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NETWORK DYNAMICS DIMENSION FACTORS IN EVENT MANAGEMENT IN KENYA

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ABSTRACT

This paper determined the factors used to measure network dynamics dimension in event management. In order to achieve this objective, the study adopted and modified scales from previous studies. Descriptive research design was adopted and two hundred and seventy one entrepreneurs of special event management enterprises formed the sample for the study. Structured questionnaires were used to collect data which was tested for reliability using Cronbach's alpha. Exploratory factor analysis was undertaken to find out factor structure of data or uni-dimensionality. The findings demonstrated that, other than those in literature, novel indicators can be employed to measure network dynamics. Consequently, the study concluded that respect, support, trust and cooperation are important in measuring network dynamics.

Keywords: Event Management, Kenya, Network Dynamics, Respect, Support, Trust

Introduction

Network Dynamics refers to how networks are created, transformed over time and how resources are produced and used to obtain specific results. It seeks to determine whether a network can effectively be activated when a network member is in need of assistance. A focus area of business network research is change dynamics or understanding how business networks evolve over time. Several researchers have argued that business networks are dynamic and undergo change (Thorelli 1986; Håkansson 1989; Powell 1990; Håkansson and Johanson 1992; Easton and Lundgren 1992; Hägg and Johanson 1992; Hertz 1998; Anderson *et al.,* 1998; Anderson *et al.,* 2000). In general, it is believed that change in a business network originates on a relationship level, i.e. an event occurs between firm A and B, leading to a change in that particular relationship, which in turn has the possibility of influencing the larger business networks, in which at least one of the firms is embedded.

Network changes and dynamics are central features of networks and according to Larson and Starr (1993), network changes are examined from a number of perspectives. The first is an organizational formation process in which social, business, and strategic networks are combined at the outset and extend throughout the whole organization, second is a structural perspective, whereby the overall network changes from an unplanned to a planned and eventually a structured network (Lorenzoni and Ornati, 1988; Larson, 1991; Lorenzoni and Baden-Fuller, 1995), third is a network evolution process in which the entrepreneurial network evolves from a social network to a business network and finally to a strategic network (Brown *et al.,* 1990). Network changes and dynamics contribute to growth measures of a venture by first providing an organizational process in which social, business and strategic networks are combined at the outset and extend through the organization.

The dynamics of personal networks of entrepreneurs are a function of the original state of networks (Burt, 1992, Johannisson, 1996, Steier, 2000, Uzzi, 1997). As network clusters evolve, friends of friends begin to be included and that expands cluster boundaries to contacts in other clusters pushing the size of ego networks further. Third-party referrals and past relationships bring in new ties to the cluster and this shapes the original network range, relations and resource configurations. As a venture develops, entrepreneurs focus on the quality of the network composition such as nonredundancy or heterophily changing their network morphology (Steier, 2000). Halinen, Salmi and Havila (1999) developed concepts for analyzing network dynamics and differentiated between incremental and radical change. The former involves change in the nature and content of single relationships. Behind it are actually forces that maintain stability, manifested in inertia such as technical and resource interdependencies, risk-reducing strategies as well as various institutional rules for correct network behavior.

McNeil (1978) states the importance of norms in networking and business relationships which all have norms. Durkheim (1964) argued for the importance of social solidarity and the common values which people hold. The society needs to make sure the collective values to be such as they

encourage congruence of moral and social norms between individuals. Acting according to social norms typically includes expectations on mutual benefits such as personal affection, trust, gratitude, and economic return (Varey 2002). However, the norms have to be accepted and maintained from both parties of the relationship. Norms can also be a reference for the behavior an actor shows in a specific situation. Based on earlier experiences of the actor's behavior, one can evaluate current or future actions of the other party (Heide and John 1992).

1.1 Trust

Trust is very important in networking and hence ethnic affiliation could be a basis that forms trust between entrepreneurs. Trust develops dependability in a network of personal relationship because of the transaction that occurs (Welter and Kautonen, 2005). Trust must be build up over time through continuous achieving each others' expectations and investments in the relationship (Carayannis and Juneau 2003). The economic exchange of a relationship is based on the level of trust between the parties involved (Dibben, 2000). Trust is essential for entrepreneurs when building relationships to potential partners (Green, 2006). Creating trust should be the basic step to build a long term relationship (Peppers and Rogers, 2004). Highly important for businesses according to Smith (2008) is the value of a solid business relationship and the trust that exist as a result. Furthermore, trust together with the power of referrals can increase sales and the exchange of networking. O´Hara (2004) posit that trust has the important function to enable people to collaborate and connects the parties of a relationship and hence lack of trust destroy a relationship (Smith, 2008). A business relationship based on trust is more efficient and can save time (Koch, 1998).

Castaldo (2007) found different concepts of trust such as expectation, belief, willingness, confidence, and attitude. Castaldo argued that trust include expectations on the other person's behavior to be coordinated and cooperative and demonstrate the expectation of favorable outcomes of a trustworthy relationship. A relationship built on trust also includes expectations of prevention of anything which could exploit the position of the one trusting someone else. Trust derives from the prediction of the other person's future behavior (Castaldo, 2007). It falls back on how reliable the promises from the individual are and if the expected obligations can be guaranteed. O`Hara (2004) claimed reputation was the key factor to support trust. The negative side of reputation is that it easily turns into generalizations. O´Hara described reputation as a common, and socially held understanding of a person's standing with respect to trustworthiness. Reputations tell how a person is likely to act and help thoughts of what will happen. The reputation therefore provides a guarantee for trust and enables the selection of trustworthy people. Bad reputation can be hard to get rid of.

Methodology

The study was undertaken in Kisumu, Nairobi and Uasin Gishu counties in Kenya. Descriptive survey research design was used in the study in which two hundred and seventy one entrepreneurs participated. Close-ended questionnaires were used to collect data that was tested for reliability using cronbach alpha at 0.7significance. Exploratory factor analysis was undertaken to find out uni-dimensionality of factors.

2.1 Measurements of Network Dynamics

Network dynamics was measured using 13 items categorized into four sub-dimensions, namely; nature of network, associations, interactions and personal/corporate adopted from Lorenzoni and Ornati, 1988; Brown et al., 1990; Larson, 1991; Larson and Starr, 1993; Lorenzoni and Baden-Fuller, 1995. The measures are as shown on table 1.

Table 1: Measures of Network Dynamics

Nature of network
• We can depend on other service providers to access resources
• Support offered by service providers depend on the event
• Certain key stages in the development of a collective project requires the collaboration of experienced individuals with good relational skills to facilitate cooperation between service providers
Associations
• We resort to good communication for cooperation between service providers
• Trust exits between us and each service provider
• Rules and norms internal to different service providers allow togetherness
• There is willingness to share resources among service providers
Interactions
• Social skills are necessary to create and maintain interpersonal relations
• Openness among service providers is necessary for collaboration
• Other service providers respect the work your venture does
• Respect among service providers is necessary for interactions to be achieved
Personal/corporate
• There is support for personal problems such as illness, job loss, bereavement, birth
• It is easy to ask for help from service providers in order to access resources

Source: Lorenzoni and Ornati, 1988; Brown et al., 1990; Larson, 1991; Larson and Starr, 1993; Lorenzoni and Baden-Fuller, 1995

Data Analysis

Network dynamics was measured via a thirteen item scale. Respondents were asked to indicate their agreement/disagreement to various aspects of network dynamics as pertains to their ventures. As shown on table 2, responses were elicited using a 5-point Likert Scale ranging from 1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly Agree. Chi square (χ^2) tests performed on each of the indicators of network dynamics were all significant at 1% level with p=0.001.

The mean scores presented in table 2 show that several respondents tended to strongly agree that respect among service providers was necessary for interactions to be achieved (M=4.14, SD=0.732), cooperation create and maintain interpersonal relations (M=4.09, SD==0.638), there was good communication among service providers (M=4.05, SD=0.681), support offered by service providers depend on the event (M=4.04, SD=0.806) and that there was need for collaboration of experienced individuals with good initiating relationships skills to facilitate cooperation between service providers (M=4.03, SD=0.674).

The respondents also agreed that openness among service providers was necessary for collaboration (M=3.97, SD=0.741), other service providers respect the work other venture do (M=3.86, SD=0.809), rules and norms internal to different service providers allow togetherness (M=3.83, SD=0.824), trust existed between service providers (M=3.76, SD=0.909), ventures support each other when they experience personal problems such as illness, birth (M=3.65, SD=1.047) and that there was willingness to share resources among service providers (M=M=3.62, SD=1.003).

However some entrepreneurs were neutral that ventures can depend on other service providers to access resources (M=3.48, SD=1.046) and that it was easy for ventures to ask for help from other service providers in order to access resources (M=3.45, SD=1.045). Besides, the values of the skewness and kurtosis indicate normally distributed data.

Table 2: Indicators of Network Dynamics

	Measurement										Statistics				
	1		2		3		4		5				SE-.148	SE=.295	df=4 *p*=.001
	f	%	*F*	%	*f*	%	*f*	%	*f*	%	M	SD	SKEW	KURT	χ^2
D1: ventures can depend on other SPs to access resources	19	7.0	39	14.4	25	9.2	170	62.7	18	6.6	3.48	1.046	-1.070	.159	314.443
D2: easy for venture to ask for help from SPs in order to access resources	20	7.4	36	13.3	35	12.9	162	59.8	18	6.6	3.45	1.045	-1.023	.137	273.077
D3: support offered by the service depend on the event	4	1.5	13	4.8	21	7.7	165	60.9	68	25.1	4.04	.806	-1.335	2.857	335.694
D4: ventures support personal problems eg illness,birth	15	5.5	28	10.3	38	14.0	146	53.9	44	16.2	3.65	1.047	-.978	.445	203.262
D5: social skills necessary to create and maintain interpersonal relations	1	0.4	5	1.8	25	9.2	181	66.8	59	21.8	4.09	.638	-.857	2.924	414.959
D6: collaboration with good relational skills facilitate cooperation	1	0.4	4	1.5	39	14.4	168	62.0	59	21.8	4.03	.674	-.624	1.532	342.339
D7: ventures resort to good communication among SPs	1	0.4	5	1.8	40	14.7	165	60.9	60	22.1	4.05	.681	-.714	1.742	338.906
D8: rules & norms internal to different SPs allow togetherness	3	1.1	14	5.2	60	22.2	145	53.5	49	18.1	3.83	.824	-.709	.815	232.074
D9: openness among SPs is necessary for collaboration	1	0.4	8	3.0	49	18.1	154	56.8	59	21.8	3.97	.741	-.615	.838	277.519
D10: trust exists between our venture and each SP	7	2.6	19	7.0	52	19.2	146	53.9	47	17.3	3.76	.909	-.918	.969	220.494
D11: there is willingness to share resources among SPs	13	4.8	30	11.1	39	14.4	154	56.8	35	12.9	3.62	1.003	-.998	.534	236.952
D12: SPs respect the work the venture does	4	1.5	11	4.1	53	19.6	154	56.8	49	18.1	3.86	.809	-.881	1.486	265.218
D13: respect among SPs is necessary for interactions to be achieved	2	0.7	4	1.5	32	11.8	149	55.0	84	31.0	4.14	.732	-.910	1.958	288.059

Note: N=271; 1=Strongly Disagree, 2=Disagree, 3=Moderately Agree, 4=Agree and 5=Strongly Agree

Source: *Survey Data (2011)*

3.1 Exploratory Factor Analysis

Thirteen items pertaining to Network dynamics dimension were subjected to exploratory factor analysis. The items were grouped into four factors which were subsequently named as respect (RES), support (SUP), trust (TRU) and cooperation (COO). Initially the number of factors to be extracted was not specified, however the eigen values (≥ 1) suggested a total of four factors to be used as network dynamics dimension observed variables which explained a total of 64.63% of the variance in the data as shown on table 3. Respect explained 34.76% of the variance in the data and had a total of 4.519 eigen values. Support explained 12.73% of the variance in the data and had a total of 1.655 eigen values. Trust explained 9.19% of the variance in the data and had a total of 1.194 eigen values. Lastly, cooperation (COO) explained 7.95% of variance in the data and had a total of 1.033 eigen values.

Table 3: Total Variance Explained

Component	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1 RES	4.519	34.763	34.763	2.549	19.604	19.604
2 SUP	1.655	12.734	47.497	2.132	16.396	36.000
3 TRU	1.194	9.186	56.683	2.006	15.430	51.431
4 COP	1.033	7.950	64.633	1.716	13.202	64.633

Extraction Method: Principal Component Analysis.

Source: *Survey Data (2011)*

As shown on table 4 a total of 13 network dynamics items loaded into four components (RES, SUP, TRU, COO). Three items loaded to respect, three items loaded to support, three items loaded to trust while two items loaded to cooperation. Table 4 shows the items that loaded, significantly to each of the four factors.

Table 4: Rotated Factor loadings: Network dynamics

	Component			
	Respect	Support	Trust	Cooperation
D13: respect among service providers is necessary for interactions to be achieved	.763			
D7: ventures resort to good communication among service providers	.686			
D9: openness among service providers is necessary for collaboration	.647			
D12: other service providers respect the work the venture does				
D8: rules and norms internal to different service providers allow togetherness				
D2: it is easy for venture to ask for help from service providers in order to access resources		.851		
D1: ventures can depend on other service providers to access resources		.793		
D3: support offered by the service depend on the event		.699		
D10: trust exists between our venture and each service provider			.751	
D4: ventures support personal problems such as illness, birth			.744	
D11: there is willingness to share resources among service providers			.717	
D5: social skills are necessary to create and maintain interpersonal relations				.763
D6: collaboration of experienced individuals with good relational skills to facilitate cooperation between service providers				.676

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 10 iterations.

Source: *Survey Data (2011)*

3.2 Reliability of factors

Four components were extracted from network dynamics namely respect (RES), support (SUP), trust (TRU) and cooperation (COO). As shown on table 5, component 1, (RES) loaded three items to a significant extent, namely (D13, D7, D9). The Cronbach's alpha value for this factor was 0.831, and was therefore considered a reliable measuring indicator the variable network dynamics. Component 2, (SUP) loaded three items to a significant extent on support namely (D2, D1, D3). Table 5 indicates that the instrument was considered reliable for measuring support as evidenced by the Cronbach's alpha value of 0.758. Besides, the high values of the item-to-total correlations shown that the items that reflect support yield similar results leading to a high level of internal consistency of the measurement instrument. Component 3, (TRU) displays the three items namely (D10, D4, D11) that loaded to a significant extent on trust, the Cronbach's alpha, the eigen value and the item-to-total correlations. The Cronbach's alpha value of 0.709 together with the high values of the item total correlation indicate that this factor is a reliable measuring instrument for the construct Network dynamics. Component 4, (COO) loaded two items to a significant extent on cooperation, namely (D5, D6). The Cronbach's alpha value for this factor was 0.696 which was above 0.7. The factor was therefore deemed a reliable measuring instrument for the construct network dynamics. Table 5 presents the items measuring network dynamics, the Cronbach's alpha, the eigen value and the item-to-total correlations.

Table 5: Construct Reliability for indicators of Network Dynamics

Factor 1: Respect; Eigen value: 4.519; Cronbach's alpha: 0.831	**Factor Loading**	**Item–to-total correlation**
D13: Respect among service providers is necessary for interactions to be achieved	0.763	0.831
D7: We resort to good communication for co-operation between service providers	0.686	0.796
D9: Openness among service providers is necessary for collaboration.	0.647	0.809
Factor 2: Support; Eigen value: 1.655; Cronbach's alpha: 0.758		
D2: It is easy to ask for help from service providers in order to access resources	0.851	0.888
D1: We can depend on other service providers to access resources	0.793	0.868
D3: Support offered by service providers depend on the event	0.699	0.693
Factor 3: Trust; Eigen value: 1.194; Cronbach's alpha: 0.709		
D10: Trust exists between us and each service provider	0.751	0.812
D4: There is support for personal problems e.g. Illness, jobless, bereavement, birth	0.744	0.750
D11: There is willingness to share resources among service providers	0.717	0.810
Factor 4: Cooperation; Eigen value: 1.033; Cronbach's alpha: 0.696		
D5: Social skills are necessary to create and maintain interpersonal relations	0.763	0.803
D6: Certain key stages in development of a collective project requires the collaboration of experienced individuals with good relational skills to facilitate cooperation between service providers	0.676	0.828

Source: *Survey Data (2011)*

Conclusion

The measurement of network dynamics used in prior research comprised nature of network, associations, interactions and personal/corporate (Lorenzoni and Ornati, 1988; Brown et al., 1990; Larson, 1991; Larson and Starr, 1993; Lorenzoni and Baden-Fuller, 1995). Based on the findings, all the four indicators from previous studies were not supported. Consequently new indicators namely; respect, support, trust and cooperation were developed. The implication of the development of indicators of network dynamics is that the measurement of network dynamics deviates when used in the hospitality sector. The indicators reveal that the new sub-dimensions tend to relate to measures that imply values which are difficult to measure, sustain, develop and maintain because of their personal nature. These sub-dimensions are not static but can change often based on various reasons that come to play at different times such as moods, associations and business environment.

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