

Design for Social Innovation: Redefining the Concept

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Abstract. Social innovation is currently an ill-defined concept, which hinders understanding of it. This paper addresses the issues with current definitions and proposes a framework within which to rewrite the definitions to enhance comprehension of the term 'social innovation'.

Keywords: Social innovation · Concept · Definitions · Design process

1 Introduction

Design for Social Innovation is a growing field of practice in design with exploration on how designers can contribute to social innovation. However, Social Innovation (SI) is a concept with many definitions and ideas associated with it, and none are agreed upon universally [1]. Discussion of SI can thus be complicated by misunderstandings, should the members debating it have varied perceptions of the term 'social innovation'. Furthermore, during the design process, a set of criteria is required to keep the design outcome in line with its goal. In designing for SI, designers and innovators face the challenge of choosing which of these many definitions and ideas they should use as a guide to create for, or as a set of dimensions to create within. Without a universal decision, each definition can be considered opinions, allowing debates to continue.

The determination of a single definition for social innovation is difficult due to the term 'social', and the very many contexts and cultural views it can occur in. The definition must account for all these differences and determine restrictions on what can be considered as a social innovation. The current core concept of social innovation universally agreed upon is that SI changes society [1–5]. This concept is too broad to determine what is and what is not a social innovation - according to it every single man-made thing that exists in our world can be considered a social innovation, as when created they changed society in some way. Thus, the current definition of social innovation is rendered useless as it provides no boundaries to include and exclude one thing from another.

To assess the suitability of existing definitions for the field of design, a review of literature with focuses on defining social innovation was performed. A total of 15 definitions were found, in addition to the use of a systematic review that included 252 definitions by Edwards-Schachter and Wallace [3]. The elements and content of the

definitions were assessed for differentiation and applicability to the field of design and associated fields.

2 The Concept of Social Innovation

There are over 260 definitions in use to describe the meaning of the term 'social innovation'. The three elements of the definitions for SI are context, focus, and end users. These elements were determined based on their prevalence in the definitions, demonstrated below. These elements vary within themselves – one definition might use one context, the next will use another, and the definition following will use yet another context.

2.1 Prevalence of Elements

These elements were found often in combination in a definition, but sometimes found alone. For example, in the following definitions: "a combination of existing and known elements of culture, material and/or non-material, or a modification of one (combination) to form a new one" [1], and "an idea that works for the public good" [4], there is the use of culture as the context, and no other elements found. Definitions with only a focus can be exampled by the following: "fundamental transformation of the social system and the structures that support it" [1], "new combination of social practice" [1], and "inventions and initiatives that are imitated" [1], where the focuses are on a fundamental transformation of the social system, new combination of social practice, and imitation of inventions and initiatives.

The element of end users seems to always be found in conjunction with another element, primarily focus. Examples of this are the following: "(social innovation) varies social action, and is socially accepted and diffused throughout society" [1], "a new set of creative solutions to unmet social needs – from environmental degradation to homelessness and global poverty" [4], and

"a novel solution to a social problem that is more effective, efficient, and sustainable than existing solutions, and for which the value accrues primarily to society as a whole rather than private individuals. A social innovation can be a product, production, process, or technology (much like innovation in general), but it can also be a principle, an idea, a piece of legislation, a social movement, an intervention, or some combination of them" [4]

In the first definition, the focus is a variation in social action, and the end users is everyone in the society where the social action is changed. The second definition has a focus on providing solutions for unmet social needs, and end users include the homeless and poverty communities, as well as Mother Nature. The third definition has a focus on novel solutions that accrue value, and the end users are society as a whole.

The combination of the elements of context and focus can also be found, as shown in the following: "a process through which social value is extracted from knowledge... to produce new or significantly improved social, economic, or environmental processes" [4] and "an initiative, product, process, or program that profoundly changes basic routines, resource and authority flows, or beliefs of any social system" [4].

The above definitions have focuses on extracting social value and profoundly changing basic routines and authority flows respectively. The contexts are social, economic, and environmental processes and social systems respectively.

There was one definition found that included all three elements: "(social innovation is a) process by which value is created for individuals and communities through public and private sectors" [4]. The context is public and private sectors, the end users are individuals and communities, and the focus is creating values.

2.2 Conflicting Meanings

As can be observed above, the definitions all vary in their contexts, end users, and focuses. There is no found significant difference in acceptance for one meaning over another, which leads to confusion and misunderstandings. The primary area of variation is in the focus, and a debate over whether the social innovation should be completely new, or a modification of what already exists (found prevalent above). It was noted by Edwards-Schachter and Wallace that a differentiation in focus can also be related to geography: North America puts a focus on social innovation as the process of social change, whereas Europe has a focus on social innovation as it relates to sustainable development [3]. Additionally, another debate of focus is the focus on social challenges versus social needs (demonstrated above).

The contexts are consistently related to a 'social' component of society, however there is a fair amount of diversity within that category. This again relates back to the use of the term 'social' and its versatility and complexity. The specificity of the contexts defined above varies as well, which can again lead to confusion. With too broad a context, the its determination is rendered void, and therefore has no relevance to the designers and actors participating in the design process. With too narrow a context, a group of innovations that are commonly considered social ones are excluded. This conflict does not improve understanding.

The end users seem to commonly be defined as everyone, however there were direct conflicts. In one definition, individuals as end users were specifically excluded, and in another, individuals were specifically included as an end user. Once again, the conflict does not improve understanding.

Thus, the concept of social innovation is ill-defined, with significant variation across all definitions in multiple dimensions. An understanding of what SI is cannot be had.

3 The Design Process

There are two main elements of a design project that are common to many types of design: a design brief, and an end user(s). Within the field of design for social innovation, there are three elements that designers should consider throughout their process: an aim, a context, and an output. The aim and context of the project can be outlined in a design brief, often in sections describing the situation being addressed and the context of use. The output is determined somewhat by what the end user needs or wants, and by the brief.

A design brief is an outline of the conditions of the project that must be met by the design output. With respect to design for social innovation, the conditions can be broken down into several categories: the problem or situation being addressed, the context of use of the output, and the functional requirements of the output.

3.1 The Situation

When describing the situation being addressed, the key factors are the current functional issue(s) or aim, the reasons behind them, and the aspects of the situation that specifically need to be addressed (which are often related to the functional issues but may also include other aspects).

The functional issue or aim of the project can have been studied formally and documented, observed informally, or generated through imagination alone. It is typically a broad statement, with specifics later addressed in the brief.

The reasons behind the functional issue or ideal function are of high importance to a designer, as they can either justify the aim of the project, or in the case of a functional issue, indicate the underlying causes of an issue. With an understanding of the underlying cause, the designer can address it directly rather than just addressing the consequences of the cause (which is often the functional issue).

The specific aspects of the aim or functional issue that need to be addressed by the design are also critical as these typically become the bases for the criteria against which the outcome is evaluated to determine its success. These are typically determined by breaking down the broad issue or aim into smaller functional units. For example, a broad functional issue could be not being able to contact a person, and the reason for which is that the internet does not work. The specific aspects of this issue could be the access point to internet and its function, the internet router, and programs on the access point to internet and their functions. All these smaller aspects can then be used to evaluate the success of the outcome in addressing each of these smaller functional units.

3.2 The Context of Use

Sometimes argued as the most important element of a design outcome and consideration throughout the design process, the context of use is critical to the full understanding of the end user, their preferences, and the situation being addressed by the design. It determines the stakeholders involved in the project, the technical/functional and/or spatial requirements of the project, and cultural factors and values that could influence the project. The context of use itself is determined by the end user, by qualities or quantities such as where they are geographically, their culture, their values, their social status, and their physical and mental capabilities. The end user can also be defined by the context of use, depending on the situation being assessed.

3.3 Functional Requirements

The functional requirements are essentially a framework within which the designer can work to address the situation and specific aspects. They can be technical requirements

such as sizes or electrical outputs, action requirements such as performing a specific action or accessing a certain piece of information, etc. These functional requirements are often described out of context and are non-biased criteria against which to formally evaluate the project output. They are evaluative descriptions of the specific aspects of the situation that need to be addressed (outlined in the situation section of a brief).

3.4 The End User

The end user is the primary stakeholder, the person or population who will use or benefit directly from the design outcome.

4 The Mismatch

Designers need the situation, end user, and context of use defined for them to fully comprehend what they are designing for, and how best to go about it. These elements need to be defined in order to compose the design brief. Each element designers require can be matched to an element of the definitions as outlined above: the context of use matches with the context of a definition, the focus equates to the situation or aim, and the end users match up in both.

At present, designers' needs are not being met by the information provided in the definitions given to them. There was only one definition found that defines all three elements – context, focus, and end user – and each element was defined poorly and vaguely, which as mentioned earlier renders the definition pointless, as it can't categorize things very well. The variation within each element leads to more confusion.

The lack of understanding can truly cause issues due to the complexity of the topic, where vastly diverse situations all fall under the same term of 'social innovation'. These situations require different design strategies and design processes to accommodate the contexts. Misunderstandings can lead to designs that are inappropriate addressing its situation. Therefore, social innovation should be defined in a better way, to accommodate the diversity of contexts where there are considered to be social innovations. Social innovation can be a powerful concept to explore, when defined in an appropriate fashion.

5 Discussion

Stemming from the perspective of encouraging diversity [2], a recommendation in response to the variation across the definitions is to view SI as a field with enough diversity to create categories of social innovation with their own defining elements. This would enable a universal understanding of social innovation and the many different scenarios in which it can manifest. Each category would have a set of subdivisions that each have their own criteria to follow for designing for social innovation. These categories come together to form a framework from which social innovation can

be better understood. With this view, scholars and designers should rewrite the definitions for this framework to better help innovators understand the meaning of 'social innovation'.

The categories would be scope, social area of application, and outcome. These terms have been chosen to respond to the need for information to define the context, focus, and end user. To define context, one must first define the general scope of the subject, from which a narrower context can be determined. This narrower context can be called the area of application, to avoid confusion of using the terms 'scope' and 'context' – they are often used interchangeably. To keep the context relevant to social innovation, it must be a social area of application, hence the term used above. The third category, outcome, is not so much a category to have definitions associated with it, but a consideration for designers to keep throughout their process – it is the directly related manifestation of the aim of the project. It is the final step in determining the design or social innovation to occur.

These categories have an order to them, indicated above – they go from general scenario to specific details about the scenario. The social innovation design process starts mostly by determining the end user, from which the general scope can be understood. Once the general scope is defined, the social area of application should be decided to better inform the designer about the other stakeholders. Finally, the outcome can be appropriated to the detailed area of application and its stakeholders, to best support their situations. This order does not indicate a level of priority to any of the categories, but simply a direction for innovators to follow the framework.

5.1 Subdivisions

The subdivisions of scope for social innovation can be determined by geographic scales: global, national, provincial, and municipal. These four scales follow government levels, allowing for the government to be a stakeholder in the social innovation if needed or wanted. In addition, designing for social innovation at a chosen scale informs the designer of obstacles to be considered in the design outcome, such as how to ensure full acceptance of the outcome at their chosen scale, and which social challenges the design is addressing.

The main contexts found in the existing definitions were businesses and their infrastructure, communities, and legislation. These are suitably specific areas to apply the social innovations to, and thus can be used as subdivisions for the social areas of application. These subdivisions, in combination with those of the category of scope, help furthering of comprehension or recognition of the scenario for which a social innovation is being designed, as well as other stakeholders.

The subdivisions of the category of outcomes are the many different ways an idea can manifest itself. Each outcome subdivision can be considered during the design process and one decided for the final solution. These subdivisions can include products, services, legislation, principle, production, social movement, etc. Thus, the outcome another factor of separation for SI that can be used to better understand how it comes about.

6 Conclusion

The concept of social innovation, if defined in a proper way, can help populations enormously, and generate better ways and qualities of life. Enabling universal understanding of SI as a concept can help the world in many ways. This framework is proposed in order to do so.

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