AN EXPLORATORY EXAMINATION OF THE IMPLEMENTATION OF ONLINE ACCOUNTABILITY: A TECHNOLOGICAL INNOVATION PERSPECTIVE

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ABSTRACT

Transparency and accountability are at the heart of the contemporary debate on transforming organizations in society. In order to satisfy public demand for greater oversight and accountability, organizations are increasingly being encouraged to demonstrate accountability online. However, our understanding of the factors that facilitate or inhibit online accountability is limited to a very few studies. We add to the empirical knowledge base by developing and testing a conceptual model of online accountability. Data for this study were obtained from a web content analysis of 125 organizational websites, supplemented with organizational and financial data from the IRS Form 990s. In order to test our model, we used a two-stage data envelopment analysis (DEA) procedure and statistical discriminant analysis (DA). The results revealed that smaller and younger organizations were more efficient at achieving higher levels of online accountability implementation. We conclude with implications for research and practice.

Keywords: technological innovation, IS implementation, online accountability, charitable contributions

INTRODUCTION

In today's digital society, there is a growing recognition of how the emergence of new technological innovations are revolutionizing the ways that organizations adapt, survive, and thrive in increasingly complex and turbulent environments [30]. A more recent technological innovation is the creative and innovative use of the web to demonstrate accountability online [41]. While the robust literature on the diffusion of information technology has examined a variety of technological innovations across a wide range of disciplines [1, 12, 18, 19, 22, 40, 46, 54], it is indeed surprising that there is very little empirical research on online accountability in the information systems (IS) literature.

Online accountability is defined as the provision of inclusive and transparent organizational practices that

serve to demonstrate or enhance accountability on the web [41]. Prior research has identified several positive outcomes that are linked to online accountability: organizational success, increased charitable contributions, and enhanced public trust [5, 21, 42, 49, 51]. While researchers agree on the relative advantage of online accountability, our knowledge of the factors that facilitate and inhibit online accountability is limited to a very few studies [21, 25, 41].

In this paper, we take a novel approach and examine the online accountability practices of 125 organizations in the Northeast United States from a technological innovation perspective. We develop a conceptual model of online accountability implementation that is informed by research on the diffusion of information technology. Data for this study were derived from a web content analysis of 125 nonprofit organizations that have websites and supplemented with organizational and financial data from the IRS Form 990s. The model was tested using a two-stage data envelopment analysis (DEA) procedure and statistical discriminant analysis (DA). The results revealed that smaller and younger organizations exhibited higher levels of online accountability implementation efficiency than larger and older organizations.

This study extends the research on the diffusion of information technology in three ways. First this study examines online accountability from a technological innovation perspective. Second, we develop an online accountability implementation efficiency model that can be used to inform the design of websites for organizations that are interested in improving transparency and accountability. Finally, this research explores technological innovation in a context that is under-researched and underexplored in IS research. We conclude with implications for research and practice.

THE NONPROFIT OPERATING ENVIRONMENT

NPOs are a critical component of the economic, social, and political fabric of the American society. Currently, there are over 1.8 million NPOs operating in the United States. In 2008, their total revenue was $1.9 trillion and total assets were $4.3 trillion [53]. Moreover, the nonprofit sector employs over 12.9 million people and accounts for 5.3% of the Gross Domestic Product (GDP). While NPOs provide a wide variety of programs and services that enhance the quality of life in communities in which we all live, work, and play, these organizations have received very little attention in IS research.

Currently, NPOs are operating in an increasingly complex and turbulent environment. For example, the recent economic crisis has resulted in decreased federal funding, decreased charitable contributions, and increased demand for programs and services [23, 41]. Many NPOs have responded by cutting services and decreasing operating hours. Meanwhile, other NPOs are on the brink of shutting their doors. Unlike private sector organizations, NPOs are not in business to earn profits. Similarly, unlike the public sector, they cannot levy taxes. Charitable contributions in the form of money, volunteer time, and materials are the primary sources of revenue in the nonprofit sector [7, 35, 37]

Furthermore, reports of high-profile public scandals involving well-known NPOs have resulted in decreased public trust and greater demands for more transparency and accountability [41, 42]. As a consequence, the U.S. Senate Finance Committee held several hearings aimed at reforming the nonprofit sector. The general approach has been geared towards disclosure-based reform [39, 44]. One key outcome of these hearings was the recommendation that organizations voluntarily disclose key financial and performance information on their public websites [44, 52]. A second key outcome was the introduction of The New Form 990 in 2008 [52].

Part IV of The New Form 990 includes subsections on governance, management, and disclosure. The disclosure section specifically reminds NPOs that Section 6104 of the U. S. Tax Code requires an organization to make its financial forms available for public inspection. In addition, the disclosure section includes three checkboxes to indicate how NPOs make these forms available: (1) own website; (2) another's website; or (3) upon public request.

Meanwhile, information gateways such as GuideStar and the National Center for Charitable Statistics have emerged to encourage greater transparency and accountability by providing free public access to the IRS 990s of NPOs. Similarly, Charity Navigator provides information on the financial health of more than 5,500 of the nation's largest NPOs. Each of these examples illustrates some of the mechanisms that are in place to facilitate disclosure-based reform and self-regulation in the nonprofit sector.

It is clear that NPOs are operating in a complex and turbulent environment in which they must overcome the recent declines in charitable contributions and public trust. Current research suggests that increased levels of online accountability is the ideal organizational response to these challenges [5, 21, 41, 49, 51]. While some NPOs have adopted online accountability practices, many others have not [21, 24, 29, 41]. Therefore, it is critical that we identify the factors that facilitate or inhibit the initiation, adoption, and implementation of online accountability in

order to preserve an important sector of the American society.

THEORETICAL BACKGROUND

In this section, we first define accountability and provide a conceptual overview of the literature on online accountability. We then provide a summary review of the literature on technological innovation and characterize online accountability as a radical technological innovation.

Accountability Defined

Accountability is a multidimensional concept that includes both financial and performance components. Financial accountability "concerns tracking and reporting on allocation, disbursement, and utilization of financial resources, using the tools of auditing, budgeting, and accounting" and "deals with compliance with laws, rules, and regulations regarding financial control and management" [6, p. 10]. This aspect of accountability is primarily concerned with financial control and management.

Performance accountability "refers to demonstrating and accounting for performance in light of agreed-upon performance targets" with its focus on "services, outputs, and results" [6, p. 10]. Often referred to as managerial accountability, this dimension of accountability is primarily concerned with the outcomes and results of the organization's programs and services.

Online Accountability

More recently, the evolution of Web 2.0 technologies has led to the emergence of a two-dimensional view of online accountability. In this new approach, Saxton and Guo [41] identified two core dimensions of online accountability: disclosure and dialogue. The first dimension, which is voluntary disclosure, consists of two components: financial and performance disclosure. Dialogue, which is the second dimension, also consists of two distinct components: solicitation of stakeholder input and interactive engagement.

Financial disclosure is defined as the extent of financial information that an organization voluntarily discloses on its website. This information includes annual reports, audited financial statements, and the IRS letter of determination. The public disclosure of financial statements provides a tool for assessing the overall financial health of the organization and is an indicator of organizational efficiency. Performance disclosure is defined as the extent of goal- or outcome-oriented information that an organization discloses on its website. This information includes the organization's mission, goals, and any report-

ing on the outcomes of programs and services. The disclosure of performance data provides a tool for funders and donors to determine how effectively the organization is operating.

The second core dimension of online accountability is dialogue, which refers to the mechanisms used to facilitate stakeholder input and interactive engagement. Solicitation of stakeholder input is defined as the extent to which the organization uses the web to obtain meaningful stakeholder feedback, input, and preferences. Examples include feedback forms, surveys, and online polls. The second component of dialogue is interactive engagement. Interactive engagement is defined as the extent to which the organization uses the web to facilitate intense interaction between core stakeholders. Examples include moderated blogs, live chats, and social network sites such as Facebook.

Saxton and Guo [41] conducted the first comprehensive study of the determinants of online accountability. Based on a Web content analysis of 117 U.S. community foundation websites, the researchers found that asset size and board performance were significantly related to the adoption of online accountability practices. In addition, the researchers found that the web was used more for disclosure (one-way communication) and less for dialogic mechanisms (two-way communication). However, these results were limited to one particular type of NPO (i.e., community foundations). Therefore, scholars have called for more research that examines online accountability in different types of organizations [41, 42].

Technological Innovation

The literature on organizational [13, 16, 32] and technological innovation [20, 46] is interrelated. Organizational innovation is defined as "the adoption of a new idea or behavior by an organization" [11, p. 197]. Technological innovation, however, is defined as innovation in the application of information technology [46]. The emphasis of this research is on the application or implementation of online accountability practices.

The literature on technological innovation is informed by the three streams of research that are relevant to our model of online accountability: diffusion of innovation; factors research, and process/stage research. First, diffusion of innovations (DOI) research seeks to identify the rate or pattern of the diffusion of an innovation in particular social system over time. An outcome of DOI research is the identification of the innovation attributes that influence diffusion (e.g., relative advantage, complexity, and compatibility) and the classification of adopters from laggards to innovators [40, 48].

Another body of research focuses on the factors that facilitate or inhibit technological innovation [11, 13, 15, 32, 46]. A review of the literature indicates that organizational size is the best predictor of technological innovation [11, 14, 15, 31, 40, 46]. Size has been traditionally measured by the number of employees and the size of assets [32]. While most studies have consistently found that larger organizations were more innovative [3, 14, 28, 46], others have not [26, 38].

Finally, there is a body of research that investigates the temporal sequence of activities and events involved in the adoption of technological innovations. Researchers tend to agree on a three stage sequence: (1) initiation; (2) adoption; and (3) implementation [40, 47]. The initiation stage includes pressure to change, and gathering and evaluating information. The adoption stage involves the decision to commit resources to the innovation. The final stage, implementation, involves the development and installation of the innovation in order to ensure that the expected benefits are derived.

The three distinct stages consist of different activities. As such, prior research has shown that the factors facilitating the initiation, adoption, and implementation of technological innovations are different [13, 18]. As indicated above, the emphasis of this research is on technological innovation [46]. Therefore, this study focuses on the implementation (e.g., application) of online accountability.

Implementation success is influenced by the type of innovation. Technological innovations can be classified as radical or incremental [15, 17]. Radical technological innovation consists of revolutionary changes in application of technology that represent a clear departure from existing practices, whereas incremental technological innovation represent minor improvements or simple adjustments in the application of technology. As a relatively new delivery channel, online accountability is an innovative use of the web that represents a clear departure from existing practices. Therefore, this research views online accountability implementation as a radical technological innovation.

A MODEL OF ONLINE ACCOUNTABILITY IMPLEMENTATION EFFICIENCY

In this section, we develop a simple conceptual model of online accountability implementation efficiency and present our hypotheses. Based on insights from the literature of technological innovation, three factors are expected to impact the implementation of online account-

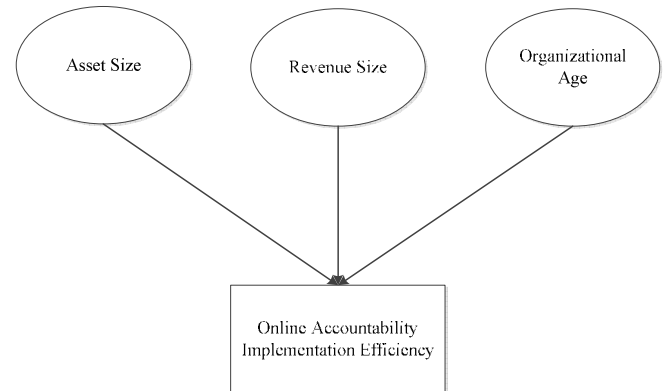ability: asset size, revenue size, and organizational age (see Figure 1).

Figure 1: Online Accountability Implementation Efficiency

Online Accountability Implementation Efficiency

The dependent variable in our model is online accountability implementation efficiency. Informed by the diffusion of information technology [16, 48] and IS implementation research [9, 34], online accountability implementation is defined as the level in which the web is used to demonstrate and support both core dimensions of accountability: disclosure and dialogue. Online accountability implementation efficiency, however, is defined as the ratio of online accountability variables to the independent variables.

Characteristics of the Organization

Organizational Size

The capacity of an organization to implement technological innovations has important implications for online accountability implementation. Organizational size is a surrogate measure for total resources, slack resources, and technical expertise that determine the capacity of an organization to innovate [40]. Similarly, researchers have reported a strong positive relationship between size and voluntary disclosure [4, 41]. In addition, researchers have reported a positive relationship between size of assets and both dimensions of online accountability [41]. For example, a study of 100 large NPOs revealed that 74% posted annual reports online [29].

In general, larger organizations have access to more resources and technical expertise. Therefore, we posit that larger organizations in terms of assets and reve-

nues will exhibit higher levels of online accountability implementation efficiency than smaller organizations. Since online accountability implementation efficiency compares organizations in an unbiased way by considering their size, we postulate the following hypotheses in their null form:

Hypothesis 1: Asset size does not impact online accountability implementation efficiency.

Hypothesis 2: Revenue size does not impact online accountability implementation efficiency.

Organizational Age

Research has shown that the age of an organization is related to online accountability [41]. The traditional line of argument has suggested that younger organizations were prone to the liability of newness [45]. However, from a strategic management perspective, organizational age increases inertia and reduces discretion [27]. Based on this premise, younger organization are more likely to implement online accountability than older organizations. From an accounting perspective, younger organizations are more likely to provide relevant information online in order to bridge the information asymmetry gap [49]. Therefore, we posit the following hypothesis in the null form:

Hypothesis 3: Organizational age does not impact online accountability implementation efficiency.

RESEARCH METHODOLOGY

In order to investigate the factors that facilitate or inhibit online accountability, we content analyzed 125 NPO websites in a three-county regional area during June and July of 2011. Content analysis is a methodology used in the social sciences to study the content of human communications such as websites [33]. The application of content analysis to the web is referred to as web content analysis [36].

Purposive sampling was used to select the organizations [2, 10]. As suggested in prior research, the organizations were categorized based on their size [38]. The initial set of 381 organizations was divided into quartiles based on the size of assets. We categorized organizations as micro, small, medium, and large. Large organizations in the 4th quartile were excluded from this study because we were more interested in micro-, small- and medium-sized NPOs which are under-researched and underexplored in IS research. Using Google and Yahoo, we performed a web search in order to identify those organizations that had a current website. The web address was

confirmed by checking the URL listed in the IRS Form 990 and the postal address in the initial dataset. The elimination of organizations that were in the 4th quartile and those that did not have a website resulted in 125 usable organizations.

Following the methodology by Saxton and Guo [41], website content was coded for financial disclosure, performance disclosure, solicitation of stakeholder input, and interactive engagement. In order to test the hypotheses, this data were combined with financial and organizational data obtained from the most recent IRS 990.

Operationalization and Measurement

Saxton & Guo's [41] approach was followed with slight modifications in the measurement of the constructs. Four dependent variables were operationalized that conform to the conceptual model of online accountability implementation.

Measuring Online Accountability

Financial Disclosure Index (FDI). Content on each website that was targeted at demonstrating financial responsibility was coded. Five items were identified that indicate a NPOs effort towards financial disclosure: annual report, IRS Form 990, audited financial statements, IRS 990, IRS determination letter, and a code of ethics. The *FDI* was operationalized as the ratio of total number of these five items that appeared on an organization's website.

As illustrated in Figure 2, NPOs have grossly underutilized the web for voluntary disclosure of information related to their finances. While some did provide an annual report, very few posted financial documents on the web. Surprisingly, only three organizations checked the box on IRS 990 indicating that their financial documents were posted on their own website.
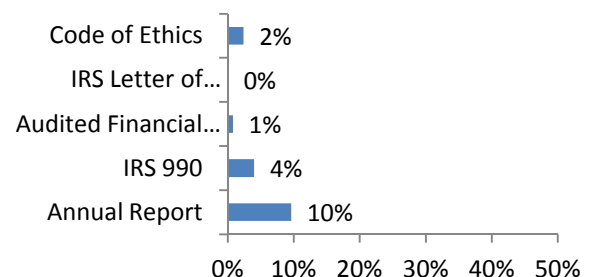
Code of Ethics   2%
IRS Letter of…   0%
Audited Financial…   1%
IRS 990   4%
Annual Report   10%

0% 10% 20% 30% 40% 50%

Figure 2: Financial Disclosure

Performance Disclosure Index (PDI). Content on each organization's website that related to the fulfillment of the social mission was coded. Five items were identified that indicate a NPO's effort towards performance disclosure: a mission statement, description of the purpose of the organization, reporting on program and service outcomes, success stories, and reporting on the broader community impacts. The *PDI* was operationalized as the ratio of total number of these six items that appeared on an organization's website.

As shown in Figure 3, the majority of organizations posted the mission and purpose of the organization on their website. However, the web was underutilized as a mechanism to provide important information on performance outcomes or broader community impacts.
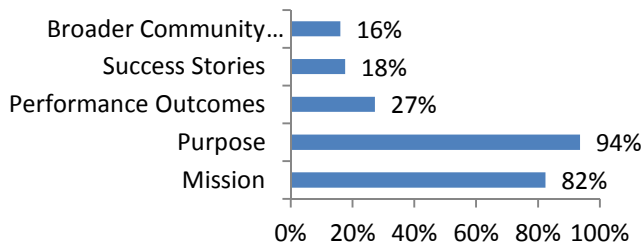

Figure 3: Performance Disclosure

Solicitation of Stakeholder Input Index (SSII). Web-based approaches that organizations were using to solicit feedback from their stakeholders, assess their preferences and needs, and facilitate participatory problem solving and decision making were coded. Four items were identified that indicate a NPOs effort towards solicitation of stakeholder input: Listserv, feedback form, stakeholder survey or poll, and contact us. The *SSII* was operationalized as the ratio of the total number of these four mechanisms that appeared on an organization's website.

As shown in Figure 4, the majority of organizations did provide a "contact us" link on their website. However, very few organizations provided mechanisms for soliciting stakeholder information, assessing their needs, or engaging them in program-related decision making.
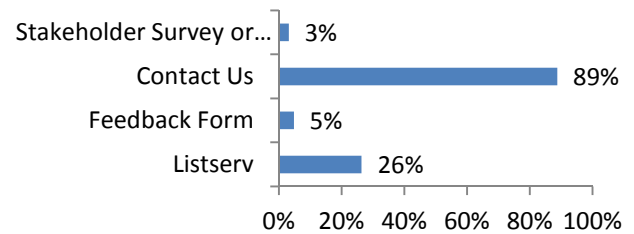

Figure 4: Solicitation of Stakeholder Input

Interactive Engagement Index (IEI). Web-based approaches that organizations were using in order to be facilitate intense dialogue with their key stakeholders was coded. Four items were identified that indicate a NPOs effort towards interactive engagement: moderated discussions, live chats, interactive blogs, and Facebook. The *IEI* was operationalized as the ratio of the total number of these four mechanisms that appeared on an organization's website.

As illustrated in Figure 5, a slight majority of organizations were using Facebook. However, only one organization utilized live chats and only three used moderated discussions.
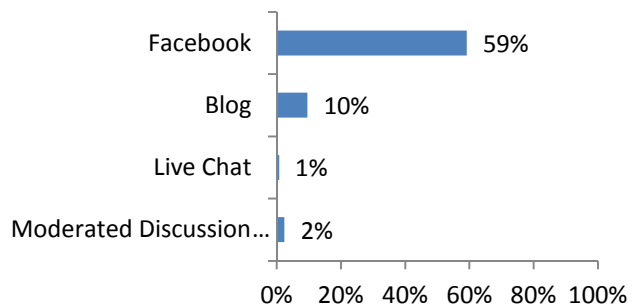

Figure 5: Interactive Engagement

Independent Variables

The hypotheses were operationalized through three continuous independent variables. First, with regard to organizational size, we used asset size (AS) and revenue size (RS). Asset size refers to a given organization's total assets that were obtained from the most recent IRS Form 990. Similarly, revenue size refers to an organization's total revenues that were obtained from the most recent IRS Form 990. Finally, organization age refers to

the number of years that the organization has been a registered NPO and was also obtained from the most recent IRS Form 990.

Dependent Variable: Online Accountability Implementation Efficiency

Since efficiency is a ratio variable, online accountability implementation efficiency (OAIE) was operationalized as a ratio of online accountability variables to the independent variables. We assume a dataset $D=(X,Y)$ of $n >2$ examples, where X is $n{\times}k$ matrix of observations on $k >0$ inputs and Y is $n{\times}m$ matrix of observations on $m >0$ outputs. Assuming that θ_i represents efficiency score for an example $i \in \{1,…,n\}$, y_i^T represents i^{th} row of matrix Y, x_i^T represents i^{th} row of matrix X and e an n-dimensional unit vector; the dual of input-oriented Variable returns to scale (VRS) DEA model can be written as follows. For each i = 1,…,n, solve: $Minimize \{\theta_i | Y\lambda \geq y_i, \theta_i x_i \geq X\lambda, e^T\lambda = 1, \lambda \in \Re + n$. (1) Once formulation (1) is solved then final solution vector $\theta^* = [\theta_1^*,…,\theta_n^*]^T$ represents efficiencies (i.e., OAIE) for each of n examples.

DEA is a nonparametric method that estimates the *best practice* frontier based on multiple inputs and multiple outputs [8, 43]. Upon solving a input minimizing variable returns to scale DEA model, if an organization gets an optimal value of θ_i^*=1 then it is deemed efficient, otherwise it is deemed inefficient. Once the DEA is conducted, the dependent variable OAIE for efficient organizations are assigned a value of 1, otherwise it is assigned a value of 0.

DATA ANALYSIS AND RESULTS

Once the dependent variable is assigned binary values separating efficient and inefficient organizations, we conducted a regression and discriminant analysis in order to test our hypotheses. Table 1 reports the descriptive statistics on efficient and inefficient organizations. As shown in Table 1, 99 NPOs were categorized as relatively inefficient, whereas only 26 NPOs were categorized as efficient the older and larger organizations. The univariate results from Table 1 indicate that smaller and younger organizations have a higher online accountability implementation efficiency ratio than older and larger organizations.

Table 1: Group Efficiency Statistics

Efficiency	Valid N	Measure	Mean	Std. Deviation
Relatively Inefficient	99	Revenue Size	$911,514.33	$1,307,678.99
		Asset Size	$675,309.57	$815,154.07
		Organizational Age	28.31	22.59
Relatively Efficient	26	Revenue Size	$173,323.27	$214,704.74
		Asset Size	$318,522.35	$632,530.72
		Organizational Age	21.23	20.33
Total	125	Revenue Size	$757,970.59	$1,204,681.58
		Asset Size	$601,097.82	$791,804.51
		Organizational Age	26.84	22.25

Table 2 illustrates the statistical discriminant analysis results on the impact of size and age on OAIE. The results from Table 2 indicate that both null hypotheses 1 and 2 were rejected and asset size and revenue size do predict OAIE. This indicates that organizations with small assets and revenues exhibited higher levels of online accountability implementation efficiency (see Table 2). The hypothesis 3 was also rejected indicating organization's age does have an impact on OAIE.

Finally, we ran an ordinary least squares regression with the dummy variable OAIE as dependent variable. $OAIE$ = + $\beta_1 RevenueSize$ + $\beta_2 AssetSize$ + $\beta_3 OrganizationalAge$ + ε.

Table 2: Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
Revenue Size	.938	8.180	1	123	.005
Asset Size	.966	4.292	1	123	.040
Organizational Age	.993	2.106	1	123	.149

Hypotheses 1, 2, and 3 will be rejected if we see a significant β_1, β_2, and β_3 respectively. Results in Table 3 reveal a significantly negative β_1 and β_3 with β_2 falling just outside 10% significance. Together these results

support our univariate results rejecting our three hypotheses. Furthermore, they indicate that smaller and younger organizations exhibited higher levels of online accountability implementation efficiency (OAIE).

Table 3: Regression Results

	Standardized Coefficients	t	Sig.
Revenue Size	-.193	-1.902	.060
Asset Size	-.171	-1.605	.111
Organizational Age	-.235	-2.723	.007

DISCUSSION

This study provides insight on the diffusion of online accountability in the nonprofit sector. Our results revealed that NPOs are severely underutilizing the web in order to demonstrate online accountability along three of the four dimensions: financial disclosure, solicitation of stakeholder input, and interactive engagement. In terms of financial disclosure, NPOs provided very little data online to demonstrate that they were operating efficiently. As a result, potential donors, volunteers, and the general public are unable to assess the overall financial health of the organization.

Similarly, a vast majority of the organizations were underutilizing technology in order to solicit stakeholder input and interactive engagement. As a result, NPOs are not leveraging the dynamic capabilities and interactive features of Web 2.0 technologies.

Organizational Size and Online Accountability Implementation Efficiency

As indicated above, our results show that size had a negative correlation to online accountability implementation efficiency. These results support previous research which found that smaller organizations were more innovative [26, 38]. Traditionally, size has been viewed as a proxy measure of total resources, slack resources, and technical expertise that have traditionally determined the capacity of an organization to innovate. However, the evolution of open-source technologies provides organizations with low-cost and flexible options to innovate on the web.

The results may be explained by a stream of research that suggests that smaller organizations benefit from greater flexibility [50]. As a result, smaller organizations have far more discretion and control, which may facilitate the adoption and implementation of online accountability practices.

Organizational Age and Online Accountability Implementation Efficiency

The results provide support that younger organizations show higher levels of OAIE than the older organizations. The results support previous research which suggests that older organizations suffer from the liability of aging. The liability of aging suggests that the structure, processes, and standard operating procedures of older organizations tend to reflect their founding environment. As a result, older organizations are unable to adopt and implement novel online accountability practices at the same rate as younger organizations.

CONCLUSION

In this paper, we examined the factors that facilitate or inhibit the implementation of online accountability. The results revealed that smaller and younger organizations are more efficient at achieving higher levels of online accountability implementation efficiency than larger and older organizations.

This research integrates the existing body of research on the diffusion of information technology in IS research and the research on online accountability in the nonprofit management research. In doing so, we identified some of the factors that distinguish relatively efficient from relatively inefficient organizations. More importantly, this research demonstrates the use of DEA as a novel technique to classify adopters into two categories: relatively efficient verses relatively inefficient in terms of online accountability implementation.

While the results of this study provide insight on the implementation of online accountability, this study was limited on two fronts. First, we only had access to data on the characteristics of the organization. Innovation is a complex, context-sensitive phenomenon that cannot be fully understood without considering all four contextual factors: individual, technological, organizational, and environmental factors [47]. Second, this study did not allow us to account for the impact of online accountability implementation (e.g. increased charitable contributions and enhanced public trust). Although, this study has some limitations, it does provide important implications for research and practice.

Implications for Research

This research examined the relationship between organizational characteristics and online accountability implementation. However, future research is needed in order to identify the interaction between each of the four contextual factors (e.g., individual, organizational, technical, and environmental) and online accountability im-

plementation. Therefore, more research is needed in order to fully understand the factors that facilitate online accountability implementation.

Similarly, in-depth longitudinal research is needed in order to fully describe the process of technological innovation as it pertains to online accountability. This research should employ ethnographic methods and grounded theory in order to explicitly describe the relationship between the contextual factors and the process of technological innovation as it relates specifically to online accountability.

Finally, more research is needed in order to identify the outcomes of online accountability. This research should focus on resource development and public trust. Research on resource development should focus on the impact of online accountability on charitable contributions and volunteer recruitment. Future research on public trust should examine the level of public trust that results from the different levels of online accountability.

Implications for Practice

This study has demonstrated that online accountability is in good currency. Our model of online accountability provides important insight for managers in all sectors of society that are interested in improving transparency and accountability. The model explicitly describes the two core dimensions of online accountability and the relative advantages of each. Therefore, our model can be used to facilitate the innovation process of initiation, adoption, and implementation of online accountability.

We further suggest online accountability is an ideal web usability goal. As a web usability goal, online accountability can be used as a design and development parameter in order to ensure that NPO websites are designed to enhance transparency and accountability. More importantly, online accountability, as a web usability goal specifically outlines the critical features that should be included on an organization's website.

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