Understanding IT Enabled Social Action Networks: Construction, Sustainability and User Participation

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Abstract. Innovative, humanitarian individuals and organizations are seeking to leverage the power of information technologies by constructing IT Enabled Social Action Networks (ITSAN) - a network of actors, connected via an IT platform, working together to improve social conditions and the lives of others. ITSANs are primarily web-based platforms that allow users to collaborate, share information and pool resources to enhance efforts to address a common social mission. The goal of this research is to investigate how ITSANs are used to positively impact social needs by examining how these platforms are constructed and sustained. Also of interest are factors influencing user participation. To develop an in-depth understanding of ITSANs this research proposes a qualitative multi-case study approach which seeks to understand ITSANs through the lived experiences of key actors.

Keywords. social action networks, information technology platforms, case study

Introduction

Many of the world’s major social issues such as poverty, hunger, education and access to basic medical care are simply too large and too widespread for any one individual, organization or even government to address alone. While groups of individuals and organizations working together have made significant progress in some areas, their reach and impact is often limited by access to sufficient financial, human and technological resources. Often, the necessary resources are available, but the resources, especially human resources, are geographically dispersed around the world and therefore extremely difficult to locate, organize, and effectively coordinate.

Advances in information and communication technologies have presented new and exciting opportunities for global collaboration in an effort to overcome these challenges. Some innovative, humanitarian individuals and organizations are seeking to leverage the power of information technologies to positively affect social needs and improve the lives of others by constructing IT platforms that are enabling the creation of sustainable networks of individuals who share a common social mission.

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We describe this network of actors that are tied together by a common social mission as an IT Enabled Social Action Network (ITSAN) – a network of actors, connected via an IT platform, working together to improve social conditions and the lives of others.

ITSANs have proven to be an effective vehicle for building networks of individuals who together can make a difference in the lives of those in the greatest need. The goal of this research is to investigate how ITSANs are used to positively impact social needs by examining how these platforms are constructed and sustained. Also of interest are factors influencing user participation. To do this we will examine these fundamental questions:

- What are the key components and relationships in an ITSAN?
- How are ITSANs constructed and sustained?
- What are the underlying factors that:
  - Enable or hinder ITSAN construction and sustainability?
  - Influence user participation?

Historically, the majority of information systems (IS) research has focused on how information technologies can improve organizational performance leading to maximization of shareholder wealth. Certainly, economic value focused IS research is fundamental to the discipline, but we suggest that IS value often manifests itself in other, equally important ways that have not received adequate attention from IS researchers. To address this gap in the literature, this research proposes a qualitative multi-case study approach which seeks to understand ITSANs through the lived experiences of key actors. Actor Network Theory (ANT) provides a theoretical background and serves as a starting point for our investigation into ITSANs. ANT seeks to describe and explain how relatively stable networks of heterogeneous actors are formed and aligned around a common interest [1]. This paper introduces a theoretical framework, including a conceptual model, which forms the foundation of the investigation into ITSANs. In addition, it briefly describes the research in progress which seeks to develop an in-depth understanding of ITSAN construction and sustainability.

1. Actor Network Theory

Actor Network Theory (ANT) emerged in the 1980s primarily from the work of French scholars Michel Callon and Bruno Latour with the assistance of British sociologist John Law [2, 3, 4]. They proposed the idea that the concepts of social determinism and technical determinism were critically flawed and they proposed a hybrid approach which made the relatively novel claim that nothing was purely social or purely technical. This fusion of the social and the technical suggests that everything which exists in the social (human) or natural (technical) world cannot be described independently of its connections to and relationships with other (both social and technical) objects. In this way ANT differentiates itself from other social theories by the inclusion of non-human actors (such as technical artifacts) as key agents in the shaping of socio-technical processes. ANT describes the various entities and their interconnections that exist within a heterogeneous network of human and non-human “actors” aligned around a common interest [1]. This collection of interconnected actors is referred to as the “actor network”. ANT is primarily concerned with uncovering and
explaining how these heterogeneous networks of actors are constructed and how they become stable and are sustained or how and why they fail and fall apart.

At its inception, ANT was known as the sociology of translation and the concept of translation is the key process by which actor-networks are formed by “the enrollment of a sufficient body of allies and the translation of their interest so that they are willing to participate in a particular ways of thinking and acting that maintain the network” [5]. Translation is the process by which actors persuade others to join the network and to align their interests with the interests of the network. Callon [2] describes four steps or “moments of translation” in the translation process: problematization, interessement, enrollment, and mobilization. An overview of the moments of translation is provided in Table 1.

Table 1. Translation Key Concepts

<table>
<thead>
<tr>
<th>Translation</th>
<th>Overall process of persuading others to align their interests with and join the network</th>
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<tbody>
<tr>
<td>Problematization</td>
<td>Framing of the problem, identifying actors with similar interests, initial role development and defining an obligatory passage point</td>
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<tr>
<td>Intereessement</td>
<td>Negotiation with potential network actors to accept their role in the actor network</td>
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<tr>
<td>Enrollment</td>
<td>Actors accept their role and align their interests with the network</td>
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<tr>
<td>Mobilization</td>
<td>Process by where spokesman are given power to represent groups of actors</td>
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1. Conceptual Model

Based on the theoretical foundation of ANT, this research proposes a conceptual model which provides a framework for the investigation of ITSANs. The proposed model, illustrated in Figure 1, identifies the key actors, relationships, and critical processes in the construction of an ITSAN. In addition, the model identifies a set of underlying factors which can positively or negatively affect ITSAN construction and sustainability.
2.1. Social Value

Richardson et al. [6] describe how innovative, humanitarian organizations, known as Social Enterprises, are utilizing traditional entrepreneurial practices in the pursuit of social value creation. They define social value as the result of the innovative use and combination of resources to produce positive social change or impact a social need, rather than working toward maximization of owner or shareholder wealth [6]. Social Enterprises are using information technology to help overcome resource constraints, including financial and human resource constraints that are common in the social sector. Information technologies address these constraints by facilitating resource sharing, education, and collaboration among stakeholders with a common social goal and facilitating organizational agility - the ability to quickly react to changing conditions and new opportunities [6].

The primary goal of any ITSAN is to improve social conditions and the lives of others. It is the pursuit of this shared social mission that is the glue which holds the ITSAN together and the engine which powers its operation. Ultimately, the success of the ITSAN is judged on the network’s ability to positively impact a social need. Through the process of translation, by leveraging the individual and collective motivations and resources of its actors, and the innovative application of information technologies, the ITSAN generates effective solutions which create social value.

3. Research Approach

This research employs a quasi-foundational interpretive research approach which seeks to understand ITSANs through the lived experiences of key actors [7]. The quasi-foundational approach recognizes that researchers are unable to separate themselves from previous exposure to theoretical concepts, and therefore, embraces theory as an initial lens through which to view phenomena of interest. Actor Network Theory will provide the initial lens through which we will analyze how, through the ANT process of translation, ITSANs are constructed and sustained. In addition to our initial theoretical lens, an iterative, interpretive approach to data collection and analysis will be followed in an effort to uncover new theoretical linkages, concepts and constructs as they emerge from the data collection and analysis process [8]. To investigate our research questions we will implement a qualitative multi-case study approach which is an appropriate methodology for conducting an in-depth examination of a relatively new and understudied phenomenon such as ITSANs [9, 10].

Primary data sources will include semi-structured interviews with members of the ITSAN management team as well as key ITSAN users. Additional data will be collected from organizational documents, archival records, direct observation, non-participant interaction with the platform, and researcher field notes. Interviews will be recorded and transcribed and all the data will be integrated and analyzed utilizing established qualitative data analysis and coding techniques including open coding, axial coding and selective coding [11]. The data will be analyzed by iteratively going back and forth between the data and theory in an effort to uncover the emerging theoretical linkages [12, 13]. First order codes will be integrated to form theoretical categories which in turn will be aggregated into theoretical dimensions representing the key concepts emerging from the data [12].
3.1. Research Sites

This research examines three separate ITSANs that have developed web-based platforms that allow users to collaborate, share information and pool resources to enhance efforts in pursuit of a common social mission. Site 1 is a children’s hospital specializing in research and treatment of catastrophic pediatric diseases. Site 2 is an organization focused on improving healthcare by supporting physicians in rural areas of central Africa. Site 3 is an organization providing support and educational opportunities to nurses specializing in treating oncology patients. Data collection including interviews of key actors in each organization is currently underway.

4. Conclusion

This research examines the phenomenon of IT Enabled Social Actions Networks and contributes to the literature by introducing ITSANs and developing a theoretically based conceptual framework for guiding research in this important area. In addition, we seek to develop an in-depth understanding of ITSANs by conducting a qualitative multi-case study examining how ITSANs are constructed and sustained including the underlying factors that influence these processes and affect user participation.

References