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ИННОВАЦИОННАЯ МОДЕЛЬ БИЗНЕСА: КРАУДСОРСИНГ НА ПЛАТФОРМЕ СОЦИАЛЬНЫХ СЕТЕЙ (CROWDSOURCING BUSINESS MODEL INNOVATION USING SOCIAL MEDIA PLATFORMS)

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Инновационное творчество всегда было уделом интеллектуалов – иженеров, учёных, инициативных предпринимателей. Современное развитие информационных технологий, тенденция перехода от экономики материальных ресурсов к экономике знаний, от авторитарного управления к соучастному создали возможность открытых инноваций, краудсорсинга, коллективного мышления в менеджменте. Перспективной технологией реализации этих тенденций является идеализированное проектирование Акоффа.

Ключевые слова: *менеджмент, краудсорсинг, социальные сети, открытые инновации.*

INTRODUCTION

In the offices of IDEO, a California product design company, there is a quote from Henry Ford posted on the wall. “If I had asked my customers what they wanted,” the founder of Ford Motor Company famously said, “they’d have said a faster horse” [8].Such was the type of thinking that predominated society through the 20th Century, removing innovation from the domain of

the “everyman” and placing it in the exclusive realm of “creative types” – engineers, scientists, and visionary entrepreneurs.

More recently, companies across all industries have begun to transform themselves from hierarchical, command and control-type organizations into flatter, self-directed structures where traditional functional silos become less important. These new, progressive organizations place greater emphasis on bottom-up management which empowers employees at all levels to contribute their individual expertise. With a continued shift from a manufacturing-based economy to knowledge-based one, these companies have reduced their focus on physical assets and enhanced their focus on knowledge and innovation as the principle drivers of growth.

The latest step in this evolution has seen companies extend this search for innovation beyond their own walls by engaging in dialogs with disparate sources of ideas including consumers, partners and even competitors. Henry Chesbrough coined the term “open innovation” to describe this new model anddefined it as “a paradigm that assumes that firms can and should use external ideas, and internal and external paths to market, as firms look to advance their technology” [4]. One popular method of gathering ideas from external sources is through the use of “crowdsourcing” which collects and filters input through Web-based tools such as blogs, wikis and structured databases.

This paper begins with an exploration of the opportunities and challenges presented by open innovation and crowdsourcing. It will present a number of theories regarding collective intelligence and the ability of Web-based tools to harness the “wisdom of crowds” to drive innovation within companies. Finally, it will explore a hypothetical example of crowdsourcing business model innovation using social media tools in a process known as “idealized design”.

CROWDSOURCING INNOVATION

Crowdsourcing is used to extract the collective intelligence of disparate individuals and turn it towards productive ends. The term was coined by Jeff Howe [5] in a 2006 issue of Wired magazine to “describe a new Web-based business model that harnesses the creative solutions of a distributed network of individuals through what amounts to an open call for proposals” [3]. Howe described the model as follows [5]:

“Simply defined, Crowdsourcing represents the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call… The crucial prerequisite is the use of the open call format and the large ***network*** *of potential laborers”.*

There are extensive cases of organizations effectively using crowdsourcing to either create or extract value from markets by implementing innovative products and services based on collective input. For example, Threadless.com uses crowdsourced design to create t-shirts which it then sells to customers. Once members join the community, they can design, vote, chat with other users, and purchase the t-shirt products created by others. If a user chooses to participate in the design process, they download a template to use with commercially available design software such as Adobe Illustrator and upload a completed design. Meanwhile, all users on the site have the ability to rate and critique the contributed designs and, ultimately, select weekly "winners" who are paid $2,500 plus $500 each time their design is reprinted. In return, Threadless.com owns the design and earns a significant profit in the process. According to Howe, as of June 2006, Threadless.com was selling 60,000 t-shirts a month with a profit margin of 35 % and gross revenue of $18 million. Now in its 10th year of business, the privately held Threadless.com has expanded internationally by publishing its site in 4 languages and is certainly realizing significant growth on all metrics including traffic, unique users and revenue.

The idea of collective intelligence is also being used to refine the research and development process within larger, more established companies through a process known as "open innovation". Many of these organizations have realized that more experts reside outside their corporate walls than within them. In fact, the percentage of patents held by small firms and individuals increased from 5 % to 20 % between 1970 and 1992 [2]. As a result, many corporations have begun to increasingly rely on external sources of innovation to fuel and compliment their internal research and development efforts. Chesbrough writes that "rather than restricting innovations to a single path to market, open innovation inspires companies to find the most appropriate business model to commercialize a new offering -whether that model exists within the firm or must be sought through external licensing, partnering, orverturning" [4].

One particularly striking example of open innovation is a company called InnoCentive which was originally founded by pharmaceutical company Eli Lilly as a research venture. InnoCentive allows companies (called "seekers") to offer financial rewards to external innovators by anonymously posting challenges to its community of experts. When large companies such as Proctor & Gamble, Dow, BASF and others become stumped by a perplexing research problem, they can get access to InnoCentive' s global network of over 100,000 experts who submit solutions in the hopes of being selected as the winning proposal.

Harvard professor Karim Lakhani conducted research to determine the value of collecting ideas from such a broad-base of experts by looking at 166 problems posted to InnoCentive's community [9]. Strikingly, 29,5 % of

these problems were solved successfully and the average winner spent just 74 hours in the process versus 6 to 24 months spent unsuccessfully by "seeker" companies. "Not only did the odds of a solver's success actually increase in fields outside his expertise", he wrote, such as mathematicians taking on chemistry or biologists looking at physics, "but the further a challenge was from his specialty, the greater the likelihood of success. That is very counterintuitive" [7]. Again, this points to the fact that more experts exist outside of a company's walls than within and bringing in this fresh insight can often lead to innovative solutions.

The power of our increasingly networked information society to tap into the collective intelligence of broad-based users was foreseen over a decade ago by Levy [10] who wrote:

"It has become impossible to restrict knowledge and its movement to castes of specialists… Our living knowledge, skills, and abilities are in the process of being recognized as the primary sources of all other wealth. What then will our new communication tools be used for? The most socially useful goal will no doubt be to supply ourselves with the instruments for sharing our mental abilities in the construction of collective intellect of imagination".

IDEALIZED DESIGN

In industry after industry, companies with superior performance are displaying innovation in the totality of the way they are doing business. This explains why a recent IBM survey [11] of over 765 CEOs shows that business model innovation is the issue they wrestle with most. In the absence of a single genius entrepreneur or leader, one of the challenges confronting businesses today is to develop a process of open innovation that taps into the creativity of the stakeholders of the organization to create a successful business model. Traditional models of innovation, which relied solely on "creative types", usually within R&D functions, are being replaced with open innovation. One of the most potent open innovation processes is idealized design. Originally conceived by Russell L. Ackoff [1] as an internal process to facilitate corporate planning, idealized design thinking is now being used for opportunity recognition.

It has become apparent that, although inspired discoveries are often attributed to talented individuals, it is more often the case that the planning team creates the solutions .The combined intellects of team members, often representing different disciplines, can create an intellectual environment in which truly new ideas emerge. The important thing is to provide the right mix of experience and skills so that the combined knowledge and understanding of the individuals can be focused on the problem. Realistically, this condition is made possible by the interplay among the different factors, such as the

participants, collaboration tools, facilitators, and the catalyzing effect of the interactive planning process itself. Clearly, the outcome of the participative interactive planning process may be affected by a set of factors peculiar to the social system in question. However, despite the idiosyncratic features of each intervention and the special characteristics of the organization involved, certain processes are generic, contributing to success in all such applications of interactive planning.

The challenge of business model innovation is in formulating a process that determines optimal strategic directions and getting stakeholders to invest in putting this strategy into successful operation. An organization that has the correct strategy, but cannot put it into action, cannot succeed. Likewise, an organization that implements the wrong strategy efficiently is also ill fated.

In the Interactive Planning approach, a methodology derived from a holistic viewpoint, it is assumed that the organization is a multi-purpose system and that the planning process should take into accountthe objectives of all stakeholders, including employees, customers, partners, management, board members, and the community. The planning process must accommodate these diverse objectives and offer an approach to resolving the differences that are inevitable in a multi-purpose system.

Every organization is comprised of a set of interrelated entities, of which no subset is unrelated to any other subset. This means that the organization as a whole displays systemic properties that none of its parts or subsets has, and every entity in the organization is either directly or indirectly related to every other entity in it. Aligning the interests of the purposeful parts (the people) with each other and with the whole is the main challenge of business model development.

The current business environment is becoming increasingly complex and uncertain. Community needs and customer profiles are rapidly changing, creating a need for organizations to adapt on all fronts to this increasing rate of change. Predicting the future is difficult in this environment.

The Interactive Planning approach is a methodology that eliminates the need for forecasting. It seeks to identify assumptions in the strategy and to frame them as possibilities and areas for contingency planning. While assumptions are about possibilities, predictions and forecasts are about probabilities. Therefore, any method of planning that is critically dependent on the accuracy of forecasting is less reliable in this environment. Identification of assumptions, however, allows for monitoring of their validity as the environment changes.

Unlike the typical consulting model based on “expert” assumptions and arbitrary goals, Interactive Planning is a bottom-up approach that is as efficient as it is effective. Over the course of several months, using online collaborative tools which make use of Web 2.0 applications, stakeholders can engage in the

creation of a shared vision of the future of the organization, a new business model and the strategies to be pursued. In achieving this, they will come to believe that their idealized vision of the future can be created and is dependent upon what they do between now and then.

The results of this approach are transferrable and adaptable, not only leading to a formal business model, but also to new ways of thinking about the nature of the organization, which will be integrated into the organization by stakeholders. Interactive planning has been successfully implemented in hundreds of organizations, including large corporations, small businesses and non-profit organizations.

ADVANTAGES OF THE INTERACTIVE PLANNING METHODOLOGY

1) Gives stakeholders an opportunity to create their own future.

2) Promotes participation from all stakeholders, including customers, employees, community members, top management, boards of directors, strategic partners, and others

3) Allows for multiple perspectives to be brought to bear on decisions. This creates consensus around the vision, enriches the process, and generates buy-in from participants.

4) Considers all the subsystems of the organization, as well as the systems surrounding it (holistic approach).

5) By having both external and internal stakeholders, can identify pieces that are already in place elsewhere in the organization and direct realignment that can increase speed to effectiveness.

6) Specifically, facilitates consumer and employee empowerment, and increases loyalty, morale and productivity.

7) Creates a critical mass of stakeholders behind the plan.

8) Makes the organization become proactive.

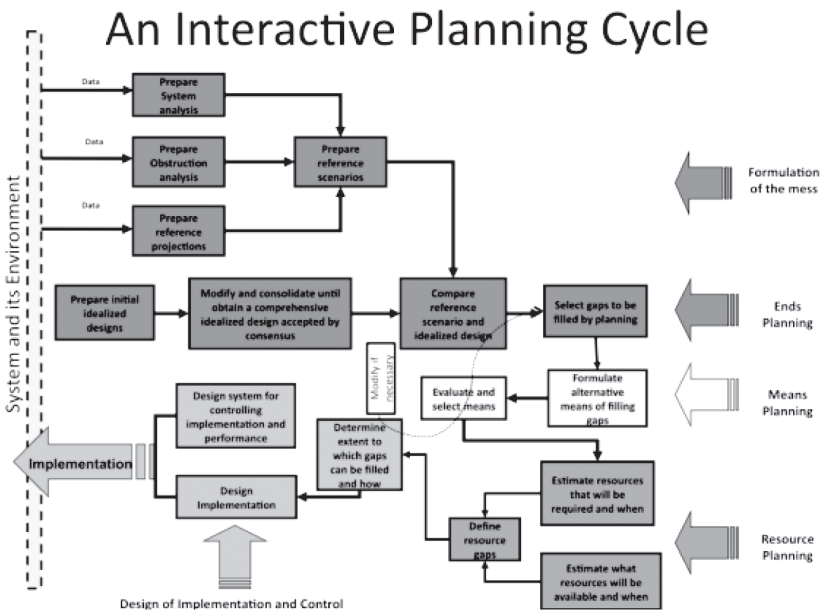
9) Acknowledges creativity and out-of-the-box thinking, which lead to powerful ideas.

10) Provides ease of implementation by having all stakeholders involved in the design process.

11) Encourages flexibility and applicability to a variety of purposes.

PROCESS

With Interactive Planning, participants apply design thinking in order to dissolve the system of problems by changing the very nature of the organization, or by altering its environment in order to eliminate the problems entirely [1]. They idealize by designing a desirable future and inventing ways to bring it about. The following Interactive Planning process has been adapted from the



traditional offline model to take advantage of open innovation through the use of crowdsourcing and social media platforms.

PREPARATION

1. Form the "Process Consulting Team" which will consist of internal and external community facilitators. This team will be responsible for the design of the planning process and the management of interactions among various stakeholders. The team will meet virtually using voice over IP (VOIP) to begin the process of refining the desired scope of work, determining practical constraints, and anticipated process outcomes. Of particular significance is the development of the shared mission for the team. These interactions will result in overall consensus and direction for the requirements, resulting in a comprehensive working colloquium.

2. Create the "Learning Space". A virtual project center that will facilitate a common understanding and a broader organizational support for the participants in the interactive planning process. A social computing platform will be set up to help create new knowledge and understanding through observation, dialogue and socialization. The learning space will enable the participants to:

a) Create a shared knowledge base;

b) Collect community input;

c) Help with integrating organizational diversity;

d) Create a common language;

e) Create a point of view for individuals to become “learning agents” for the organization.

3. Create the “Mess Team”. The Mess Team will consist of internal organizational leaders. As rising stars that have a vested interest in the organization’ s survival, they should have excellent operational knowledge and should not have been sheltered from the “bad news” of daily operations. As a group, they should cover all the major functional areas - because, although they are not on the team to “represent” their groups, they should bring data, information and knowledge of all key areas to the team effort.

4. Decide on the “Steering Committee”. The Steering Committee should comprise of top executives and policy makers with authority to approve new strategic directions and commit resources for successful implementation.

5. Create the “Core Design Team”. The design team will be distinct from the mess team and should be composed of a large number of individuals including customers (current or potential), employees, partners and other stakeholders. These outside experts will bring a wealth of experience to bear on the design process, similar to what was seen in the success discussed with InnoCentive’s community. Therefore, the top management team (Steering Committee) should empower the Core Design Team with the authority to make key decisions and think out of the box. Note: One of the primary reasons for having a separate Mess Team is to prevent the Core Design Team from using its energy to think about how to fix the current business model and focus on developing a new one instead.

ORIENTATION

An orientation to systems thinking as a mindset and interactive planning as a methodology for all the participants will be presented using a series of online multimedia tutorials.

STAKEHOLDER SPECIFICATIONS

An information-gathering phase with key organizational stakeholders: partners, customers, employees, management, board members, and other stakeholders will be conducted to generate specifications for the design process, taking into consideration diverse perspectives. Stakeholder idealized design data gathering is used to reveal stakeholder wants and needs. This is very different from the traditional market research where the stakeholders (including the service recipients and partner organizations) are asked to say what they want and need. In this approach, stakeholders will be engaged in a

creative design of a new system. This method is fundamentally different from focus groups in which participants are asked to react to preconceived, already partially designed, offerings.

MESS FORMULATION

The aim of this phase is to determine how the organization could fail if it were to continue behaving as it is currently – that is, if it failed to adapt to perfectly predictable aspects of a changing environment. The internal "Mess Team" will carry out the work for this phase using social media tools as outlined. The elapsed time for this effort is a maximum of 4 months from beginning to end.

IDEALIZED DESIGN

This phase determines what the organization would like to be and identifies the gaps between this vision and the current reality. The remainder of the planning process seeks to remove or reduce these gaps. The "Core Design Team" will design the idealized business model based on the specifications developed in stakeholder design sessions. This work will be performed in a collaborative online environment where community interactions are facilitated by the "Process Consulting Team".

It is important to note that specifications consist of a statement of the properties that the planners want the idealized organization to have. The design states how the properties specified are to be obtained. For example, a family that decides to build a house may specify the number and types of rooms it wants, the number of floors, the architectural style, and a cost not to be exceeded. The architect whom they employ prepares a design that describes how these properties are to be obtained. Put another way: specifications are aspirations; a design is a set of instructions on how to realize those aspirations.

FOCUS GROUP

After the completion of the idealized design phase, the stakeholders are asked to react to the idealized design and to validate the designs presented by core design team, based on participant input, to reveal whether the design would likely satisfy their requirements in given scenarios.

GAP ANALYSIS

The gap analysis will take place when the work of the Mess Team and Design Teams are brought together. The Process Consulting Team will facilitate

the gap analysis in a participative manner and will create a consensus around the decisions that have been made.

MEANS PLANNING/BUSINESS MODEL FORMULATION

The point of this phase is to determine what should be done to remove or reduce the gaps; it selects the courses of action, practices, projects, programs, and policies that should be implemented. It is crucial to note that by utilizing the Interactive Planning Approach, the need to do feasibility study is minimized because the process does not generate alternative courses of action. Instead the best course of action is invented by the stakeholders.

The feedback from the validation workshop session might require a number of changes and modifications before proceeding with means planning. At this stage most of the attributes and idealized design concepts will be developed into a number of salient offerings. These offerings, along with relevant business plans and their assigned "champions" will be selected and will be reported to the Steering Committee for the final review before embarking on further implementation.

RESOURCE PLANNING

This phase examines how much of each type of resource – facilities and equipment; materials, energy and services; personnel; money; and information, knowledge, understanding, and wisdom – will be required to implement the means selected.

DESIGN OF IMPLEMENTATION

This phase identifies who should do what and when it should be completed.

DESIGN OF CONTROLS

This phase determines how to monitor these assignments and schedules and to adjust for failures to meet the schedules or meet expectations.

DELIVERABLES

The "Process Consulting Team" will be responsible for analyzing community inputs and creating several important documents:

1) Reference Scenario Document.
2) Idealized Design Document.
3) Business Model Document.

FACILITATORS

In the Interactive Planning process, online community facilitators play an important role. The facilitators focus on the design and management of the process, thereby allowing team members to focus on the content. By separating these functions, a leader facilitator can help by "saying the unsayable and thinking the unthinkable" – in other words, by being catalyst for thinking outside of the box. By posting "stupid" questions to the online community, the leader can challenge assumptions that are so much a part of the culture that they are not even perceived by the people on the teams. Finally, the leader can also help manage the online interpersonal dynamics that arise and help to modulate the effect of disputes. On the other hand, it is essential that the teams not delegate the job of thinking, synthesizing, and creating the leader/facilitator. With a strong leader, teams can have an active role in coming to conscious conclusions themselves.

CONCLUSION

The organizational climate in 2010 is characterized by increasing rate of change, complexity, and uncertainty, conditions that make it hard to plan for the future. However, while we are all faced with similar environmental conditions, our perceptions and responses are often individualized. Interactive Planning is a proven process to align the stakeholders behind an idealized strategy for the organization.

The Interactive Planners believe that the future can be created and is dependent upon what one does between now and then. In planning, the process, not the plan, is the most important product. Participants dissolve a problem by changing the nature of either the entity that has it, or altering the environment in order to eliminate the problem entirely. They idealize by designing a desirable future and inventing ways to bring it about.

The methodology aims for the participants to collaboratively and collectively design an ideal-seeking system based on the fundamental premise that the new business model can be created without the limitations of the old model. The purpose of this is to free the participants from the trap of just improving the limitations of the current system. Rather, they are encouraged to be as creative as possible in coming up with out-of-the-box ideas that lead to innovation. The idealized system should be technologically feasible, operationally viable, and have the capacity to learn and adapt quickly.

Innovation drives our economy. Without it, we would not have laptop computers, chemotherapy drugs, pocket-sized cellular telephones or any of the myriad technologies upon which we depend.

Where do these innovative ideas come from? There is no easy answer because good (and bad) ideas are all around us. The process of identifying,

refining, and executing the best ideas is what makes a company into an innovation superstar. The Holy Grail of these companies is to capture this "lightning in a bottle" through a systematic process leading to predictable innovation. Crowdsourcing and open innovation have great potential in the area of business model innovation when used as part of the Interactive Planning process first developed by Ackoff [1] and adapted here for use as an open innovation platform.

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