

Developing a business modeling approach to realize innovative service ideas through consensus building.

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Abstract:

Most of business incubation projects applying service design techniques usually proceed from the ideation phase through the feasibility test phase to the service launch phase. In order to utilize the strength of service design techniques such as co-production or co-design, it is necessary for the project to apply effectual design tools and also involve appropriate stakeholders depending on the phase and step of a design project.

However, many of such projects often have problems before launching a service due to the conflicts and misunderstandings among stakeholders who participate in different phases or steps of the project with differing perspectives and interests.. Besides the knowledge about the usage of service design tools to promote a consensus building among different stakeholders has been not yet well formulated. In this paper, we introduce an ideal framework to organize service and business modeling processes to facilitate the collaboration among stakeholders with applying design tools appropriate to the design phases and steps. For this purpose we divide the whole process of service and business modeling into several steps, identify key problematic issues that might interfere with the consensus building in each step, and select the ideal design tool for resolving those issues..

Key words: Co-Creation, Service design, Service business models

1 INTRODUCTION

Recently, the value customer seek for and firms competes on is changing from the functional value of a product to the experience value generated by using various and products and services in combination as a service system. For example, Nike provides Nike+² as a service system by integrating Nike's running shoes and other stakeholder's services such as Apple's iTunes, demanding that these companies coordinate their products and services consistently to offer a holistic experience to the customer.

Many of ideation methods have been developed recently to create such innovative experience (OEJD¹). Various design tools to examine technical and business feasibilities for implementing and launching a service, such as Service Blueprint²) and Business Model Canvas³), have been popularized among designers and business practitioners.

Most of business incubation projects applying service design techniques usually proceed from the ideation phase through the feasibility test phase to the service launch phase. In order to utilize the strength of service design techniques such as co-production or co-design, it is necessary for the project to apply effectual design tools and also involve appropriate stakeholders depending on the phase and step of a design project. However, many of such projects often have problems before launching a service due to the conflicts and misunderstandings among stakeholders who participate in different phases or steps of the project with differing perspectives and interests.

¹ Further author information: (<http://www.dnp.co.jp/cio/servicedesignlab/index.html>)

² Nike+: (<https://secure-nikeplus.nike.com/plus/>)

Moreover the knowledge about the usage of service design tools to promote a consensus building among different stakeholders has been not yet well formulated.

To overcome such problems, we introduce an ideal framework to organize service and business modeling processes to facilitate the collaboration among stakeholders with applying design tools appropriate to the design phases and steps. We divide the whole process of service and business modeling into several steps and then identify key problematic issues that might interfere with the consensus building in each step. We further select the ideal design tool for resolving those issues. In Section2, the feature of our service and business modeling approach and the procedures are explained. This approach has been actually applied to a real service design project to create a new business for a real client. Based on the evaluation of the project, we examine the future prospects in the conclusion.

2 METHOD

2.1 Emphasis of the approach

The main feature of the proposed approach is to specify key factors for consensus building in each step of service/business modeling process and arranges correspondingly the design tools to solve each key factor. The approach consists of six steps of service/business modeling process assigned with specific design issues, design tools, and project members required to solve the issue. Such an organization makes it easy for the approach to be applied to various business cases (Fig.1).

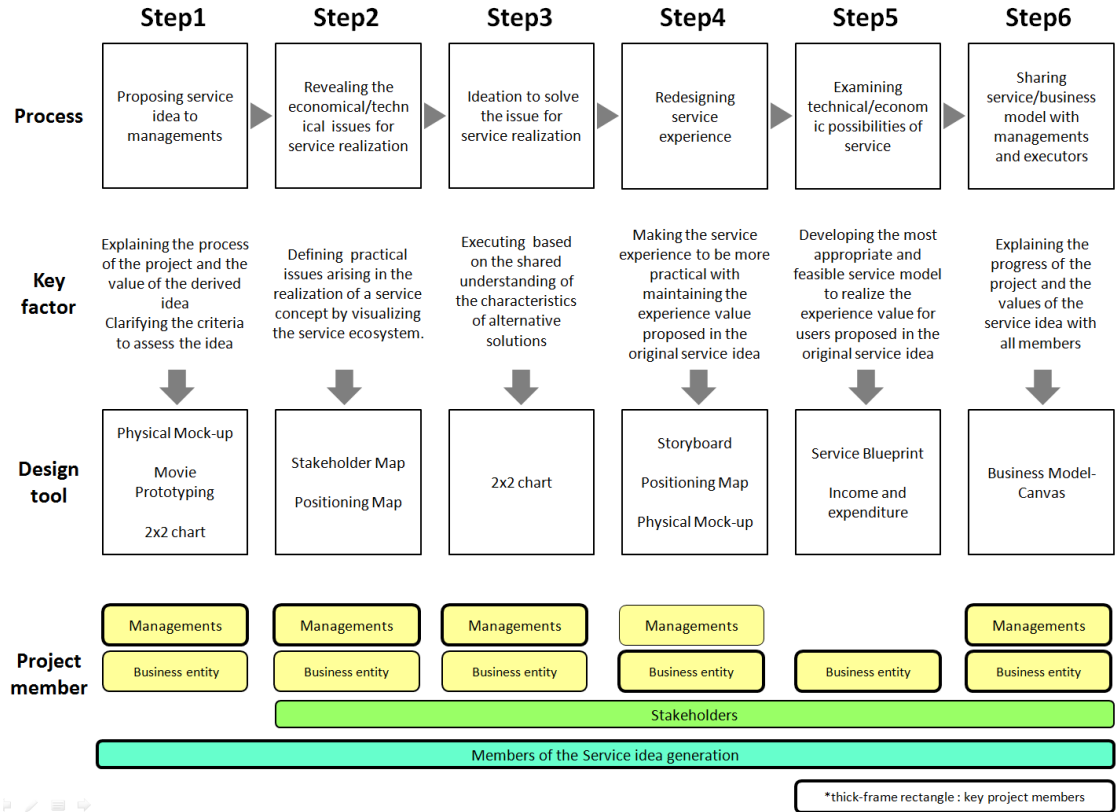


Fig.1 The service/business modeling process framework

2.2 The service/business modeling process framework

The service/business modeling process framework consists of six steps. Each of these steps and the procedure are explained below in order.

Step1: Proposing service idea to managements

The first step of the proposed process framework is to explain the value of service idea to the managements in order for gaining agreement on launching the service. In particular, the design team needs to explain both the process of the service design project and the value of the derived idea. It is also necessary for them to clarify the criteria to assess the idea. To attain the purpose the team uses a movie prototype, a physical mock-up, and the idea evaluation technique using a 2 x 2 chart.

The physical mock-up conveys the important experience value of a service idea by giving visual and interactive expressions to the concept. The 2 x 2 chart defines two most important criteria for assessing service ideas to gain approval for its development, also allowing the design team to evaluate the value of the idea easily from the a viewpoint of managements.

Step2: Revealing the economical/technical issues for service realization

The purpose of this step is to reveal economical/technical issues in the service practice, and clarify the issue to be solved as priority. Here, it becomes important to define practical issues arising in the realization of a service concept by visualizing the service ecosystem depicting the relationship of stakeholders and their concerns.

Therefore, a stakeholder map⁴⁾ and a positioning map are used in this step.

A stakeholder map can be used to investigate the stakeholders who are necessary for service realization, and visualize their roles, collaborations, and demands. A positioning map clarifies some advantages of the proposed service idea in comparison to its competing services and also helps the design team to build consensus on the direction of service development. To draw a more realistic service model, it is desirable for the design team to involve not just service implementing body but also other related stakeholders to participate in this step.

Step3: Ideation to solve the issue for service realization

In this step, the design team examines the way to resolve the important issues defined in Step2. It is important to for the project members to execute this process based on the shared understanding of the characteristics of alternative solutions and also the merits and demerits assumed by each of the solutions. Therefore a 2 x 2 chart, which can consider the relationship of two elements, is used for the ideation of a solution.

Step4: Redesigning service experience

In this step, the service experience is redesigned based on the solution derived in the previous step. The goal of service redesign to make the service experience to be more practical with maintaining the experience value proposed in the original service idea. A storyboard⁵⁾ is used to describe the experience value of service and the service system.

Step5: Examining technical/economic possibilities of service

The purpose of this step is to examine the service idea on the aspects of technological feasibility as well as business viability, and then elaborate the service model. The important point here is to develop the most appropriate and feasible service model to realize the experience value for users proposed in the original service idea. Therefore we apply a service blueprint to design the service model and formulate the income and expenditure to examine the viability of the business model.

We first draw a service blueprint to represent an ideal service system that realizes experience value best, and then design the front and back yard processes referring the opinions of service manager and developer. Through these procedures, we can investigate the service system desirable for both users and service provider. In addition, an appropriate income and expenditure plan should be designed considering the opinions of the primary contractor.

Step6 Sharing service/business model with managements and executors

The purpose of this step is to share the service and business models and their values with the managements and executors. It is important for the design team in this step to explain the progress of the project and the values of

the service idea to members who have not participated in the design project. We use the Business Model Canvas to describe the service and revenue models in addition to the user experience value in a concise integrated format. We also use a service blueprint drawn in Step3 to describe the service system in detail.

2.3 Experimental service design project

To test the service/business modeling process described in 2.2 in a real business setting, we executed a service design project aiming at developing a new service and its business model for “*Mangakocchi*”³ an online digital comic store, managed by DNP. We indeed applied the service/business modeling process to develop a service and business model for the new service idea called Gift Quotes, which came out through the design project. Gift Quotes is a smart phone application that users can pick up and send various quotable lines appeared in comics as gifts to encourage their friends. Resorting to such quotable lines, users can express their feeling with the words that they would hesitate to tell directly by their own words, and thus they appreciate the experience value of getting more chance to feel sympathy with others. Those quotable lines are sorted into several categories so that users can easily find the best quotes they want to send. The member of this project is constituted of several service designers, the manager and executor of the business entity, and other stakeholders. The project has executed from December 2013 through April 2014.

2.4 Summary of the service design project

Step1: Proposing service idea to managements

An application screen of Gift Quotes was developed as a hot mock-up using Adobe Creative Cloud⁴. In addition, a movie prototype was also produced to represent a series of service experiences and the experiential value of the service idea depicting the user’s performance and interaction with the application (Fig2). Using the hot mock-up to represent the user interaction in detail and the movie prototype to represent the experience value of the service idea in a story, we explained the advantages of the proposed service idea to the managements and other members who have not participated in the idea generation phase.

Moreover, we evaluated the value of the service idea based on the two evaluation criteria, “Strength of Desire” and “Innovativeness of Experience”, to push forward the service idea to the next step.



Fig.2 A movie expresses the experience value of “Gift Quotes”

Step2. Revealing the economical/technical issues for service realization

Several new stakeholders were invited in this step to collaborate on increasing the feasibility of Gift Quotes. We investigated required stakeholders to realize the service in cooperation (Pink rectangles in Fig.3), and drew

³ *Mangakocchi*: (<http://manga.chch.jp/>)

⁴ Adobe Creative Cloud: (<http://www.adobe.com/creativecloud.html>)

money and information flow exchanged between those stakeholders (arrows in Fig.3). As a result, we confirmed that the acquisition of the profit source in terms of the application usage charge on a user and the expenditure by way of the payment of the license fee to the publisher for the usage of quotable lines were regarded as priority issues to advance the project.

In addition, possible barriers for the users to entry for Gift Quotes were confirmed. Here we regarded Gift Quotes as a gift service utilizing digital comics/books so that it would compete with existing other casual gift services. Therefore a positioning map of casual gift industry was drawn to confirm entry barriers (Green rectangles in Fig.3).

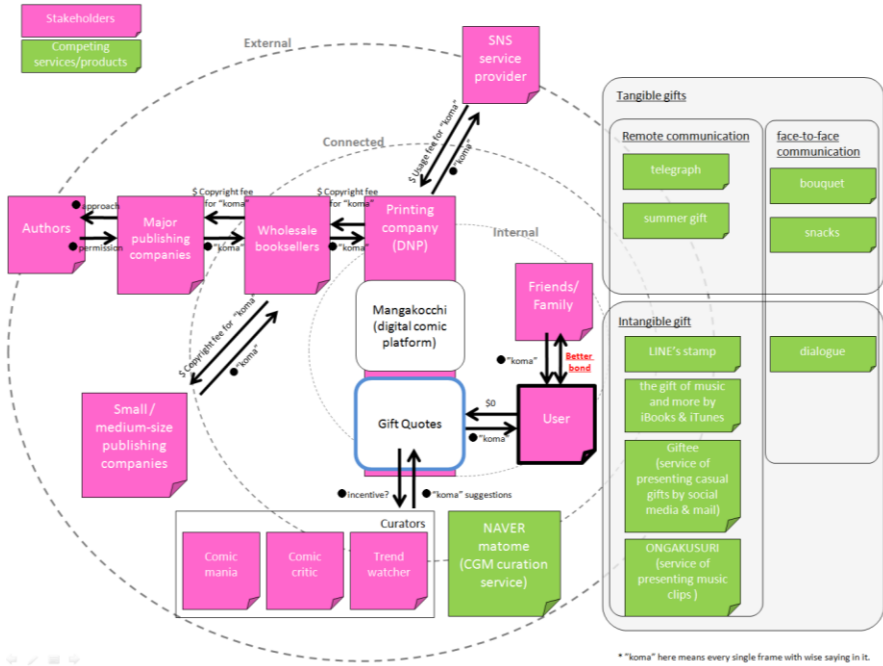


Fig.3 Stakeholder Map of "Gift Quotes"

Step.3 Ideation to solve the issue for service realization

Regarding the priority issues confirmed in Step2; 1)"the revenue from application usage charge" and 2)"the payment of license fee to the publisher", we considered two choices of imposing or not imposing usage charge on the user, and also two choices of paying or not paying the license fee to the publisher. Since these two kinds of choices could be combined to become four alternative approaches, we draw a 2 x 2 chart composing of the two axes representing the choice on usage charge and the choice on license fee payment respectively such that the four possible approaches are located in one of the four quadrants of the chart (Fig.4).

Based on the examination of the appropriate monetizing approach, we derived the final plan to monetize the service in the way that the business entity charges users by selling them a gift product consisting of a *koma*⁵, a frame including a quotable line and a digital comic book that includes the *koma* (as the solution for 1)), and uses a *koma* and its quotable lines without paying any license fee to the publisher in return for promoting the sales of the digital comics/books (as the solution for 2)).

⁵ A single frame in a comic.

		2) License fee of “koma” which GQ pays to the publishers	
		Paying	Not paying
D) Usage charge on the user	Imposing	<p>GQ pays the license fee to the publishers from usage charge on the user.</p> <p>Possible service detail: selling user a gift product consisting of a <i>koma</i>, a frame including a quotable line and a digital comic book that includes the <i>koma</i>.</p>	<p>GQ uses “koma” as one of the promotion tools without paying any license fee.</p> <p>Possible service detail: selling user a gift product consisting of a <i>koma</i>, a frame including a quotable line and a digital comic book that includes the <i>koma</i>.</p> <p>*This quadrant has been considered as the most appropriate monetizing plan.</p>
	Not imposing	<p>GQ pays the license fee to the publishers from its promotion budget.</p> <p>Possible service detail: Providing this service for free under condition of user become a member of “Mangakocchi”, the parent service of GQ.</p>	<p>No money circulation occurs.</p> <p>Possible service detail: Users can use this service for free. Though they must be the member of “Mangakocchi”, the parent service of GQ.</p>

Fig.4 Examination of the monetizing approach by a 2x2 Chart.

Step.4 Redesigning service experience

Based on the monetize solution decided in the previous step, we redesigned the service model keeping its original experience value. Entire user experience was represented as a storyboard and visualized every single touch point to support the user experiences well as the relations among touch points in a sketch of the service system.

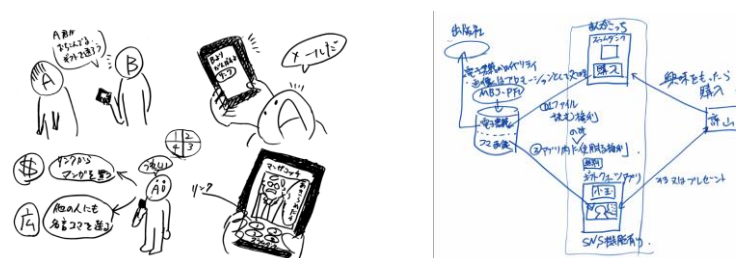


Fig.5 Storyboard (Left) and a sketch of Service System (Right)

Step.5 Examining technical/economic possibilities of service

Based on the redesigned user experience and service interactions depicted in the storyboard, A service blueprint was drawn to design both the front and the back yards of the service operation and also estimate the cost and profits to implement the service model (fig.6). We executed this step with the members who have specific knowledge of service development and creation. The other member of service operation also estimated the

income and the expenditure for the proposed business by simulating the cost and profit relationship analyzed in the service blueprint.

Knowledge	GQに気軽にアクセスできる	使い方がわかる	相手の状態にあった言葉があった	選びやすい(名言一覧)	コマと名言を確認	相手に合わせた送り方が選べる	気持ちが変わるメッセージも送れる	専段のコミュニケーション手段で受け取る	コマに触れられる	励まされる	手触無く読みたいマンガが読める	
Point of UX												
Layer action	ユーザー体験						友人の体験					
Event card	1友人が落ち込んでいることを知る まんがこっちのGQにアクセス	2GQの使い方を知る	3励ますための名言コマを見る	4励ます名言コマを選択	5送る名言コマを確認	6送信方法を選択	7メッセージ入力	8友人:メッセージが来く	9友人:名言コマを見る	10友人:うれしい	11友人:マンガを読んで気分が落ちる	
Back card	GQページへのリンクするページ	GQの使い方	励まし方ページの検索機能 タイトル別ページの検索機能	名言コマのサムネイル まんがこっち商品情報ページへのリンク	まんがこっちDBの連携	多様な送信方法 送信手段へのシームレスな遷移	押したくなるURLのリンク 自動実行されたURLのチェックボックス表示	URLの自動実行	URLのリンク	フィードバックビュー内に読むボタン	名言に転送され容易に購入できるUI	読みたい話(or巻)に遷移
Preparation	家種局 GQページへのリンクするページ	GQランディングページ	GQ励まし方選択ページ 名言コマのキュレーター(専門家orユーザー)	GQ名言選択ページ 名言コマのデータ化	名言コマとまんがこっちDBの連携	GQ送信手段選択ページ	各送信方法につなげるAPI	URLの自動実行	閲覧した名言コマの該当話(or該当巻)のキャッシュ保存			
Cost	バナー制作代	GQランディングページ代	GQ励まし方選択ページ代 キュレーター人件費	GQ名言選択ページ代 (INI:名言コマ作成代/画像&テキスト...万円/月 RUN:名言コマ追加更新代...万円/月)	まんがこっちDBの連携	GQ送信手段選択ページ代						

Fig.6 Service Blueprint of “Gift Quotes”

Step.6 Sharing service/business model with managements and executors

We integrated the service and business models developed in the process through Step1-5 into a Business Model Canvas, and proposed the entire project and the value of the idea to the members who were in charge of developing the service for a pilot business experiment.

KP: Key Partnerships Major publishing companies authors	KA: Key Activities promotion Curation of “koma” “koma” creation	VP: Value Propositions Users will be able to express their words and expressions which they hesitate to tell directly by their own words, and thus they gain experience value of getting more chance to feel sympathy with friends/family. [Slogan] Communication that “koma” conveys our feelings instead (of our own words).	CR: Customer Relationships Long-term relationship by WEB	CS: Customer Segments People that want to encourage depressed friends/family
	KR: Key Resources Mangakocchi platform Mangakocchi comic mania (=“koma” curators)		CH: Channels Website	
C\$: Cost Structure Initial cost -“koma” creation cost -Web creation cost -Database cost Running cost -Maintenance cost -Curator cost		R\$: Revenue Streams Mangakocchi registration fee (-) Promotional spending		

Fig.7 Business Model Canvas of “Gift Quotes”

3 CONCLUSION

Through this research, we succeeded to develop a framework to systematize the process of a service and business modeling such that a new service idea is transformed into a feasible service and business models with keeping the experience value proposed in the original idea. This framework also has been proved to facilitate successfully the collaboration among various stakeholders. The framework introduced in this research organizes the major consensus as well as design issues and resolving techniques for the 6 consecutive steps of service and business modeling. Such a systematic process framework enables smooth and effective communication through which a design team and stakeholders can easily share the understanding and the assessment of proposed service ideas, making it easier for the design project to advance to the implementation stage.

However, the validity of the proposed framework has to be proved by testing it in kinds of design projects and in different organizations. It is also necessary to develop a knowledge base on the effective uses of design tools appropriate for the context of a project. Through continual case studies in practical design projects, we will improve the framework for service and business modeling to be effective for more various business settings.

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