

Measuring Community Vitality Using the Importance Performance Analysis Technique: Evidence from Three Case Studies in Thimphu, Bhutan

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Abstract

The 2015 Gross National Happiness (GNH) Survey shows that just under half (43%) of the Bhutanese population enjoys sufficiency in the community vitality domain, with urban areas having the biggest insufficiency compared to rural areas. While GNH survey results identify opportunities for government policy intervention to address the areas of insufficiency, a detailed analysis of existing services that comprise the domains could help increase the domain's overall performance. This paper suggests how the development of GNH policies relating to community vitality can be improved through the application of the Importance Performance Analysis (IPA) technique. The IPA was developed to evaluate users' perceptions of attributes or features of public and private sector services. The results of IPA studies provide service managers with clarity on which features are considered important by users and how users evaluate the performance of services on those features. Three case studies of public services that contribute to a sense of vitality in Thimphu are presented to indicate the potential of IPA. Analysis of the cases show that while performance on delivering service features is acceptable, lower performance scores and higher importance scores of service features indicate the opportunity to further improve service delivery and increase community vitality. The paper concludes with recommendations on adapting the IPA to measure different GNH domains of government services.

Keywords: Community Vitality, Evaluation, GNH, Government Services, Importance Performance Analysis

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Introduction

Bhutan has embarked on an innovative development path using Gross National Happiness (GNH) to tackle limitations of a conventional Gross Domestic Product (GDP) approach to development. GNH attempts to resolve the dilemma of 'what citizens actually want' by extending the definition of happiness beyond financial or material comfort to incorporate additional innovative domains of psychological well-being, time use, cultural diversity and resilience, and community vitality.

Two decades of adherence to the GNH approach has resulted in a marked improvement in the well-being of the Bhutanese population (Centre for Bhutan & GNH Studies, 2016). However, the 2015 GNH survey results indicate some areas of significant reduction in sufficiency, particularly in the so-called 'soft domains' of community vitality, cultural diversity and psychological well-being. Urban areas in Bhutan have experienced a sharper decline than rural areas. While national and local government organizations have been enhancing levels of GNH for citizens through policy interventions, programme developments and new services, it is possible the quality of existing services may not have received sufficient attention or may have been overlooked as means to increase the vitality.

A response to this situation is to assess the adequacy of existing government services and to consider a variety of evaluation tools that might help in the task. Examples of tools include the SERVQUAL and SERVPERF scales to measure service quality (Sanjay & Garima, 2004), and the MRKTOR and MARKOR scales to measure the marketing orientation of organizations (Tomášková, 2009). An additional tool, and one presented in this paper, is to consider the Importance Performance Analysis (IPA) tool (Martilla & James, 1977) as an applied research technique to assess the quality of public and private sector services in order to improve their design and delivery. The paper provides an overview of the IPA technique and then presents a brief description and analysis of three IPA case studies to suggest the utility of the technique for wider use by the Bhutanese government and business sector.

Overview of the Importance Performance Technique

The IPA technique was developed by Martilla and James (1977) to measure the construct of customer satisfaction. Since their landmark paper, IPA has been widely used by Western and Asian governments to evaluate e-government services, local government facilities, and public transport facilities (Seng Wong et al., 2011); in the education sector to assess attributes of universities and good curriculum design (Pike, 2005); in the health sector to examine hospital information services and patient care systems (Cohen et al., 2016); in the financial sector to investigate banking and insurance practices (Joseph et al., 2005); in the retail and manufacturing sectors to study customer satisfaction and management performance (Matzler et al., 2003); and in the tourism and hospitality sector to analyse customer experiences in hotels, restaurants, cafes and tourist attractions (Faché, 2000).

The attraction of using IPA relates to three characteristics. The first characteristic is the technique provides a conceptually robust measure of satisfaction by asking service users (e.g., local residents, programme participants, clients, customers, staff members, etc.) to rate the importance of attributes or features of a service (e.g., the friendliness of front office staff) and then by asking them to rate how the service provider performs in the delivery of features (e.g., the users' satisfaction with the friendliness of front office staff). Both importance and performance scores are typically measured using a 5 or 7-point Likert scale to capture the spread of scores, and the scores can be disaggregated according to users' socio-demographic (e.g., youth/elderly), geographic (urban/rural) and behavioural (infrequent/frequent user) circumstances. Hence, the technique aims to identify the needs of different service users and to know how well the service provider is doing in terms of meeting these needs through users' experiences of a particular service.

The second characteristic is that IPA provides researchers and practitioners with a visual representation of data that is easy to understand and interpret. This typically occurs in the form of a table that lists features and their mean importance and performance scores; and in the form of a two-dimensional grid that produces a 4-quadrant graph. The quadrants are created from a vertical x-axis representing

importance scores and an intersecting horizontal y-axis representing performance scores. Importance and performance scores for each feature are plotted on the graph and fall into one of the four quadrants. Scores with a 'high importance mean' and a 'low performance mean' are identified as 'concentrate here' features as they are important to users but are poorly performed by the organization. Scores with a 'high importance mean' and a 'high performance mean' are identified as 'keep up the good work' features; meaning the organization is performing well by meeting the users' expectations. Scores with 'low importance' and 'low performance'; and scores with a 'low importance' but a 'high performance' are respectively labelled as 'low priority' or 'possible overkill' features.

The final characteristic of IPA is the 4-quadrant graph, which provides organizations with a practical source of information about user satisfaction that can be converted into service management strategies. For example, 'concentrate here' features require the organization to make adjustments that lead to service improvements; 'keep up the good work' features can be highlighted in promotional campaigns as successful or unique aspects of an organization's services; while features of 'low priority' or 'possible overkill' might enable the organization to re-deploy resources to more important priorities or reduce or eliminate service features altogether. The technique can therefore complement GNH policy interventions made by government agencies and business organizations as a tool for evaluating the quality of existing services, for informing the development of a new policy or for evaluating the post hoc effectiveness of a policy intervention.

But like other research applications, the IPA technique has a number of conceptual and methodological limitations (Vlachos & Lin, 2015). Researchers have questioned the construct validity of the importance dimension on the basis that importance can have different meanings. For instance, importance could refer to features specifically sought prior to using a service or to features that are responded to as a situational consequence of interacting with a service. Similarly, the reliability of the performance dimension as a measure of overall satisfaction has been questioned on the grounds that satisfaction can depend on factors beyond the control of the service provider. A

methodological concern is where to set the location of the x and y-axis on the grid; at the mid-point level of the survey scale which represents the least rigorous level of discrimination (e.g., at 2.50 using a 5-point scale), at a forced and more rigorous level (e.g., at 3.00 on a 5-point scale) or at the overall mean point calculated for each dimension, which represents the most rigorous level of discrimination. The final choice can result in features being allocated into different quadrants which can have significant impact on subsequent management decisions and user experiences.

IPA Case Studies

Bearing in mind these limitations and in order to demonstrate the potential for using the IPA to support and extend GNH survey results, three IPA research projects are examined. All three cases are taken from projects conducted by students studying at a tertiary education institute in Thimphu, Bhutan. Characteristics of each project are briefly described before providing a detailed description of the results adapted from one of the projects.

The first project collected information from 80 local residents about service features of 10 public outdoor exercise gyms (Sonam Norbu, 2017). The project was undertaken to evaluate their satisfaction with the gym facilities and used a 26-item survey to measure motivations for using the facilities, the range and condition of exercise equipment, the location of facilities relative to distance from home and public transport, and issues with personal safety.

The second project is a response to concerns highlighted in local media about perceptions of residents and tourists about the poor quality of public toilets (Tshechi, 2017). This project used a 15-item scale administered to 80 users to evaluate their views about the accessibility of toilets for different age and ability groups; hygiene, comfort, privacy of toilets, and preferences for different toilet designs.

The third project examined 90 users of a public library (Wangchuk, 2017), and investigated 25 features relating to the location and operating hours of the library; the availability of books, magazines, digital and reference media; the spatial layout and atmosphere of the

library, the qualities of library staff, and the usefulness of communications between staff and users.

As evident by the variety of features examined in the projects, the content of survey instruments differed according to the organizational context and the relevance for service users and managers. However, all three projects examined similar categories of features that related to perceptions about the accessibility and availability of services, physical or material features of services, intangible features or amenity of services, relationships among service providers and users, and issues of safety and security. Of these categories, the only set of indicators of direct relevance to community vitality listed in the 2015 GNH survey are the items linked to crime and safety. However, an argument can be made for considering the other categories as plausible indicators of community vitality. Literature support for this argument appears in Curtis and Cunningham's (2012) community vitality tool that includes items measuring opportunities for sport and recreation spaces, the quality of public infrastructure such as public toilets and public meeting areas, the maintenance of community appearances, and service amenity in the form of education and cultural activities. Similarly, the Canadian Well-being Index contains indicators of social and civic engagement and references community organizations as places where connections and relationships can be fostered (Scott, 2010). While the number of indicators available to measure community vitality is potentially diverse (Herbert, n.d.), a useful way to understand the service features described in this paper is that they represent 'containers' that have the potential to deliver experiences of community vitality.

Shown below are detailed results of the IPA for the public library. Table 1 lists service features of the facility and library users' ratings of the importance and performance of these features. Ratings are expressed as mean response ($\bar{x}$) based on a 5-point scale where 1=of low importance to 5=of very important and 1=low performance to 5=high performance. The importance features are also rank ordered to convey their significance for users, while the gap statistic provides a descriptive estimate of the difference between the importance and performance score for each feature.

Table 1*Results of an IPA Study of a Public Library*

Code	Service Features	Mean Importance	Mean Performance	Gap
5	Quiet study areas	4.53	2.87	1.66
4	Comfortable location	4.52	2.87	1.65
14	Ease of using library catalogue	4.52	2.53	1.99
6	Adequate lighting	4.50	3.01	1.49
17	Availability of books listed in catalogue	4.45	3.18	1.27
19	Richness of reference section	4.43	3.40	1.03
3	A pleasant and inviting location	4.43	2.87	1.56
13	Availability of computers & printers	4.43	3.27	1.16
7	Feeling of spaciousness	4.40	2.67	1.73
15	Internet connectivity	4.38	2.30	2.08
16	Well organized web pages for searching	4.37	2.32	2.05
18	Access to electronic journals	4.28	2.60	1.68
8	Availability of information desk	4.27	3.30	0.97
24	Maintenance of the library	4.27	3.48	0.79
1	Convenient location of the library	4.27	3.60	0.67
2	Convenient service hours of the library	4.25	3.55	0.70
20	Resources added on request	4.25	3.13	1.12
10	Willingness to help users	4.23	3.83	0.40
12	Signposting & directions	4.22	3.05	1.17
11	Courteous, polite, friendly staff	4.20	3.80	0.40
9	Availability of staff when required	4.17	3.57	0.60
3	Accessibility for disabled persons	4.17	3.12	1.05
21	Keeping users informed of library services	4.13	3.30	0.83
23	Reasonable late fee for overdue materials	3.88	3.63	0.25
22	Acquisition alert services	3.85	3.18	0.67
Overall Mean		4.29	3.13	1.16

The results indicate the importance of features ($\bar{I}x=4.29$) exceeds the level of service delivery performance ($\bar{P}x=3.13$). The same pattern of difference, but of slightly less magnitude, was reported for the outdoor exercise gym ($\bar{I}x=3.92$, $\bar{P}x=3.43$) and public toilet projects ($\bar{I}x=4.21$, $\bar{P}x=3.15$). These results collectively suggest the potential for some loss of vitality associated with the three services and that subsequent improvement to services might be effective in making a small but

appreciable difference to individual and perhaps community wellbeing. When the results are plotted on the IP graph as depicted in Figure 1, the relationship between the importance of individual features and the performance of these features becomes apparent, and significantly, highlights the basis for service delivery managers to construct targeted interventions that might lead to an increase in satisfaction and perceptions of vitality for individuals and communities.

According to the results, features relating to the amenity of the library such as lighting, noise levels and the layout of the library; and features relating to the ability of users to access library resources through the catalogue, internet connectivity and web page design, could be modified to provide a more comfortable and accessible experience for users. While some of these features may have significant cost implications, the challenge for service providers is to find creative ways to modify services within budgetary constraints. Alternatively, the results confirm that the users are satisfied with the availability, friendliness and helpfulness of staff. This finding can be brought to the attention of staff, and used as an opportunity to acknowledge their contribution, and to reward and encourage higher levels of performance. For both sets of results, a breakdown analysis, for example on the basis of user behaviour (e.g., regular and infrequent users) would further clarify the status of features and provide more detailed evidence to confirm or deny the need to make service modifications.

While these case studies illustrate the application of IPA to a few organizations contributing to community vitality, the technique might well benefit organizations whose areas of operation relate to other GNH domains. In the first instance, and given evidence showing declining levels of psychological well-being, these organizations could include those which target *at risk* populations such as unemployed or addicted youth, women suffering from domestic violence, the frail aged and people with physical or intellectual disabilities, incarcerated individuals, and isolated rural groups. Organizations contributing to the psychological wellbeing of mainstream populations including child care centres, schools and workplaces; health and lifestyle services; sporting and recreation programmes, and other such organizations

might also benefit from paying closer attention to the quality of their service delivery performance. Given the important role played by religious organizations in catering to the spiritual wellbeing of communities, and with increasing evidence of less than acceptable standards of performance being displayed by some organizations (Toynbee, 2018), the idea of monasteries and other places of spiritual interactions undertaking *service development activities*, while unusual, might well provide them with the opportunity to strengthen their pastoral care services and, like other public and private sector organizations, reinforce the social responsibility contract they hold with citizens to provide good quality services.

Conclusion

To restate the contention examined in this paper, the challenge of developing and implementing effective policy might be enhanced through the use of additional evaluative techniques in addition to GNH survey data, which has the ability to inform policies aimed at improving community vitality and other domains of GNH. The IPA technique presented in this paper focuses on evaluating the effectiveness of existing policies and programmes, and of targeting service improvements at the organizational level. In this respect it can be seen to complement the broader improvement agenda of GNH by operating at a local level where the impact of services on peoples' wellbeing is most immediate and salient to the satisfaction of their needs.

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