

## Social Implementation of Design Workshops Output

### Research on Factors Leading to a Project Successful Introduction and Application

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This paper is a summary of the analysed experiences collected from 'social implementation projects', which started as participatory design workshops. Since there is very little research done on social implementation methods based on these kinds of workshops' outcome, this study aims to review the projects that were successfully implemented and clarify the factors leading to their successful social realization. Using a qualitative approach, archival data was reviewed, and project leaders were interviewed, which shed light on the characteristics necessary for the successful enactment of the ideas sprung from the workshops. This study shows there are four essential attributes that a workshop output must possess, in order to be socially implemented: A stake-holding oriented system, a collaborative environment, a strong bond between local issues and external resources, and a solid foundation of flexible design thinking methods.

Keywords: design workshop; social implementation; social-output; design process

### Background

A study with these characteristics demands a large amount of data not easily compiled without having a significant pool of projects supported by an established workshop organization. Fukuoka City, the largest economical and industrial hub of Japan's Kyushu region, has been very active in supporting and enabling initiatives and ideas toward a more inclusive and socially driven implementation of design projects (Universal Fukuoka City, 2011). Thanks to this ideal environment, the authors have been annually conducting 'participatory design workshops' (design-WS) from 2012 to 2020. "Universal City Fukuoka Design Workshop", a two-day workshop to propose social participatory solutions (including people from diverse backgrounds), was conducted annually since 2012. In 2016, it was merged into the framework of the Global Goals Jam, an international workshop for creating solutions from solving problems under the theme of Sustainable Development Goals (SDGs).

In the current format of the design-WS, teams are allocated time to develop their ideas according to a design process that enables (1) understanding, (2) problem identification, (3) idea development, (4) testing (prototype making), and (5) proposal presentation. In the last stage of the workshop, each team presents their design proposals, an invited panel of judges from design education and local government reviews, comments, and selects the best proposal for the "Jury Prize" based on 5 points evaluation criteria: universal design perspective, social impact, ideas originality, the potential for social implementation, and presentation. After the workshop, some design proposals continue developing, reaching a successful 'social implementation condition', a project which effectively identifies social issues and is capable of providing a sustainable concrete solution by its own means (by public allocation or private self-funding). These projects are successfully deployed (or given official support) into the public development plan at various levels of the administrative structure.

From a theoretical point of view, there are some empirical studies that focus on effective methodologies for a workshop program design (Anzai et al., 2011; Anzai et al., 2013). In addition, there are several studies investigating the facilitation of workshop practitioners (Anzai and Aoki., 2018). However, few studies shed light on the methods related to the social implementation derived from the output (design proposal) originated on



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the design-WS.

## Purpose of the Study

This study's objective is to comprehend (define, organize, classify) the factors that effectively lead to the social implementation of design proposals derived from design-WS.

## Research Method

This study used a two-pronged approach to gain insights into the factors that lead to successful social implementation. The first one, consisted of an archival research of the data collected from the design-WS conducted between 2012 and 2020. The second one, to understand the internal dynamics, and especially the decision-making process that occurred at the interior of each group, qualitative interviews of the standardized open-ended type were conducted among the team leaders.

## Findings

The following findings are compiled from 3 case studies of design-WS and the conducted interviews with the respective team leaders of the implemented projects.

### Archived Design-WS Data Collected Between 2012 and 2020

This archived data was organized and classify on a yearly basis, the structure considered the 'Theme of the Design Proposal', 'Winner of Jury Prize', and 'Social Implementation Status'. Table 1 (Zhang et al., 2020).

Table 1. Organized data of the design-WS conducted from 2012 to 2020

2012	TEAM-A	TEAM-B	TEAM-C	TEAM-D		
Theme	HAKATA kiten Project	The Ring	Info-rest	HAKATA SHIELD		
Jury Prize			●	●		
Social Implementation						
2013	TEAM-A	TEAM-B	TEAM-C	TEAM-D		
Theme	Double Maru Project	Plasico	Umakamon	Allergy Free Cake "NICO"		
Jury Prize				●		
Social Implementation						
2014	TEAM-A	TEAM-B	TEAM-C			
Theme	kamiiji musium for all	Amenity Lunch Box	KIZUNA			
Jury Prize		●				
Social Implementation						
2015	TEAM-A	TEAM-B	TEAM-C	TEAM-D		
Theme	FUKUOKA B-ITE	EAT JAPAN PROJECT	YATAI KIT	YATAI BUDDY		
Jury Prize			●			
Social Implementation			●			
2016	TEAM-A	TEAM-B	TEAM-C			
Theme	UMBRELLA YATAI	YURUEI YATAI	TRIP YATAI FUKUOKA			
Jury Prize		●				
Social Implementation						
2017	TEAM-A	TEAM-B	TEAM-C	TEAM-D		
Theme	TOIOT	Wheelog!	Cazera	Baby BnB		
Jury Prize				●		
Social Implementation				●		
2018	TEAM-A	TEAM-B	TEAM-C	TEAM-D		
Theme	Adventure of Underground Kingdom	City Oasis	Kawasemi Project	KNOW MORE PLASTICS		
Jury Prize				●		
Social Implementation				●		
2019	TEAM-A	TEAM-B	TEAM-C	TEAM-D		
Theme	Wheel Chaire Fashion	PROJECT IMA	Uki Uki Park	Sustainable Our Hometown		
Jury Prize				●		
Social Implementation		●		●		
2020	TEAM-Fukuoka A	TEAM-Fukuoka B	TEAM-Fukuoka C	TEAM-Kyoto A	TEAM-Kyoto B	TEAM-Kyoto C
Theme	Shikanoshima Footprint Project	Let us make a Maching bus	Design lesson of new age lifestyle	URUSHI forest school	Emocycle	Oiwayama Bamboo Base"Kizuna"
Jury Prize				●		
Social Implementation	●	●		●		●

It can be observed that there were three social implementations between 2012 and 2018, all winning the "Jury Prize". In 2019 and 2020, there were six social implementations and four out of the six did not win the "Jury Prize".

Design-WS (2012-2018) differ from those of 2019 in that the first ones, the issue to be resolve was proposed within the time allocated for the workshop itself. In the later ones, the organization called for participants who

already had a defined issue (interest or direct stake-holding) to undertake. This requisite may have contributed to an increment in the number of social implementations in 2019 and 2020.



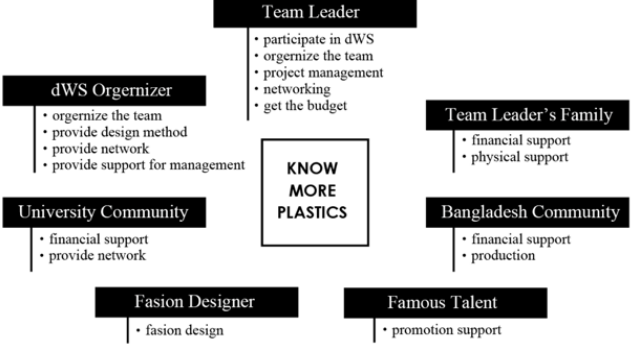
### Interview with Team Leaders of the Social Implementation Projects

Interviewed leaders were selected based on the degree of success achieved by their respective projects, and only those projects still going on (up to 2021 first semester) were chosen.

#### Case 1: "KNOW MORE PLASTICS" - 2018. Team D

- Interviewee: Mr. H, project leader, male, 30s, from Bangladesh, doctoral student
- Proposal: "De-plasticization" for environmental conservation
- Time: November 2018
- Implementation: Development and production of the brand "KNOW MORE PLASTICS". Bags made of linen (from Bangladesh) to reduce the environmental impact of plastic use. Under the guidance of a Japanese fashion designer, a fashion exhibition in Tokyo was organized (2019). Launch of REVIVAL (Table 2), a sustainable fashion brand for promoting women independence through cultural exchange and heritage preservation.
- Social-output: Brand REVIVAL

Table 2. Case 1 Design proposal and social implementation identified from the interview with Mr. H



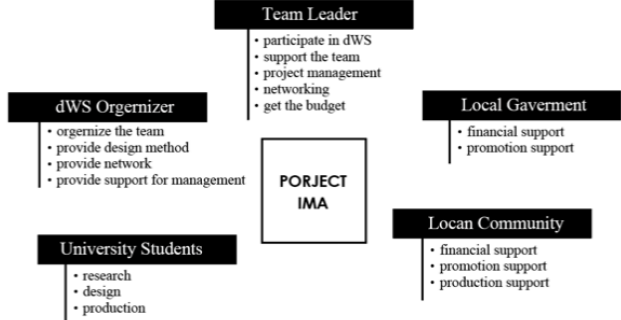
Case 1: Design proposal	Implemented proposal: REVIVAL fashion show	Stakeholders of project
		
Factors that lead to success		Team leader's characteristics
Design-WS and organizer	Others	
<p><b>[DURING]</b> Design-WS</p> <ul style="list-style-type: none"> <li>• Stake-holding discovery and (or) establishment ① *</li> <li>• Design methodology acquisition (understanding and execution) ④</li> </ul> <p><b>[AFTER]</b> Design-WS</p> <ul style="list-style-type: none"> <li>• Introduction of an established fashion designer ③</li> <li>• Expert support for exhibition planning and management ③</li> </ul>	<ul style="list-style-type: none"> <li>• Bangladesh local connections ②</li> <li>• Bangladesh community - university involvement (development of social capital) ②</li> <li>• Family members financial, emotional, and participatory (e.g., staff role) support ②</li> <li>• Expert advice (from experience) ②</li> <li>• Support from household name professionals ③</li> <li>• Multidisciplinary commitment ②</li> </ul>	<ul style="list-style-type: none"> <li>• Socially driven activities significant experience</li> <li>• Proactive (connected to) academic research background</li> </ul> <p><b>Difficulties</b></p> <ul style="list-style-type: none"> <li>• Securing a budget</li> <li>• Having mentorship</li> <li>• Finding Japanese collaborators</li> <li>• Negotiating with Japanese companies</li> <li>• Understanding Japanese customs</li> </ul> <p>Acceptance into the Japanese community</p>

\* Symbols ① ② ③ ④ in the columns refer to the 'Factors that lead to success' explained later in the discussion section.

Case 2: "PROJECT IMA" - 2019. Team B

- Interviewee: Ms. S, project leader, female, 50s
- Proposal: Improving the use of local buses in Imajuku
- Time: September 2019
- Implementation: Collaboration between the Nishi(west) Ward Office of Fukuoka City and Kyushu University. A team of students were deployed to the coastal area of Imajuku. They did fieldwork regarding Imajuku's public transportation system, culture, tourism, and local(behavioural) customs. In 2020, the focus was put on using local buses and the improvement of its associated support infrastructure (e.g., signage system, tourist info, web). (Table 3)
- Social-output: Imajuku's bus-stop signage, and website



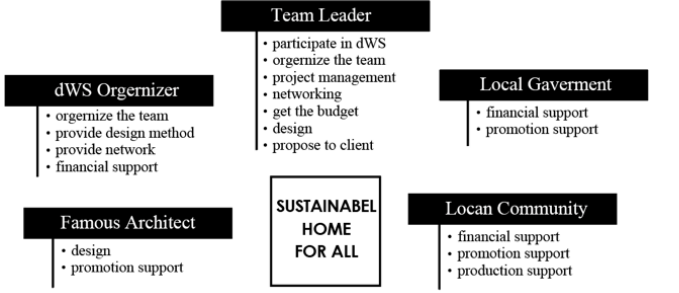
Table 3. Case2 Design proposal and social implementation identified from the interview with Ms. S

Case 2: Design proposal: prototype	Implemented proposal: interview of bus stop signage	Stakeholders of project
		
Factors that lead to success		Team leader's characteristics
Design-WS and organizer	Others	
<p><b>[DURING] Design-WS</b></p> <ul style="list-style-type: none"> <li>• Stake-holding discovery and (or) establishment ①</li> <li>• Communication tools learning ④</li> </ul> <p><b>[AFTER] Design-WS</b></p> <ul style="list-style-type: none"> <li>• Collaboration with university students ②</li> <li>• Project management skills acquisition ③</li> </ul>	<ul style="list-style-type: none"> <li>• Administrative support</li> <li>• Support from local people ②</li> <li>• Utilization of regional networks ②</li> <li>• Communication with local community (development of social capital) ②</li> <li>• Teamwork (local, external expert, students, government) ③</li> </ul>	<ul style="list-style-type: none"> <li>• Interest in social activities</li> <li>• Positive attitude</li> <li>• Ability to lead (influence, motivate, and encourage) others</li> </ul>
		Difficulties
		<ul style="list-style-type: none"> <li>• Securing budget</li> <li>• Administrative system</li> <li>• Finding collaborators</li> <li>• Gender inequality in rural areas. Initiatives by woman usually not successful</li> </ul>

Case 3: Sustainable home for all. - 2019, team D.

- Interviewee: Ms. F, project leader, female, 30s
- Proposal: To create a sustainable residential sector in depopulated areas, aiming to increase the number of migrants.
- Time: September 2019, currently still going on.
- Implementation: Collaboration with architects from Tokyo. (Temporary) utilization of infrastructure belonging to public transit authority provisionally not being used (tunnels) to be used as provisional social hub for tourism (Table 4).
- Social-output: Tunnel hotel

Table 4. Case3 design proposal and social implementation identified from the interview with Ms. F

Case 3: Design proposal	Implemented proposal: event poster	Stakeholders of project
		
Factors that lead to success		Team leader's characteristics
Design-WS and organizer	Others	Team leader's characteristics
<p><b>[DURING]</b> Design-WS</p> <ul style="list-style-type: none"> <li>Stake-holding discovery and (or) establishment ①</li> <li>Design methodology acquisition (understanding and execution) - case in point, quick &amp; dirty prototyping ④</li> </ul> <p><b>[AFTER]</b> Design-WS</p> <ul style="list-style-type: none"> <li>Networking (social capital) support ②</li> <li>Communication and promotion support ③</li> </ul>	<ul style="list-style-type: none"> <li>Communication with local community (development of social capital) ②</li> <li>Ability to confront, understand, and accept for failure</li> <li>Developing communication skills to enable advice from people with experiences ②</li> <li>Support from household name professionals - case in point, a famous architect ③</li> <li>Interdisciplinary teamwork ②</li> </ul>	<ul style="list-style-type: none"> <li>Social issues awareness</li> <li>Confidence</li> <li>Perseverance and commitment (having passion for the project regardless of its type)</li> <li>Visualization skills (interpretation and communication of data-information)</li> <li>Proactive</li> </ul> <p><b>Difficulties</b></p> <ul style="list-style-type: none"> <li>Securing a budget</li> <li>Securing collaborators</li> <li>Difficulty faced in responding to the different people involved in the administration</li> <li>Administrative documents are complicated</li> <li>Administrative processing takes time</li> </ul>

## Summary

These three projects are the longest and most developed ones originated from a design-WS. The existence of recurring and overlapping factors that lead to the successful implementation were discovered:

### 1. Academic and strategic vision

During the workshop time, teams are educated regarding Design Methods, and social capital strategies. Post-workshop, strong support about management and administration of human resources, logistics, planning.

### 2. Essential conditions

Deep (vertical), wide (horizontal) and fluid (interlinked) local connections. It does not matter how good or brilliant on paper a project might seem to be, it will not get anywhere near adoption without nurturing a rich and vast network of contact at all levels (e.g. from high echelons of local governance down to low ranking civil servants).

Diverse participatory background. It is essential the fair (equal allocation, e.g. time) and open (non-biasing, nor censoring) discussion of all members' input as a catalyst of innovation from different (even contradictory) points of view.

'External agents' seamless inclusion. This non-local experts with a vast and long trajectory related to the project at hand, and (or) household names with little to no relation with the community in which the project is implemented, were included in the native community cultural dynamics and were able to mould concept and ideas respecting local culture and custom.

### 3. Individual leader characteristics

“Leaders are made, not born”. In addition to essential inherent individual characteristics (e.g. charisma, passion, pro-activity, experience), a good leader will not rise to the occasion without emotional stability and reassurance provided by key people such as family and friends. Means for enabling their participation in the dynamics of the workshops could turn into a critical, decisive factor.

The two points becoming the main hurdles toward a successful implementation of a project are, first, the budget and (or) securing its financing. Although securing economic means can be overcome by encouraging voluntarily “bona fide” and (or) “ad honorem” at the human level. However, it would be practically impossible at a logistical one without the participation of the complex apparatus of technocracy and bureaucracy of local governments.

### Discussion

The (revealed) factors that lead to social implementation are:

#### 1 Stake-holding oriented system in design-WS

The adoption of a system in which vested concrete interest of a first (direct beneficiary) or secondary order (indirect beneficiary) rather than the gaining of an academic experience for the sake of it, is more likely to trigger the development of a proposal with social implementation possibilities.

The stakeholder role (participation, responsibility, and commitment) is directly proportional to the state of implementation (Figure 1. This implementation experiments a progression going from an ‘inception state’ (design-WS), in which the potential exists but it is nothing more than the “prospect of an outcome”, to a ‘pre-operational state’ in which the project is being logistically supported but not fully liberated into society, and finally, ‘operational state’ in which the project is fully implemented (and continues).

#### 2 Collaborative multi-background participation

A system of co-creation based on a five-axis structure (by role). See Table 5 below.

Table 5. Roles of the various people involved in the co-creation

Co-creation					
	Design WS Organizers	Team Leader	Local Supporters	External Supporters	Family
[DURING] Design-WS	<ul style="list-style-type: none"> <li>Networking</li> <li>Practice of design thinking</li> <li>Future cooperation system</li> </ul>	<ul style="list-style-type: none"> <li>Socially driven</li> <li>Perseverance and commitment (Having passion for the project regardless of its type)</li> </ul>			
[AFTER] Design-WS	<ul style="list-style-type: none"> <li>Socially capital creation</li> <li>Logistical and operational support (e.g., introduction of human resources, design support, budget management, grants application, among others)</li> </ul>	<ul style="list-style-type: none"> <li>Visualization skills (interpretation and communication of data-information)</li> <li>Proactive</li> <li>Ability to confront, understand, and accept failure</li> <li>Deep relationship with local community</li> <li>Empathy (with team members)</li> </ul>	<ul style="list-style-type: none"> <li>Providing local resources (human and non-human)</li> <li>Logistical and operational support (e.g., budget application support)</li> </ul>	<ul style="list-style-type: none"> <li>Providing specialized knowledge</li> <li>Design support</li> <li>Logistical and operational support (e.g., introduction of human resources, design support, budget management, grants application, among others)</li> </ul>	<ul style="list-style-type: none"> <li>Financial support</li> <li>Planning and management support</li> <li>Emotional and psychological support</li> </ul>

#### 3 Co-creation system between local-external agents

Local problems solutions are greatly benefited by incorporating ‘external agents’ as long as they function based on symmetrical cooperation, that is to say, as part of the team and not as the leader or “person in charge”. In all the studied cases, the research results show that creating a topical co-creation system and

solving local issues by utilizing local materials and involving external agents has a higher potential for social implementation. External agents can inject new energy into the team with their own thoughts, ideas, and methods that are fresh to local members; or (household names) can use their name recognition to help promoting team activities. Another point of no less importance is the one related to the ‘invitation’ itself of these external agents. Although external agents may agree to participate on “bona fide” and (or) “ad honorem” basis, the very nature of their expertise or reputation preclude them from undertaking a long-term engagement. Also, it is critical to consider that asking them to participate free-of-charge for their knowledge and wisdom is very different from soliciting them to incur logistical expenditures. It falls to the side of the organizers to secure and facilitate the logistical means in advance (transportation, lodging, among others) to external agents so they can contribute to the design-WS. Finally, organizers should aim for linking professionals with a project at hand in which the compensation is not of the monetary type. A sense of deeper commitment and compromise is usually obtained when professionals with long careers and established reputations are driven to benefits that contribute to cementing (not exclusively) their image, knowledge, or idealism (social contribution and humanistic views).

#### 4 Design methods flexibility

For a workshop output to become part of an implementation strategy, the workshop not only must provide the necessary design competence (Design Methods), but it also needs to have the flexibility (expertise) necessary to recognize the potential of an idea or concept and to be able to adapt its dynamic even when a particular idea might deviate from the workshop main objectives.

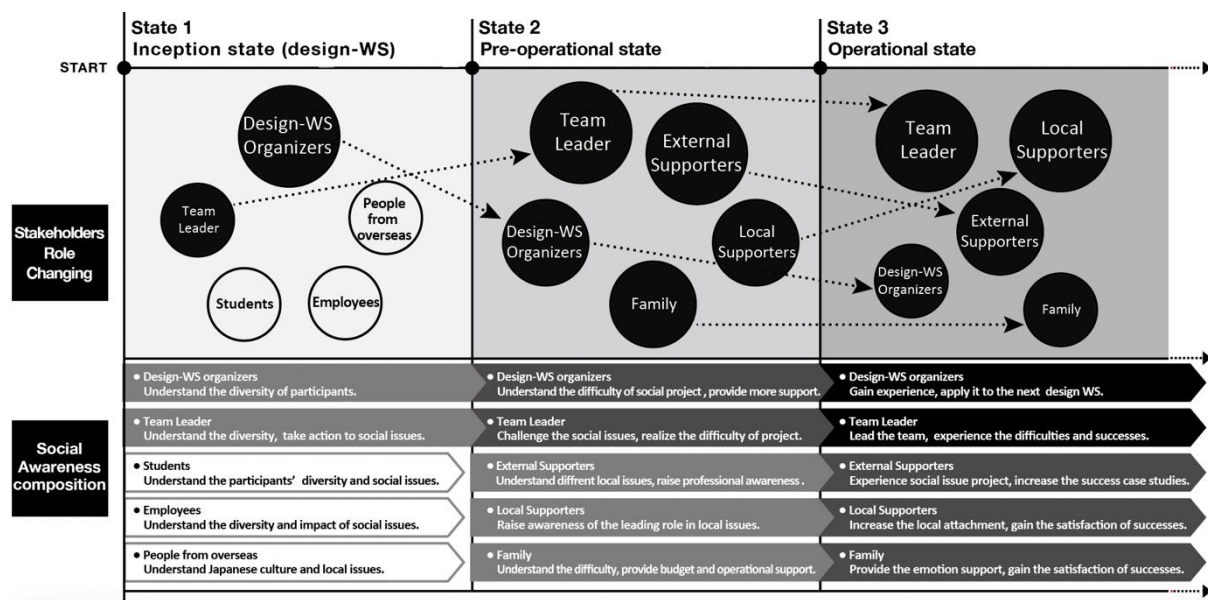


Figure 1. Three states of social implementation

Another interesting finding is the variability of the ‘social-awareness composition’ (Figure 1). Social awareness is the level of social impact related to a project, the comprehension of how much effect has a particular phenomenon in society at large. It is directly proportional to the states described in 1. At the inception state, the project members develop ideas based on a social-awareness composition in line with the internal reality of the team and (or) general common knowledge. As the state of implementation progresses, the social-awareness composition changes toward the recognition of the effects that the implementation of their project will have in the community (society).

### Conclusion and Future Development

This study shows the importance of the following four factors at the moment of considering the prospects for the social implementation of any particular project originated in a design-WS. 1 Stake-holding oriented system in design-WS. 2 Collaborative multi-background participation. 3 Co-creation system between local and external agents. 4 Design methods flexibility. Among these, probably the most critical one is 4. A flexible methodological design approach can supplement and offer alternative routes when there is a deficiency in any of the other three factors, a monolithic “by the book” design methodology more often than

not fails to enable a successful social implementation.

Among the three case studies analysed here, it was found that the common denominators which obstruct the implementation are budget and participation (temporal commitment). Securing economic resources is a hurdle onto itself, however, the efficient administration of a budget could be as (if not more) important. Regarding participation, at the inception-state, or before that, participants get involved mostly on a learning-driven initiative, the expected time is that of a fast-sprint, however as the implementation progresses, long-term projects conditions set in, usually this translates into the loss of participants and the created networks and bonding.

This study shows that general, yet essential attributes such as ‘high awareness’ (control and management of human and logistical resources), ‘participatory commitment’ (increase motivation of people with different background in working toward unify goals), ‘dialogue’ (enabling a fluid communication between local issues and external agents), in combination with flexible design methods, revealed to be (among others) the key elements necessary to successfully transform ideas from a workshop exercise into social implementation. The authors of this document encourage future design-WS organizers to develop and establish support systems based on the collected information regarding the factors which contribute to the success (or failure) of any participatory Design-WS. Shareable information of this nature will greatly contribute to the standards of the outcomes by raising the quality of the environments and dynamics in which design projects are developed on.

Currently, the study only focuses on cases that were successful in its social implementation. The authors of this academic document recognize that studying success is only part of the whole picture and it will not be completed until failure is also studied in detail.

The successful implementation of participatory design workshops that involve the general public may lead to more people thinking about the society in which they live, this meta-reflection might make them spring an interest toward solving their own problems. As idealistic as this final phrase may sound, it is no less true that regardless of ideals, dogmas, or principles, any idea will not leave the drawing board and become an implemented project if we do not understand first the reasons behind their failure and (or) success.

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