The Strategic Use of Web 2.0 Social Media by Civil Society Organisations

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Abstract
This study focuses on how South African civil society organisations deploy Web 2.0 technologies strategically in support of their social advocacy initiatives. The technologies targeted for study are those commonly described as Web 2.0 social media. The research undertook a survey of South African civil society organisations, which painted a picture of the extent of adoption of Web 2.0 social services across South African civil society. The framework for the strategic use of networked technologies identifies variables that naturally lend themselves to the generation of a model. This research has developed such a model, which has been statistically validated and subsequently modified.

Keywords: Civil Society, Web 2.0

Introduction
The main aim of the article is to explore how civil society organisations are strategically appropriating and deploying emerging social media technologies effectively for transnational advocacy. The strategic appropriation of technology by civil society occurs when organisations becomes proficient enough to ensure that the technology furthers the aims of the organisation. Surman & Reilly (2003) define a spectrum that CSOs must traverse as they gain knowledge, evaluate and eventually adopt an emerging technology. The first step relates to basic access e.g. an office with an Internet connection and

/ or use of a cell phone. The second step, termed adoption, stresses the need for the necessary skills to use the technology optimally. The final step, appropriation, occurs when an organisation becomes proficient enough to ensure that technology is able to be used strategically to further the aims of the organisation. The main areas where networked-technology is used strategically are collaboration, publishing, mobilisation and observation (Surman & Reilly 2003).

Online observation spans a range of activities that include research and intelligence gathering. Within CSOs specifically it involves the collection and pooling of information (Surman & Reilly 2003). The emerging interactive and collaborative communications paradigm makes more information readily available, whilst demanding greater transparency from governments and corporations (Wikileaks is a case in point).

One of the most fundamental tasks of CSOs is to publish information i.e. books, articles, reports, news releases, alerts, policy statements, pamphlets, posters, radio programs and videos (Surman & Reilly 2003). The ability to post content online in real-time, not only poses a challenge to print media, but in many cases replaces it. The advent of social media means that online publishing is more than just about the web and e-mail, but rather encompasses blogs, and the uploading of audio and video content. Civil society organisations have always been able to adapt to new communication and technological opportunities (Castells 2004; Anheier, Glasius & Kaldor 2001; Surman & Reilly 2003).

Surman and Reilly (2003: 46) define online mobilisation primarily as the 'efforts to move people to action – to protest, intervene, advocate, support'. Networked technologies provide the ability to mobilise globally, directly and quickly while lessening the dependence on mainstream media channels, which in turn combines the advantages of broadcast and many-to-many media.

While civil society organisations have always cooperated with each other, the recent past has witnessed increased levels of consensus, cooperation and collaboration (Anheier & Themudo 2002) enabled in the main by inexpensive, worldwide, networked communications infrastructures that enable a many-to-many paradigm. It has become easier to communicate decisions and to engage with members on a regular and ongoing basis. It is easier to place staff in various parts of the world and still effectively engage

with them; it is also easier to coordinate the work between multiple offices. Online collaboration offers the possibility of increased information sources, which produces better quality information, more support and a discernible impact on the political environment (Surman & Reilly 2003).

Research Methodology

This study is exploratory and focuses on how civil society organisations deploy emerging Web 2.0 technologies strategically for social advocacy. A survey targeting South African civil organisations was conducted between May and June 2011. The online survey was developed using the Google Docs© toolset, which provided an effective means of survey research – online surveys cannot be easily mislaid and remain in place until purposefully deleted (Sheehan & Hoy 1996) - with respondents citing ease of use as one of the things they liked most about answering a Web survey (Cook, Heath & Thompson 2000).

The development of the survey instrument followed a comprehensive process, which included: an initial desktop review of existing and similar surveys, which provided a necessary structure and some of the initial questions (MobileActive 2010; NTEN 2010; NTEN 2011; NTEN 2011a; NTEN 2011b); ethical clearance through the ethics committee of the University; evaluation of the survey by a statistician; a pre-test; and finally a pilot study.

The population of South African civil society organisations is most comprehensively embodied in the Prodder database, which is maintained and administered by the non-government organisation (NGO) SANGONeT, whose main function revolves around ICT-related services to the broader NGO sector. At the time of the survey, the database had information on three thousand two hundred and forty one (3241) civil society organisations. The target population represented all the CSOs listed in the Prodder database that had an Internet presence and an email address, which turned out to be a total of two thousand five hundred and seventy one (2571) organisations. Eight hundred and fifty nine (859) organisations did not have a valid email address (emails were returned as undeliverable) and the remaining one thousand seven hundred and twelve organisations (1712) represented all the South

African civil society organisations that had a valid email address and was the eventual population of the study

Strategic Uses of Web 2.0

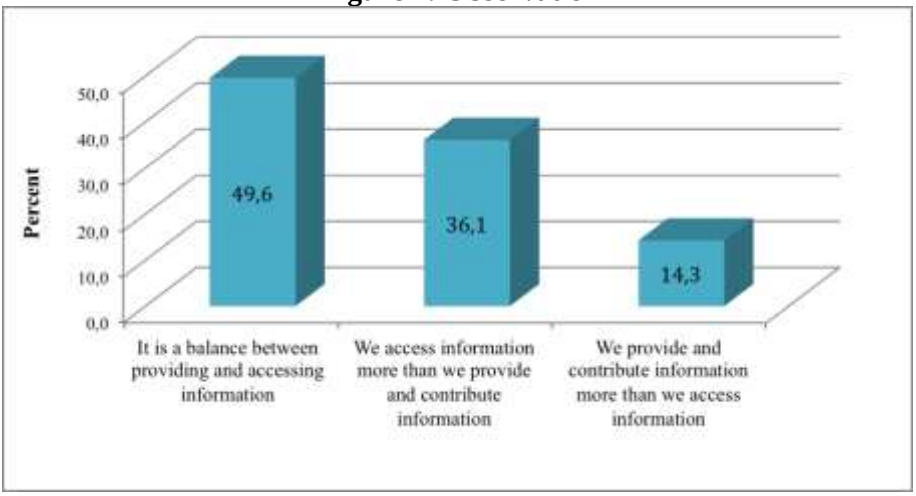
This section relates to the strategic use of Web 2.0 by South African CSOs. Responses from different questions and sub-questions within the survey were consolidated to give an overall picture of the strategic areas of collaboration, publishing, mobilisation and observation.

Observation

Online observation spans a range of activities that include research and intelligence gathering and within CSOs; specifically it involves the collection and pooling of information (Surman & Reilly 2003).

Just under half (49.6%) of all organisations indicated that they use social media equally when providing and accessing information. A fraction over thirty per cent access information more than they provide information, while small a minority (14.3%) provide and contribute information more than they access it (see Figure 1).

Figure 1: Observation



Various statements relating to Web 2.0 for information gathering are presented in Table 1.

Table 1: Observation Using Web 2.0 Social Media

Observation using Web 2.0 Social Media	**Percentage**
Web 2.0 has helped organisations gain a wider perspective	55
Monitoring of the blogosphere	17.3
Downloading of podcasts for market research	12.7
Use of wikis for market research	26.4
Use of RSS feeds for market research	21.3
Importance of getting information available from other sources	76
Importance of gathering relevant information and knowledge	79.3

While many organisations recognise the importance of Web 2.0 for gathering information (76% and 79.3%) it does not necessarily translate to actual practice with only a small percentage of organisations using any kind of social media services for data gathering: monitoring of the blogosphere (17.3%), downloading of podcasts (12.7%), and using wiki's and RSS feeds for research (26.4% and 21.3% respectively). One of the main uses of social media for civil society has been the ability to access and disseminate vast amounts of information from disparate sources in real-time, something that aids advocacy efforts

Publishing

This section relates to the publishing of information by CSOs which is one of the most fundamental tasks of CSOs i.e. books, papers, reports, news releases, action alerts, policy statements, pamphlets, posters, radio programs and videos. Not only has publishing content online augmented traditional print media, but in many instances it has actually replaced it. Online

publishing goes beyond the web and e-mail and now includes the use of blogs and the publishing of audio and video materials. Table 2 presents various statements relating to the use Web 2.0 for publishing information.

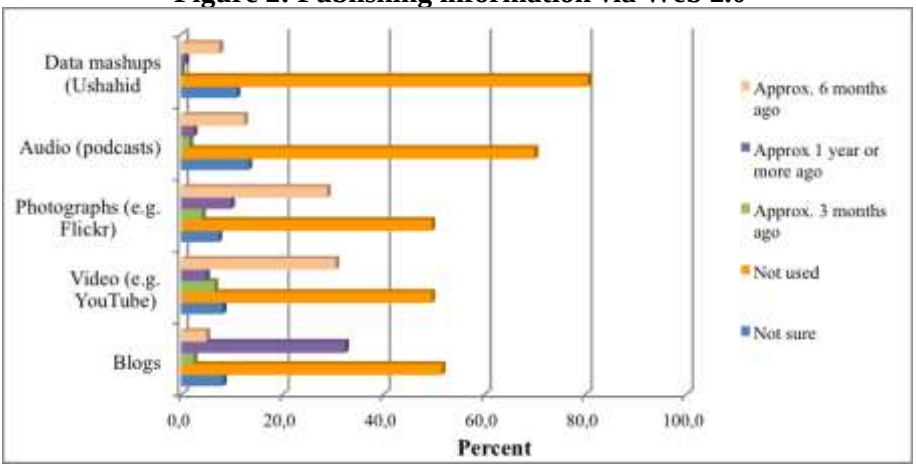
Table 2: Publishing Information via Web 2.0

Publishing using Web 2.0 Social Media	**Percentage**
It is a balance between providing and accessing information	49.6
Better communication of ideas with the public	55.5
Important to disseminate information to other parties	71.9

A large majority of organisations (71.9%) believe that Web 2.0 is an important tool to disseminate information to other parties while 55.5% of organisations believe they are able to use social media to better communicate ideas to the public.

Figure 2 illustrates the responses to the question 'Indicate for how long your organisation has been using the following Web 2.0 services to publish information on the web.'

Figure 2: Publishing information via Web 2.0



The cumulative usage percentages are presented in Table 3. Many organisations have begun posting videos (42.2%), sharing photographs on photo sharing sites (42.9%) and using blogs (40%) in the last twelve months. Blogs have been the most popular form of publishing information and also one of earliest adopted publishing services with 32.5% of organisations having adopted blogs one year or more ago. Data mashups are the least used service with 80.5% of organisations indicating no usage of this service to publish information.

The 1999 protests against the World Trade Organisation's Ministerial meeting, which came to be known as the 'The Battle for Seattle' owes much of its success to the ability of the organisers of the protest to disseminate information. This protest was also the birthplace of the Independent Media Centre (IMC or IndyMedia), which enabled the rapid distribution information (Pickerill, 2006).

Table 3: Publishing information via Web 2.0

Social Media Service	Not used	Cumulative Usage %	3 months ago	6 months ago	>1 year ago
Blogs	51.7	40	2.5	5.0	32.5
Video (e.g. YouTube)	49.6	42.2	6.6	30.6	5.0
Photographs (e.g. Flickr)	49.6	42.9	4.1	28.9	9.9
Audio (podcasts)	70.0	16.7	1.7	12.5	2.5
Data mashups (Ushahidi)	80.5	8.4	0.0	7.6	0.8

Mobilisation

Surman & Reilly (2003: 46) define online mobilisation primarily as the 'efforts to move people to action – to protest, intervene, advocate, support.'

Networked technologies give the ability to mobilise globally, directly and quickly; it lessens the dependence on mainstream media channels; and it combines advantages that are inherent in broadcast and one-to-many communication channels.

Fundraising

An important aspect of mobilization is the ability to raise funds. Fundraising is analysed in respect of questions 2.8 and 3.6 posed in the survey, and reported in Table 4 and Figure 3 respectively.

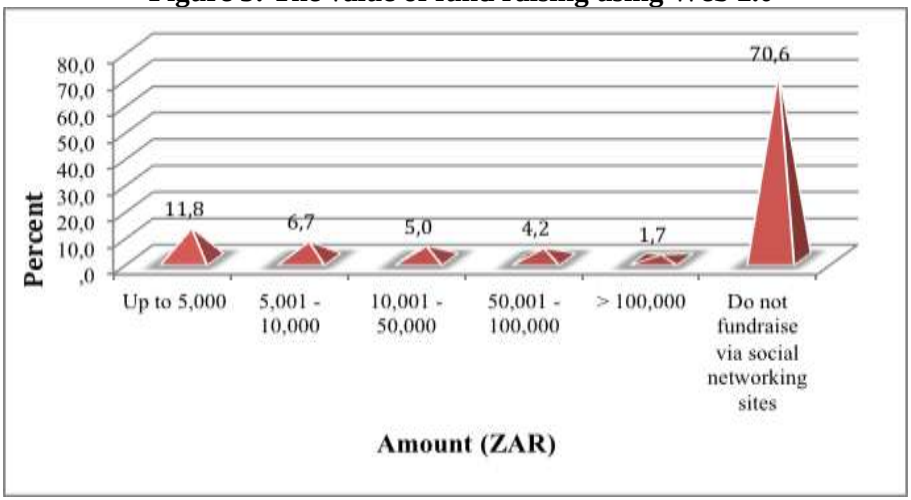
The majority of organisations (65.3%) believe that the value of fundraising via traditional means is more significant than fundraising via Web 2.0. Only 15.3% believe the opposite. Organisation in the large do not raise funds via social networking sites. The largest proportion of organisations that do fundraise via Web 2.0 (11.8%) raise only up to ZAR 5,000. Only 1.7% of South African CSOs raise more than ZAR 100,000.

Table 4: Fundraising using Web 2.0 Social Media

Fundraising via Web 2.0	**Percent**
The value of fundraising via traditional means is more significant than Web 2.0 fundraising	65.3
The value of fundraising via Web 2.0 and via traditional means is similar	19.5
The value of fundraising via Web 2.0 is more significant than traditional forms of fundraising	15.3

While early attempts at online fundraising were not very successful, more recent efforts which aggregate online fundraising efforts with advocacy activities (termed advocacy fundraising) is starting to bear fruit; the example of Amnesty International in Spain is illustrative with a successful online fundraising initiative, which was preceded by a high profile online petition (Surman & Reilly 2003).

Figure 3: The value of fund raising using Web 2.0



Fundraising: An International Perspective

Internationally, fundraising via social networks (and Facebook in particular) is growing but it is still a minority effort with many CSOs generating minimal revenue streams of between ZAR 7 to ZAR 70,000 annually (or $1 to $10K annually). The number of organisations raising ZAR 700,000 or more per year on social networks doubled in 2011 year from 0.2% to 0.4% (2011 Nonpprofit Social Network Report 2011).

Mobilisation

Various questions from the survey were analysed with respect to mobilisation by civil society and are presented in Table 5 below.

Table 5: Mobilisation via Web 2.0

Mobilisation using Web 2.0 Social Media	Percentage
Has increased dialogue with supporters	54.6

Better communication of ideas with the public	55.5
Campaigning / opinion building	38.1
Has had a positive impact in advancing advocacy initiatives	57.5
Important to accumulate bargaining power for advocacy	47.9%
Important to widen influence on society	71.1

While many organisations cite the positive contribution of social media in mobilisation initiatives, only thirty eight percent of organisations chose campaigning/opinion building as a benefit (see section 4.6.1 for a discussion on benefits). A majority did believe that it increased dialogue with supporters (54.6%); assisted to better communicate ideas with the public (55.5%); has a positive impact in advancing advocacy initiatives (57.5%) and was important to widen influence on society (71.1%).

Networked technologies are vital when attempting to shift policy through advocacy because of its ability to reach diverse groups of people, which increases representativeness reaching beyond the 'converted'. Organisations are no longer reliant on existing mass media organisations to get their message out; instead they have new media in the form of e-mail, protest websites, and text messaging that allows many-to-many broadcasting giving CSOs the ability to quickly and affordably reach a large group of people (Surman & Reilly 2003).

Collaboration

Various statements relating to the use Web 2.0 for collaboration were extracted from the survey protocol and the responses are summarised and presented in Table 6.

Table 6: Collaboration via Web 2.0

Collaboration using Web 2.0 Social Media	**Percentage**
Positive influence on relationships with other organisations	52.9

Better communication of ideas with other organisations	48.3
Building a wider network with other organisations	52.5
Collaborative projects with other organisations	29.1
Important to collaborate with other organisations	67.8

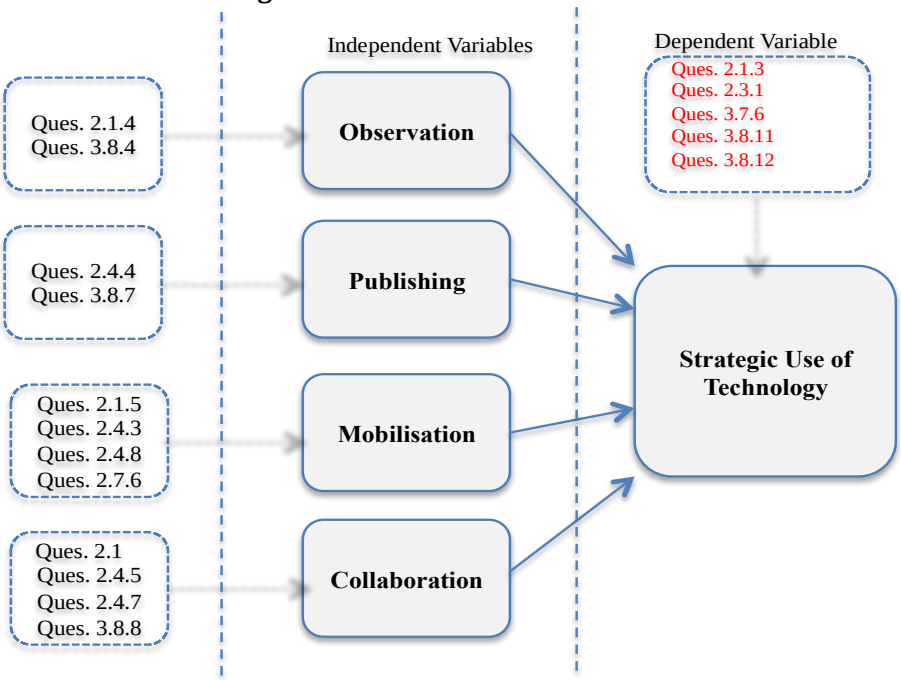
Many organisations believe that social media is important in respect of collaborating with other organisations (67.8%) and also with regards to relationships with other organisations (52.9%). This perception is not turned into practice though with just over twenty-nine percent of organisations citing collaborative projects with other originations as a benefit of adopting social media. The emerging global communications infrastructure has enabled increased levels of cooperation, partnership and opportunities for joint actions and campaigns amongst CSOs (Anheier & Themudo 2002). It has become easier to communicate decisions and to engage with members on a regular and ongoing basis, irrespective of geographic location.

Social media provides CSOs with a communications platform that simplifies access to large volumes of previously published information. It reduces the costs of publication and allows organisations to circumvent established media houses (who often act as gatekeepers of information), which in turn enables global scale communication. All of which enables the rapid formation and maintenance of virtual communities of shared interests (Naughton 2001).

A Model for Strategic Use

The strategic goal of civil society is to engage citizens in activities that advocate for the changing of policy and behaviours, which is achieved by proposing alternate debates, highlighting issues to relevant decision-makers, and by proposing alternate solutions to issues (Jones 2011). In order to conceptualise a model for strategic intent by CSOs the following predictors were chosen: collaboration, publishing, mobilisation and observation as suggested by Surman and Reilly (2003). These variables constitute the strategic use of networked technologies and lend themselves naturally to a model.

Figure 4: Proposed Model for the Strategic Appropriation of Networked Technologies



Rogers (2003) employs a similar approach for describing the relationship between structural characteristics and organisational innovativeness. In this model the independent variables of individual leader characteristics, internal characteristics of organisational structure and external characteristics of the organisation are related to the dependent variable of organisational innovativeness. A simple regression model was chosen to illustrate the impact of these variables on the strategic use of social media services, which is represented visually in Figure 4.

Five relevant operational questions from the survey were chosen as a measure of strategic intent. The questions were aggregated using simple averaging techniques. Similarly, relevant operational questions were chosen and aggregated using a simple average for the dependent variables: two for observation and publishing and four each for mobilisation and collaboration (detailed in Table 7).

Table 7: Operational Questions Versus Model of Strategic Appropriation

Strategic Adoption Constructs	Operational Questions
Strategic Use of Technology (SuT)	• The use of Web 2.0 social media has positively influenced the organisation's aims, missions and goals • We have engaged Web 2.0 in almost all aspects of our work • Web 2.0 services are important in order to achieve missions, and targeted goals. • Web 2.0 services are important in to accumulate bargaining power for advocacy • Web 2.0 services are important in to widen the influence on society
Observation (Obs.)	• The use of Web 2.0 social media has helped the organisation to gain wider perspective towards issues and concerns • Importance of gathering relevant information and knowledge
Publication (Pub.)	• Better communication of ideas with the public • Important to disseminate information to other parties
Mobilisation (Mob.)	• The use of Web 2.0 social media has increased dialogue with supporters • Social media has benefitted the organisation by better publication/communication of ideas with the public • Social media has benefitted the organisation with campaigning / opinion building • Web 2.0 has had a positive impact in advancing Advocacy initiatives
Collaboration (Collab.)	• The use of Web 2.0 social media has had a significant positive influence on the organisation's relationships with other organisations • Social media has benefitted the organisation by building wider network with other organisation(s)

	• Social media has benefitted the organisation by collaborative project with other organisation(s) • Web 2.0 is important for co-operation intensity (to co-operate, collaborate with other organisations)

Correlations

The correlations in Table 8 were generated using all one hundred and twenty-two data points and all correlations were statistically significant.

Table 8: Correlations

Correlations						
		SuT	**Obs.**	**Pub.**	**Mob.**	**Collab.**
Pear. Corr.	SuT	1.00	0.75	0.73	0.77	0.76
	Obs.	0.75	1.00	0.76	0.67	0.75
	Pub.	0.73	0.76	1.00	0.80	0.87
	Mob.	0.77	0.67	0.80	1.00	0.87
	Collab.	0.76	0.75	0.87	0.87	1.00

Model Summary

Table 9 is a summary of the model and describes the correlation and coefficient of determination.

The Durbin-Watson statistic is an indicator of the likelihood that the deviation (error) values for the regression have a first-order autoregression component. Small values of the Durbin-Watson statistic indicate the presence of autocorrelation. A value less than 0.80 usually indicates that autocorrelation is likely. Autocorrelation indicates that errors for the predictors are not related to each other and that errors are independent of each other.

Table 9: Model Summary

Model Summary				
R	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
0.83	0.688	0.677	0.48925	2.115

Analysis of Variance (ANOVA)

Table 10 presents the analysis of the variances (ANOVA). In general t-tests are used to test two variables and they test for proportions or averages. When more than three variables are being tested the ANOVA statistic is used which is essentially multiple t-tests.

Table 10: Analysis of Variance

Analysis of Variance (ANOVA)					
Model	**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig**
Regression	60.739	4	15.185	63.437	0.000
Residual	27.527	115	0.239		
Total	88.266	119			

Coefficients

Table 11 presents the coefficients for the regression model.

Table 11: Coefficients

Coefficients					
Model	**Unstandardised Coefficients**		**Stand. Coeff.**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		
(Constant)	0.818	0.182		4.482	0.000
Obs. (X_1)	0.307	0.069	0.369	4.433	0.000
Pub. (X_2)	0.049	0.099	0.056	0.491	0.624
Mob.(X_3)	0.307	0.087	0.376	3.537	0.001
Collab. (X4)	0.094	0.115	0.110	0.819	0.415

The first column shows the predictor variables (Observation, Publishing, Mobilisation and Collaboration). The constant represents the Y-intercept which is the predicted value of strategic use of technology when all other variables are zero.

The second column represents the coefficients for the linear regression. The regression equation is represented as:

$$Y_{predicted} = b_0 + b_1*x_1 + b_2*x_2 + b_3*x_3 + b_4*x_4$$

The column of estimates provides the values for b_0, b_1, b_2, b_3 and b_4 for this equation. Hence, the equation is:

$$Y = 0.818 + 0.307*\text{Observation} + 0.049*\text{Publishing} + 0.307*\text{Mobilisation} + 0.094*\text{Collaboration}.$$

Here Y is the strategic use of technology and the equation above is interpreted as follows, using the variable 'observation' as an illustration:

The coefficient for observation is 0.307, which shows that a unit increase in the independent variable (observation) yields a 30,7% increase in the dependent variable (strategic use of technology). The other variables may be interpreted in a similar fashion. All told, this model accounts for approximately 76% of the strategic use of technology.

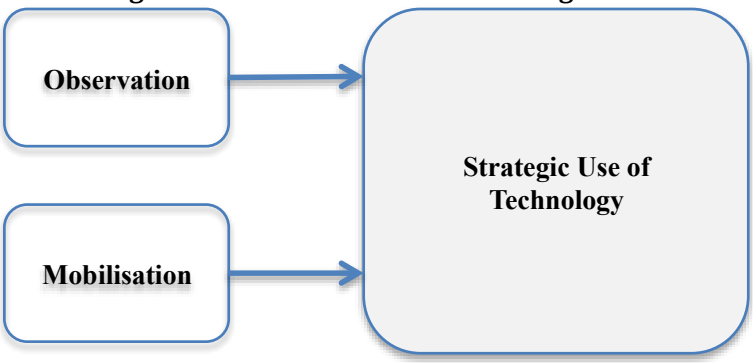
Using the standardised coefficients, Beta, yields the equation:

$$Y = 0.369*\text{Observation} + 0.056*\text{Publishing} + 0.376*\text{Mobilisation} + 0.110*\text{Collaboration}.$$

By using standardised coefficients it allows the reader to compare the effect of the different independent variables upon the dependent variable. For example, it can be noted that 'mobilisation' has a greater effect on the strategic use of technology than 'observation'.

The significance levels in the table indicate that regression coefficients for publishing (X_2, $p=0.624 > 0.05$) and collaboration (X_4, $p=0.415 > 0.05$) are not significantly different from zero and hence may be omitted from this model. The revised model is illustrated in Figure 5.

Figure 5: Modified Model for Strategic Use



The new linear equation is:

$$Y = 0.818 + 0.307*\text{Observation} + 0.307*\text{Mobilisation}$$

Conclusion

This study developed a model for the strategic use of technology based on criteria that were identified from the literature and tested empirically. This model lends itself to testing within other developing environments or countries.

A deeper analysis of the independent variable and a broader understanding of the dependent variables may also improve the model. It may also be useful to test specific constructs in a more focused questionnaire, as would a wide-scale survey to determine how CSOs strategically and politically use social media.

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