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Discrepancies between desired and perceived measures of performance of IS professionals: Views of the IS professionals themselves and the users

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Abstract

Evaluation of IS professionals is difficult. Measures are seldom fully defined and suffer from the inability of a user to consider differences between expectations and perceptions of performance. In addition, expected levels of performance and perceived levels of performance depend on the satisfaction of each group of stakeholders. Discrepancy theory leads one to expect that satisfaction is highest when performance matches expectations. To explore this gap in different groups, a sample of users and a matched sample of IS professionals was investigated in order to determine the relationship between the performance gap and *satisfaction with the system* on the part of the users and *careers* on the part of the IS professionals. Larger gaps were found to be associated with poor satisfaction in both samples. Additionally, each group had a different set of expectations, indicating that the measures did not represent the same expectation or meanings to different stakeholders. Thus, management should strive to promote uniform understanding of the measures employed in IS professional performance evaluation by all stakeholders and manage expectations according to the metrics selected.
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1. Introduction

IS personnel evaluation practices are generally seen as inadequate in today's organizations [9]. Initially, IS personnel performance evaluation focused almost exclusively on system development performance, and it was from there that nearly all measures in use today evolved [22]. Saarinen [21] suggested that these traditional criteria should not stand alone in judging IS personnel performance: the decision process needed to be supplemented by subjective judgment and surrogate measures. Furthermore, the different goals of various stakeholders leads to different courses of action and conflicting perspectives of IS personnel performance [18]. Earlier surveys of IS personnel rated IS personnel evaluation as the second most critical issue of IS management [2].

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To respond to the lack of good measures in IS personnel evaluation, Jiang et al. [14] proposed a seven-dimension IS personnel job performance evaluation framework. However, in spite of progress in IS personnel evaluation frameworks, perception of the final outcome is subjective and difficult to determine due to differences in perception of performance and levels of expectation of different stakeholders. Such problems are predicted by discrepancy theory [19], which states that individuals hold a set of expectations or desires for a product or service; they also have a perception of how that desire is being met and what was received. A gap between what an individual expects and perceives to have been delivered leads to dissatisfaction.

We examined the impact of the gap between expectation and perceived delivery on satisfaction from two different stakeholder views (IS users and IS personnel). Our work pinpointed the gap between user expectations of the IS function and their perception of its delivery. The gap was then related to user satisfaction. A similar analysis was also conducted for IS personnel, by relating their perception gap to career satisfaction.

2. Background

IS authors have discussed the difficulty of developing software systems and evaluating IS personnel in the organization for more than 40 years. The perceived lack of developmental skills has resulted in negative evaluations by system users and thus lower social support of IS professionals, which correlates with poor IS developer job satisfaction and intent to leave. Thus, organizations must better understand performance measurement and the expectations and perceptions of differing stakeholders.

2.1. IS personnel job performance

Though IS job performance has been discussed for years, until quite recently no integrated set of IS personnel job performance measures has been developed. Based upon a literature review, we found seven important performance dimensions: (1) work quality, (2) project work, (3) general tasks, (4) interpersonal quality, (5) dependability, (6) teamwork and leadership, and (7) career related training. This framework had three essential properties. First, it represented many aspects of the system development *process*—not just the *result*. Second, the items had been long recognized as important and measures had been validated in prior research. And third, they represented concepts that were

understood by users as well as IS personnel. Items of technical quality were avoided because of the general lack of ability of IS users to judge them. Quality of the product and professional use of tools and procedures should make a favorable impression on the user and arouse positive feelings about the capabilities of the IS personnel. User involvement in the setting of expectations should thus promote better understanding and acceptance of a project.

2.2. Discrepancy theory perspective

Discrepancy theory claims that satisfaction is related to the extent to which real outcomes match the expectation of the individual: the closer the match, the higher the person's satisfaction with it. An important part of discrepancy theory is in finding how to measure and reduce this perceived "gap" between project outcomes and desires. Large negative gaps result in dissatisfaction, while smaller ones result in satisfaction. Large positive gaps vary in impact, depending on the nature of the item and its utility as expressed by the stakeholder. As the measures considered in our research were all desirable ones without detriment if expectations were exceeded, a positive gap was always of value.

Behavioral researchers have empirically supported this claim. An individual's satisfaction is determined by their self-perceived desires and self-perceived delivery. Discrepancy between them are associated with turnover [15]. Although Jiang et al. have examined expectation and perceived delivery differences between users and IS staff on job performance measures for IS personnel, the impacts of these gaps have not been explored. Of particular importance is the gap between individual's expectation and perceived delivery.

2.3. Hypotheses

Positive discrepancies are experienced when the amount of expected service received by users is more than their expected standard of delivery (i.e., project outcome is better than expected). Based on discrepancy theory, we expected that a positive gap between perceived delivery and expectation will relate to higher satisfaction and proposed the following hypotheses:

H1. A positive gap between IS users' perceived delivery and expectations will yield higher user satisfaction.

H2. A positive gap between IS professionals' perceived delivery and expectations will yield higher career satisfaction.