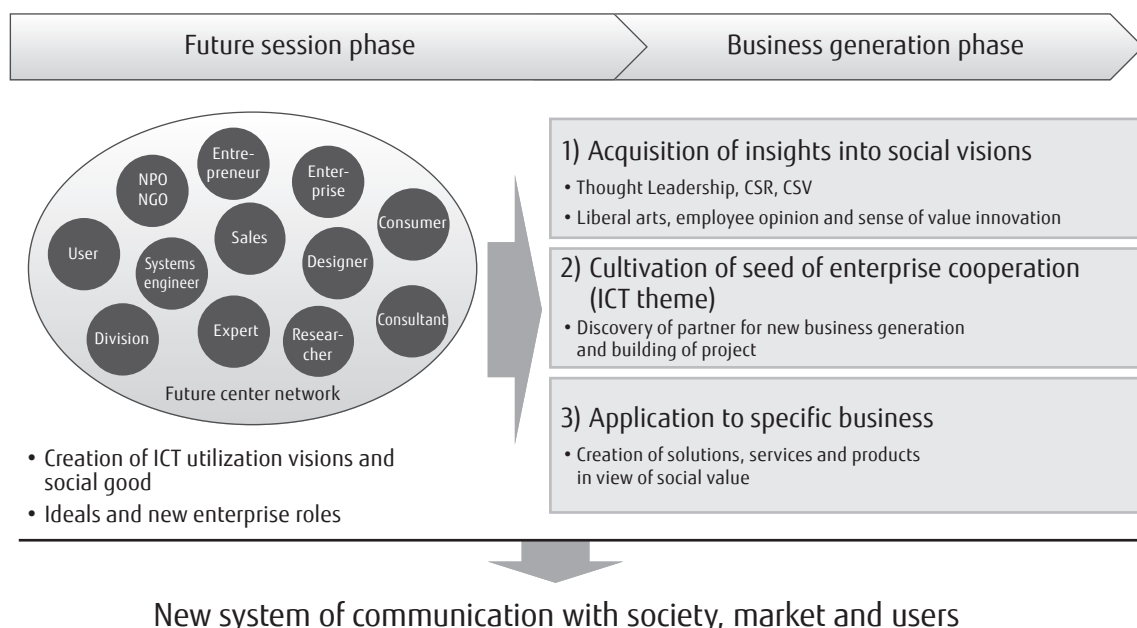
Use of future centers by enterprises is assumed to allow achievement and enhancement in terms of three points (**Figure 3**):

- 1) Acquisition of insights into social visions  
As a starting point of activities leading to CSR and CSV, knowledge of the present and future social conditions, challenges and business chances can be gained.
- 2) Cultivation of seed of enterprise cooperation (ICT theme)

What is necessary to social users should be reviewed in a broad view to lead to the generation of new business, which is resolved by ICT, with sociality.

- 3) Application to specific business

In application from seeds, new use of technologies and products/services owned by enterprises should



**Figure 3**  
Point of contact with society required of enterprise.

be sought.

We believe a key to innovation generation is to make an environment allowing collaboration not only with enterprises, which are our customers, but also the parties, incorporated NPOs and the administration wishing to solve challenges and to incorporate it into enterprise activities. We also think that deploying future centers openly including enterprises and the administration regardless of the sector, in addition to innovation going beyond the organizations in an enterprise, and expansion of the network will enhance the effects.

## 6. Conclusion

This paper has presented the concept and the situation of practice of innovation by co-creation processes and approaches to the continuous activities.

An enterprise is required to engage in activities of creating products and services for a better society to be the support of the coming age in parallel with the actual work site operations as the backbone. The functions and understanding of the organizations that support those activities are also essential.

To that end, co-creation in business must be developed and established and use of design thinking must be broadened from a tool for designers to a tool that goes beyond the job categories and positions. Furthermore, the base of those activities must be built including inter-enterprise networks. That will lead to a

step toward innovation generation.

As an attitude with a focus on social benefits and public good is expected, we intend to expand and continue to practice our activities for the creation of a better, human-centered society. We will do so together with engineers, sales personnel, researchers and consultants as well as users, enterprises and NPOs working on social design, community design, solutions to social issues and creation of new business.

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