

**SELF-ORGANIZED COLLABORATION:
A Self-evolving Online Collaborative Production Model for Social Enterprise Grassroots Startups**

by
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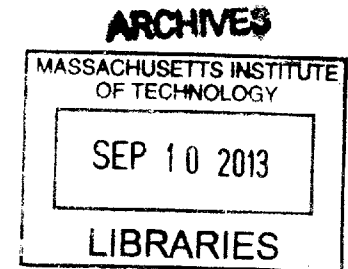
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SELF-ORGANIZED COLLABORATION:

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Yu Gao

Submitted to the Department of Architecture on August 9, 2013
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ABSTRACT

Collaborative production is a process in which people coordinate with one another to accomplish specific goals. Widely recognized as an effective model in aggregating meaningful outcomes, it greatly extends the effects of simple sharing. However, two major obstacles to a successful outcome are the complexity and unpredictability of the collaborative production process itself.

Social enterprise, as the rising force in advancing economic development, presents a wide range of challenges and unmet needs. It is especially critical for social enterprise grassroots startups to harness useful and meaningful contributions in the process of collaborative production. Through promoting nonfinancial motivation and collecting contributions at all different levels, the new online collaborative platforms, such as Wikipedia, have established a positive impact in allowing large groups to collaborate. However, platforms with a clear financial motivation suffer a great deal in obtaining multiple levels of constructive contribution and participation. Investigation of the methods aggregating individual (and often tiny) contributions for social enterprise grassroots startups may offer new frameworks from which a great range of applications can be extracted.

Prior work on collaboration through digital platforms has mainly focused on a centralized collaboration model through highly managed and fixed Internet portals. This research will look into the alternative model, such as the wiki (a distributed collaboration), to find solutions for the emergence of an evolving collaboration model.

Thesis Supervisor: George Stiny

Title: Professor of Design and Computation



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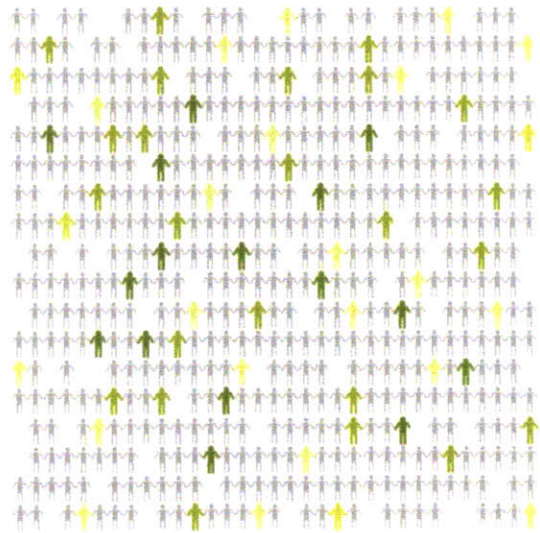
1. INTRODUCTION

1.1 Problem Statement

1.2 Methodology

1.3 Research Questions

1.4 Intended Contributions



vs.



1. INTRODUCTION

1.1 Problem Statement

How Personal Motivation Meets Collaborative Production for social Enterprise Grassroots Startups?

Collaborative production, where people have to coordinate with one another to get anything done, is considerably more difficult than simple sharing, but the results can be more profound. However, the process of collaborative production is usually highly complicated and unpredictable.

New tools are allowing large groups to collaborate by taking advantage of individuals' nonfinancial motivations and by allowing for wildly differing levels of contribution into the production process, e.g., Wikipedia. However, to date, tools that involve financial motivations have great difficulty in obtaining multiple levels of contribution.

The importance of grassroots social entrepreneurship is undeniable. In Joseph Schumpeter's book *The Theory of Economic Development*, he argues that economic development is not initiated and sustained by capitalists, but instead by

entrepreneurs. He proposes that the role of the entrepreneur is to break out of the routine framework of economic life and, as a result, propel economic growth forward throughout history. Furthermore, social enterprise commits their efforts to applying commercial strategies to maximize social improvements at large, rather than maximizing profits for themselves or external shareholders. Social enterprise is a unique mechanism in combining economic advancement and social improvement, enabling sustainable social changes within a larger framework.

But critical issues exist. Social enterprise grassroots startups struggle greatly in the process of searching for matching resources, contribution, and support. Furthermore, grassroots social entrepreneurs need to seek every possible route to develop their ideas/projects through their personal efforts, including finding team members, funding, and recognition. This search process for the startup tends

to be highly unpredictable, without any sort of specific logistical framework, and it seems to be a "black box" type of journey. Given grassroots social entrepreneurs' lack of access to potential collaborators and contributions, establishing an effective online presence for collaborative production will bring a needed framework to and provide new possibilities for advancing their process.

This thesis studies the case of Wikipedia to understand how the model of peer mass production contributes to the collaborative problem-solving process; specifically, how could the contributors take roles and interact with each other differently to accelerate the process through an online presence for social enterprise grassroots startups. This research intends to explore whether and how peer mass production model (the wiki model) can improve productivity and efficiency when applied to the highly unpredictable social enterprise grassroots startups process.

1.2 Methodology

This thesis presents a critical comparative analysis of the peer production model (wiki model) and the collaborative problem-solving action-based model (social enterprise grassroots startups model), including case studies of wiki model and existing digital platforms facilitating social ventures. In this research, case studies will include sources such as literature reviews and interviews with professional and academic communities.

The examining criteria of these case studies include:

- Satisfying constraints (context)
- Interpreting social issue scenes
- The models of acquiring funding, specific funding sources
- Socially-engaging design language
- Planning courses of action
- The effectiveness of strategies

1.3 Research Questions

- Main Question:

Self-Organized Collaboration: How does the alternative collaborative model, such as wiki (a distributed mass collaboration), contribute solutions for a self-evolving collaborative model for social enterprise grassroots startups?

- Secondary Question:

- How to effectively create an online presence facilitating collaborative production for social enterprise startups?

- Can the peer mass production model (wiki model) improve the productivity and efficiency in the highly unpredictable social enterprise grassroots startups process? Specifically, how?

- What principles and lessons can we learn from the wiki model (peer production) and how can we apply them in the context of social enterprise grassroots startups?

1.4 Intended Contributions

Prior work on collaboration through digital platforms has mainly focused on a centralized collaboration model through highly managed and fixed Internet portals. This research will look into the alternative model, such as wiki (a distributed collaboration model), to find solutions for the emergence of an evolving collaboration model.

The recommendation of rules for establishing a more self-organized flexible online collaboration model will better facilitate and expand the capacity of social venture startups.

2: PROBLEM STATEMENT:

Social Enterprise Grassroots Startups

2.1 Introduction

2.2 Entrepreneurship

2.3 Current Theories of Entrepreneurship

2.4 Difference between Business and Social Entrepreneurs

2.5 Definition of Social Entrepreneurship

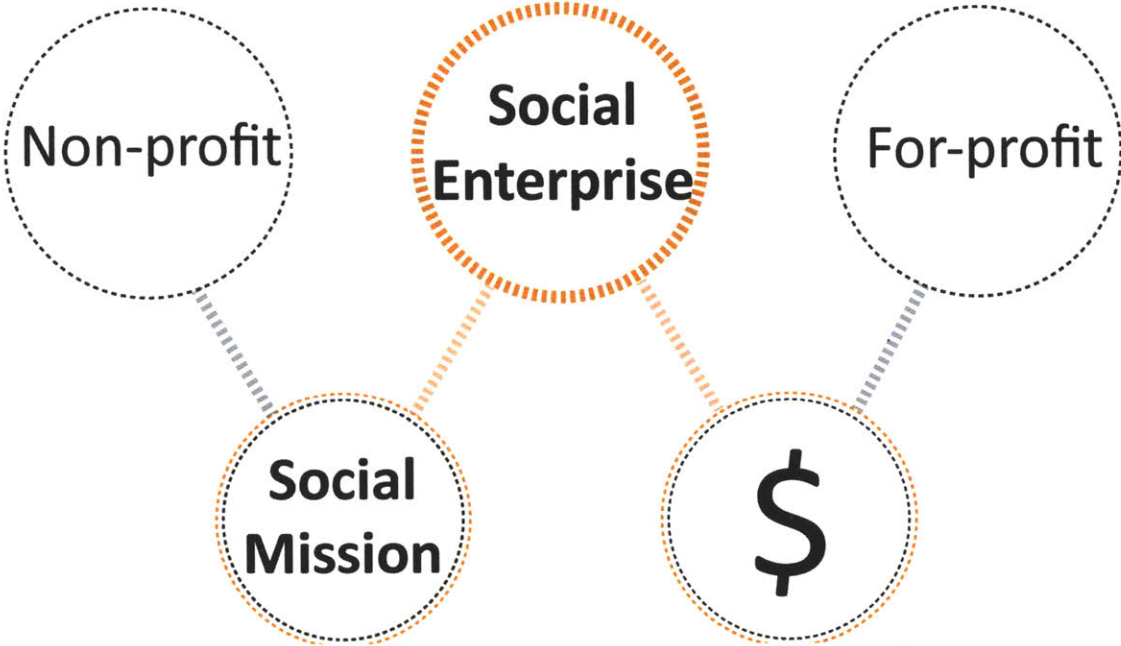
2.6 Precedents of Social Enterprises and Innovations

2.7 Social Enterprise Grassroots Startup: A Personal Story from the Author

2.8 Benefits and Limitations

2.9 Conclusion: Social Enterprise Grassroots Startups

Social Enterprise Grassroots Startups



2. PROBLEM STATEMENT

2.1 Introduction

The term, “social entrepreneurship” has become increasingly popular and gained significant recognition over these past few years. Its increasing popularity has a strong relationship to its unique position, crossing the traditional boundaries separating nonprofits, governments, and for-profit business. This approach combines the motivation of achieving social mission with a business-like discipline and innovation. Since many efforts from government and non-profit sectors have proven to be inefficient, ineffective, and unresponsive, falling short of the expectations. Therefore, social entrepreneurs are in the unique position to develop new models that transcend different sectors and ultimately contribute to the advancement of societies’ social good.

Social entrepreneurship as a term might be new, but the phenomenon is not. Institutions of this type have been around for a while, even though people are not aware of them. By coining this new term, “social entrepreneurship,” it implies the blurring of different sectors and raises the awareness of possibilities, such as innovative non-profit ventures, social purpose business ventures (e.g., for-profit community banks, such as Grameen Bank), and hybrid organizations combining both non-profit and for-profit components.

Even though the idea of “social enterprise” has been around for a while, it means different things to different people. The term can be quite confusing at times. For some people, it means non-profit enterprise with initiation of for-profit ventures, whereas for others it means either exclusively non-profit ventures or business ventures with an effort to include social responsibility. Therefore, the understanding of the meaning of “social entrepreneurship” is very important in navigating this domain. What constitutes “social entrepreneurship”? And why is it important?

2. PROBLEM STATEMENT

2.2 Entrepreneurship

The Origins of the Term “Entrepreneur”

Joseph Schumpeter

Generally speaking, an entrepreneur is associated with a person that starts a new business. However, this term has a much deeper and richer historical and theoretical background. The term “entrepreneur” originated in French economics in 17th to 18th centuries, meaning someone who initiates and carries out significant activities and instigates economic breakthroughs through finding new ways of doing things. Jean Baptiste Say, a French economist in the 19th century, argued that entrepreneurs create value and shift resources from the lower to higher areas of productivity. In the 20th century, Joseph Schumpeter was considered the godfather championing entrepreneurship.

In his book “The Theory of Economic Development”, the Austrian economist Joseph Schumpeter argues that entrepreneurs, not capitalists, instigate economic development.¹ In great contrast to many of the other mainstream economists’ views, Schumpeter champions the value brought by entrepreneurs, due to their capacity of initiating new actions within the existing system, and therefore advancing economic development at large.

Schumpeter’s definition of entrepreneur excludes the owner of capital, the inventor, and the manager, roles with which the entrepreneur was usually confused. The key advantage that an entrepreneur brings into the picture is to introduce

economic innovation. According to Schumpeter, the role of the entrepreneur is to break out of the repetitive and habitual routine of economic life. He further suggested that an extraordinary creative mind and energy is quintessential to this process. Entrepreneurship requires “the creative power and dominating force of a leader.” In other words, entrepreneurs are one the core forces in advancing economic development.

Development in Schumpeter’s definition is entirely different from the tendency towards equilibrium. The new disruptive change disturbs the previously existing equilibrium. This change refers to the kind of change stemming from within the economic system. In his book, he states:

2. PROBLEM STATEMENT

2.2 Entrepreneurship

This change so displaces its equilibrium point that the new one cannot be reached from the old one by infinitesimal steps.

For example, regardless how many mail coaches get added successively, it will never become a railway. Schumpeter presents five ways to break out of the routine in his book. Firstly, the introduction of a new, good or a meaningful improvement in the quality of an existing good. Secondly, the introduction of a new method of production. Thirdly, the opening of a new market. Fourthly, the

conquest of a new supply. Lastly, the creation of a new type of industrial organization.

According to Schumpeter, this kind of discontinuity is mainly introduced through entrepreneurship. In his book, he states:

...but entrepreneurs employed existing means of production differently, more appropriately, more advantageously. They have "carried out new combinations." They are entrepreneurs. And their profits, the surplus, to which no liability corresponds, it is an entrepreneurial profit.

As one of the core driving factors in economic development, the importance of entrepreneurship is undeniable. Schumpeter further argues that will and action are the keys to enable entrepreneurs to accomplish their ventures. This will and act can be interpreted as the persistent iteration of collaborative production throughout entrepreneurial activities.

Schumpeter's theory serves as the foundation of the contemporary use of the notion that champions entrepreneurs as the changing agents to advance economic progress.

2. PROBLEM STATEMENT

2.3 Current Theories of Entrepreneurship

Peter Drucker

Heavily influenced by Joseph Schumpeter, Peter Drucker further emphasizes the opportunity captured by any entrepreneurial ventures. His theory does not require entrepreneurs to initiate change, but to respond and exploit change caused by technology advancement, societal preference, etc. Therefore, according to Drucker, starting a new business itself does not count as entrepreneurship. He argues, "Not every new small business is entrepreneurial or represents entrepreneurship." He continues to give the example of a "mom and pop" store opening -- another Mexican restaurant in the American suburb. In other words, not every new organization, either for-profit or non-profit, would be considered as entrepreneurial.

In his book, *Innovation and Entrepreneurship*, Drucker states that entrepreneurship does not require profit motive. He gave the example of the modern American university, and emphasizes how much innovation and change has brought by this creation.

Howard Stevenson

Howard Stevenson, a distinguished theorist in entrepreneurship at Harvard Business School, added another dimension to Drucker's change-instigating definition. He conducted research in identifying the difference between entrepreneurial management and common administrative management. He found that entrepreneurs do not limit their pursuit of opportunity to the resources currently at hand, but mobilize every possible opportunities and resources to achieve their objectives, whereas the administrators allow their existing resources to constrain their vision and action. This is another definition of entrepreneur that does not have a direct relationship with a business startup.

2. PROBLEM STATEMENT

2.4 - 2.5

2.4 Difference between Business and Social Entrepreneurs

These definitions from Say, Schumpeter, Drucker, and Stevenson help to establish a foundational understanding in entrepreneurship both in the business sector and the social sector. Their theories portrait a type of mind-set and behaviors that can be manifested across sectors. Social entrepreneurs are entrepreneurs with a clear social mission. Since a social mission is core and central in social entrepreneurial ventures, a different set of challenges need to be addressed than in regular entrepreneurship.

For business entrepreneurs, market and wealth creation are the key for measuring their success, since market/profit is the perfect indicator of the productivity, efficiency and effectiveness of the business venture. In contrast to business enterprises, social enterprises have a less clear measurement of their impact and success. Profit alone is not sufficient in evaluating the value creation process for social enterprises, because wealth creation is a

means to the end but not the end, and is therefore inadequate to measure the social impact of the venture. The ambiguity in measuring progress and improvement in social enterprises has been one of the key challenges for them to advance and evaluate their social impact.

2.5 Definition of Social Entrepreneurship

In J.Gregory Dees's paper, *The Meaning of "Social Entrepreneurship"*, he gives the definition as follows:²

Social entrepreneurs play the role of change agents in the social sector, by:

- *Adopting a mission to create and sustain social value (not just private value),*
- *Recognizing and relentlessly pursuing new opportunities to serve that mission,*
- *Engaging in a process of continuous innovation, adaptation, and learning,*
- *Acting boldly without being limited by resources currently in hand,*

• *Exhibiting heightened accountability to the constituencies served and for the outcomes created.*

Social entrepreneurs can be revolutionary in pursuing a social mission. Their visions are bold, and they push fundamental changes in social sectors. The core difference between social entrepreneurs and business entrepreneurs -- even from socially responsible businesses -- is that the social mission is core and fundamental to social entrepreneurship. This mission is rooted deeply in social improvement, and cannot be compromised by creating profits for individuals. For social entrepreneurs, profit is a means to the end but not the end in itself. With the character of perseverance, social entrepreneurs are innovative in making progress in solving problems and taking calculated risks. A continuous effort to meet the need between making profit and community needs is one of the most important parts of the challenges in these ventures.

2. PROBLEM STATEMENT

2.6 Precedents of Social Enterprises and Innovations

Microfinance: Grameen Bank

Microfinance includes financial institutions that provide financial services such as banking, lending, and insurance to the poor who otherwise would not have the access to these financial resources. The disadvantaged and poor can improve their lives through saving money and having access to loans and insurance. It also enhances financial inclusion, giving the poor an opportunity to be lifted out of poverty.



Grameen Bank is the earliest organization for microfinance and microcredit, and also a Nobel Peace Prize-winning microfinance institution and community development bank founded in Bangladesh.

Muhammad Yunus, the founder, launched *Grameen* Bank in 1983 to provide banking services to the poor, making financial resources available to the poor at an appropriate and reasonable condition.

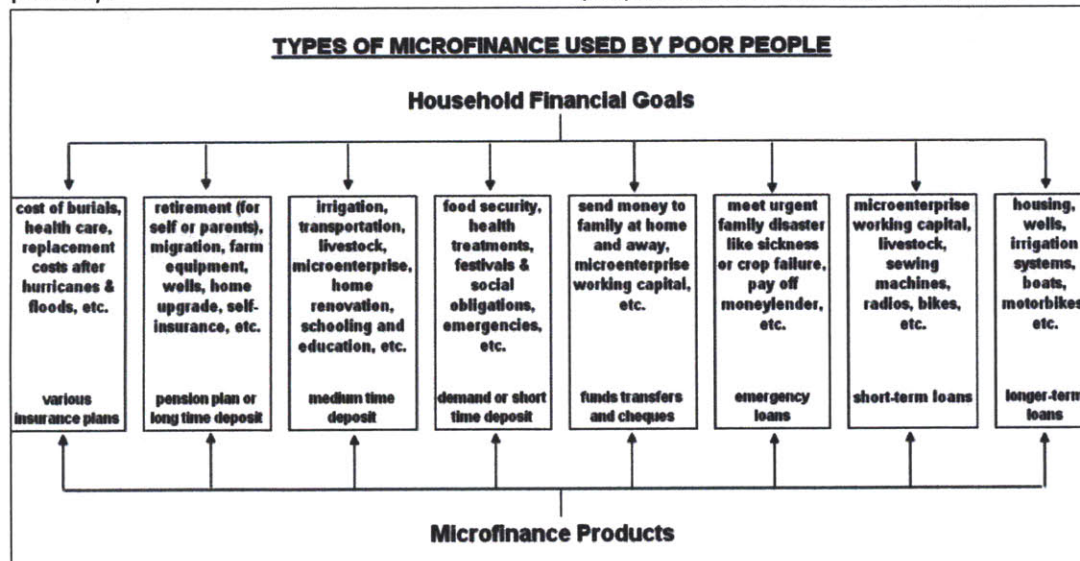
Ashoka: Innovators for the Public



ASHOKA

INNOVATORS FOR THE PUBLIC

Ashoka: Innovators for the Public is a non-profit organization supporting the largest network of social entrepreneurs worldwide. Founded by Bill Drayton in 1980, Ashoka has consistently offered financing and professional support services to a global network of social entrepreneurs. With around 3000 Ashoka Fellows in 70 countries, Ashoka instigates social change through the social enterprises carried out by these fellows. Their primary approach is to ensure social changes through their intervention on three levels, i.e., the individual, the group, and the sector, therefore delivering sustainable social innovations and solutions into a larger scale.



2. PROBLEM STATEMENT

2.6 Precedents of Social Enterprises and Innovations

M-PESA



M-Pesa is a mobile money transfer and micro financing service for Safaricom and Vodacom, the largest mobile phone operation companies in Kenya. By providing a mobile banking opportunity to the “un-banked” population, the rural poor in Kenya, M-Pesa has managed to become the most developed mobile payment system in the world currently. The interesting fact is that even among the rural poor in Kenya, the majority of them own mobile phones. Because of the wide penetration of mobile phone services to almost everyone in Kenya, the mobile bank services provided by M-Pesa empowers the poor to manage their money transfers, deposits, and withdrawals easily, enabling them to have more financial autonomy.

Divine Chocolate



Divine Chocolate is a pioneering fair trade brand, co-owned by the cocoa farmers’ cooperative Kuapa Kokoo in Ghana. As the owners of the company, the farmers maintain a high control of the larger share of the company’s profit and receive a fair price for their cocoa. The brand was launched in 1998 by a group of cocoa growers in Ghana to trade its own cocoa more efficiently and effectively than government cocoa agents. Divine Chocolate has received a wide range of distinguished awards and recognitions worldwide.³

Social Enterprises have been around for decades without being labeled as “social enterprise”. All these above examples show a clear motive in doing good for benefitting the poor and the underprivileged. It is not wise to believe that “do good” can only be associated with charity, and only rich people with spare money have the luxury to do so.

That been said, we still need to acknowledge that social enterprise is a tough route to take, due to its uniqueness and societies’ misassumption towards it. However, it is possible and highly fulfilling to accomplish social enterprise business, benefitting society at large.

2. PROBLEM STATEMENT 2.7 Social Enterprise Grassroots Startup: A Personal Story (Author)

Identify the Social Issue: A Quest to Serving the Underprivileged

The story all started with my experience as a volunteer summer camp teacher in the SiChuan earthquake area in 2009. Even though my initial motivation was only to help the after disaster recovery process, an unexpected encounter with a “left-behind” little girl brought me new awareness of and great grief for her situation. The Chinese government has reinforced a household registration policy for more than five decades, which was meant to keep people’s residence at their birthplace. However, the rapid urbanization of the population, a major economic driver in recent years, has brought about many social issues. People with rural status -- migrant workers -- are deprived basic human rights and welfare in the urban areas. Specifically, any migrant children are deprived even the most basic education in the cities.

The encounter with this little girl greatly hurt my heart. She had been left behind by her parents who moved to cities to

search for a better job and life. This little girl, only seven years old, had already shown many psychological symptoms from abandonment, neglect, and emotional instability. It was extremely difficult for me to witness the brokenness of this beautiful little girl and how desperately she desired love and care. It was surprising for me to realize that the brokenness of my country stems greatly from this divide between urban and rural status, and the government -imposed policy that ensures segregation and control. Unfortunately, Chinese citizens have been born to be unequal.

What can we do to alleviate this unfortunate reality? As an ordinary citizen, one who does not have political or financial connections with the people with power, one of the 300 million middle class, but one who actually cares enough to try to do something, one who does not possess any power but wanting to contribute as much as possible to improve the lives of the underprivileged, one who is willing to fight against the system and achieve the potential influence through bottom-up approach, what concrete and practical

steps can I take to make a difference?

All these questions were in my mind for quite a while, and I had no answer for a long time. The persistent desire in finding a solution for this situation has never gone away. This personal internal drive is quintessential in this case, motivating me to become an entrepreneur, even before I realized that I wanted to be one. Not everyone can be or need to be an entrepreneur; however, everyone can have some level of contribution to the issues that are heavy on their hearts. My quest to search for a sustainable solution to serve these underprivileged migrant children started my journey.

Searching for Plausible Solution: Master of Architecture Thesis Design

With my background in architecture and design for over 7 years at that point, I was searching for a solution that can marry my expertise and background with serving their needs. One day in a class, an idea just hit me. I came to the realization that

2. PROBLEM STATEMENT 2.7 Social Enterprise Grassroots Startup: A Personal Story (Author)

education can be one of the most important life-changing keys to unlock their value in life. Also, without any illusion about non-profits, I was aiming at creating an institution that can be financially sustainable and socially responsible at the same time. Therefore, the component of business finally came into the picture.

The idea of combining arts/design, education, and business only matured when I was in the process of figuring out my Master of Architecture (MArch) thesis.

Even with all my focus on creating a sensible and beautiful building structure, the ultimate motivation of serving the migrant children had never fell out of my radar. I was constantly going back and forth to check with my building design to ensure the honest execution of my vision. As a vision carrier, I successfully conceived and formalized an architecture design proposal for serving migrant children. However, this is only the beginning of a long journey.

Seeking for Mentor and Team Members: Networking

I was fortunate enough to be selected as one of the Legatum Fellows in 2013, from which gave me tremendous amount of opportunity to learn and grow. I was offered workshops, seminars, and discussion sessions to make sure my business was being developed. I benefitted greatly from this entire process from one-on-one coaching, mentor guidance, and formal presentation opportunities in conference before potential collaborators and investors.

One of my key team members, Tan Zhao, was from the Sloan Business School MBA program, with over 10 years' experience in international financing operations. I connected to him through one of my fellow Legatum fellows after my first public presentation of my idea. It was very interesting how I encountered the right team member through an extremely unpredictable and informal process; namely, networking. There was no clear road map in any way in connecting me to potential

matching collaborators and contributors. It was entirely dependant on trial and error. I felt like I was working within a "black-box", where the only thing that I could control is the input, and I could only wait and hope for the best for the output.

There is no guarantee whatsoever in facilitating this difficult but highly crucial "matchmaking" process for social enterprise startups, because not everyone has the interest in doing both social good and business. The probability of finding matching team members and advisors is much lower compared with a pure for-profit venture. Therefore, the ability to aggregate useful contribution is highly crucial for social enterprise startups.

Refining Idea and Implementation: Business Plan Competitions

Thanks to Legatum Center's manager, Will Guyster, an experienced and highly passionate social entrepreneur and my mentor John Kennedy, a professor from the MIT Center of Real Estate, I managed

2. PROBLEM STATEMENT 2.7 Social Enterprise Grassroots Startup: A Personal Story (Author)

to work on my business plan consistently and incrementally. We went through many rounds of iterations and refinement. In the mean time I got a seed grant from the Legatum Center to implement and test my idea on the ground in China. It was very successful in many ways, and the idea grew into a startup within such a short time -- even when it's under the leadership of a founder who does not have a background in business.

Against all odds, my startup, M.I.SPOT (Micro-Institution Spot) got several recognitions from three business plan and pitch competitions, including the MIT \$100K Business Plan Competition, the MIT IDEAS Global Challenge, and the China Education Symposium Pitch Contest. M.I.SPOT also had the privilege to be featured as one of the key presented ideas in the Legatum Conference 2013.

When I first entered the MIT \$100K Business Plan Competition, I did not have any expectation other than making an effort to try out different things to see what worked. I was overjoyed when I got to know that M.I.SPOT got into the

semi-final round. Almost at exactly the same time, we got to know M.I.SPOT also got in to finalist I in the MIT IDEAS Global Challenge. A process of intense iterations began. We sought out connections to experts in related fields, reaching out to potential teammates and advisors. Through some help from the \$100K organizing team, we did find one mentor to help us with our business plan and pitch deck. However, despite all kinds of network events and personal connections, we did not have the chance to get any more matching teammates and advisors. The whole search process seemed to be quite random and too unpredictable, not guided in any way. We dedicated a lot of our efforts into pushing the business plan forward; however, this process of "seeking for help and advice" seemed to be quite unclear. In short, beyond "trying to meet as many people as possible and seeking every opportunity to pitch your idea", there were no explicit practical steps that entrepreneurs like us know how to take to ensure collecting useful contributions and collaborators.

At the meantime, we also needed to prepare and pitch in several other competitions. All these competitions brought us deadlines, requirements, and most importantly opportunities to get more exposure (networking) and gaining advice. However, the frustration that we had is that most of the competitions that we entered inherently favored other types of ventures, especially high tech or digitally related products/services. We came to the realization that even with the best effort and refinement of a business model, if it is not in the right context it might still have a hard time to progress to next level of development. My key takeaway from this experience is that even with the best efforts and motivation too many variables are in play within the process in searching for contributions and collaborators. I came to the conclusion that the key is to minimize these variables and lower the risk of trying for nothing or progressing on the wrong paths as much as possible.

2. PROBLEM STATEMENT **2.7 Social Enterprise Grassroots Startup: A Personal Story (Author).**

Funding Seeking

So far, we haven't managed to gather significant amount of donation or investment from any way we have progressed. M.I.SPOT is fortunate enough to have support from the MIT Legatum Center with two seed grants to help us testing the idea and operations. It is definitely a beginning of a long journey.

In 2013, M.I.SPOT was fortunate enough to be featured as one of the key presented ideas in a conference with 200 people. However, even with that level of exposure, we still did not manage to get any investment or donations. It is quite interesting to see that exposure does not guarantee opportunity of funding; however, it does open many doors for connecting to potential advisors and collaborators.

It is a long journey to identify and refine the competitive edge of our startup and at the same time find matching contributions. The process feels like playing a game without clear rules. Only the people who have played the game for a long time understand all the unspeakable, indefinable rules can manage to advance to further adventures. This "black box" scenario is highly undesirable; however this is the norm that entrepreneurs have to deal with.

A Long Way to Explore

It has been 2 years since I first conceived this idea. It has been a wonderful journey for me to explore and grow. Even though I do not know what will be next and what will lead to the success for my startup, life does has its hold on me and lead me towards many surprising turns on my life path. I am yet to see what is going to come.

2. PROBLEM STATEMENT

2.8 Benefits and Limitations

The benefits of social enterprise are obvious, since social entrepreneurship and social enterprise (social innovations/innovative social solutions) cut across traditional boundaries separating non-profits, governments, and for-profit business. Therefore, social enterprise has the advantages to attract support from both the ethical investment industry and usual private investment, gaining publicity and below market rate labor due to its social mission. The core focus on social mission with a sustainable financial approach helps social enterprises to gain a unique position in integrating the benefits across sectors, accomplishing social change through the social mission, maintaining financial sustainability through the for-profit approach, and creatively exploiting the resources from different sectors through its unique aggregation of different sectors' characteristics.

However, this uniqueness also contributes to its potential downfall and limitations. It is highly argued by many agencies that social enterprise has limitations in the following ways.⁴

1. Conflicting goals and strategies in social and business sectors bring extra difficulties. Social mission requires a different set of approaches compared with profit-driven business strategies. Social goals tend to bring extra challenges that a pure business would not encounter, and therefore overwhelm the business bottom line. For most pure for-profit businesses, making money alone is difficult enough. Social enterprises face a double challenge, both coming from the social and business sector, comparing with the pure for-profit ventures. In short, navigating across sectors requires careful strategic decisions in positioning business models and implementation strategies.

2. Unclear funding sources. Venture capitals and private equities emphasize profit above anything else, in great contrast to the core social mission of social enterprises. As a result, many social enterprises are having a hard time in acquiring investment. On the other hand, foundations favor more of a non-profit approach, into which social enterprise struggles to fit. In short, the in-between position that social enterprises are taking gives an ambiguity

that most of the investors and foundations are not looking for.

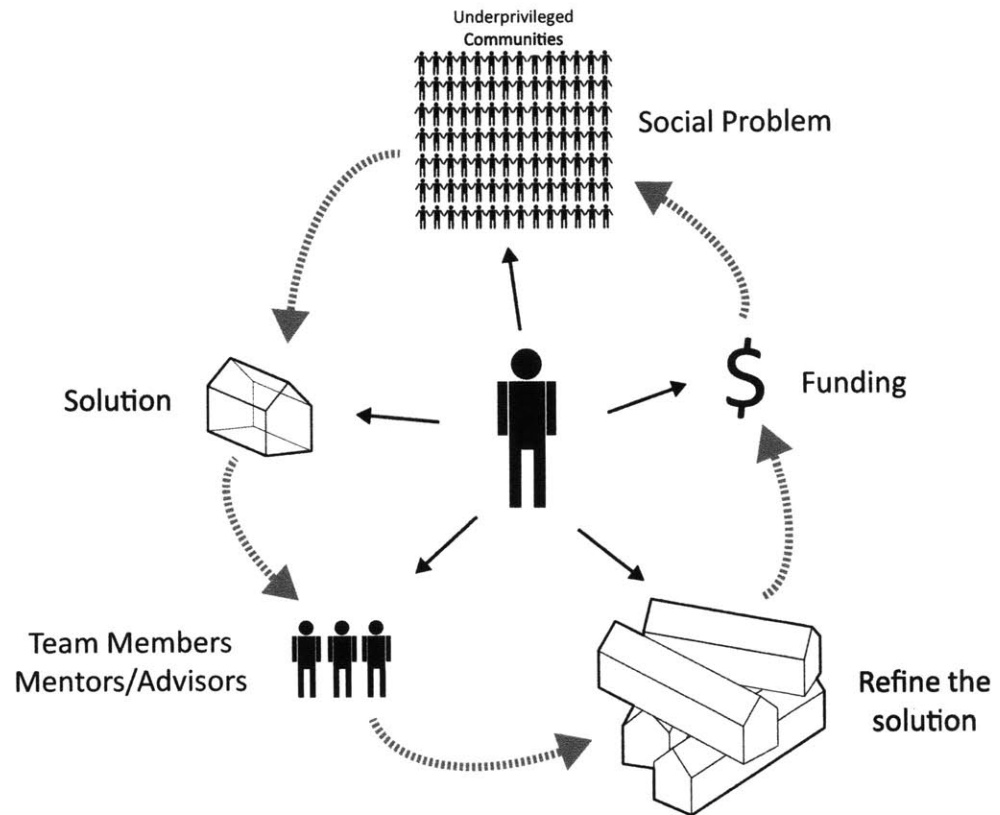
3. The social entrepreneur is a rare breed. The creativity required to accomplish the mission of social enterprise is exceptional. The abilities and temperament for this kind of work make social entrepreneurs extremely hard to find. As a result, it is very difficult to find appropriate contributions from capable individuals who have both the motivation and abilities to pursue both social and financial gains. Rodney Schwartz,⁵ the CEO and founder of ClearlySo, which raises investment for social entrepreneurs, described social entrepreneurs as extraordinarily innovative individuals, deploying models that seem to derive results out of thin air.⁶

The quest into a way in which can facilitate the process of matching appropriate resources, advice, and contributions to social enterprises will be essential for its success, achieving social changes at large. If "do good" can be coupled with "do better", social enterprise can gain a crucial competitive edges in reality.

2. PROBLEM STATEMENT

2.9 Conclusion: Social Enterprise Grassroots Startups

The process of building social enterprise grassroots startups has proven to be very difficult. It is highly unpredictable and requires a high commitment from the social entrepreneurs' individually persistent endeavors. Firstly, a social entrepreneur identifies a particular social problem and tries to come up with appropriate ideas as solutions. Secondly, they try to gather team members and advisors to support and carry the venture through to a higher level. Thirdly, they need to come back to the original ideas and refine them according to what they learn and the input they receive in the process. Lastly, they need to seek for funding and financial support along the way. These steps are not linear but cyclical. Furthermore, social entrepreneurs have to go through iterations of all these steps back and forth and navigate through this unknown and highly unpredictable territory without any sort of "map." Therefore, looking into potentially facilitating this process through an online presence might shed light on to an alternative way to conduct social enterprise grassroots startups.



3. CASE STUDIES:

Existing Digital Platforms Facilitating Social Ventures

3.1 Introduction

3.2 Methodology

3.3 Precedent Studies:

Existing Digital Platforms Facilitating Social Ventures

3.3.1 ChangeMaker

3.3.2 OpenIDEO

3.3.3 NABUUR (the Global Neighbor Network)

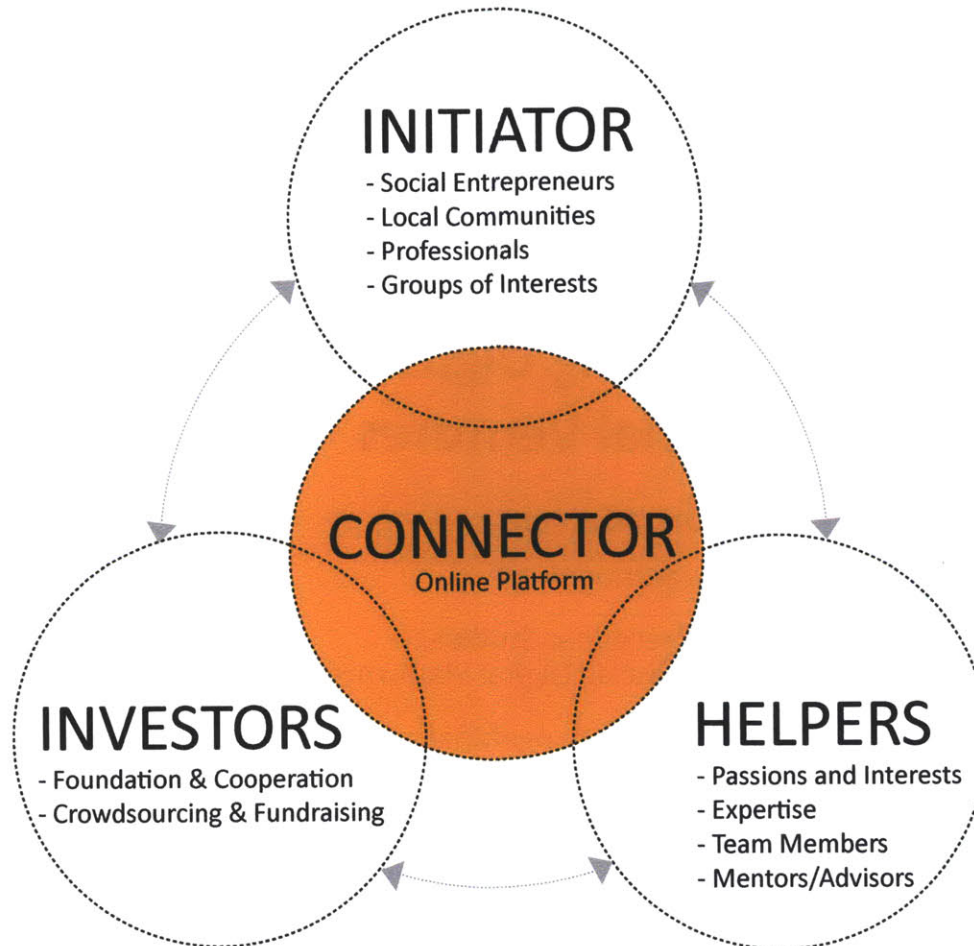
3.3.4 Global Giving

3.3.5 IDEAS Global Challenge

3.3.6 Engineering for Change

3.3.7 Engineers Without Borders

3.4 Conclusion: Existing Online Platforms Facilitating Social Ventures



3. CASE STUDIES

3.1 Introduction

The Mechanism of Social Ventures

The three key actors in social ventures include initiators, helpers, and investors. Initiators are the vision carriers and individuals or groups that initiate the venture and push through the projects. Initiators can take many forms, such as social entrepreneurs, local communities, professionals and groups of interested individuals. Helpers contribute to the collaboration on multiple levels, including in the highest level in an advisory capacity such as mentors, advisors, and team members; to the lowest commitment level, such as people with the expertise and connection that will be able to help for a short period of time along the way. Investors are groups or individuals that can provide funding, including foundations, cooperation, crowdsourcing, and fundraising processes.

The dynamics among all these actors are highly unpredictable and mostly depend on the initiators' personal effort to reach out, connect, and push through in partnership. Most of the existing online platforms function as the connector to link all these three actors together and facilitate the process. However, these online platforms tend to categorize participants into different roles and constrain the contributors into particular roles. However, the boundary between those three major actors should be less defined in order to provide a less managed but non-chaotic, self-organized collaboration model.

3. CASE STUDIES

3.2 Methodology



This chapter will investigate and evaluate the following established online platforms in order to identify the current modes of operation.

1. ChangeMaker
2. OpenIDEO
3. NABUUR
4. Global Giving
5. IDEA Global Challenge
6. Engineering for Change
7. Engineers Without Borders

The examining criteria include:

1. Satisfying Constraints (Context)
2. Interpreting social issue scenes
3. The models of acquiring funding, specific funding sources
4. Socially-engaging design language
5. Planning courses of action
6. The Effectiveness of Strategies

All the existing online platforms will be analyzed through the following aspects:

1. Historical Background: Reasons to Start the Web Platform
2. Overview
3. Model/System
4. Major Actors
5. Focus
6. Social Media Presence
7. Funding Model
8. Mentorship
9. Partners
10. Impact
11. Tools
12. Outcome for the Initiators
13. Outcome for the Helpers
14. Outcome for the Funders
15. Evaluation

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.1 ChangeMaker

<http://www.changemakers.com/>



Historical Background: Reasons to Start the Web Platform

Connection to Ashoka

Ashoka, founded in 1980, is the pioneer of the global field of social entrepreneurship. It has supported more than 3,000 fellowships for leading social entrepreneurs in more than 70 countries. Changemakers has been an Ashoka initiative since 1994 that focuses on advancing the vision of an “Everyone a Changemaker” world. Through a hybrid of online and offline collaborations and communication, Changemakers helps advance and scale-up blossoming social innovations.

Overview

Changemakers identifies and connects the best social innovators and implementers through online competitions and

“Changeshops”, an online network for scaling-up innovation. Participants compete to surface the most promising solutions, and then collaborate to refine, enrich, and implement them. Changeshops offer a place to plug game-changing ideas into networks of resources, talent, and support.

Model/System

Changemakers has established itself as a pioneer in applying an open-source approach to showcasing and supporting innovations for social change through its collaborative competitions. It provides tools that not only identify solutions, but also help them grow. This is part of a new trend in the social sector called Open Growth. Its goal is to provide a transparent network; open to all, for bringing resources to innovative solutions so they can scale-up their impact on the world. It’s called Open Growth because it’s based on the open tracking of progress. It gives investors a way to track innovators’ success and reward it.

Major Actors



Initiator:

Innovators: People putting creative new ideas to work to solve social problems.



Helper:

Advocates: People compelled to support the work of social innovators.



Funder:

Investors: People who provide resources to accelerate the most effective solutions.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.1 ChangeMaker

Focus

To grow new ideas through transparency and collaboration, a process of Open Growth.

Social Media Presence

Twitter (400,000 + followers) Facebook (12,000 + Likes) YouTube (200 subscribers, 30,000+ views)

Funding Model

Channel funding directly to innovation teams from sponsors... Over 600million in funding has been channeled through Ashoka.

Mentorship n/a

Partners

Ashoka, Nike, Bill and Melinda Gates Foundation, G 20, Exxon Mobil, EBay, the Rockefeller Foundation



Impact

Building an “Everyone a Changemaker” world

Ashoka Changemakers is a global community of action that grows the impact of changemaking – from dedicated individuals and community organizers to Fortune 500 companies and global foundations.

Open Growth

Open Growth allows their community to transparently collaborate on identifying, tracking, and accelerating cutting-edge innovations.

The following image is the official numbers that the website put out.



3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.1 ChangeMaker

Tools

Changeshops -A changeshop is the way to broadcast innovators' ambition and success to would-be investors. It can be considered as an online storefront for new ideas, innovations, or social ventures.

The initiators, helpers, and funders exchange their ideas through this format. The innovators present their ideas/projects through answering all the questions listed in the website and create these webpages as show in the image here. However, the process is quite one-directional and lacks the encouragement for interaction among major actors.

The screenshot shows a project profile on the ChangeMaker platform. At the top, the ChangeMaker logo is on the left, and navigation links for 'Projects', 'Opportunities', and 'Getting Started' are on the right. The main heading is 'STEM FOR ALL'. Below it, a small image shows a group of diverse students looking at a laptop. To the right of the image, key details are listed: Website (http://elite-education.org), Business Model (citizen sector), Annual Budget (\$50,000 - \$100,000), Sector (Children & Youth > At risk youth +3 more tags), and Location (United States). A 'Stage of Project' progress bar shows five stages: 1. Idea, 2. Start-up, 3. Growth (highlighted), 4. Established, and 5. Scaling. Below this are three tabs: SOLUTION, SUSTAINABILITY, and TEAM. The 'SOLUTION' tab is active, displaying a paragraph about ELITE's in-school enrichment programs and online learning platforms. Below this is a 'Problem' section describing the lack of access to strong academic programs for Black students, and a 'Solution' section describing ELITE's project-based curriculum. At the bottom, a 'Get Involved!' section has three categories: FUNDING (with a note 'There are no offers/needs.'), TALENT, and VISIBILITY. On the right side of the page, there is a 'Take Action' section with buttons for 'NOMINATE', 'FOLLOW', 'SHARE', and a Facebook 'Like' button showing 0 likes. Below this, it says 'Created: July 31, 2013' and 'Last Update: July 31, 2013'. A 'Connections:' section notes that no one has connected with Chelsey Roebuck yet. A 'Related Projects' section lists 'BigDada Me - An Engaged Learning Workforce Solution'.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.1 ChangeMaker

Outcome for the Initiators (Local Communities)

- Enter competitions to share ideas, gain global attention, and win cash prizes.
- Build a changeshop to broadcast the success and discover new resources.
- Connect with members of the community to draw on their talents and resources to fulfill the organization’s needs.

1. Idea 2. Start-up 3. Growth 4. Established 5. Scaling

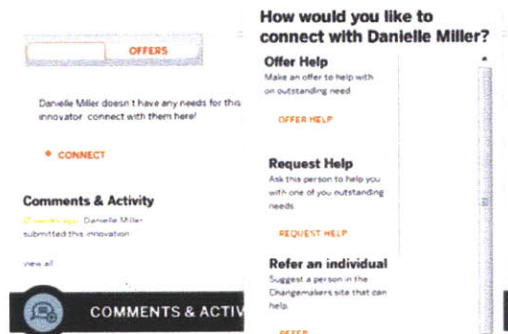
Stage: Milestone 2 of 4



The result achieved by the ideas and projects are mostly represented by these bars of progress as shown above. It is quite unclear through the website how much progress have they made other than these abstract bars with lists of description.

Outcome for the Helpers (Online Volunteers)

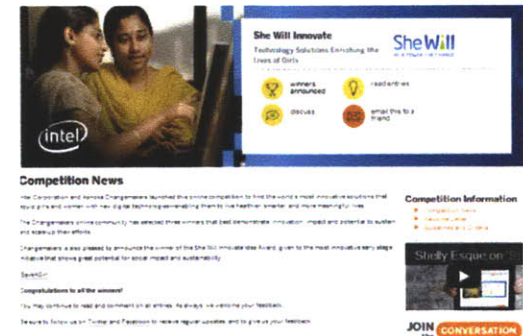
- Connection to an inspiring idea and a clear call to action.
- Actively offer help and support to the innovators.



The achieved result for the contribution from the helpers is highly unclear. Other than the venues provided to ask for help from potential contributors, helpers themselves are not very easily offering help. The natural flow of developing ideas and growing projects is not very present here. In short, helpers can contribute but only when the innovators ask.

Outcome for the Funders

- To discover the next great innovations.
- Set up competitions to draw forth innovative ideas for a particular agenda.



This online platform provides a clear structure for funders to contribute mainly through setting up competitions. Change-maker does not directly provide funding, however, it offers a platform for the funders to present their goal and gather innovative ideas and projects. In short, this platform highly benefits the funders.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.1 ChangeMaker

EVALUATION



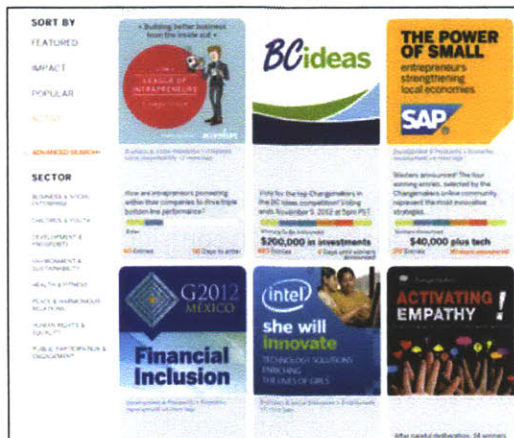
- **Close Partnership with Investors**
Changemakers has channeled 600 million dollars to social innovators, but they don't actually raise the money... they partner with organizations or companies who are the ones with the \$\$\$
- **Wide Range of Funding Opportunity**



- **Hosting Web-competitions**
(50+ to date) to help “source powerful social innovations” each competition has a different sponsor and different theme
- **Global Impact**
125 countries are represented in changemakers collaborative network of innovators



- **Biased towards Favoring Funders**
The highly structured competition section for investors give them opportunities to support ventures that meet their agenda.
- **Less Clear Infrastructure for Helpers**
The categorization of all the social innovations (Changeshops) is very clear, however, there is no clear facilitation for helpers.
- **Favoring ideas and projects that are ready for scaling up**
The “storefront” Changeshop relies on the innovators to well present their ideas, and helpers’ active contact to other participants. The process is very formal and doesn’t facilitate a natural flow of collaboration for growing ideas.



3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.2 OpenIDEO

<http://www.openideo.com/>



Historical Background: Reasons to Start the Web Platform

Since August 2010, IDEO, a design and innovation firm, developed OpenIDEO as a way to include a broader range of people in the design process through inspiration, concepting, and evaluation. Nathan Waterhouse co-leads OpenIDEO with Tom Hulme, a Web-based platform that enables the community at large to help design human-centered solutions to social and environmental problems worldwide.

OpenIDEO is a place where people design better, together for social good. It's an online platform for creative thinkers: the veteran designer and the new guy who just signed on, the critic and the MBA, the active participant and the curious lurker.

Together, this makes up the creative guts of OpenIDEO.

To become a place where good ideas gain momentum, OpenIDEO depends on participation — your inspirations, his comments, her concepts, OpenIDEO's design process. It's these efforts, these big and small moments of sharing and collaboration, which make this platform a dynamic resource for tackling significant global challenges.

Overview

How does OpenIDEO work?

After a challenge is posted at OpenIDEO.com, the three development phases — inspiration, "concepting", and evaluation — are put into motion. Community members can contribute in different ways (through inspirational observations and photos, sketches of ideas, to business models and snippets of code).

People participating in OpenIDEO provide

feedback every step of the way. Between each development phase, IDEO helps shape the journey through framing the challenge, prototyping, and encouraging the conversation.

Eventually concepts are chosen as winners. All concepts generated are shareable, remix-able and reusable by anyone — in a similar way to Creative Commons. The hope is that some of these concepts will become reality outside of OpenIDEO.com

Model/System

"An Open Platform for Innovation Where We Create Better. Together."

Challenge Timeline:



3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.2 OpenIDEO

THE BIG QUESTION

Every challenge starts with a big question posed by OpenIDEO and our challenge sponsor. It's like a newspaper headline and a call to action, with the Challenge Brief offering more details about the issues being tackled.

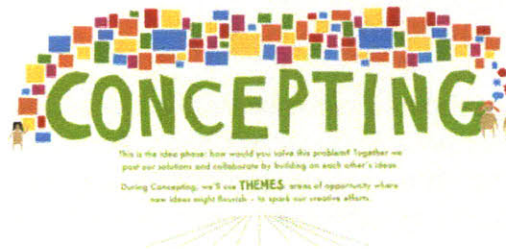
Big Question

OpenIDEO and sponsor team set goals in the form of big questions



Inspiration

collect existing examples of possible solutions, brainstorming process



Concepting

take the insights from the Inspiration phase to develop participants' own creative and innovative ideas to address the challenge question.



Applause

OpenIDEO core team encourages participants to help choosing their shortlist by applauding and commenting on favorite concepts.



Refinement

collaboratively strengthen the shortlisted ideas, helping them achieve even greater impact.

Evaluation

consider the shortlisted concepts according to factors like viability and potential for impact to help OpenIDEO's core challenge team select the winning ideas.

Winning Concepts

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.2 OpenIDEO

Major Actors



Initiator + Helper =

Inspirers + Concepters + Evaluators + Collaborators (All users have the choice to contribute in different roles.)

Over 34,000 users (only 2 years old) over 5,000 inspirations and 2,500 concepts have been developed



Funder:

Not present in the process

Focus

An open platform that applies basic design principles to innovative ideas and creative solutions to global problems

Social Media Presence

Twitter (16,000 + followers) various YouTube videos (no channel) Facebook (7000 + Likes)

Funding Models

no direct funding is offered, though a sponsor may end up adopting your idea and offering funding to implement the idea in the future

Mentorship N/A

Partners

Each challenge is sponsored by a company, organization, or govt. bureau, or by IDEO itself

Tools

1) Challenges catalog

How might we all maintain wellbeing and thrive as we age?
We will all age and we all have people in our lives who are aging: parents, grandparents, friends. Most of us wish to retain our wellbeing and autonomy physically and mentally – to remain in our homes, in our communities. Within elderly related social, economic, and cultural contexts, how can we help people understand their options, make informed decisions and advocate themselves towards a state of wellbeing as they grow older? How can we help people thrive and live the lives they wish to live as they age?



How might we gather information from hard-to-access areas to prevent mass violence against civilians?
USAID, Humanity United and OpenIDEO have partnered to pursue ways to prevent mass atrocities – that is, deliberate mass violence against civilians. Examples of mass atrocities include genocide, ethnic cleansing and mass rape. Often the perpetrators of these crimes try to conceal their actions – blocking journalists and humanitarian organizations from entering the area, blocking internet and mobile access, etc. How might we better listen and respond to the needs of victims in these situations even though physical access may be limited? How can we help gather information from these regions, given the challenges of actually being on the ground? Let's collaborate to explore this topic and propose solutions – which might include services, platforms, tools, products or approaches – to tackle this critical yet complex issue.



OpenIDEO and their sponsors posed all the big question as challenges. Within different challenge, there is a schedule for conceiving, refinement, evaluation, and selection of winners. Participants can choose to initiate a concept or help to refine the ideas through the commenting section. However, users themselves do not have the opportunity to start a challenge.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.2 OpenIDEO

2) User profiles database

Johan Löfström
"Buy less crap - work little less - live more - feel richer"
 Extremely creative mind with speed, positivity and criss-crossing between many different interesting topics at the same time.
 I am trying to live extremely green and with a minimum carbon footprint.
 Read my very long testimonial below, if you are interested

Recent Contributions

- Gamify microexercise (update may 8th)**
 Please ignore the project proposal below suggest that everyone joins 1 or 2 of the gamable events. But go on constantly. + "exercise" BCL, exercise, entertainment, competition, Wymarking / Tail Game
 December 14, 2012 12:21AM
 277 likes
 30 comments
 71 applied
- Sculpture auctions**
 Create open competitions for all students within 6 volunteering hours. Let them build constructional sculptures out of 6 collected locally. Auction these and spend their money for more local environments

My Design Quotient

INSPIRATION	167%
CONCEPTING	236%
EVALUATION	530%

6,548 INSPIRATIONS
 3,264 CONCEPTS
 42,270 USERS

The active users will have their own profile showing all the contributions that they've made. The badge of honor, "My Design Quotient", is quite effective in showing users' effort and motivating them for further participation.

44

3) Idea/Concept Profile

How might we all maintain wellbeing an age?

INSPIRATION 317 inspirations | IDEAS 134 concepts | APPLAUSE 134 final concepts | REFINED 20 final

14 days before Refinement finishes

Check out the concepts so far!

Challenge Brief

We will all age and we all have people in our lives who are ageing: parents, grandparents, friends. Most of us wish to retain our wellbeing and autonomy and mentally - to remain in our homes, in our communities. Within wider social, economic and cultural contexts, how can we help people understand options, make informed decisions and activate themselves towards a fit wellbeing as they grow older? How can we help people thrive and live fit wish to live as they age?

Learn more

- Guiding Principles →
- Ageing Peoples →
- Additional Resources →
- Interview Toolkit →
- Q&A with Mayo Clinic →
- Factors that Impact Ageing →
- Brainstorm in a Box →
- Lowdown on Virtual Teams →
- Lowdown on OpenSTORMS →
- Tips for Ideas →
- Design for People, Not Age →
- Lowdown on Refinement →
- Design Priorities for Refinement →

Users have the choice to either enter the challenge or comment on the proposed concepts/ideas. The commenting process happens mainly in the blogging section. Through the online chatting/blogging method, users manage to exchange ideas and updates.

Outcome for the Initiators + Helpers

FEATURED IMPACT STORY
The Bone Marrow Donation Challenge
 Stanford University Haas Center for Public Service and 100K Cheeks
 Our Bone Marrow Donation Challenge focused on increasing the number of South Asians signed up on the U.S. bone marrow registry. In this challenge our community collaborated its way to winning concepts that raised awareness, outlined toolkits for social media campaigns, and even planned cheek-swabbing parties. Since the challenge ended, 100K Cheeks has helped register over 100,000 new potential bone marrow donors, thanks in large part to a website they developed based on the OpenIDEO community's concepts. And for our community, impact was achieved simply by learning more about bone marrow donation and for many of us, actually swabbing our cheeks and signing up for the bone marrow registry. [Read more...](#)

FEATURED IMPACT STORY
The Sanitation Challenge
 Unilever and WSPUR
 The purpose of our Sanitation Challenge was to focus on sanitation and waste solutions for low-income, urban areas like Kumasi, the second largest city in Ghana. Together our community surfaced a wealth of inspirations and posted a variety of ideas that played a big role in shaping the design and rollout of Clean Team, a sanitation service that is currently being piloted with 80 families in Ghana. [Read more...](#)

The initiators are the sponsoring organization and IDEO team. It is a highly controlled process, and not anyone can post a challenge (big question). The outcome that initiators gain is clear, including all the ideas and inspirations from the participants. The final stage of each challenge will be the realization stage where the sponsoring organizations carry out their own project in the field.

The helpers are the users who contribute ideas, advice to the entire process. Their ideas/concepts will be voted to gain recognition and potentially become winners. They will also gain their "design quotient" as a visual way to represent their contribution in this community.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.2 OpenIDEO

EVALUATIONS



- Created incentives for users to join the community through user recognition and the 'Design Quotient'



DESIGN QUOTIENT

The Design Quotient is how we recognise the unique innovation strengths of each of us. As we contribute to OpenIDEO in various ways, we earn DQ points, which becomes a badge of honour over time.

DQ is basically a measurement tool for members that indicates which of the four phases the user is strongest in. inspiration, concepting, evaluation and collaboration. OpenIDEO members use this as a 'badge of recognition'.



- Less defined collaboration model, each individual is a contributor and can contribute to different stage of different ideas.

- Visualization of the connectivity of different collaborators and ideas.



- Highly controlled process

Only sponsors and IDEO team can post big question as challenges. All the users can only contribute to the brainstorming process. Even after the winning concepts are chosen, most of the ideas won't be implemented.

- Ideas/Concepts stayed only in the brainstorming process, but not directly to be implemented in the Realization Process.

Even though the realization and winners announced process are all presented in the same bar, it gives people a wrong impression that they are all done by the users.

- Only Promoting Idea Generation Process (Brainstorming), but not realization.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.3 NABUUR

<http://www.nabuur.com/>

nabuur.com
the global neighbour network

Historical Background: Reasons to Start the Web Platform

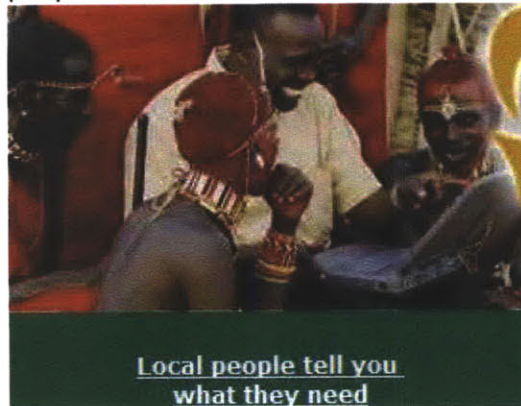
NABUUR Foundation is a Dutch not-for-profit organization, founded on 30 October 2001. NABUUR's goal is to give local communities all over the world access to people from elsewhere who can help solve the local sustainability problems. The role of the NABUUR organization is to generate credible local agendas, to mobilize virtual neighbors around the world and generate new solutions and to enlarge the effect by making the lessons easily accessible and by telling the stories through the media. In other words, NABUUR creates the mechanism that gives local communities direct access to others.

"I'm interested in a new organizational concept," said NABUUR's founder, Siegfried Woldhek, "where a local community

calls the shots" in determining the advice or assistance they want. By embracing the open-source concept (other popular examples of which include the Linux operating system, the Firefox browser, and Wikipedia, an online encyclopedia), Mr. Woldhek, who previously directed the Dutch branch of the World Wildlife Fund, hopes NABUUR will eventually take on the self-organizing characteristics of a real neighborhood, eliminating the need for a central controller.

Overview

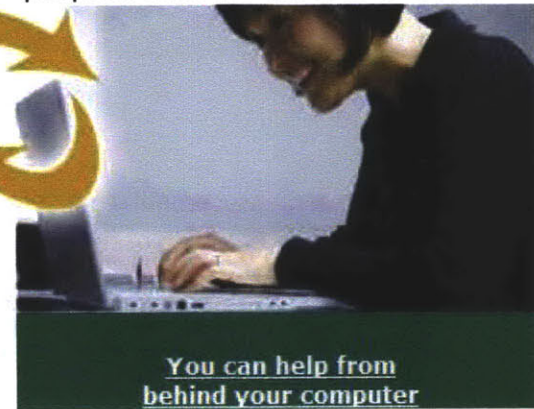
NABUUR leverages the Internet to enable people around the world to connect and



collaborate. Online volunteers (Neighbors) are matched to and linked with Local Communities (Villages) in developing countries through the platform. The people living in the Villages formulate projects to address local issues. Together, the people and the Neighbors find solutions. For Neighbors, the focus is not on donating money, but on sharing knowledge, ideas and contacts. This approach leaves the initiative in the hands of the Villages.

Model/System

NABUUR leverages the internet to enable people around the world to collaborate.



3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.3 NABUUR

Major Actors



Initiator:

Villages: Local Communities in Developing Countries



Helper:

Neighbors: Online Volunteers



Funder:

Not Present

Focus

NABUUR connects online volunteers with communities in developing nations to find sustainable solutions for local problems.

Funding Models

Doesn't provide funding.

Mentorship

No mention of mentorship programs.

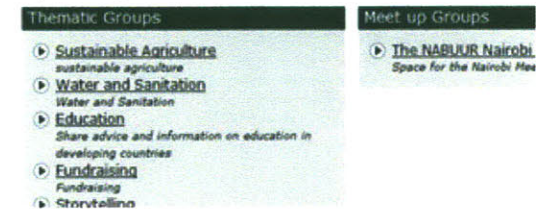
Partners

very limited



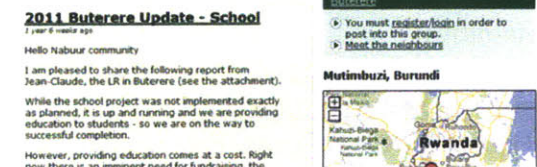
Tools

1) Groups



different categories of projects and opportunities

2) Villages



Village is the place on NABUUR where new solutions are found for the local community.

A Village on NABUUR.com can represent a settlement, a township, a refugee camp, a slum, a neighborhood or any other place where a group of people lives.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures


3.3.3 NABUUR

3) Neighbor

Mary

Village / City:
York, United Kingdom

My motivation:
I enjoy getting to know people from around the world. Although different places, I think we can all learn a lot from each other. I want to encourage local communities to build on their own skills, and find long-term solutions to the issues that they face.



More about myself:
I am the Facilitator for Buchanan village in Liberia, and we are working to improve their primary school. We would welcome you as a neighbor.

An online volunteer, everybody joining NABUUR is called a Neighbour.

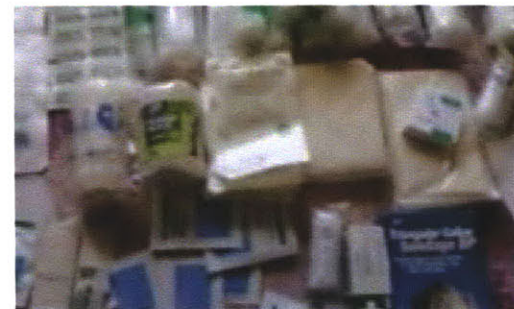
Outcome for the Initiators (Local Communities)

1) Tangible Outcomes: Physical Objects, such as built structures, gifts, aids, etc.

Figure 1. Notre Dame High School received a grant of 12,000 pounds to build new and improved washrooms for the boys, including a water tank.

Figure 2. Netherland friends visited the school and brought gifts for both parents and the children.

Figure 3. First aid materials donation received.



2) Intangible Outcomes: Ideas, Concepts, Information, Services.

- Examples include helping to refine a proposed solution, connecting the community to organizations or people, volunteering to revise business plan, build websites (anything that can be done online).

- Mainly through the blogging format.

Danielle Herman Re: Volunteers needed to create our business organizations



Tue, 2012/08/21 - 17:34

Dear entrepreneur,

A great project you are setting up! I am at your disposal to help in creating a business plan. I have written a Bachelor in Hospitality Administration. I am also a poet and have a financial advisor of my own who can double check the numbers if you need it.

Hope to hear from you!

Greetings,
Danielle

Average:
☆☆☆☆☆

22 reads

JOSEPHAT BWIRE Volunteers needed to create our business plan organizations

Wed, 2012/08/22 - 09:41



Hi Danielle,

Thanks for the response hence we have a program ENTERPRISE INCUBATOR, aimed at equipping local entrepreneurs with vocational & life skills and finally nurturing their ideas in an incubator whereby the trainees will be involved in producing products & services which will be sold to the public. The proceeds which will be used to pay them allowance and ex-

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.3 NABUUR

Outcome for the Helpers (Online Volunteers)

Helpers' contribution shows mostly in the format of verbal communication in the blogs and offline communication with the community leaders. They contribute comments, information, connection, expertise, and ideas. Many of the advice is about directing the community to the possibly-related helper. Some of them offer direct help ranging from web design to providing money. From the helpers' perspective, the impact of their contribution tends to be not so clear, if not having offline personal contacts.

Neighbours around the world		
Erisjct.TZ last online 22 weeks 1 day ago		Colchester, United Kingdom 15 posts
Gillian last online 30 min 10 sec ago		Edinburgh, United Kingdom 12 posts
Sustanta Lahir last online 2 weeks 5 days ago		Kolkata, India 10 posts
Michelle Rowden-Gandy last online 1 year 27 weeks ago		Caerphilly, United Kingdom 10 posts
		

EVALUATIONS



- Creating direct linkage from online volunteers to the local communities.
- Self-Organization as the initial vision and concept to establish a flexible system.



- Mismatch of the need and the help. The local communities tend to ask for money and supplies, while most of the volunteers might not be the direct help.
- Highly Informal: Volunteer-run website. Intended to be self-organized, however, the quality of the results tend to be small scale and about short term needs.

- Lacking filtering system for the information provided by volunteers or local communities.
- Good intention to facilitate local communities' initiatives, however, the vision provided by the local communities tends to be immediate and short term.
- Lacking high quality mentor system to guide/nurture the proposed projects to a higher level.
- The progress of the project and the contribution from the helpers are mixed and unclear.
- The online volunteers can only provide advice, connection, information, and expertise which highly rely on staying online.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.4 Global Giving

<http://www.globalgiving.org/>



Historical Background: Reasons to Start the Web Platform

In 1997, World Bank executives Mari Kuraishi and Dennis Whittle were asked to develop innovative ways to combat poverty. They created the World Bank's Development Marketplace, a first-of-its-kind event where people from around the world competed for World Bank funds. The event's success unveiled the enormous potential of a global marketplace for philanthropy, and participants asked for a real marketplace that was open year round and operated virtually. Mari and Dennis saw the brilliance of this idea, left the World Bank and launched GlobalGiving in February 14, 2002.

Overview

GlobalGiving is a charity fundraising web site that gives social entrepreneurs and non-profits from anywhere in the world a

chance to raise the money. It is an online marketplace that connects donors with grassroots projects in the developing world. As a web-based fundraising platform, it is based on social networks and real-time feedback between donors and grassroots social entrepreneurs or "project leaders". Each organization pitches one or more development projects to prospective donors on the website. The funding decision for each project is crowd-sourced to the public, rather than determined by a team of experts.

Model/System

Global Giving works with registered organizations to raise money and organize donors for specific projects in communities all over the world. Unlike a traditional foundation, Global Giving does not provide grants. Instead, they offer organizations an easy-to-use fundraising and donor management system, fundraising tools and training, and access to their corporate partners and media outreach.



3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.4 Global Giving

Major Actors



Initiator:

Social Entrepreneurs and non-profits that can prove themselves as qualified registered organizations through the criteria that set up by GlobalGiving and screening from the cooperate partners.



Helper:

GlobalGiving Team



Funder:

Individual Donors + Businesses and other organizations with custom giving services and specific giving needs

Focus

The mission is to catalyze a global market for ideas, information, and money that democratizes aid and philanthropy.

Social Media Presence

40,000+ Twitter Followers , 34,000+ likes on Facebook

Funding Models

Pairs individual donors with individual organizations/ teams through direct donations. GlobalGiving takes 15% of the total donation.

“We ensure that at least 85% of your donation is sent to the organization implementing the project you chose within 60 days. Donors have the option to cover GlobalGiving’s 15% fulfillment fee, in which case 100% of the original donation goes directly to the implementing organization.”

Mentorship n/a

Partners

“We also provide businesses and other organizations with custom giving services and help them with their specific giving needs. Some of our corporate partners include Dell, Gap, Pepsi, Nike, and Neutrogena.”



3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

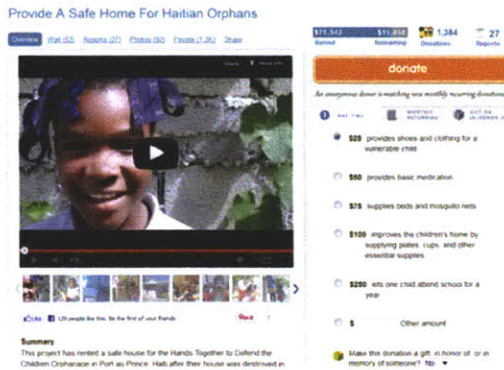
3.3.4 Global Giving

Tools

Website offers Direct donations via credit card.

The registered organizations can post their projects through the screening process and gain donation from people all over the world.

The donation process is designed to be convenient easy to capture all possible funding.



The corporate partners have a particular section in the website to contribute their donation through different means.



Outcome for the Initiators (Registered Organizations)

“Since 2002, GlobalGiving has raised \$76,345,017 from 304,035 donors who have supported 7,051 projects.”

The organizations are mostly established NGOs. GlobalGiving provides them an extra venue to seek for funding.



Outcome for the Funders (Donors and Corporate Partners)

Project leaders are encouraged to post progress reports on GlobalGiving regularly; typically, reports are posted every 3-4 months. There are about 21,052 progress reports since 2002. Donors get to see the progress from the projects through these progress reports.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.4 Global Giving

EVALUATIONS



- Connecting Donors to Doers

No Grants given by Global Giving, instead Global Giving connects donors to projects and collects a fee for doing so... they provide the network for giving to teams or organizations...

- Good Publicity with Notable Partners:

They get a good amount of publicity and have many notable partners within the non-profit and for profit communities including Dell.

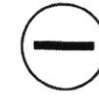


- Global Impact

GlobalGiving has helped 6,653 projects, non-profits and social entrepreneurs grow their community of donors and volunteers to raise a total of \$74,323,258.

- Quality Control of the Projects

Projects that can be allowed to fundraise in the website need to be initiated by registered organizations and prove their ability to carry out the projects.



- Difficult for Non-established Teams to Fundraise

The quality control of the project is very necessary; however, the structure greatly limits the types of projects that can fundraise in the platform. A lot of the projects are from fairly established organization. It is not very fitting for startup teams which have not registered or become more established to fundraise.

- Not all the funding will be channeled to the projects.

15% of the donation will be used for supporting GlobalGiving's organization. This is quite an overhead cost.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.5 IDEA Global Challenge

<http://globalchallenge.mit.edu/>



Historical Background: Reasons to Start the Web Platform

The IDEAS Competition is a MIT campus-based innovation competition that encourages student teams to develop and implement projects that make a positive change in the world. Since 2001, more than 50 IDEAS teams have received awards to implement innovative community-based solutions to real problems. IDEAS teams have worked in more than 25 countries, served the needs of tens of thousands of people, and secured over \$2.2 million in follow-on funding from sources such as the World Bank, USAID, Microsoft, the Clinton Global Initiative,

AT&T and the National Collegiate Inventors and Innovators Alliance.

Developed in conjunction with last year's MIT150 and built on the success of the IDEAS Competition, the IDEAS Global Challenge offers a window into innovation at MIT and invites students, faculty, staff, alumni, and their collaborators to identify and address community development challenges through innovation and collaboration in communities around the world.

Overview

The MIT IDEAS Global Challenge connects students with the passion and talent to improve the world with the experience and resources of the MIT community worldwide. This organization supports innovation and entrepreneurship as public service through an annual competition that awards up to \$10,000 per team for the best ideas to tackle barriers to well-being.

Model/System

MIT IDEAS Global Challenge has three major components. Firstly, a webpage for student teams to showcase/broadcast their projects. Second, an offline mentorship program helps the teams to further their ideas. Thirdly, the IDEAS Challenge management team organizes mentoring and networking events to help nurturing the teams. The funding is fairly limited, with the awards up to \$10,000 per team for the best ideas. The participants don't have to be affiliated with MIT; and everyone is encouraged to contribute time, energy, and expertise to support student innovation as public service. All teams must be 1/3 MIT students to be eligible to win an award.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.5 IDEA Global Challenge

Major Actors



Initiator:

Teams with at least 1/3 MIT students



Helper:

Mentors: MIT Alumni.



Funder:

Not Present

Focus

Creates an exciting window on invention as public service at MIT and a gateway for alumni to support student innovation for public benefit.

Funding Models

What sponsorship means:
Sponsors who make a financial contribution toward the Global Challenge help to meet their bottom line – make awards, innovate on the Global Challenge platform, staff the Global Challenge and cover overhead. Sponsors can come at any level.

How to donate:
Make a gift to the MIT Public Service Center.

Mentorship

offline meeting and networking.

Partners

In addition to their key partners in 2010-2011- the MIT150 and the MIT Alumni Association, they also work with:

- The Public Service Center at MIT
- The Community Innovators Lab (CoLab)
- D-Lab
- The Edgerton Center
- The Global Poverty Initiative
- The International Development Initiative (IDI)
- The Legatum Center for Development and Entrepreneurship
- Sloan Entrepreneurs for International Development (SEID)

Tools

The basic unit for showcasing student team projects is through this website, from which people can choose to follow or contact the team. However, the mechanism is structured one directional.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.5 IDEA Global Challenge

Outcome for the Initiators (student teams)

The team website and the mentoring events are the two major benefits that most of the teams can get from IDEAS Global Challenge. However, the traffic of the websites is highly dependent on individual teams' personal effort of getting attention, and also directly related to the voting process. When the challenge is in its community voting process, the traffic of the website will peak, however, not any other time. In short, the teams get the benefit of broadcasting their project through finite amount of time, and the of-line mentorship support.

Outcome for the Helpers (MIT Alumni Volunteers)

The volunteers from MIT alumni and other partners contribute their expertise, time, and advice to help the team furthering their ideas. Any general public can

contribute fundings.

EVALUATIONS



- Tight connection to MIT resources in large, utilizing the MIT alumni and partnerships power to help furthering student team projects.
- Strong management team in organizing the mentorship programs and offline networking events to help teams expand their capacity.



- Overly structured interaction among student teams, mentors, and funders. Student teams can only showcase their projects, but not too much interaction with mentors and funders through the online platform.
- The mentorship programs rely heavily on the offline events and the management from the IDEAs Challenge teams.
- No structure for funders to contribute.
- The attraction of traffic through the website depends too much on teams' individual efforts.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.6 Engineering for Change

<https://www.engineeringforchange.org/home>



Background

E4C Online Platform Launched in January 2011, E4C's innovative online platform provides users with a convenient and diversified way to collaborate and share knowledge, leading to enhanced problem solving and impact. E4C users are able to:

- Post challenges to gain insight, perspectives and experience from other E4C community members.
- Work collaboratively and virtually on project teams.
- Utilize a growing, open-source archive of catalogued technical solutions and related information submitted by organizations from around the world.
- Keep updated with news and information related to the nexus of engineering and global development.

- Learn from expert practitioners on applying engineering in developing countries.
- Follow projects of particular interest.

Model/System

Problem Central Model

Major Actors

Initiator:
Engineers



Helper:
Social scientists, NGOs, local governments and community advocates



Funder:
Not Present



Focus

The focus of E4C are the **networking and problem-solving components**... E4C does not offer prizes, or funding, but rather connects engineers who already have funding or are seeking funding to those with ideas or problems that need funding or solutions.

Social Media Presence

Strong social media presence compared to organizations of similar age.

Facebook (8,000+ likes), twitter (5,000 + followers), YouTube (11,000 + views), LinkedIn, Flickr

Funding Models

Doesn't really touch on funding, mostly networking and problem solving.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.6 Engineering for Change

Mentorship

No direct mention of mentorship programs, but offers connections.

Partners

Founded by several groups of global engineering organizations (Engineers Without Borders USA, American Society of Mechanical Engineers, and Institute of Electrical and Electronics Engineers.



E4C Workspaces

where members can come together to collaborate and solve challenges.

E4C Bulletin Board

for posting inquiries, find resources or offer assistance to the community

E4C Learning Lab

offers the appropriate and scalable solutions, share best practices, and connect with leading thinkers from around the world

E4C Solutions Library

houses the growing collection of cataloged global solutions and related information from organizations throughout the world... Solutions are free to be adapted or innovated further.

Members- directory of members (10,000 +)

EVALUATIONS



- Strong social media component adds to exposure and reputation

- 'Solutions library' is catchy. In general their tools or 'resources' are formatted well, easy to find, coherent

- Successful at organizing members into a valuable network (social media, bulletin boards, etc.) and engaged community of engineers



- Much more of a problem-driven model... little opportunity for funding from E4C, there is a page in the 'Bulletin Board' titled 'funding' but it seems that there is very little actual funding floating around.

3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.7 Engineers Without Borders

<http://www.ewb-usa.org/>



Background

EWB-USA has chosen the delivery of smaller scale infrastructure projects within an overall community program framework as its program delivery model. At its core, the EWB-USA model is rooted in practical engineering solutions.

EWB-USA’s vision has two components: one of building the capacity of developing communities to meet their basic human needs in a sustainable manner, and one of providing innovative professional educational opportunities that offer an important global perspective of the developing world. It is this combination that

Model/System: Organizational Structure

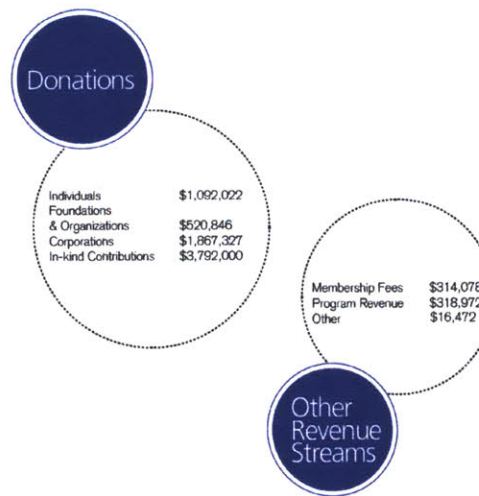


Operational Strategies

The overall strategic outcome of EWB-USA is to accomplish EWBUSA’s vision and mission while strengthening its position as a leader in the field of community development and transformational education. Having achieved such a leadership position, EWB-USA will become the first choice among engineering and technical organizations for partnerships in providing assistance to small, developing communities, and a complement to university engineering education and life-long learning.

There are organizational prerequisites (structure, processes, tools, talents, financial strength, relationships, alliances, etc.) that must be in place to achieve EWB-USA’s mission in alignment with its three guiding principles. EWB-USA has chosen four operational strategies complete with measurable objectives, tactics and key metrics to enable organizational strength building in accord with its current priorities and imperatives.

Funding Models



3. CASE STUDIES

3.3 Precedent Studies: Existing Digital Platforms Facilitating Social Ventures

3.3.7 Engineers Without Borders

To accomplish its mission and goals, EWB-USA will begin working towards fulfilling these operational strategies, as defined below:

inspiring leadership daily in EWB-USA's 12,000+ members. Our members are more than engineers; they are college students, businessmen, architects, stay-at-home moms, academics and innovators. They are emerging leaders. In 2011, EWB-USA members took 351 trips to 37 countries around the world.

STRATEGY 1 Build and Deliver an Effective and Efficient Infrastructure to Support EWB-USA's Mission

OBJECTIVE Build and strengthen the project delivery system through a focus on project quality.

Tactics	Metrics
<ul style="list-style-type: none"> Require compliance by all projects with EWB-USA's policies and procedures including GA/OC systems in which all projects are peer reviewed prior to construction. Maintain and enhance the Technical Advisory Committee (TAC) and its operation. Create a framework for long-term community gains for future sustainable development. 	<ul style="list-style-type: none"> Annual number of projects successfully implemented and transitioned into sustainability. Benchmark's increase in the number of projects that comply with all policies and procedures. Rate of project approval without major revisions (percentage). EWB-USA's project design and delivery process is rated by peer review (independent third party) as effective and efficient. Chapter and project team satisfaction of the process is high. Number of community long-term plans with at least one project in sustainability. Benchmark increase in the number of community plans being in place prior to second project. Benchmark increase in the number of satisfied communities. Benchmark increase in the number of community programs.

OBJECTIVE Ensure that the technologies and project delivery systems are appropriate and sustainable in the communities in which EWB-USA works.

Tactics	Metrics
<ul style="list-style-type: none"> Implementation of a Monitoring and Evaluation Program. 	<ul style="list-style-type: none"> Benchmark increase in the number of projects maintained by community (project acceptance). Benchmark increase in the number of projects done by the community that replicate the EWB-USA project.

OBJECTIVE Ensure the health and safety of the EWB-USA members and communities.

Tactics	Metrics
<ul style="list-style-type: none"> Implement a Health and Safety Program for all Community Programs. Evaluate and manage the health, safety, operating, and logistical risks of design and construction within developing communities. 	<ul style="list-style-type: none"> Benchmark increase in the number of Health and Safety plans approved without revisions. Benchmark decrease in number of near misses. Benchmark decrease in number of incidents. Benchmark decrease in number of security incidents / evacuations. Benchmark increase in number of programs completed without accident.

STRATEGY 2 Recruit and Retain the Right People

OBJECTIVE Build a general awareness of the organization by meeting all goals related to chapter development and branding initiatives stated in the strategic communication plan in order to educate EWB-USA members about EWB-USA.

Tactics	Metrics
<ul style="list-style-type: none"> Implementation of a Branding Guide and guidance for chapters. 	<ul style="list-style-type: none"> 70 percent of established chapter Web sites using branding elements. 90 percent of newly formed chapters using branding elements within 60 days.

OBJECTIVE Strengthen the volunteer governance bodies of EWB-USA through policy governance and education.

Tactics	Metrics
<ul style="list-style-type: none"> Implementation of Governance Policies. Definition of roles and responsibilities for all volunteer levels. Development of Success Planning for all volunteer bodies. Implementation of training and orientation modules for officers and organizational elements. Implementation of Administrative Processes and Procedures. 	<ul style="list-style-type: none"> Creation, maintenance and revisiting on annual basis of Board Governance Policies. Regional Structure in place with succession plans. Assessment of volunteer engagement at all levels. Type of volunteer diversity at all levels. Creation of National Finance and other policies.

OBJECTIVE Strengthen the staff of EWB-USA and improve the capacity and abilities to match the growth and development needs of the organization.

Tactics	Metrics
<ul style="list-style-type: none"> Provide fully defined roles and responsibilities of staff and relationships to volunteer bodies. Implementation of a Staff Development Program. Development of succession planning for staff turnover. 	<ul style="list-style-type: none"> Job descriptions updated and consulted annually during year-end review process. Staff satisfaction survey administered annually. 360 personnel reviews conducted annually before close of fiscal year.

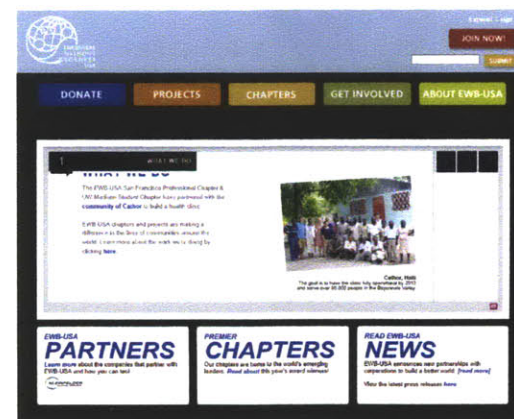
STRATEGY 1
Build and Deliver an Effective and Efficient Infrastructure to Support EWB-USA's Mission

STRATEGY 2
Recruit and Retain the Right People

STRATEGY 3
Build Sustainable Financial Strength

STRATEGY 4
Attract and Foster Effective Partnerships

EVALUATIONS



- Highly structured with strong organizational control. It can be too rigid at times.

- Global Impact: with projects all over the world.



- Highly focused on engineering solution

3. CASE STUDIES

3.4 Conclusion: Existing Online Platforms Facilitating Social Ventures

The analysis shows a consistent effort from different professionals and organizations to facilitate the process of making social changes. In general, a significant amount of people have the good will to reach out and make a difference in the world. Online platforms like Changemakers, OpenIDEO, and NABUUR are good examples of making efforts in facilitating a more natural flow of interaction among collaborators. They have made some attempts to blur the boundaries of different participants' roles. However, most of these digital platforms withhold a high level of control, keeping it for management. As a result, the workflow and interaction among collaborators tend to be predetermined and constrained. In

contrast with most of these structured platforms, NABUUR is very unique, because it is the only platform from this study run entirely by volunteers. However, it also has difficulties in delivering quality outcomes.

The balance between unmanaged organization (maintaining a natural collaboration flow) and quality deliverables of the projects is essential in making a successful digital platform facilitating social venture. Due to the nature of most social ventures at their earlier stage, unpredictability propels people to register themselves to existing frameworks or organizations, such as business competitions,

online campaigns, fundraising, and activities/events that will guarantee measurable outcomes. However, this approach also greatly encourages the platform to be organized in a way that is too structured and controlled. As a result, it loses its natural spontaneity of interaction and collaboration in real life.

How can online platforms achieve a level of spontaneity and a natural flow of collaboration? How can we, as designers, propose a new way of organizing the unpredictable? How can we introduce a paradigm shift in establishing digital platforms facilitating social enterprise start-ups?

4. ANALYSES:

Peer Production, Wikipedia, OpenIDEO

4.1 Introduction: Personal Motivation Meets Collaborative Production

4.2 Peer Production

4.3 Wiki Model: Wikipedia

4.4 Collaborative Problem Solving Space & OpenIDEO

4.5 Conclusion: Lessons from
Peer Production Model, Wikipedia, and OpenIDEO

4. ANALYSES

4.1 Introduction: Personal Motivation Meets Collaborative Production

Less Managed Division of Labor

Division of labor/roles is usually associated with highly managed settings, but this type of implementation usually leads to a slow and rigid work flow and eventually unsuccessful initiatives for highly-unpredictable social enterprise startup works. Spontaneous division of labor is considerably more natural and aligns with the nature of social venture processes. The inquiry of the method in establishing unmanaged division of labor will be highly valuable for social enterprise startups

How to organize a group for collaboration?

In “The Nature of the Firm” suggests that in organizing any group, the choice is between management and chaos; the author assumes that it’s very difficult to create an unmanaged but non-chaotic

group. But lack of managerial direction makes it easier for a casual contributor to add something of value; in economic terms, an open social system like Wikipedia dramatically reduces both managerial overhead and disincentives to participation. What is the incentive to make people contribute and participate? How to motivate them?

Love+ trust+ care

How can we do things for strangers who do things for us, at a low enough cost to make that kind of behavior attractive, and those effects can last well beyond our original contribution? Our social tools are turning love into a renewable building material. When people care enough, they can come together and accomplish things of a scope and longevity that were previously impossible; they can do big things for love

This chapter focuses on the lessons that we can learn from peer production model and Wikipedia. The inquiry into why and how this peer production model works can shed light on the potential application of this method of organizing communities on facilitating social enterprise grassroots startups. The level of definition in roles and management, methods in organizing communities for collaboration, and the way in which contributors can build trust towards each other for collaboration will be the core areas to be examined in this chapter. d.

4. ANALYSES

4.2 Peer Production

4.2.1 Introduction

Peer production is widely defined as the phenomenon of self-organizing communities of people coming together to accomplish common goals. All the contributing individuals are on an equal footing (the general public), rather than exclusively coming from experts or paid professionals in the fields.⁷ As one of the biggest advocates of peer production, Yochai Benkler, a Harvard Law School professor, states the advantage of peer production as follows:

*The primary advantage of peer production is in acquiring and processing information about human capital available to contribute to information production projects, and that in this it is superior to both market-based or hierarchical managerial processes. In addition to the informational advantage, peer production more efficiently assigns human capital to information inputs because it does not rely on controlling bounded sets of either factor.*⁸

The success of peer production has been consistently proved in the area of open

source software, such as Linux, Firefox, Project Gutenberg, and etc. It demonstrates that the networked individual contributors can make a collective effort in producing meaningful content, information, and projects without the intervention of formal institutions or management.

There is a wide range of optimistic supporters advocating the idea that the application of peer production can also be expanded into many other areas beyond the coding of software. Jimmy Wales, the founder of Wikipedia, has argued that peer production, the social backbone behind Open Source, could venture into many other types of areas. Then the immediate question becomes what other areas can peer production venture into. Paul Graham, a renowned programmer and venture capitalist, suggested that business could also be a viable realm. He emphasized that companies should learn more from Open Source beyond utilizing free code. Furthermore, he argued, “[it is]not about Linux or Firefox, but about the forces that produced them.

Ultimately these will affect a lot more than what software you use.”

The inquiry into the extent to which peer production, as a social system, can be promoted and expanded to facilitate the process of building and scaling social enterprise grassroots startups will be the main focus of this thesis. By examining the effectiveness of peer production in the space of Open Source Software can shed light in the potential application in the business world.

4. ANALYSES

4.2 Peer Production

4.2.2 Paradigm Shifts

A New Mode of Production

Against all common understanding of economic behavior, the phenomenon of peer production has opened up an entirely new understanding of collaboration in production. It is extremely eye-opening to see hundreds of thousands of volunteers come together to collaborate in producing complex economic projects. Many of the frontrunners from peer production space, such as Linux, have even established their significant presence in the space and beat some of the largest and best-financed business enterprises in the world.

The dominant paradigm about productivity is that production is only arranged by either market-based exchanges or firm-based hierarchies. Both of these conventional modes of production highly rely on clear property rights to have control over resources and outputs. Therefore, the information policy in the past few decades has been favoring property rights and exchanges through contracts. In great contrast to this traditional way, peer

production, as a new mode of production, has offered an alternative way and considerations for information economy, breaking down boundaries and hierarchies and achieving phenomenal outcomes in the realm of software development and many other areas.

Besides instigating a paradigm shift in the definition of modes of production, according to Michel Bauwens⁹, founder of the Peer-to-Peer Foundation, peer production produces different type of value : *Peer-to-peer systems produce use-value through the free cooperation of producers who have access to distributed capital: this is the P2P production mode, a 'third mode of production' different from for-profit or public production by state-owned enterprises. Its product is not exchange value for a market, but use-value for a community of users.*

A New Mode of Governance

The system of peer production encourages equality in the status of the contributors and resists any level of dominance

and control from individuals. It is meant to be governed by the community of contributors themselves, and not by an authority, institutions, or market allocation. It has been recognized as “the third mode of governance.”

For example, Wikipedia’s teams of volunteers self-organize themselves into different roles in monitoring and administering Wikipedia, however, this online community has consistently rejected any personal intent of control over the communities. Instead, this community excels at upholding the value of this collective governance.

A New Mode of Distribution

The prevalence ownership and usage of informational technologies, such as computers, smart phones, and Internet, has escalated the convenient accessibility of peer production space. The shared process of production has offered these new common property regimes, allowing anyone to freely access and uses the products on a universal basis. This new mode

4.2.3 Characteristics and Principles of Peer Production

of distribution can be regarded as a “third mode of ownership”, in great contrast to private property or public property.

The phenomenon of volunteering collaboration among individuals to achieve common goals is emerging everywhere. Furthermore, as a model for social production, peer production presents itself in great contrast to market-based, managerial-firm based and state-based production. There are two core characteristics for this innovative form of production.

Firstly, decentralization is the foundational characteristic in peer production space. Authority to act is in the hand of individual contributor when they are presented opportunities for action. The absence of a central organizer, such as the manager of a company, gives liberation to peer production space to break through the limitation brought by centralized control, allowing individuals to self-identify their contribution within the domains.

Secondly, the diversified motivation beyond financial gains or commands greatly

stimulates the coordination among participating agents. By definition, peer production promotes a non-financial motivation, avoiding any marginal payment to contributors for their participations. The multiplicity in the amount and variety of talents and capacities gaining through peer production space gives rise to a self-organized collective coordination effort in optimum usage of human capital.

Furthermore, peer production usually possesses three structural attributes. Firstly, the target potential projects for peer production must be modular. With this capacity of being divisible into manageable components, these projects’ modules should be able to be produced independently, harnessing different individual contributions from different people at different times. In short, peer production projects should be incremental in their process. Secondly, the size of these projects’ modules is quintessential. In order to gather as many contributions as possible, it is highly important to provide diversified modules, allowing people with different level of motivation, capacity,

and availability to collaborate their contribution according to their level of comfort. Ultimately, peer production should be structured to accommodate this variation in human capital. Lastly, peer production projects should be structured with the mechanism for low-cost integration in two areas, including the quality control over the modules and a system to integrate all the modules into a finished product. For example, most of the open source software is fighting to maintain their quality through various ways to defend themselves against both incompetent and malicious contributions.

In short, peer production lowers both the physical and human capital requirements for information production, and their projects have been intelligently structured to accommodate different levels of contribution and encourage diversification and flexibility among their collaborators. It is fair to say that peer production space offers an alternative framework from which innovative modes of production can be produced in many different areas.

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4.2 Peer Production

4.2.4 Examples

Open-Source Software



Open-source software is a kind of computer software that promotes sharing of their source code. Through allowing other people to freely study, revise, and distribute the software, open-source software is one of the most significantly influential examples for open-source development, allowing massive collaboration in a public realm and producing many widely spread products, such as Linux, Firefox, and etc. No single contributor owns a free software project. This allows free distribution and adaption for different functionality in business and many other fields.

Open-source software is a process of systematically capturing open development and distributed peer review to lower costs and increase software quality. It is

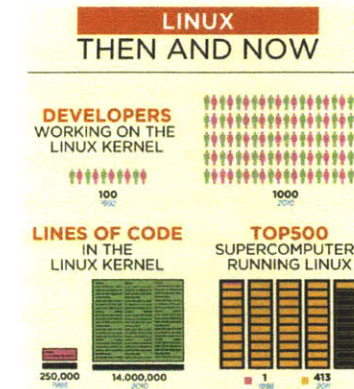
not a brand new idea. This tradition can be traced back to the beginning of the Internet 40 years ago, but it only managed to gain significant recognition starting about 10 years ago when the technology advancement and market force converged.

Linux



Linux is a computer operating system that is similar to Unix, developed within the free and open source software movement. The core component of Linux is the Linux kernel, which was originally developed and released by Linux Torvalds in 1991.

As the poster child for open-source software movement, Linux monumentally contributed to the explosion of websites and online business development. For example, Facebook, Twitter, Amazon, and



auctions on eBay are all using Linux. The rise of big data and cloud computing has tight relationship with Linux. The freely availability for modification for both commercial and non-commercial usages lays the foundation for many influential online products and services.¹⁰

Project Gutenberg

<http://www.gutenberg.org/>



4. ANALYSES

4.2 Peer Production

4.2.4 Examples

Founded in 1971 by Michael S.Hart, Project Gutenberg is the oldest digital library, aiming at changing the world and spurring literacy.¹¹ It uses volunteering efforts to digitize and archive books in the public domain into eBooks. It is a distributed proofreading peer production effort. With more than 42,000 eBooks by 2013, all of these items in the collection are free to download to anyone. The collection also includes books in many other languages, including French, German, Finnish, etc. Through their full dependence on volunteers in making these eBooks, Project Gutenberg manages to have more than 50,000 volunteers' contribution and allows download of eBooks 3 million times in a week from just one site, www.ibiblio.org at the University of North Carolina.

Even before the inception of handheld electronic devices, Project Gutenberg was a visionary project ahead of its time. The vision to "encourage the creation and distribution of eBooks" has proven to be increasingly effective, due to the prevalence usage of portable digital devices for

reading eBooks. Project Gutenberg, a peer production venture, has successfully laid the groundwork for the digital literacy development in this modern time.

Slashdot

<http://slashdot.org/>



Slashdot is a technology-centered news website, founded in 1997 as a blog. Billed as "News for Nerds", Slashdot primarily consists of user-submitted and commented news stories covering technology-related topics. The two major features of this website include the initial submission of news from Slashdot readers and the follow-up comments of the initial submission from hundreds of other users. Slashdot enables this multi-layered mechanism in peer producing relevance and accreditation¹², demonstrating a rich example of distributed peer production

model in these functions, i.e., posting and commenting on stories.

The judgment of the accuracy of Slashdot's stories is in the hand of the submitters and audience. Slashdot, as a news platform, does not have a formalized framework to filter the stories. However, Slashdot implements an automated system to select moderators from the users, moderating on the commentary section. In this way, participants can contribute in a distributed manner.

Slashdot is designed to allow the aggregation of many small judgments. The moderating system is intentionally structured to minimize power to each contributor, preventing any potential dominators. Users and moderators are all volunteers. The complex software mediates the multiple level of judgment coming from different levels of contributors. Slashdot offers a distributed peer production way to aggregate many small contributions and judgments, instead of relying on efforts from profession experts, such as editors and experts.

4.2.5 Benefits and Limitations: Peer Production Model

The peer production model has been significantly proven to be widely applicable among not only software development, but also business ventures and many other areas beyond information production. It also manages to cover production in content, accreditation, etc. With the advantage of reducing communication and coordination costs, the peer production model is highly efficient in identifying matching human capital to production tasks in extremely refined increments to accomplish innovative information goods. The benefits and limitations brought by peer production model are as follows:

Peer Production Model Benefits

1. A new model of information production: Peer production has advantages over firm- and market-based production due to its ability in matching human capital with production tasks in a low-cost, distributed manner. In contrast to firm- and market-based production, peer production enables mass collaboration in the public realm, blurring sector boundaries

and mobilizing talents for information production. This new model of information production gives rise to a wider range of potential applications in many different realms.

2. Reducing physical and managerial capital cost for production process: As peer production offers an alternative model in collecting human capital, it dramatically reduces capital cost in seeking for useful matching talents for identified goals. Since most of the peer production projects only acquire contributions according to the availability and willingness of the volunteering participants, it does not require a formal structure for hiring experts and paid professionals to do the jobs, such as accomplishing tasks in a firm.

3. Larger pool of potential contributors: The widespread ownership of communication tools, such as computers, smartphones, greatly lowers the threshold for contributing. In short, participants can contribute anything at any time according to their own preferences and availability. As a result, the peer production model

can harness a larger pool of potential contributors.

4. Allowing individuals to self-identify matching contribution: If human capital is the dominant input, peer production allows effective contribution matching. The motivations of the contributors in peer production space range from self-gratification in creating and building new projects, pure personal interests and preferences, a higher fulfillment in achieving goals within community settings, to personal visions and passions. Without the limitations from formal structure in working for a firm, peer production allows individuals to self-identify matching contributions according to their own interests and motivations.

5. Aggregation of content and judgment = self-correction: In peer production space, the freedom to contribute according to individual's own pace, competence, and preferences helps to harness a large pool of contribution, aggregating both content and judgments from individuals. The assumption is that the wisdom of the crowd

4. ANALYSES

4.2 Peer Production

4.2.5 Benefits and Limitations: Peer Production Model

has the ability of correcting misassumption, mismatch, and incompetence contribution.

Peer Production Model Limitations

1. An illusion of equal participation (in need for administration, management and monitoring): By its definition, peer production is designed to give equal amount of power, accessibility, and freedom to contribute to each contributor. However, it has been proven in practice that any self-organization (peer production project) without sufficient administration, management, and monitoring system will only end up in chaos and decay. For example, many blogging websites suffers greatly from the attack from spamming and vandalism. As a result, peer production model does require moderate amount of organizing efforts, however, the term “peer production” does give outsiders an illusion of equal participation.

2. Unclear power dynamics (vandalism

overpowering and insufficient respect for experts/anti-elitism): Even though peer production requires a certain level of organization, the issue of vandalism overpowering legitimately contributing experts is very pressing in most of the peer production projects. Due to the unclear power structure within the space, if the experts are not giving privileges in clearing out the messes done by vandalism, it is really tiresome and discouraging for the constructive contributors to stay and fight for the quality of these peer production projects.

3. Not for producing innovation and new ideas, having a tendency to replicate existing modes of operation or culture: Peer production projects have received considerable amount of criticism for their lack of originality and innovation. For example, Wikipedia is an online version of an encyclopedia. Linux is following Unix, a very similar model. To date, peer production space has not produced any original ideas, and has heavily relied on replicating existing culture and functioning models in physical space.

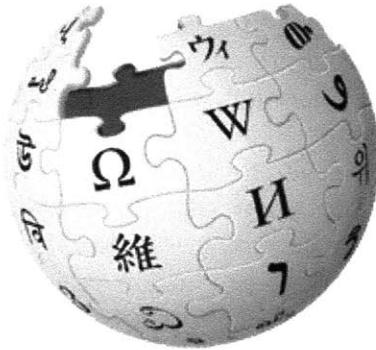
4. Difficulties in quality control and great need of monitoring system: Peer production model promotes mass participation and collaboration, offering opportunities for anyone with the means to contribute. However, this huge range in accepting contribution also brings difficulties in quality control. It is widely recognized that any peer production project needs to implement an effective monitoring system ahead of time to ensure quality.

5. Insufficient tangible and financial reward system, relying on the contributor’s day jobs: The communities contributing to peer production space upholds their ethos in achieving higher purpose instead of any personal financial gains for individuals. Therefore, there is a huge amount of resistance coming from these communities in any attempts to commercialize the projects or gain financial advantages for the projects. As a result, most of the contributors in peer production space are volunteers without any financial reward, relying on their own day jobs to sustain them. Peer production projects lack financial reward system to the contributors

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4.3 Wiki Model: Wikipedia

4.3.1 Introduction



<http://www.wikipedia.org/>

Jimmy Wales, the founder of Wikipedia states:

Imagine a world in which every single person on the planet is given free access to the sum of all human knowledge. That's what we're doing.

Currently, as one of the top seven websites worldwide, Wikipedia has successfully gained significance in becoming the number-one online encyclopedia site, influencing tremendous number of people's lives around the world. It is almost impossible not to experience Wikipedia when people are surfing the Internet.

However, for people who are not familiar with the history and background of Wikipedia, there is a common impression that experts or professionals have produced all the entries without knowing the fact that according to Andrew Lih, Wikipedia has been created by a bunch of "nobodies." These people worked across countries, regions, languages, and culture through Wikipedia as the online platform, contributing their passion, interests, and efforts to form this sum of human knowledge for free.

What is Wikipedia? How it gains its success? What can we learn from their process of building this online army of volunteers? How did they manage to set up this self-organized community and system? What are the incentives for people to contribute for free to such a large scale? Why and how the existing encyclopedia model contributes into Wikipedia's success or not? How does Wikipedia instigate this social revolution, or is it really a revolution at all? What are those other similar successful and unsuccessful models, why they succeed or fail? What are

the lessons and wisdom that we can learn from Wikipedia to be implemented into collaborative problem solving space, specifically for social enterprise grassroots startups?

The inquiry into both the pros and cons in Wikipedia's success will shed light in a wide range of possible applications for online collaboration efforts. The existing culture that has been captured and translated, coupled with the new culture that Wikipedia is creating, will help people to understand the method in organizing online collaborations.

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4.3 Wiki Model: Wikipedia

4.3.2 Backgrounds and Precedents

Encyclopedia

The attempt to gather all general human knowledge began in Roman times, though usually focusing on particular, discrete disciplines and areas. This categorization and classification was not very consistent compared with a modern version of the encyclopedia. In our modern time, the notion of “encyclopedia” came into reality as truly a complete record of all human knowledge.

Historical examples of encyclopedias include a Roman encyclopedia in *Naturalis Historia* in 1c A.D., covering mainly the entire known natural world, and the Chinese *Yongle* encyclopedia in 14c, presenting topics of all matters related to history, literature, medicine, natural history, etc. Unfortunately, all of the ancient encyclopedias either suffered from insufficient size or preservation of the collection. However, the French encyclopedia in 17c was the origin of the modern encyclopedia, as a powerhouse challenging Catholic

dogma, and featuring prominent Enlightenment thinkers.

The Encyclopedia Britannica was created as a conservative alternative to the more radical version of *Encyclopedia* in France, first completed in 1771 and with the most famous eleventh edition in 1910-1911. Although the content of *Britannica* has been successful, their business model suffers. They struggled from the high cost of paying qualified academics to produce new editions. With much effort from their competitors, such as Microsoft’s *Encarta*, World Bank in digitizing *Encyclopedia*, Britannica was pushed to also produce CD-ROMs version of their books and ask for a high price to purchase this version or subscriptions. All of these encyclopedias gained their primary income through aiming primarily at big-budget institutions, such as universities and libraries. However, there was no complete and free online version of encyclopedia in the field.

The market of encyclopedias is ready for a new player.

The Nupedia Idea and Rules



Following the spirit of open source software movement at around the same time, Nupedia, as an experimental Open Directory Project, an open source, online collaborative encyclopedia was implemented in 2000. Nupedia upheld the objectivism, articulated well by Sanger, the chief editor and manager of Nupedia at the time:

Neutrality, we agreed, required that articles should not represent any one point of view on controversial subjects, but instead fairly represent all sides.

Nupedia is the precursor of Wikipedia. The principle concept is similar to Wikipedia, however the implementation was very different. Only highly qualified PhDs or academics were authorized to contribute in the creation of articles. The process required passing the review from the paid

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4.3 Wiki Model: Wikipedia

4.3.2 Backgrounds and Precedents

Nupedia editors before the articles can get out to be openly reviewed by other authorized highly qualified Nupedians. As a result, only twelve articles got through the process in the first year. The downfall of Nupedia is that its high bar for contributors and a way too structured process, creating a double barrier to attract the necessary critical mass to gain the momentum for this online collaborative Encyclopedia. Nupedia was soon to be regarded as too much process and too little volunteer output by their own creators, therefore, at the end of 2000, the founders sought a change.

Wiki Introduced: Ward's Wiki Idea

Ward Cunningham, an Internet pioneer and programmer, created the first wiki, WikiWikiWeb in 1994. The concept is simple, i.e., it allowed anyone to edit any webpage at any time without any special software or login requirement. With the struggle from the Nupedia initiative, the founders were enlightened by this.

WikiWikiWeb and decided to use the wiki model as a new experimental ground for generating content for Nupedia. Even though Wikipedia was also designed to display “finished” looking work (e.g., Wikipedia’s encyclopedia articles), Ward’s Wiki had been designed only for discussion. In January 15, 2001 Wikipedia.com was launched as a spin off from Nupedia

The Backbone of Wikipedia

Millions of people have contributed to Wikipedia since 2001. Its exponential growth in the field of online collaboration is unprecedented. Since Wikipedia only depends on text communication for writing articles, talk page debates, and email list for exchanging discussion, setting a highly recommended but not firm policy was essential to the success. The policy and guidelines help Wikipedia community to achieve civilized and objective interaction and progress. With careful policy reinforcement, Wikipedia managed to encourage people to converge while

collaborating. Wikipedia guidelines can be summarized as “Five Pillars”, including the following¹³:

1. Wikipedia is an encyclopedia.
2. Wikipedia has a neutral point of view.
3. Wikipedia is free content.
4. Wikipedia has a code of conduct.
5. Wikipedia does not have firm rules.

With the strong encouragement to assume good faith (AGF) to each other among all the contributors, Wikipedia also succeeded in maintaining a good community dynamics and culture. This self-organized platform has these clearly defined policy and guidelines as the substructure in cultivating Wikipedia community to accomplish this impressive growth.

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4.3 Wiki Model: Wikipedia

4.3.3 Characteristics and Principles of Wikipedia

A Social Innovation, Not a Technological Innovation

It is quite interesting to see that although Ward Cunningham invented this wiki idea in 1995, only in 2001 that Wikipedia came into being. The question is that if both the technology and the idea of wiki existed before 1995, why Wikipedia did not come about earlier? It is very clear that Wikipedia is not a technological innovation but a social innovation. This social innovation in between 1995 and 2001 was not about technology but the discovery of the method in organizing a community.

What are the social norms, values, practices that people need within a community? Specifically, what are the attributes in fostering a healthy online community? The contributing factors include creating a sense of ownership and meeting the personal motivations and interests of individual contributors, providing an extremely low threshold for offering contribution, a feeling of creating something substantial in relation to others, etc. Even

though Wikipedia advocates open and free access for anyone at any time, the guidelines and basic structure put into place before launching the website was quintessential to ensure an organized online Encyclopedia community. .

Jimmy, the co-founder of Wikipedia presented the secret source of Wikipedia as follows:

Lots of things come and go in the world, but as long as you put it out there under free license, and you've collaborated with other people, you know it will always be there as a base for someone to move forward on...We're not talking about some magic process. Quality matters, and a thoughtful community has emerged around the ideal.

Free licensing in Wikipedia empowers all of the people working on the site, and lowers the barriers for people to contribute. Therefore, the content on the website belongs to the community. This sense of ownership greatly motivates people to contribute at all levels. The trust and care towards each other and the articles in

Wikipedia enable this fairly self-organized online Encyclopedia community.

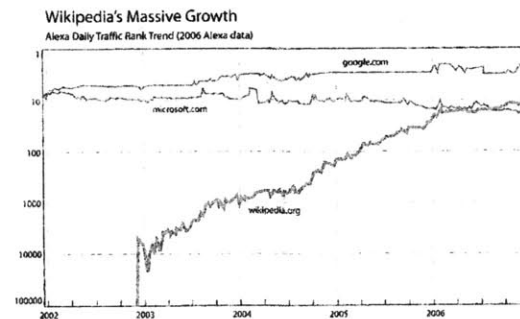
Nothing incredibly complex and autonomous can be created out of random coincidence. In order to cultivate a successfully growing online community contributing positively to the society at large, it requires substantial amount of foundation building, e.g., rules and frameworks from which a healthy self-organized community can be encouraged. As a result, it is extremely important to recognize existing socio-political dynamics/behaviors within a certain community, and transform it into the online environment. Technology is not the core innovation here, but inventing or discovering the rules of laws governing/enabling success in nurturing online social groups achieving certain defined goals was quintessential for Wikipedia.

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4.3 Wiki Model: Wikipedia

4.3.3 Characteristics and Principles of Wikipedia

Effective Matching of Supply and Demand



Wikipedia promotes itself as “the encyclopedia that anyone can edit”. According to Alexa, Wikipedia has become the #7 websites in the world, surpassing most of the other for-profit sites. As a nonprofit, Wikipedia’s impressive ranking only follows after Google, Yahoo, Facebook, etc, which are all multibillion-dollar enterprises with tens of thousands of employees. Its success has a close relationship to the effective matching of both supply and demand in the virtual space. On one hand, in an information age with so much information online, reliable and balanced content is in high demand. On the other hand, there are a lot of people from

different geographical and cultural regions who possess knowledge, skills and expertise and are willing to offer their help and contribution. Offering an effective virtual meeting place for the above two elements (supply and demand) to come together is the fundamental reason of success for Wikipedia.

The matching method between supply and demand bases on simple principles, including the “hacker ethos” which appears to be incredibly radical but in fact has a long tradition, ever since the inception of the Internet. The technological elite first developed the Internet under the strong belief of freedom in cyberspace, including free as in cost, and free as in freedom. Wikipedia realized this principle by allowing universal accessibility to all people and offering excessive connectivity on the Internet, so that making the space in Wikipedia for everyone, and not limiting it only to the tech elite or disciplinary experts. With this extensive and spread out large pool of supply and people’s eagerness and hunger to finding reliable online content, Wikipedia was

created to effectively match the demand, producing “all human knowledge” by “all humans”.

Self-Organized Collaborating Community with Monitoring System

Wikipedia does reinforce some level of power structure among users and implement a series of rules and principles that can allow maximum freedom for contribution and prevent vandalism by controlling the quality and level of accuracy. This section examines both the characteristics of contribution and the mechanism for quality control.

Contributors

Users across the globe have the freedom to enter any topic that they like, for example, a high school student typing in his homework related materials, a non-English-native speaker trying to start a page introducing her own culture. The requirements for accepting new entries are very limited and inclusive. There is no elitism,

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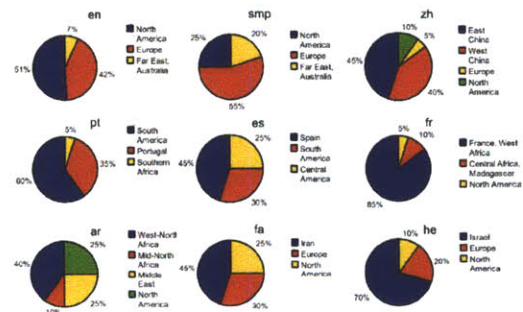
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no judgments, and no entry qualification test. Wikipedia is a legend of spontaneous and self-organized organization and achievement.

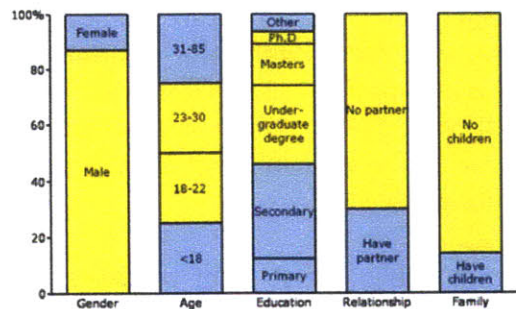
Although Wikipedia was originally launched to invite everyone to contribute to this online Encyclopedia, the contributing community has distinct demographic characteristics, such as contributions coming from primarily men and people at their 20s. In an article published by Yasseri in PLoS ONE in 2012, the author has analyzed the share proportion of contributors to different editions of Wikipedia from different regions across the world. For instance, the article presents the dominant contribution from North America contributors (about 51%) in the English Edition, and Europe as the driving force (about 55%) in the simple English Edition.

In short, with its huge success of exponential growth in quality articles resulting from tremendous amount of different contributors, its contributors still display a high concentration of certain cultural/

gender backgrounds and characteristics. It is highly argued that Wikipedia's main feature of writing and editing can only attract participants with the same interests and therefore attracts a certain type of contributors across different regions under different editions of Wikipedias.



Self-reported "occasional" or "regular" contributors to Wikipedia (n=43,793)



Note: Data for age category also includes respondents who were not contributors but who did read Wikipedia. Average age for contributors is 26.6 (vs. 25.3 for readers). "Regular" contributors include authors, editors, and administrators. "Occasional" contributors include readers who occasionally contribute as authors or editors. Source: "Wikipedia Survey - First Results," UNU-MERIT, April 2009

Quality Control: Accountability and Monitoring System

After Wikipedia proved its worth and success as the most influential online encyclopedia, it exceeded most people's expectations would ultimately fall into chaos and fail in producing anything meaningful. To the contrary to this common-sense belief, the Wikipedia community has managed to acquire a critical mass of people to watch over the quality of the articles and implement tools to prevent vandalism, making sure of Wikipedia's increasing credibility and status.

In his article "Wikipedia: Exploring Fact City" in the New York Times (2009), Noam Cohen drew a convincing comparison between Wikipedia virtual space and the physical space of the modern cities, arguing that the trust, civilized behaviors, and self-organized qualities in Wikipedia community are very similar to the civility for the city dwellers. He raised the question of how to keep the quality in Wikipedia when the filters for accepting entry of articles are so limited. He answered this

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4.3.3 Characteristics and Principles of Wikipedia

question by the following remarks in his article¹⁴:

It is this sidewalk-like transparency and collective responsibility that makes Wikipedia as accurate as it is. The greater the foot traffic, the safer the neighborhood. Thus, oddly enough, the more popular, even controversial, an article is, the more likely it is to be accurate and free of vandalism. It is the obscure articles — the dead-end streets and industrial districts, if you will — where more mayhem can be committed. It takes longer for errors or even malice to be noticed and rooted out. (Fewer readers will be exposed to those errors, too.)

Therefore, accountability can be largely achieved through mass collaboration among contributors with the utmost openness and transparency. Even though the power structure among editors is not entirely clear, the Wikipedia articles that received more attention do manage to achieve a higher level of accuracy and credibility. As a result, quality control on the subjects that receive less traffic and

edits, the implementation of another layer of monitoring system is highly needed.

Vandalism has been the major enemy that the Wikipedia community has to fight against ever since the beginning of Wikipedia platform. Any edit that deliberately compromises the integrity of Wikipedia's content is regarded as vandalism. Obvious vandalism includes the entry of spam, crude humor, indecent remarks, and excessive removal of information, and etc. However, the less detectable vandalism can compose of deliberate insertion of plausible but false information to articles. In one widely known incident in 2005, the Wikipedia biography of John Seigenthaler, an American political figure, was found with false information. This high-profile incident instigated many policy changes in putting in specific measures to the verifiability of the Wikipedia information.

From public users' point of views, the not-so-clear mechanism in Wikipedia for preventing vandalism always gives readers the reasonable doubt whether the

articles are entirely correct, whether someone provided some false information or removed core information the minute before they encounter the articles. Unlike the articles from traditional encyclopedias such as Encyclopædia Britannica with experts' writing effort and tight control over the accessibility for editing with its reputation of being "accurate", Wikipedia is usually accused of inaccuracy and misrepresentation. However, analysis of Wikipedia's ability to fix vandalism has been fairly positive. In an article, "Creating, Destroying, and Restoring Value in Wikipedia", the analysis shows that the median time for Wikipedia community to fix obvious vandalism is only a few minutes.¹⁵ Furthermore, the widespread usage of anti-vandalism bots created by Wikipedia community also effectively stops many obvious vandalism damages.

The steadily evolving efforts to implement tightened measures to defeat vandalism has proven to be quite effective in controlling the quality of Wikipedia's articles. Even though the process has been

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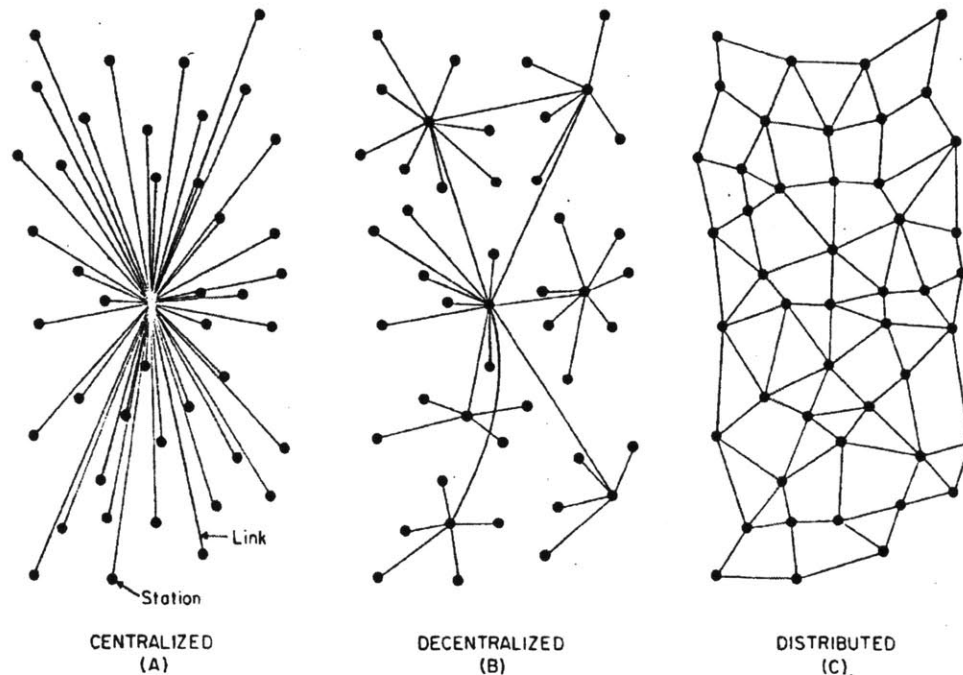
messy, it is undeniable that Wikipedia has increasingly gained recognition and merit for its positive influence over society.

Distributed Mass Collaboration Model

From "On Distributed Communication Networks", Baran, 1962

In Albert-Laszlo Barabasi's book *Linked: How Everything Is Connected to Everything Else and What It Means for Business, Science, and Everyday Life*, he argues that the Internet today evolves under a distributed network model, in great contrast to centralized and decentralized models. The decision of adding or removing

certain nodes and links are mostly locally decided when needed, without needing permission from a central authority to implement. In Paul Baran's research, *On Distributed Communication Networks* in 1962, Baran argues that a distributed network model retains great redundancy in connectivity and therefore, and offers a better way to diminish the reliance on central control nodes.



Wikipedia is the best example of distributed mass collaboration to date. The low threshold for accessibility and the redundancy in contribution have greatly enabled its growth and impact in the world. Wikipedia demonstrates a successful example for distributed mass contribution and collaboration. Without a strong central control system initially, Wikipedia gradually implemented many ways to increasing its central control since 2010, in order to gain more control over maintaining the inherent qualities. As a distributed mass collaboration model, Wikipedia's has exerted a conscious effort to setting up strategic management and constraints to achieve a balanced model.

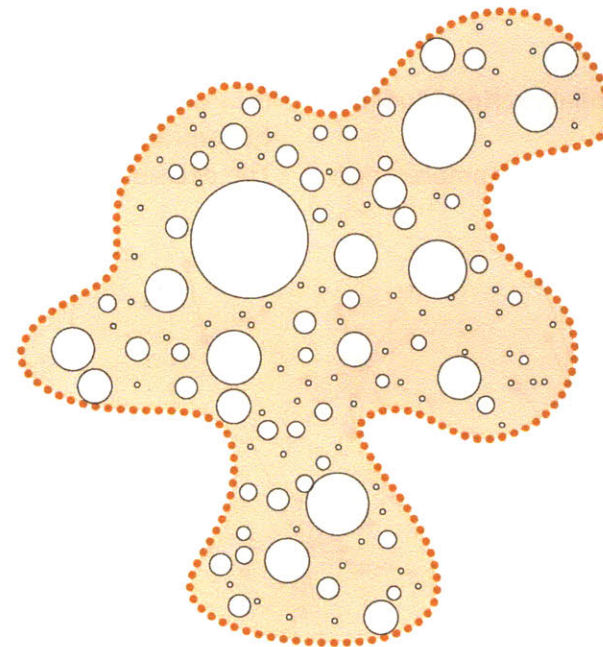
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Power Structure

The power structure within Wikipedia is fairly unclear and extremely flexible ever since its inception. The strong resistance to giving any individuals authority of control from the Wikipedia community is the main driving force to keeping this unclear power structure for a historically. However, due to an intentional effort of eliminating or minimizing vandalism and vicious attacks, Wikipedia did start to implement certain levels of power structure and create constraints and a amount of control to some of the contributors to monitor and administrate contributions. This evolving power structure has been gaining more definition through trial and error.



Power Structure in Wikipedia

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4.3 Wiki Model: Wikipedia

4.3.4 Benefits and Limitations in Wikipedia

Wikipedia Benefits

Wikipedia has set out a great example as online mass collaboration. It is revolutionary in its unexpected, rapid and sustaining success. Andrew Lih states his optimism towards Wikipedia's success as follows¹⁷:

Wikipedia initiated something new and unprecedented, and for the better part of a decade, it led the way in demonstrating that the collaborative accumulation of knowledge was not only feasible, but also desirable. Its neutrality policy, combined with a global team of volunteers, helped make Wikipedia not just a clone of existing encyclopedias, but an encyclopedia that made recording human history a revolutionary, collaborative act.

The benefits that Wikipedia has brought by are undeniable.

1. Digitalization of Existing Cultures (encyclopedia and hacker ethos)

Wikipedia did not come out of thin air. It came about at the right timing with a right set of attitudes. The existing culture of contributing and consuming encyclopedia and the hacker ethos from the tech elite communities offered Wikipedia a fertile soil to work with. In short, Wikipedia managed to digitalize existing mature cultures and enter the scene at the right time.

2. Individual's desire to achieve social value (motivation matching with good intentions)

Sometimes it might be difficult to believe that many people are willing to contribute for free in order to achieve good social value at large. However, Wikipedia has proved that under the right circumstances and appropriate cultural context, people can be motivated to contribute to social value with their good intentions. The self-motivation from Wikipedia community contributors has been largely due to the opportunity of building up "online human knowledge", via an online encyclopedia, as a good social cause for people to pursue.

3. Positive personal gratification of tasks

I do have to admit that contributing to Wikipedia might not be super exciting for everyone, even though most of us today are using Wikipedia as a reference tool. In the English Wikipedia site, most of the contributors are men who enjoy writing and editing. However, on the flip side, the positive personal gratification of editing articles greatly motivates the core contributors in Wikipedia, enabling a huge amount of consistent contribution from different geographic and cultural regions.

4. Socio-psychological reward of forming an online community and interacting with others.

Wikipedia has a "talk" page, directing people's discussion towards the articles. The Wikipedia community forms a very strong bond through working on articles, discussion, and negotiation of different opinions. Many Wikipedia contributors know each other and recognize others' contributions. It is this socio-psychological reward of interacting with each other in an online community that offers extra incentives for Wikipedia participants.

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4.3 Wiki Model: Wikipedia

4.3.4 Benefits and Limitations in Wikipedia

5. Clearly defined problems/goals (online encyclopedia production collaboration)

The rapid growth and success of Wikipedia has a great connection to the fact that Wikipedia started out with a clearly defined problem/goal, which was to build the first online encyclopedia through online mass collaboration. Many of the successful peer production projects, like Wikipedia, have this common trait of knowing exactly what problem they are tackling. Therefore, when the goal is clear, the flock of potential online contribution can be better guided.

6. Low threshold for contributing (“edit” buttons allowing any change from anyone)

The initial and radical strategy that Wikipedia took was to allow edits from anyone at any time from anywhere, harnessing a much larger pool of potential contributions. This low threshold of accessibility in contributing significantly lowered the bar for participation, therefore, attracting significant attentions from almost everyone who has the means to contribute to Wikipedia. Elitism is no longer the

dominant deciding factor as to who to contribute what. As Andrew Lih put it nicely in his book¹⁸, Wikipedia has allowed a bunch of nobodies to come up the world’s greatest encyclopedia.

7. Recognition of individual contribution

Even though most of the contributions are under anonymous names, for people who actually registered online names and are consistently using them, their constructive and consistent contributions have been recognized in Wikipedia community. Individual positive contributions can help “Wikipedians” to build up their credits as experts in certain areas and to be given larger managerial power in the community.

8. Evolving management mechanism (governing and monitoring structure)

Wikipedia initially built its community under the assumption of assuming good faith of other people. Furthermore, the entire Wikipedia community strongly resisted the idea of bestowing more managerial power to individuals in the community. However, throughout the years, the

continuous attack from vandalism pushed the Wikipedia core management team to implement more monitoring structure, giving out more managerial power to trusted individuals in order to keep the quality control under check. Wikipedia’s evolving management and monitoring mechanism greatly enables the stability of the Wikipedia production.

Wikipedia Limitations

1. Illusion of equal status and equal power (regular participants has less control than administrators)

Although Wikipedia does promote universal accessibility for any willing contributor, its power structure has not been clearly presented or indicated in its platform. The fact that regular participants have less control in their contribution than administrators has not been explicitly presented until people actually encounter their limitation in control. It is fair to say that there is an illusion created of equal status and power among all participants.

4. ANALYSES

4.3 Wiki Model: Wikipedia

4.3.4 Benefits and Limitations in Wikipedia

2. Lack of respect for experts

Due to the strong resistance towards elitism in Wikipedia community, experts sometimes do not get sufficient respect for their input. There are many cases in which experts are consistently frustrated by the fact that they only have an equal amount of say in topics which they have mastered, compared with other participants who do not know the subjects too well.

3. Lack of clearer power structure, and a better balance between bottom-up individual contribution and top-down overseeing/governance.

Wikipedia has substantially increased the size of its management team, starting in 2009. However, it does not have a clear power structure among participants. For long-term steady contributors with significant contributions, Wikipedia might give that person monitoring power as an administrator. However, there is no established power structure that can achieve more balance between bottom-up individual contribution and top-down governance.

4. Mostly thriving in western culture, for example, English and German Wikipedia

English Wikipedia gains its dominance due to its nurturing enthusiasm in encyclopedia and the culture of computer techs' hacker ethos. Wikipedia thrives mostly in Western culture. Its top two languages are English and German. Even though there are way less German speaking people in the world compared with Chinese, the Chinese Wikipedia does not really gain significance in the Wikipedia family, because it is not natural within Chinese culture to write and contribute for free, there is less drive from Chinese people to contribute to a writing and editing task than in Western cultures, etc.

5. In need of less democratic quality control system and more effective prevention from vandalism

Wikipedia community has gotten a lot of volunteer efforts in fighting against vandals' attack. However, the system is a bit too democratic, and almost equal to "when you see something, do something." It is quite tiring and frustrating for many of the faithful Wikipedia

contributors to come up with their own solutions and repeatedly fix issues themselves, when a firmer and less democratic quality control system could have been put into place to dramatically increase efficiency in preventing vandalism.

6. Not for encouraging originality and innovation. Conceptually, Wikipedia is an online collaborative version of print encyclopedia.

Wikipedia is not creating something disruptively innovative, compared with the invention of the computer. At its core, Wikipedia is an online peer production of the print encyclopedia. It has been highly criticized for its lack of originality and innovation in the originality of its idea and concept, but the significance of Wikipedia is not about its idea but its implementation and the way it proves its success through working out and solving problems along the way.

7. Quantity might not guarantee quality. The underlying assumption is that aggregation of individual efforts will provide effective self-correction. However, this

4. ANALYSES

4.3 Wiki Model: Wikipedia

4.3.5 Other Wiki Inspired Ventures

might not always be the case.

Along with many other peer production and crowdsourcing efforts, Wikipedia has also encountered a lot of similar difficulties, especially the issue about keeping quality. The self-correction mechanism within a large crowd of people requires a critical mass to maintain. However, many of the articles that are attracting less attention and traffic tend to suffer greatly; and many of the high-profile controversial topics might attract opposing attention and therefore create huge tension among views but not really quality. Therefore, quantity (mass collaboration) might have a hard time to ensure quality in output.

8. Uneven effort/attention towards different type of topics. For example, pop culture and science section in the US Wikipedia are much better developed than many other sections.

Since the contributors have their control over where and what they want to contribute, Wikipedia's articles do not gain equal attention and efforts in collaboration. Many categories are way more developed than others, leading to unevenly

developed articles. Readers need to be extra careful about the credibility of the articles that are lacking traffic and contributions.

4.3.5 Other Wiki Inspired Ventures

Microsoft Encarta's Experiment



As a digital multimedia encyclopedia, Microsoft published Microsoft Encarta from 1993 to 2009. In an effort to attempt to reproduce the Wikipedia-style online collaboration success, Microsoft Encarta launched an experimental system to solicit user contributions in 2005. As a clear reaction to the threat by Wikipedia, Microsoft Encarta announced its

experiment in allowing suggestion for revisions. Although it was perceived as a wiki-like feature to Encarta's established encyclopedia, in reality there was no timely mechanism allowing open free changes from outside contributors. With a wiki-like policy, Encarta's implementation of this experiment was incredibly traditional and half-hearted.

At the end, Microsoft Encarta's experiment did not create too much traction. It is not surprising that in retrospect not too many people even know about this experiment. There was never any integrated visible features on Encarta's website promoting this wiki-like effort, such as Wikipedia's "edit" button. People did not have a place to collaborate and build on each other's work. Furthermore, the result from this experiment was merely a six-month report from Encarta.

The lesson learnt from this experiment is that wiki-like online collaboration requires a level of dedication in implementation to encourage and allow people to collaborate in its online platform.

4. ANALYSES

4.3 Wiki Model: Wikipedia

4.3.5 Other Wiki Inspired Ventures

Wikitorials

Wikitorial is the term that used by the Los Angeles Times experiment in attempting to allow public editing in an editorial column. It was launched on June 17, 2005, but only after two days Wikitorials staffs were forced to turn it down. Spams and vandalism from the moment of its inception immediately flooded the site. This type of struggling towards fighting against vandalism is very common in Wikipedia's collaborations.

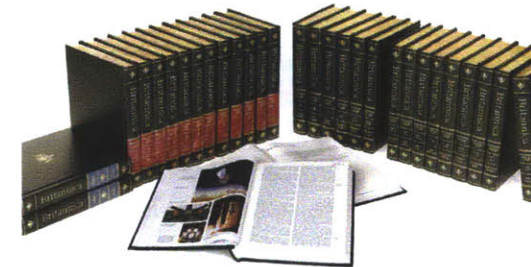
The difference between Wikipedia's success and Wikitorial's failure was explained very clear by Andrew Lih in its book, *The Wikipedia Revolution*:

What the LA Times did not realize was that it takes a legion of dedicated users and administrators in the background of Wikipedia to keep things vandal-free. The simple launch of the feature without this in mind was like building a theme park without sanitation workers or security guards. There was bound to be trouble.

And it was about as bad as one could imagine, with some of the Internet's most famous shock images making unexpected appearances on the LA Times wiki site. That was simply too much for a mainstream media organization to handle, and it was shut down faster than you could say "undo".

The high-profile, high-exposure media sites require greater attention of administration and control over their content. The lesson that was learnt through this experiment is perhaps that the wiki-model might not fit well with organizations that cannot loosen their control and cannot afford the consequences of a messy process of online collaboration.

Britannica free and collaborative online section



Encyclopaedia Britannica Print Version

As the traditional dominator among encyclopedias since 1768, the Britannica Encyclopedia also readjusted its digital strategy in reaction to Wikipedia's overwhelming success. In early 2008, Britannica also went free and collaborative online, offering users opportunities to be part of Britannica's content creation. This effort of going free and online has been fairly successful, attracting a sufficient amount of contributions and producing fairly high-quality collaborative articles. For example, the multimedia section has been particular successful, through integrating videos and negotiating rights to those copyrighted materials. Under the section of "Britannica's New Site: More Participation, Collaboration

4. ANALYSES

4.3 Wiki Model: Wikipedia

4.3.6 Conclusion: Wikipedia

from Experts and Readers” Britannica editors emphasized the difference between Wikipedia and Britannica:

Two things we believe distinguish this effort from other projects of online collaboration are (1) the active involvement of the expert contributors with whom we already have relationships; and (2) the fact that all contributions to Encyclopaedia Britannica’s core content will continue to be checked and vetted by our expert editorial staff before they’re published.

In this way we aim to leverage the power of the Internet to integrate the work of many people in a common project and on a large scale, but without relinquishing the editorial oversight that makes Britannica’s content trustworthy.

Britannica’s large and strong existing expert contributors’ group and its historical record in producing reliable encyclopedias gave them a good start in understanding the core principle to building up a reliable online encyclopedia, and to what extent they should open up their content for editing. Their “collaborative-but-not-democratic” approach gives great recognition to the voices and powers of experts, still

keeping a tight quality control over some of the core content Britannica feels responsible towards. In short, Britannica’s online encyclopedia efforts keep a better balance in privileging experts’ power and allowing regular users’ voices. Compared with Wikipedia, the content seems to be better-controlled and more clearly distinguished between experts and regular users’ contribution.

4.3.6 Conclusion: Wikipedia

Wikipedia, as one of the most widely known and successful example of peer production models, has rapidly gained dominance in online encyclopedias, exceeding everyone’s initial expectation. One can argue that the secret of success lies in the fact that Wikipedia allows anyone to contribute anything at any time. However, there is no magic in using open and free access for anyone to guarantee attraction of constructive online traffic, without noticing that a legion of dedicated volunteers devoting huge amount of their time and effort in keeping the ship going, raising the quality, and fighting

against vandalism. There is no easy way to build Wikipedia. The Wikipedia model is not merely a simple open free access approach. Its success has close relationship with its strong support from the contributing community, a clearly defined goal, initial absolute insistence in universal access to anyone, an evolving management team and system for quality control, and a perfect marriage between the hackers’ ethos and interests in building up human knowledge, i.e., the encyclopedia precedent.

One may assume that Wikipedia’s model can be reproduced easily in many other culture and context. Many have made the attempt, including Wikitorials and many others, since proven to be very unsuccessful. Without a deeper understanding of all the pros and cons that the Wikipedia model could bring to the table, a blind belief in reproducing wiki success through simply allowing free and open access has proven to be disastrous. In conclusion, the possible applications in utilizing the wiki model in achieving financially motivated ventures will require further examination and inquiry.

4. ANALYSES

4.4 Collaborative Problem Solving Space & OpenIDEO

4.4.1 Collaborative Problem Solving Space



Collaboration Creates Intangible Advantages, by Jay Derago, 2013

Many online platforms have made attempts to support the collaborative problem solving space. The definition of collaborative problem solving space in this thesis is that the condition when people coming together to solve real-world problems collaboratively. Examples can range from coordination of volunteers and donation efforts for after-disaster

reconstruction, consultants initiating and implementing new school building construction for rural China, to NGOs trying to gather resources for resolving sanitary issues in Ghana, etc.

The benefits of collaborating to solve specific real-world problems include head-on tackling difficulties in working through

real world processes, mobilizing resources and talents to resolve pressing issues, down-to-earth application of theories and knowledge, etc. However, when processes involve people working together, the complexity goes up multiple folds due to sociological, managerial, and structural difficulties. Furthermore, the challenges in collaborative problem solving space largely stem from the high level of unpredictability of the collaborative action process. In particular, starting a new business involves so much trial and error and back and forth in ideation, communication, and implementation. The fact that there is no definite formula for success further demonstrates the level of difficulty for navigating within the collaborative problem solving space.

Therefore, inquiry into the complications and implications in implementing collaborative problem solving processes will greatly shed light on the possible solutions or road map for establishing online platforms facilitating these processes. Specifically, OpenIDEO is a stellar example of a functioning online platform

4. ANALYSES

4.4 Collaborative Problem Solving Space & OpenIDEO

4.4.2 OpenIDEO

attempting to support the ideation portion of the process in collaborative problem solving space. This thesis has already analyzed the pros and cons within the mechanism of OpenIDEO's online platform in Chapter 3.3.2. This section will focus on examining the managerial and structural approach of OpenIDEO online platform.

4.4.2 OpenIDEO



IDEO: the Mother Ship



As a renowned international design firm and innovation consultancy, IDEO has already established its competitive edge in the field of innovative design methodology consulting. IDEO's roots are in applying design-driven innovative principles in designing products, consulting, business, and organizational challenges. OpenIDEO is clearly structured as the extension of IDEO to tap into the wisdom of the crowd, expanding IDEO's capacity from a firm with 500 employees to 50,000 talents. The origin of OpenIDEO came from this vision of combining open-source software approach and the formation trend of creative communities, helping to match supply and demand. The open source approach supplies opportunity and accessibility for creative communities to excel in their interests and needs.

The apparent alignment of IDEO's working style and philosophy with OpenIDEO organizational and managerial strategies promotes and prioritizes IDEO's methodologies; for example, the categories of phases in OpenIDEO are inspiration, ideation, and implementation. There are

many questions that can be raised to examine OpenIDEO's success and shortcomings. What can we learn from the OpenIDEO venture? How to innovate with the community? How to mobilize the community? How to tailor the platform according to the needs from different types of users? Whether and how to include financial incentives? What is the most important indicator for maintaining the sustainability of any organization?

IDEO, as the mother ship for OpenIDEO, maintains full control over OpenIDEO and considers OpenIDEO as its experimental venture with clear purpose of serving IDEO's design capacity expansion.

4. ANALYSES

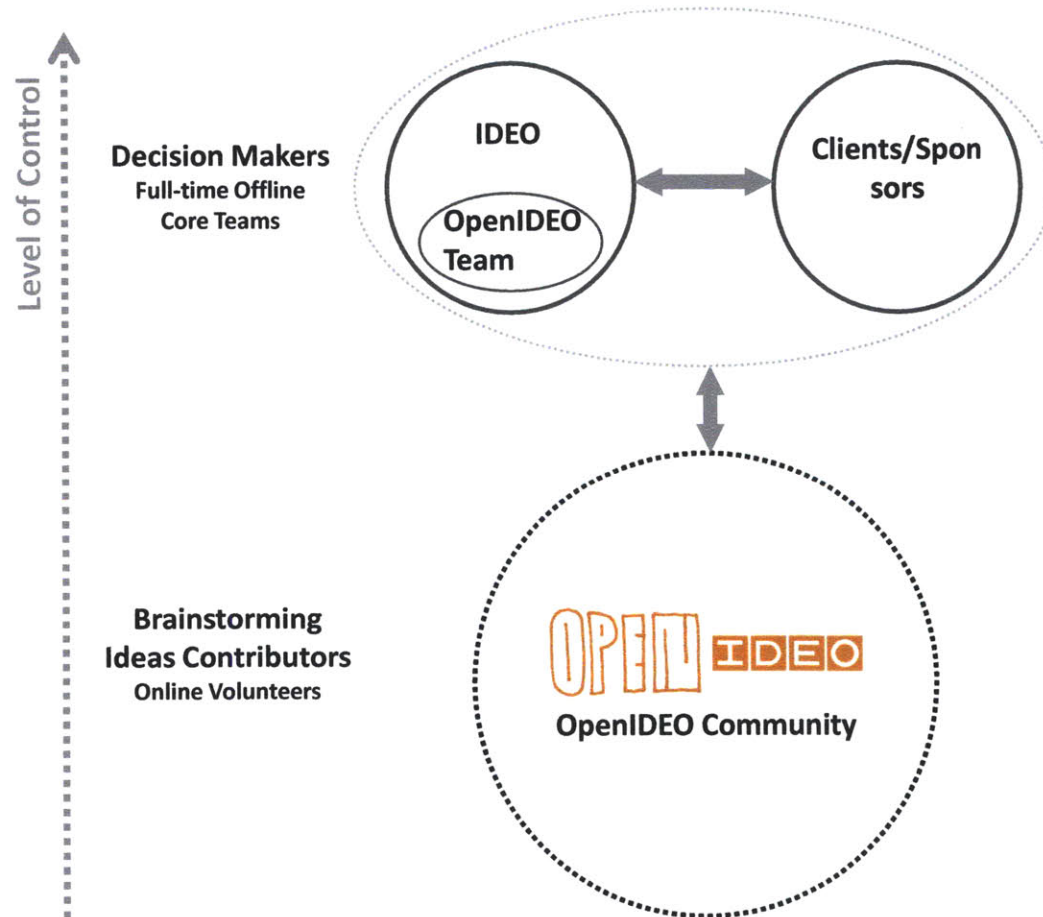
4.4 Collaborative Problem Solving Space & OpenIDEO

4.4.2 OpenIDEO

Clear Power Structure

The main actors in OpenIDEO online platform include IDEO's in-house team, the OpenIDEO management team, clients/sponsors, and the OpenIDEO online community. The roles among the above four players are clearly defined within the relationship and dynamics between all these actors.

IDEO and OpenIDEO in-house teams, alongside with sponsors, maintain tight control in defining the agenda, guiding the process, the evaluation and carrying out of implementation, whereas the OpenIDEO online community contributes primarily on ideation and brainstorming process. This clear power structure does have a positive impact in achieving the goals that OpenIDEO team set out to do. However, the lack of flexibility in setting up agendas and processes might be the reason hindering more people from understanding and contributing to the OpenIDEO online platform.



4. ANALYSES

4.4 Collaborative Problem Solving Space & OpenIDEO

4.4.3 Benefits and Limitations in OpenIDEO

OpenIDEO Benefits

1. Clear vision: to expand IDEO's capacity
With IDEO as the clear guiding force, OpenIDEO maintains its vision in using the wisdom of the crowd to expand IDEO's design capacity through using the OpenIDEO online community's brainstorming capacity. This clearly defined goal greatly contributes to success in realizing OpenIDEO's vision.

2. Adoption of IDEO's working model into OpenIDEO (an online version)

IDEO has its established design methodology and processes. It is only logical for OpenIDEO to adopt IDEO's proven-to-be-successful working model and transform it into an online version. OpenIDEO's online processes also translate and reflect nicely IDEO's design methodology, enabling a dynamic online creative community.

3. Brainstorming platform for ideas and concepts

The main function of OpenIDEO is to

brainstorm and collect information for certain proposed social challenges. It is highly possible that this acute and highly defined function for OpenIDEO attracts a certain type of creative crowd and manages to maintain the dynamic online community.

4. A finite development time period

OpenIDEO structures each challenge within a finite amount of steps and time period, giving participants a clear timeline as to when to achieve what stage. It is very helpful to create a sense of beginning and ending through this linear structure, offering a sense of accomplishment for the contributors.

5. Non-financial motivation for setting up the big question (doing social good to change the world)

OpenIDEO and IDEO core team were very intentional in choosing non-financial incentives to motivate and attract participants, for example, personal gratification from doing social good through collaboration. In order to promote collaboration rather than competition, the OpenIDEO

platform promotes creative collaborations and offers recognition (design quotient/DQ) instead of any prizes. The assumption is that the positive encouragement of collaboration and avoidance of competition guides the participants to build on each other's contribution. In short, the exclusion of money in offering incentives has been quite crucial in creating a constructive and healthy OpenIDEO online community.

OpenIDEO Limitations

1. High threshold to understand the system (design concept and working principle)

OpenIDEO's processes have been built entirely on the working model of IDEO. However, people without a design mentality and understanding will have a hard time to understanding this system. It is highly possible that this high threshold for participants might be one of the main reasons that the OpenIDEO community is

4. ANALYSES

4.4 Collaborative Problem Solving Space & OpenIDEO

4.4.3 Benefits and Limitations in OpenIDEO

only appealing to a certain cross-section of people but not all.

2. High commitment to the platform

Because of the highly defined goal and the finite amount of time for the different working stages, the OpenIDEO platform requires contributors to highly commit into the platform in order to contribute anything meaningful. There are many examples of OpenIDEO contributors spending many days to refine their proposals and push their ideas into the next stage. This high bar for commitment might be another factor limiting the size of the pool for the contributors.

3. IDEO, OpenIDEO team and sponsors control the agenda, direction, process, evaluation, and implementation

There is a clear reason why compared with Wikipedia, OpenIDEO has a much smaller contributor pool, largely due to the overly defined roles and power structure among all the players. IDEO, OpenIDEO core team, and sponsors steer the “ship,” whereas the OpenIDEO online contributors are mainly participating

only in the way that have been defined for them. The lack of flexibility and impossibility for contributors to participate in decision-making process might hinder OpenIDEO’s further development.

4. A linear process: Disconnection from realization, lacking mechanism to transform ideas into real action

The fundamental tension in defining ownership indirectly demotivates contributors to have personal drives to push through and ultimately implement their ideas. The inherent and inevitably tremendous efforts and perseverance required for implementing any idea in real life generally ask for full dedication and consistent contribution, pushing through adversity no matter what.

The most challenging sector for OpenIDEO is in fact the implementation. How can OpenIDEO structure its platform beyond informational exchange? How can it promote collaboration of action in real implementation beyond the collaboration of ideas and concepts? What are the pros and cons of keeping clearly defined roles and power structure among all the actors? How are managerial problems that social enterprise grassroots startups face similar or different from those of the OpenIDEO idea collaborative platforms? What are the applicable principles and strategies that social enterprise grassroots startups can learn from the OpenIDEO mode of operation? How to achieve the balance between authoritative power dynamics from the organizers/administrators and democratic-collaborative nature of many online contributor communities? Last and most importantly, is it ever possible to manage and organize communities online and/or offline to overcome real world hardships in the process of implementation with action?

4. ANALYSES

4.5 Conclusion: Lessons from Peer Production Model, Wikipedia, and OpenIDEO

The peer production model has achieved its wide influence through its self-motivating coordination model, tapping into a large amount of creative power to create meaningful products and services. Its intention in excluding any financial purpose in the production process contributes greatly to its success in many peer production projects, such as Wikipedia, and OpenIDEO. However, it requires further discussion whether this model of non-financial motivation can be applied to other ventures that have a clear financial purpose. The inquiry into these successful peer production stories will help the further understanding of the principles in creating functioning self-organized online efforts and the potential applications into ventures with financial outlooks. The key takeaways from these successes in peer production space can potentially be applied to other ventures include the following:

- First and foremost, any online effort should be a virtual embodiment of interests, passion, and culture in real life, so that the self-organization can have enough attraction to ensure a critical mass for the peer production model. Nobody will work on anything for free when they don't have any personal drive to do it. People will be well motivated when the tasks offered match with their personal passion and interests.
- Setting up clear goals (clearly defined problems) and a framework for solutions to allow individuals to self-identify their matching contribution. Contributions need to be acutely guided. There is no magic in self-organization. The secret is a clearly defined organization for contributors to navigate and gain personal gratification.
- A clearly defined but flexibly-implemented power structure to allow a subset of the trusted contributors to gain more control over monitoring and administration. In order to ensure better quality

control, contributions need to be regulated in the sense of preventing vandalism and spamming, but at the same time still allowing an equal amount of accessibility for anyone to contribute at any time. A clearly delineated power structure and low threshold of accessibility for contributions are not mutually exclusive.

- Providing a methodology for aggregating content and judgment = self-correction. With the assumption that the crowd does have certain level of wisdom, the aggregation of different contributions in both content and judgment will be quintessential in formulating meaningful and quality outcomes. The possible constructive strategies consist of having and stating clear policies and guidelines for contributors to conduct their behaviors in peer production communities, allowing errors and disagreement through conflict resolving, maintaining faith even when vandalisms are temporarily overpowering constructive contributions, and formalizing authority to a core group of dedicated contributors to ensure the sustainability of the community.

5. COMPARISONS:

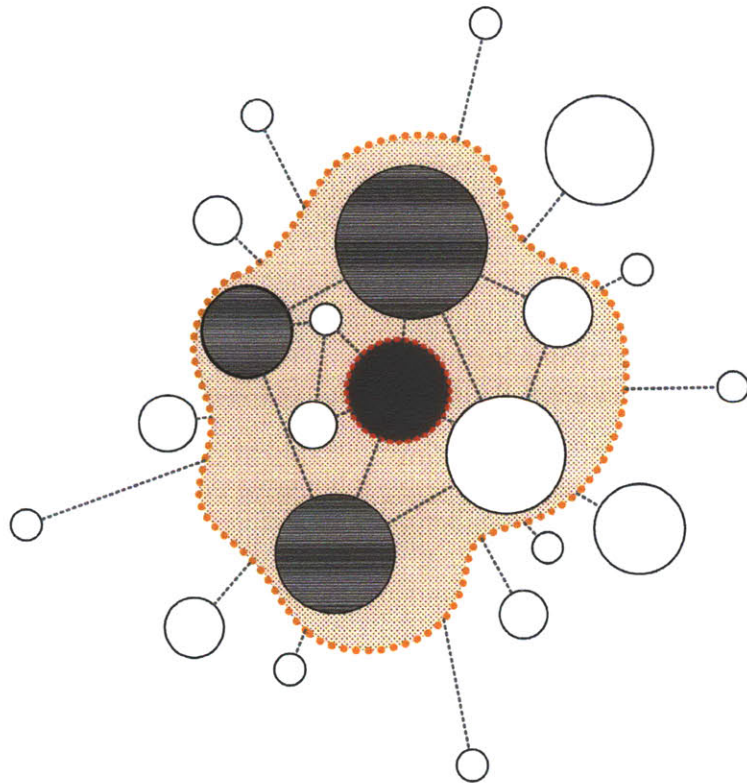
**5.1 Comparison of Peer Production Model
and Collaborative Problem Solving Model**

**5.2 Comparison of Different Models of Online Collaboration:
Wikipedia versus. Existing Digital Platforms for Social Ventures**

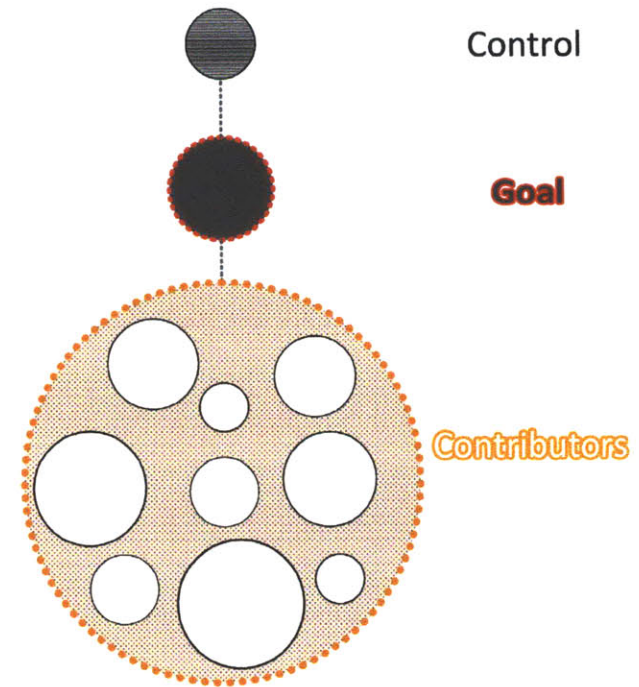
5. COMPARISONS

5.1 Comparison of Peer Production model and Existing Collaborative Problem Solving Action-based model

Peer Production model



Collaborative Problem Solving Action-based Model



5. COMPARISONS

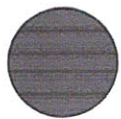
5.1 Comparison of Peer Production model and Existing Collaborative Problem Solving Action-based model



Goal + Solution



Collaboration Process



Control: Core Groups Maintaining Control over the Operation



Contributors: of all kinds, without specific power

5. COMPARISONS

5.1 Comparison of Peer Production model and Existing Collaborative Problem Solving Action-based model

Peer Production Space

Differences

- Clearly defined final goals
- High resemblance to physical collaboration process
- Mostly thriving at software development, writing, editing, blogging, and etc.
- Bottom-up approach + Top-down structure
- Unclear power dynamics
- Exclusion of any financial motivation

Similarities

- Key roles: initiators, helpers, and administrators/governors
- Quality control
- Contribution matching process

Collaborative Problem Solving Space

- Unpredictable process: Learning through doing
- Lower resemblance to physical collaboration process, due to the limitation of computer convention
- Highly action-based
- Top-down structure
- Clearer power dynamics
- Inclusion of Investors

5. COMPARISONS

5.1 Comparison of Peer Production model and Existing Collaborative Problem Solving Action-based model

5.1.1 Differences:

a. Goal + Solution:

Clarity of final goal/solution: In the process of figuring out possible solutions, the form of the solution is often very unclear and unpredictable in the collaborative problem-solving space due to the learning-through-doing process. To the contrary, in peer production space contributors have much clearly defined understanding of their goals and the final outcomes.

b. Collaboration Process:

Level of resemblance to physical collaboration processes: In peer production space, the online collaboration process has a high resemblance to the physical

collaboration process in real life. Furthermore, it mostly thrives at software development, writing, editing, and processes that are translated more easily into online formats. In great contrast to peer production space, collaborative problem solving space mainly consist of highly action-based processes, and therefore maintains a much lower resemblance to its real-life processes due to the limitation of computer convention.

c. Control:

Peer production space has a combined top-down and bottom-up approach with a relatively unclear power structure, whereas collaborative problem-solving space mostly implements a much clearer power structure with a top-down approach. As a result, peer production space

provides more potential in including flexibility in power distribution and collaboration methods; however, the unclear power structure might also cause a considerable loss of efficiency.

d. Exclusion/inclusion of financial motivation: The peer production model has been extremely careful in including any financial motivation in their collaborative processes, due to the inclusion of a huge cadre of volunteers and preventing personal gains out of collective efforts. To the contrary, the nature of most of the collaborative problem solving projects have clear financial goals, therefore, it is almost impossible not to accommodate financial factors as part of their motivation.

5. COMPARISONS

5.1 Comparison of Peer Production model and Existing Collaborative Problem Solving Action-based model

5.1.2 Similarities

a. Key roles: initiators, helpers, and administrators/governors:
Even though the peer production space has a fairly unclear power structure, the key roles required to propel the processes are very similar to collaborative problem-solving space, including initiators, helpers, and administrators/governors. The innovative flexibility comes from the self-identifying process of these roles by each individual contributor instead of being assigned to a role by authorities.

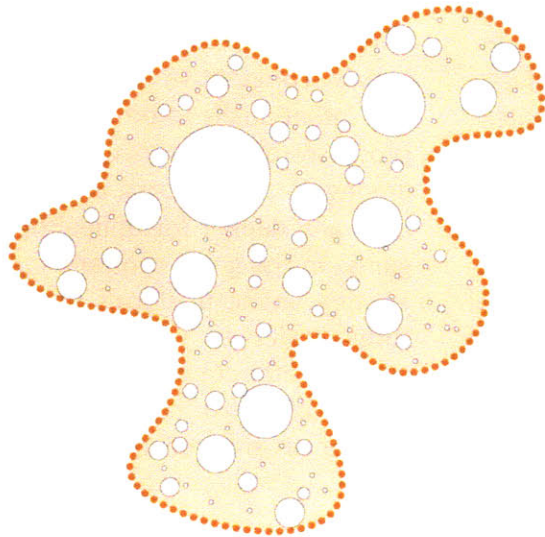
b. Quality control:
One of the key factors contributing to the success to both models includes the mechanisms for quality control. This is an indispensable structural element for both models, ensuring the proper accomplishment of their goals.

c. Contribution matching process:
Whether being self-identified or assigned, the contribution matching process is at the core of both models in harnessing appropriate human capital to ensure successful implementation of the processes.

5. COMPARISONS

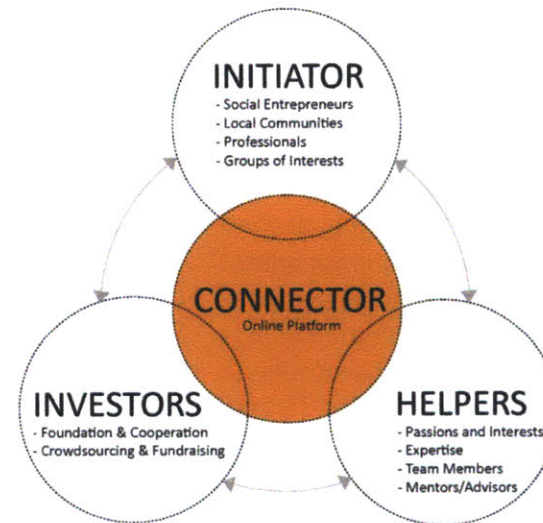
5.2 Comparison of Different Models of Online Collaboration: Wikipedia vs. Existing Digital Platforms for Social Ventures

Wikipedia



- Flexible Structure
- Flexible/Interchangeable Roles
- Power Dynamic: Corporative > Competitive

Existing Digital Platforms for Social Ventures



- Clearly Structured and Phased
- Defined Roles
- Power Dynamic: Competitive > Corporative

5. COMPARISONS

5.2 Comparison of Different Models of Online Collaboration: Wikipedia vs. Existing Digital Platforms for Social Ventures

Structure of the Platforms

Wikipedia thrives under the collective efforts from a legion of dedicated online contributors. Even though the goal, an online encyclopedia, was defined ultra-clearly, the structure of the Wikipedia platform was fairly flexible in terms of allowing contribution from anyone at any-time. The possibility of having anyone from around the world starting completely new articles and editing existing articles within their interests is a mind-blowingly revolutionary concept, and harnesses an exceptionally huge pool of human capital. In contrast to Wikipedia's flexible structure in allowing different levels of contribution, the existing digital platforms for social venture are mostly highly structured and phased. Due to clear financial purposes, the existing condition demonstrates highly controlled and phased processes to prevent unfair personal gains among contributors, leading to limited traction of contributions and participations.

Roles for the Contributors

In Wikipedia, the roles that contributors can take are very flexible and interchangeable. Wikipedia's contributors can choose to take on one role or several roles differently in one project or multiple projects. By allowing self-identification of matching roles, Wikipedia excels at offering the maximum opportunities for contributors to participate. Unlike Wikipedia's flexible role distribution, existing digital platforms for social ventures usually have clearly defined roles for individual contributor. Each participant needs to register into the already compartmentalized roles and participate within the defined and phased structure. There is not too much room for changing among the roles, since the structure of the platforms have the minimum capacity to allow that.

Power Dynamics

The difference in including a financial purpose is one of the key factors contributing to the different types of culture within online communities, such as cooperative versus competitive dynamics. Wikipedia intentionally promotes cooperative processes and prevents competitiveness among its contributors, in order to minimize any danger for unhealthy personal gains. To the great contrary, most of the existing online platforms for social ventures prefer to use competitions and prizes to attract participants, leading to a less collaborative culture and promoting smaller circle of collaboration.

6. CONCLUSION & RECOMMENDATIONS:

Design Rules for Creating Self-organized Collaborative Model for Social Enterprise Grassroots Startups

6.1 Lessons Learnt from Entrepreneurial Experience
and Peer Production Model

6.2 Strategies for Creating Self-organized Collaborative Model

6.3 Design Rules for Creating Self-organized Collaborative Model

6.4 Conclusion

6. CONCLUSION & RECOMMENDATIONS

6.1 Lessons Learnt from Entrepreneurial Experience and Peer Production Model

Lessons from Entrepreneurial Experience

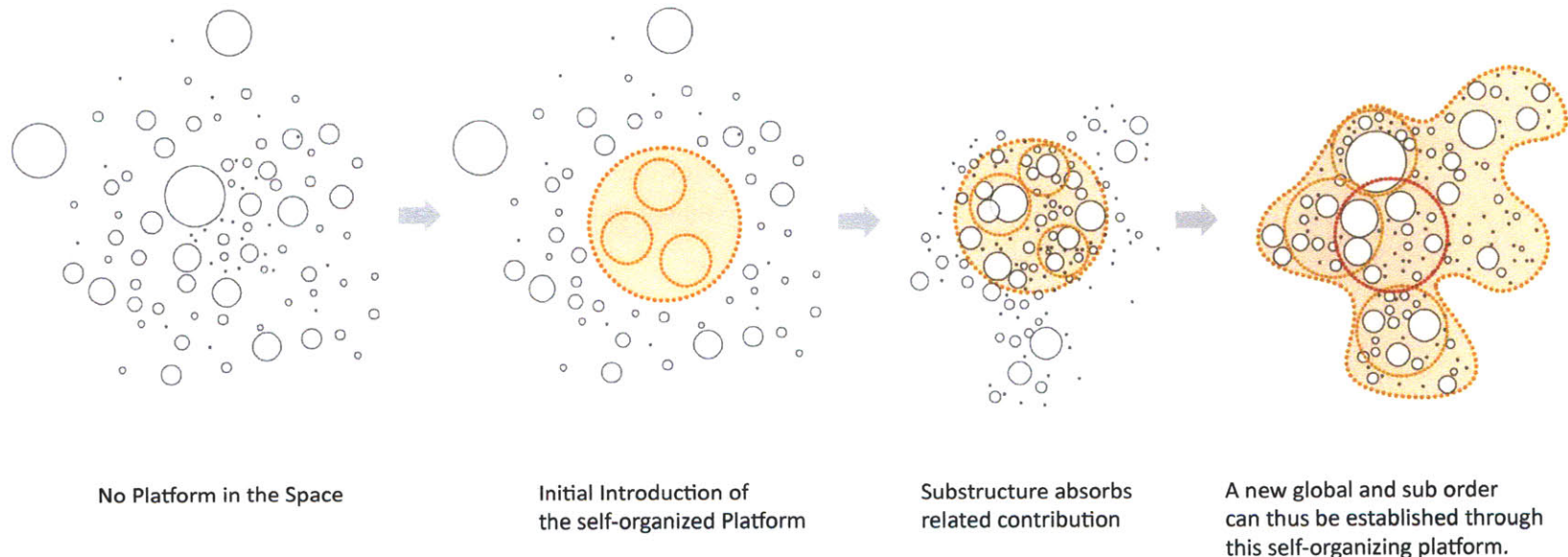
- Will + Act
- Iterations of Testing Ideas and Implementation
- Incubating and Cultivating Entrepreneurial Ecosystems
- Attracting Collaborators, Contributions, and Resources: Advice, Connection, Funding
- Creating a Culture of Embracing Failure
- Clarity in Planning and Flexibility in Adapting.

Lessons from Literature: Peer Production Model

- Clear Goals and Tasks
- Low Threshold for Contribution and Commitment
- Interchangeable Roles
- High Resemblance to Offline Collaboration Process

6. CONCLUSION & RECOMMENDATIONS

6.2 Strategies for Creating Self-organized Collaborative Model



The strategies for establishing online self-organized collaborative platform include the four stages illustrated in the above diagrams. Firstly, there are large amount of potential contributions floating around in the “space”, waiting to be harnessed to construct meaningful outcomes. Without the introduction of any platform in the space, it will be much more difficult to collaborate cross-culturally and

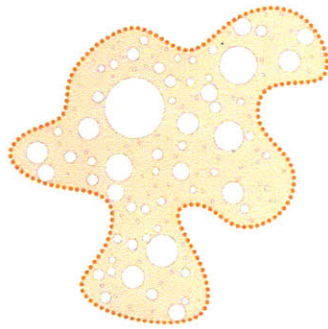
geographically. Secondly, after the initial introduction of the self-organized platform, the potential contribution can start to aggregate in response to its presence. The self-organized platform should consist of a flexible substructure defining the key roles for the collaborative processes. Thirdly, the substructure starts to absorb related contributions, reorganizing the space to gather and create communities

that can accomplish certain tasks for the overall goal. Lastly, a new global and sub-order can thus be established through this self-organizing platform, occupying the space with a soft and flexible boundary and harnessing matching contributions. The substructure is clearly defined but flexibly implemented to accommodate interchangeable roles and a flexible power structure.

6. CONCLUSION & RECOMMENDATIONS

6.2 Strategies for Creating Self-organized Collaborative Model

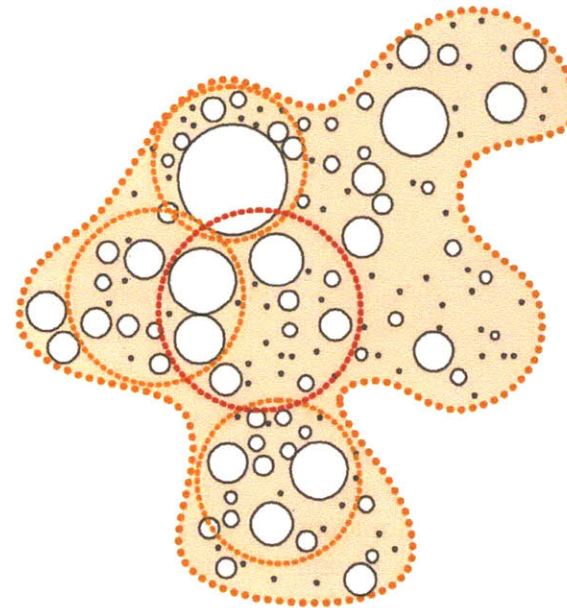
Self-Organization
+
Intentional Power Structure



+



- Platform as the Gatekeeper, providing underlying rules and guidelines with clear sub power structure.
- Flexible/Interchangeable Roles
- Power Dynamic: Corporative + Competitive



6. CONCLUSION & RECOMMENDATIONS

6.2 Strategies for Creating Self-organized Collaborative Model

In short, the strategies for creating online self-organized collaborative platforms incorporate two major components. First is providing a clearly-defined but flexibly-implemented power structure and having interchangeable roles for contributors. The self-organized platform should function as the gatekeeper, providing underlying rules and guidelines with clear sub-power structure. Second is including soft boundaries for the overall platform and all the defined roles within the substructure, establishing openness in accepting all levels of contribution, and allowing an evolving and organic growth of the organized online communities for the contributors. Therefore, the power dynamic within the self-organized platform should be a combination of cooperativeness and competitiveness.

6. CONCLUSION & RECOMMENDATIONS

6.3 Design Rules for Creating Self-organized Collaborative Model

- Clear Power Structure (Administrators, Entrepreneurs, and Masses) with Interchangeable Roles (Initiators, Helpers, Investors)
- Inclusion of Iteration of Idea Forming, Testing, Implementing, and Adjusting
- Favor: in Competition During the Idea Formation, in Cooperation During the Implementation
- Creating/Attracting an Online Supporting Ecosystem Customized for Each Individual Venture
- Sorting Online and Offline Contribution, and Offering Low Threshold for Matching Contribution and Commitment.
- Setting up Clear Goals and Task Modules to Resemble Offline Collaboration Process

6. CONCLUSION & RECOMMENDATIONS

6.4 Conclusion

Collaborative production in social enterprise grassroots startups offers profound challenges but also tremendous opportunities, bringing positive and revolutionary social impact into society. The difficulties in conducting social enterprise grassroots startups range from its highly unpredictable process to the unmet needs in seeking for matching resources and contributions. It is imperative to aggregate different levels of matching contributions for social enterprise grassroots startups to facilitate a more efficient and productive collaboration among all the key actors. More importantly, meaningful outcomes can come out of effective collaboration cross-culturally and

geographically through harnessing a much larger pool of human capital and potential contributions.

Through the analysis and critique of the peer production model (esp. Wikipedia), collaborative problem-solving space (esp. OpenIDEO), and the existing online platforms facilitating social enterprise grassroots startups (seven case studies), this thesis aims to offer an alternative self-organized collaboration model, enabling effective online collaboration among the main players in social enterprise grassroots startups. It is very clear that a clearly-defined but flexibly-implemented power structure and interchangeable roles for

contributors greatly enable a more self-organized mechanism in facilitating the online collaborative processes. The recommendation of strategies and design rules suggest a wide range of applications that could occur in establishing better-organized online platforms facilitating social enterprise grassroots startups.

Future research might include testing of the proposed design rules and strategies, and incorporating real world data into further validation of the effectiveness in using self-organized collaborative online platform in facilitating efficient gathering of useful contributions for social enterprise grassroots startups.

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BIOGRAPHICAL NOTE

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Yu Gao has obtained both degrees in SMArchS Design and Computation and Master of Architecture. Her work is focused on helping reduce the socioeconomic inequalities faced by rural migrants within China. Her project, Micro Institution SPOT (M.I.Spot), adds economic and cultural value to the existing infrastructure of the schools for migrant children. It incorporates living space for artists into the schools and encourages creative tourism to help subsidize the cost of those schools. Through fostering a mutually beneficial relationship between students, educators and artists, Yu hopes to create a new, socially engaging creative institution which can be treated as a prototype and be replicated around the world.

Prior to coming to the United States, Yu worked as an architect in Hong Kong, managing a variety of projects from high-end commercial and residential towers to primary schools. She's from mainland China and possesses a true passion to serve the underprivileged.

.....For the Love of God