IMPROVING ORGANIZATIONAL SERVICE DELIVERY THROUGH INSTITUTIONAL INNOVATION

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Abstract

The organizational survival depends on innovation. Organizations that are best in innovation are also apt to be the best collaborators, both internal and external, when dealing with a complex problems such as leadership, human resource and funding. The paper therefore seek to examines the mediating role of collaboration in development of organizational needs such as workers’ productivity, sharing ideas, pulling resource and leadership quality. The collaboration can emerge with new models, better designed processes, and novel technology— as well achievements of the aims and objectives in which the organizations was set up. The study conducted a survey research with 96 respondents, Smart PLS 2.0 was used in analyses of the data, seven hypotheses were formed and all the hypotheses were supported indicating the relationship between bureaucracy, collaboration, resource, leadership quality and innovation. The paper recommends increase in collaboration.

Keywords: Organization, Collaboration, Innovation and Productivity

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Introduction

Organization future depends on its ability to create innovation. Innovative enterprises survive during the period of uncertainty, it enable organization to pool resource, develop new ways of doing things and diversifies between productive and unproductive activities. The application of innovation is influenced by the institutional arrangements that determine the relative payoffs. In lazier faire economies, the arrangements include collaborations, rules that protect private property from expropriation, rules for the enforcement of contracts, a system allocation, and rules of bankruptcy protection that encourage risk taking (Redford & Fayolle, 2014). With these arrangements in place, the innovative and inventors can expect earnings and prestige if they are successful. IBM for instance, has used innovation-focused services to increase productivity in its innovation processes by facilitating communication among collaborating employees which is like mega-innovative innovations. Innovation lowers costs and increases productivity in an organization. There is little study on innovation in public institutions; this study therefore examines the role of innovation in improving public service (Guerrero, Urbano & Salamzadeh, 2014).

Leadership

Leadership play a vital role in enhancing innovation within the organization, the ability of organizations to innovate depends on the qualities of a leader. Leaders use of inspirational motivation and intellectual stimulation is critical for organizational innovation (Elkins and Keller, 2003). Transformational leaders promote creative ideas within their organizations; this behavior reflects the championing role of transformational leaders (Howell and Higgins, 1990). The leaders must have vision that influences their followers, increases their willingness to perform beyond expectations, and challenges them to adopt innovative approaches in their work. The resulting heightened level of motivation is likely to enhance organizational innovation (Mumford et al., 2002).

A number of researches had support such leaders' positive impact on innovation (e.g., Keller, 1992 and Waldman and Atwater, 1994). These studies examine the relationship between leadership and innovation mostly in research and development units and at the project level. The impacts of leadership on innovation at the organizational level has become a topic of empirical research only recently. Jung et al. (2003), in a study of 32 Taiwanese companies, find that leadership played a significant and positive roles in organizational innovation as measured by R&D expenditures and number of patents obtained over the preceding 3 years (MacKenzie & Zhang, 2014). leadership is among the most important factors affecting innovation. leaders’ effect on organizational characteristics such as culture, strategy, structure, reward systems, or resources (Woodman, Sawyer, and Griffin, 1993), or through a direct effect of their
behavior on employees’ creativity (Oldham and Cummings, 1996), and motivation. Leaders can help their followers to exhibit higher levels of creativity at work can establish a work environment supportive of creativity, can create an organizational climate serving as a guiding principle for more creative work processes and can develop and maintain a system that rewards creative performance through compensation and other human resource-related policies. Furthermore, leaders can have an impact not only on innovation within the firm but also on marketing the innovative products. For example, their active participation in selling the innovative products might decrease resistance from the potential customers (Ettlie, 1983).

Transformational leaders may also have a positive influence on the market success of the innovations. Leaders who articulate a strong vision of innovation and display a sense of power and confidence will strive to ensure the market success of the innovation (Markowska, 2014). These leaders mobilize their followers to ensure the innovations’ success (Jung et al., 2003). Keller (1992) suggests that leading professional employees might require more than traditional leader behaviors especially in R&D settings where quality rather than quantity is the primary performance criterion. Furthermore, in addition to the internal roles, the transformational leader may be effective in playing external roles such as boundary spanning and entrepreneuring/championing (Howell and Higgins, 1990); these might be important both for understanding the needs of the market and for successful marketing of the innovation. Therefore, this study proposes a positive relationship between transformational leadership and organizational innovation which is conceptualized in this paper as including both the tendency of the organization to innovate and the success of innovations (Grünhagen & Volkmann, 2014).

H1: leadership relates positively to organizational innovation.

Collaboration

Collaboration is defined as process of pooling resources by stakeholder with the aims and objectives of achieving common goal. It involves planning and evaluating outcome together. It is also entails working jointly with others on a common goal that is beyond what any one person or group can accomplish alone (Blok, Lans & Dons, 2014). Collaboration plays a vital role in programme design, development, pedagogy, stakeholder relationship development and partnerships (local, regional, national and international); research design and development; research impact; funding and resource acquisition; trans-disciplinary approaches to research and teaching; interdepartmental and cross-boundary collaborations in general; internationalization; and organization development (Steiner, 2014).

This forms of collaboration may includes financial aid, funding and awards, academic faculty receive career promotions and financial awards; university businesses (spin-offs) are awarded free equipment, financial aid, tax exemptions (based on university notification to government), and free services; and affiliate businesses enjoy an ease of collaboration and consultation services (Mari Saua Svalastog & Leunbach, 2014). Therefore in this study, Collaboration is mediating variable.

H2: Collaboration relates positively to organizational innovation.

H3: Collaboration mediates the relation between Resource, Leadership and bureaucracy in organizational innovation.

Figure 1. Forms of collaboration

Bureaucracy

Bureaucracy is the most critical element in the organizational transformation process. As a concept Bureaucracy means delineation of a set position in term of command or authority relation (Pickernell, Packham & McCarthy, 2014). The characteristics of modern organization is that large proportion of the production and distribution of goods and services take place through (Kanter, 1991).
Bureaucratic autonomy means that bureaucrats define task and shape goals independent of the Political authority (Fukuyama, 2013). The ability to formulate and implement government policies and programmes show degree of bureaucratic independent (Burg, 2014). The promotion of bureaucrats ought to be on the bases of merit and their technical expertise not on the bases of political patronage (Fukuyama, 2013) but in many developing world reverse is the case bureaucrats lack autonomy, it is the politicians that rule which create problem to the development of the institution. In Japan the developmental, strategic quality of economic policy is reflected within the government in the high position of the economic bureaucrats, that is, the officials of the ministries of Finance, International Trade and Industry (Muir & Edwards, 2014). These official agencies attract the most talented graduates of the best universities in the country, and the positions of higher-level officials in these ministries have been and still are the most prestigious in the society. Although it is influenced by pressure groups and political claimants, the elite bureaucracy of Japan makes most major decisions, drafts virtually all legislation, controls the national budget, and is the source of growth and development of the state(Johnson cited Danjuma & Abdullah, 2014). Therefore in this study, Bureaucracy is independent variable.

H4: Bureaucracy relates positively to organizational innovation.

Resources
Public organizations are characterized by diverse sources of funding (e.g., in education; government, research contracts, campus services, student fees and others. Funding is a very important element of organization (Crayford, Vuuren-Cassar, Colm Fearon, 2014). It determines the success or failure of organization. Many public institution as well as government policies and programme could not see the light of the day due to inadequate resource (Schneeberger, Kalaitzandonakes & Kolympiris, 2014). A particular community is relevant for pooling resource. The concept of community is thus close to the stakeholder concept at the collaboration. It therefore follows that the government needs to ensure that organization meets the interests of society in general. In point of fact, today’s public organizations interact with many other external domains, such as health, industry, culture, territorial development and the labour market. To this point, Organization is not only expected to deliver excellent service, but it also has to deliver them in ways and forms that are relevant to the productive process as well as helping to shape the knowledge society, using the perspective of stakeholders rather than just customers (Harrison and Freeman, 1999). Public organizations need to assume their role in society by engaging with various stakeholders and their communities. Such interconnections and interdependencies relate to the social and economic functions, as well as to the services that organizations provide, in terms of delivering services (Jongbloed et al., 2008). Thus, it is axiomatic that, in order to meet its expectations, organizations must carefully select and identify the right partners. Therefore in this study, Resource is independent variable.

H5: Resource relates positively to organizational innovation.

Innovation
Since most organizations engage in innovative activity as a way to survive, the present study adopts a market-oriented approach and it impacts in public service delivery. Organizational innovation is the ability of the organization to develop new or improved services and its success in bringing those services to the market. Damanpour (1991) defined innovations as, introduction of new service to meet an external user or market need, in addition to the above, OECD (2004: 64) viewed innovation as, the successful bringing of the new product or service to the market.

Innovation is defined as the creation and implementation ideas within an organization (Amabile, 1998; Amabile et al., 1996).

History has shown that the first industrial nation was through invention, the second industrial nation was through innovation and Japan, South Korea and Taiwan developed through learning. Innovation is associated with ideas, while innovation is the application of ideas for commercial use. Invention is trial and error, while innovation is through theory and experimentation. Learning involve borrowing, adapting and improving upon foreign design. Therefore in this study, Innovation is dependent variable. (Amsden, 1992).Therefore, in this study Innovation is dependent variable.

Theoretical framework
The theoretical framework of this study is theory of institutional design as advocated by Eliner Ostrom. It is also known as common-pool resource, and it worked in areas such as a lake, an ocean, an irrigation system, a fishing ground, a forest, the Internet, or the stratosphere, is a natural or man-made resource from which it is difficult to exclude or limit users once the resource is provided by nature or produced by humans. One of the basic feature of common pool resource is it difficulties of excluding beneficiaries. Resource is in form of private goods. The free-rider problem is a potential threat to efforts to reduce appropriation and improve the long term. Although, one of the problems facing the joint users of a common-pool resource is known as the “Commons Dilemma,” given the potential incentives
in all jointly used common-pool resources for individuals to appropriate more resource units when acting independently than they would if they could find some way of coordinating their appropriation activities. Joint users of a common-pool resource often face many other problems including assignment problems, technological externality problems, provision problems, and maintenance problems (E. Ostrom, Gardner & Walker 1994). And, the specific character of each of these problems differs substantially from one resource to the next. Participants, a set of n symmetric subjects who do not have any outside relationships with one another.

Method of data collection

The variables were measured by 5 items on a 5-point scale ranging from 1 (“Strongly disagree”) to 5 (“Strongly agree”). The respondents indicated the extent to which their organization supported innovation, collaboration and effective leadership. Based on results, items with loadings less than 0.50 were removed.

Method of data analysis

The analysis of the data was done using Partial Least Squares through the Smart PLS 2.0 software. The main reason behind the choice of PLS as the analysis technique for this study is because PLS allows the analysis of formative constructs. Unlike most covariance-based SEM analysis which requires items/indicators used to measure a latent variable to be reflective in nature, both reflective and formative measures can be included in research model in line with the suggestions of (Chin, 2010) as reasons for using Smart PLS.

Measurement Model

The measurement model consists of relationships among the latent variables and the (item) indicators underlying each latent variable. Before proceeding to examine the research model for hypothesis testing, it is pertinent to first establish construct validity for the measurement model.

Construct validity concerns the extent to which the indicators reflect their underlying constructs (latent variables). In order to establish construct validity, items in the measurement model need to demonstrate both convergent and discriminant validity. Establishing convergent validity involves satisfying the conditions imposed upon indicator loadings, reliabilities and average variance extracted (AVE). The indicator loadings, reliabilities and AVE for all the reflective items listed in the model. The loadings of all reflective indicators surpassed the minimum required cut-off level of 0.50 except LEA, LEB, LEC, BUB, BUC, BUD, COC, COD, INNA, INNB, INNC, REB, REC and RED were dropped from the model. In terms of reliability, the composite reliability and Cronbach Alpha values for all formative constructs exceeded the threshold value of 0.70 recommended by Hair et al. (2010) and Nunnally (1978) respectively. The AVE for each construct was over the recommended value of 0.50 suggested by Fornell and Larcker (1981). Short, convergent validity was established. While indicator loadings, reliabilities and AVE are used to assess convergent validity for constructs (Bollen & Lennox, 1991; Diamantopoulos & Winklhofer, 2001). When interpreting a measurement model with formative constructs, the focus should be on the weights of each measure rather than the indicator loadings (Petter et al., 2007).

Table 1. Convergent Validity

<table>
<thead>
<tr>
<th>Loading</th>
<th>Composite reliability</th>
<th>Ave</th>
<th>Alpha Cronbach</th>
</tr>
</thead>
<tbody>
<tr>
<td>@LE</td>
<td>0.839463</td>
<td>0.791</td>
<td>0.655</td>
</tr>
<tr>
<td>@LE_D</td>
<td>0.778242</td>
<td></td>
<td>0.791</td>
</tr>
<tr>
<td>BU</td>
<td>0.916716</td>
<td>0.922</td>
<td>0.855</td>
</tr>
<tr>
<td>BU_A</td>
<td>0.93236</td>
<td></td>
<td>0.855</td>
</tr>
<tr>
<td>CO</td>
<td>0.568315</td>
<td>0.801</td>
<td>0.580</td>
</tr>
<tr>
<td>CO_A</td>
<td>0.831922</td>
<td></td>
<td>0.580</td>
</tr>
<tr>
<td>CO_B</td>
<td>0.851192</td>
<td></td>
<td>0.580</td>
</tr>
<tr>
<td>INN</td>
<td>0.850592</td>
<td>0.816</td>
<td>0.605</td>
</tr>
<tr>
<td>INN_D</td>
<td>0.709966</td>
<td></td>
<td>0.605</td>
</tr>
<tr>
<td>RE</td>
<td>0.567868</td>
<td>0.759</td>
<td>0.614</td>
</tr>
<tr>
<td>RE_A</td>
<td>0.878061</td>
<td></td>
<td>0.614</td>
</tr>
<tr>
<td>RE_B</td>
<td>0.849714</td>
<td></td>
<td>0.614</td>
</tr>
</tbody>
</table>

Table above indicates composite reliability values of the factors ranging from 0.580 to 0.855, which exceed the recommended benchmark of 0.7 (Gefen, Detmar and Boudreau, 2000). The average variance extracted values for all the constructs ranged from 0.580 to 0.855, which
indicated that all the values were higher than the cut-off value of 0.5 (Bagozzi and Youjae, 1988).

**Table 2.** Table of loading and cross loading

<table>
<thead>
<tr>
<th></th>
<th>Leadership</th>
<th>Bureaucracy</th>
<th>Collaboration</th>
<th>Resource</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>@LE</td>
<td><strong>0.839</strong></td>
<td>0.706</td>
<td>0.652</td>
<td>0.785</td>
<td>0.456</td>
</tr>
<tr>
<td>@LE_D</td>
<td><strong>0.778</strong></td>
<td>0.635</td>
<td>0.564</td>
<td>0.655</td>
<td>0.458</td>
</tr>
<tr>
<td>BU</td>
<td>0.770</td>
<td><strong>0.917</strong></td>
<td>0.728</td>
<td>0.690</td>
<td>0.541</td>
</tr>
<tr>
<td>BU_A</td>
<td>0.766</td>
<td><strong>0.932</strong></td>
<td>0.804</td>
<td>0.783</td>
<td>0.638</td>
</tr>
<tr>
<td>CO</td>
<td>0.568</td>
<td>0.567</td>
<td><strong>0.568</strong></td>
<td>0.523</td>
<td>0.416</td>
</tr>
<tr>
<td>CO_A</td>
<td>0.575</td>
<td>0.592</td>
<td><strong>0.832</strong></td>
<td>0.701</td>
<td>0.578</td>
</tr>
<tr>
<td>CO_B</td>
<td>0.580</td>
<td>0.724</td>
<td><strong>0.851</strong></td>
<td>0.737</td>
<td>0.535</td>
</tr>
<tr>
<td>INN</td>
<td>0.415</td>
<td>0.518</td>
<td>0.599</td>
<td><strong>0.572</strong></td>
<td>0.851</td>
</tr>
<tr>
<td>INN_D</td>
<td>0.487</td>
<td>0.489</td>
<td>0.447</td>
<td><strong>0.525</strong></td>
<td>0.710</td>
</tr>
<tr>
<td>RE</td>
<td>0.627</td>
<td>0.638</td>
<td>0.546</td>
<td>0.568</td>
<td><strong>0.549</strong></td>
</tr>
<tr>
<td>RE_A</td>
<td>0.766</td>
<td>0.615</td>
<td>0.735</td>
<td>0.878</td>
<td><strong>0.538</strong></td>
</tr>
</tbody>
</table>

Table above indicates the cross loading. Bold values are loadings for items which are above the recommended value of 0.5.

**Table 3.** Lantern variable

<table>
<thead>
<tr>
<th>Lantern variable</th>
<th>Leadership</th>
<th>Bureaucracy</th>
<th>Collaboration</th>
<th>Resource</th>
<th>Innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td><strong>0.809</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bureaucracy</td>
<td>0.830</td>
<td><strong>0.925</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaboration</td>
<td>0.754</td>
<td>0.830</td>
<td><strong>0.761</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource</td>
<td>0.893</td>
<td>0.799</td>
<td>0.869</td>
<td><strong>0.778</strong></td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>0.564</td>
<td>0.640</td>
<td>0.676</td>
<td>0.572</td>
<td><strong>0.783</strong></td>
</tr>
</tbody>
</table>

From the table above, diagonals (in bold) represent square roots of average variance extracted (AVE) while off-diagonal represent correlations. Table clearly indicates that each construct shares greater variance with its own measurement items as compared with other constructs. To evaluate the discriminant validity (the extent to which the items measure the intended or other related constructs), the square root of the average variance extracted for each construct should be greater than the correlations between constructs, indicating adequate discriminant validity (Chin, 1998; Fornell and Larcker, 1981). Table illustrates the correlations among the constructs with the square root of the average variance extracted on the diagonal. The results indicated that all of the diagonal values were larger than their correlations with other constructs, presenting that the values of diagonal elements exceed the off-diagonal elements. This demonstrates that the measurement items have good discriminant validity.

**Figure 2.** The result of the partial least square
Discriminant validity

|                        | Beta | Standard Error (STERR) | T Statistics (|O/STERR|) | Decision |
|------------------------|------|------------------------|-----------------------------|----------|
| Bureaucracy -> Collaboration | 0.505 | 0.124 | 4.082* | Supported |
| Bureaucracy -> Innovation | 0.342 | 0.097 | 3.527* | Supported |
| Collaboration -> Innovation | 0.676 | 0.081 | 8.371* | Supported |
| Leadership -> Collaboration | -0.403 | 0.133 | 3.017* | Supported |
| Leadership -> Innovation | -0.272 | 0.097 | 2.795* | Supported |
| Resource -> Collaboration | 0.825 | 0.113 | 7.297* | Supported |
| Resource -> Innovation | 0.558 | 0.097 | 5.765* | Supported |

*P<0.01

Structural model

The table provides the structural model results with the coefficients for each path that indicates the causal relations among the constructs in the model (Sang, Lee and Lee, 2010). The tests on the significance of the path and hypothesis in the path model were performed using the Smart PLS’s bootstrap resampling technique (5000 re-samples). All the seven hypothesized were supported with path coefficients larger than 2.33 and significant p < 0.01.

The research results confirmed that Bureaucracy had a significant and positive effect on the Collaboration, with the path coefficient (B = 0.505) and t-value = 4.082 at p < 0.01 significance level. Therefore, Hypothesis one Bureaucracy has a positive effect on Collaboration is supported.

A statistical positive relationship between Bureaucracy and Innovation is found in this research having path coefficient (B = 0.342) and t-statistic = 3.527 at p < 0.01 level, which leads to the conclusion that Bureaucracy is agent of innovation.

The results also support Hypothesis three; Collaboration has a positive effect on Innovation.

With the path coefficient B = 0.676 and t-value of 8.371 at p < 0.01, indicating that collaboration improves innovation.

Hypothesis 4 theorized that leadership has a positive effect on Collaboration is supported by this study’s data results. The path coefficient between the two constructs was B = -0.403 with t-statistic 3.017 at p < 0.01 significance level. The statistical positive relationship indicates that Leadership has effect on collaboration.

Also, Hypothesis 5, states that Leadership has a positive effect on Innovation, is also supported in the results of this study. The results indicate that the path coefficient was B = -0.272 with t-value of 2.795 at p < 0.01 significance level.

Hypothesis Six, states that Resource has a positive effect on Collaboration is also supported in the results of this study. The results indicate that the path coefficient was B = -0.825 with t-value of 7.297 at p < 0.01 significance level.

Finally, Hypothesis 6, states that Resource has a positive effect on Innovation, is also supported in the results of this study. The results indicate that the path coefficient was B = -0.558 with t-value of 5.765 at p < 0.01 significance level.

In summary, Hypotheses 1-7 of this study were supported. A closer examination revealed that Leadership was the key enhancer of innovation.

Discussion

The study discovered that there is positive relationship between leadership and innovation and it is in line with that of Keller, 1992 and Waldman and Atwater, 1994 who had support such idea that has leaders' positive impact on innovation. These studies examine the relationship between leadership and innovation mostly in research and development units and at the project level. The impacts of leadership on innovation at the organizational level have become a topic of empirical research only recently. Jung et al. (2003), in a study of 32 Taiwanese companies, find that leadership played a significant and positive roles in organizational innovation as measured by R&D expenditures and number of patents obtained over the preceding 3 years.

The study discovered that there is positive relationship between bureaucracy and innovation and it is in line with that of (Johnson cited Danjuma & Abdullah, 2014) . The study found that the official agencies of Japan attract the most talented graduates of the best universities in the country, and the positions of higher-level officials in these ministries have been and still are the most prestigious in the society. Although it is influenced by pressure groups and political claimsants, the elite bureaucracy of Japan makes most major decisions, drafts virtually all legislation, controls the national budget, and is the source of growth and development of the state.

The study discovered that there is positive relationship between collaboration and innovation and it is in line with findings of (Ostrom, 2005) Collaboration is defined as process of pooling resources by stakeholder with the aims and objectives of achieving common goal. It involves planning and evaluating outcome together. It is also entails working jointly with others on a common goal that is beyond what any one person or group can accomplish.
alone. Collaboration plays a vital role in programme design, programme design, development, pedagogy, stakeholder relationship development and partnerships (local, regional, national and international).

In addition, the study also discovered that there is a positive relationship between funding, funding and innovation and it is in line with findings of (Ostrom, 2005). Public organizations are characterized by diverse sources of funding (e.g., government, research contracts, campus services, student fees and others). Funding is a very important element of organization. It determines the success or failure of organization. Many public institution as well as government policies and programme could not see the light of the day due to inadequate funding.

Finally, the study discovered that there is a positive relationship between Innovation and development and it is in line with findings of (Amsden, 1992). The second industrial nation was through innovation and Japan, South Korea and Taiwan developed through learning. Invention is associated with ideas, while innovation is the application of ideas for commercial use. Invention is trial and error, while innovation is through theory and experimentation. Learning involves borrowing, adapting and improving upon foreign design. Therefore in this study, Innovation is dependent variable.

**Recommendations**

The following are some of the recommendations with the hope that if put in place will help in addressing problems of institution building:

1. Adequate funding: The major problem facing organizations is that there is no adequate funding; government should try as a matter of urgency to ensure adequate funding of organization.
2. Partnership and consensus building: The organization can also collaborate with private partnership and philanthropic donations which will contribute their quarter towards the development of institution.
3. Government should enhance the autonomy of each and every organization. There should be minimal interference in organizational activities in order to enable them function more effectively.
4. Also the organization should ensure proper record keeping of the income and expenditure of the institution.
5. Attracting and retaining the competent bureaucrats through motivation such as giving good package. It encourages hard work and lessens corruption (Hyden eel., 2003).
6. Strengthening the capacity of watchdog organizations such as public complaint commission.

**References**


