# Does Size Matter? Enterprise System Performance in Small, Medium and Large Organizations

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## ABSTRACT

*Organizations invest enormous sums of money in acquiring Enterprise Systems, presumably expecting positive impacts to the organization and its functions. Despite the optimistic motives some Enterprise System projects have reported nil or detrimental impacts. This paper studies the proposition that the size of an organization (i.e. small, medium, and large) may have contributed to the differences in receiving benefits from Enterprise Systems. The alleged differences in organizational performance are empirically gauged using a prior validated measurement model, using four dimensions and twenty-seven measures. Information is gathered from three hundred and ten respondents representing twenty-seven organizations. The paper also derives classification guidelines to categorize organizations according to their size for system evaluation purposes. Results of the analyses reveal that: (1) larger organizations receive higher benefits compared to their small and medium counterparts, and (2) small organizations demonstrate a higher reliance on their Enterprise System. The study also (3) demonstrates the utility of a classification based on the number of user licenses for system evaluation purposes.*

**Keywords:** Enterprise System, Organization Size, IS-impacts, Cluster analysis

## INTRODUCTION

Enterprise System (ES)[1] is an ideology of planning and managing the resources of an entire organization in an efficient, productive, and profitable manner, and is manifested in the form of configurable information system packages (Laukkanen, Sarpola et al. 2007). Organizations make large investments in ES expecting positive impacts to the organization and its functions, particularly expecting improvements in – business processes, management of expenditure, customer service, and more generally, competitiveness. Forrester survey data (Wang and Hamerman 2008) consistently shows that investment in ERP and enterprise applications in general remains the top IT spending priority. The ERP market, currently estimated at $38 billion,

[1] In this paper, the terms ERP, Enterprise Resource Planning System and Enterprise System (ES), are used interchangeably. For further discussion, see Klaus, H., M. Rosemann, et al. (2000). "What Is ERP?" Information Systems Frontiers **2**(2): 141-162.

continues to grow at a steady rate of 6.9% and is predicted to reach $50 billion by 2012 (Wang and Hamerman 2008).

Substantial resource requirements in Enterprise System implementation and maintenance have traditionally restricted such product suits to large organizations, prompting some researchers and practitioners to claim that ES are only suitable for large corporations (Hillegersberg and Kumar 2000). The aforementioned and the recent changes in ES market, wherein the demand for Enterprise Systems from large organizations has plateau, has prompted ES vendors to focus on Small and Medium Enterprises (SMEs) with scaled-down ES (Piturro 1999; Everdingen, Hillegersberg et al. 2000). Such changes have renewed discussion on the suitability of conventionally large packaged Enterprise System for Small and Medium Enterprises. It is argued that, since the costs and risks of these large technology investments can more than rival their potential payoffs, these highly cost sensitive SMEs, more than their larger counterparts, will scrutinize to justify the value of ES. This paper contributes to this dialogue by analyzing ES performance in small, medium and large organizations that had implemented SAP R/3 in the late 1990s.

**Organizational Size:** Prior research (Raymond 1985; DeLone 1988; Raymond 1992; Lai 1994), focused predominantly on legacy applications, allude to the importance of organizational size as a key consideration in Information Systems (IS) development lifecycle. Welsh and White (1981) differentiate medium and large organizations using such aspects like time, skills, and resources for IS development and found that medium-sized organizations lack all three aspects compared to their larger counterparts. D'Amboise and Muldowney (1988) argue that the lack of resources make small organizations more vulnerable to environmental effects and misjudgments forcing them to allocate more time to adjusting to, rather than devoting time on predicting and controlling. Lack of resources has also been found to hinder IT adoption (Baker 1987; Cragg and Zinatelli 1995; Iacovou, Benbasat et al. 1995; Proudlock, Phelps et al. 1999), and to negatively affect IS implementation success (Thong 2001) and IT growth (Cragg and King 1993) in Small and Medium Enterprises (SME).

With the advent of packaged software, where a software vendor builds an application for a large client-base, systems are seldom tailor made for the client organization. The advent of Enterprise System software – an archetype of packaged software – stared to target providing software services to large corporations especially since 1990s. Having seen the adoption by their larger counterparts (and presumably seeing the benefits), many medium sized organizations too have joined the ES-bandwagon, purportedly without considering its viability and sustainability of such packages. It is also believed that large, medium and small organizations face different types of issues and receive somewhat different impacts. In relation to ownership of Enterprise Systems, large companies in particular face a variety of challenges that drive up their ownership costs. Not only are large-scale ES packages complex to set up, use, and administer, but also most large companies haven't standardized on a single ES vendor. This frequently leads to complex ES environments that consist of often-customized packages from multiple vendors as well as an array of internally developed software that must integrate with the packages. On the other hand, medium-size organizations struggle with finding a solution that balances ease-of-use with the industry-specific requirements needed to effectively run the business (Wang and Hamerman 2008).

Though we are yet to observe a large number of ES implementations in small organizations around the world, much can be learnt from large and medium ES adoptions. Contributing to the debate on organizational size, and its role on determining benefits to the organization, this study specifically compares benefits brought-to-bear by the Enterprise System (commonly referred in Information Systems research as 'system success') in large, medium and small organizations. ES impacts are empirically compared using information received from 310 responses from 27 organizations that had implemented a market leading Enterprise System solution in the second half of 1990. This was an appropriate system and context, being relatively simple and homogenous: all organizations were implementing the same ES; all organizations implemented around the same time and had been operational for approximately five years at the start of the data collection and, thus, were at a similar point in the ES lifecycle.

The paper begins with a background by providing a synopsis of literature on organizational size. The study context is introduced next, followed by a discussion on research methodology and data collection instrument. The last section discusses the observations made between the three classes of organizational sizes across the four dimensions of success.

## BACKGROUND

Prior research, pertaining mainly to legacy applications, has discussed the distinctive and unique needs of organizations based on its size (Raymond 1985; DeLone 1988; Lai 1994).

Schultz and Slevin (1975) and Ein-Dor and Segev (1978) were among the very first researchers to point out the importance of organizational factors in managing an Information System. In their early work, Ein-Dor and Segev (1978) proposed a framework after studying Management Information System (MIS) in which they identified organization size as a critical variable. Ein-Dor and Segev (1978) identified ten (10) organizational variables with direct or indirect influence on the impact of an IS. The identified variables are: (1) organization size, (2) maturity, (3) structure, (4) time frame, (5) psychological climate towards [CB] IS, (6) organizational situation, (7) rank of responsible executives, (8) location of responsible executives, (9) steering committee location and rank and (10) resources. They found that the organization size had special importance because of its influence on resource availability, requirements necessary for integration of professional units within an organization, degree of formalization of organizational systems, and lead time for planning and implementation. Furthermore, Ein-Dor and Segev (1978) recognized organization size as an uncontrollable variable and stating that [CB] IS projects are less likely to succeed in smaller organizations compared to larger counterparts. Similarly, Whisler (1970) studied nineteen insurance companies and reputed that firm size was directly related to performance of IS. Bilili and Raymond (1993) described SME decision making process as reactive, informal, and intuitive. (Doukidis, Lybereas et al. 1996; Proudlock, Phelps et al. 1999) asserted that small to mid-sized organizations tend to have an opportunistic, day-to-day focus in relation to Information Systems management and benefits and seldom plan for long-term benefits.

Cheney (1983) investigated various factors affecting small businesses in using information systems and found that small business are prone to: (1) software, (2) hardware and (3) implementation problems in Information Systems. Similarly, DeLone (1981) studied the relationship between the size of manufacturing firms and IS usage. He concluded that firm size is: (1) directly related to the age of the firm's computer operations, (2) inversely related to the

amount of external programming that are being used, (3) directly related to the portion of revenues allocated to Electronic Data Processing (EDP), and (4) inversely related to the percentage of EDP costs that are used for purchasing computer hardware. He also confirmed that smaller firms experience more computer related problems than their larger counterparts. Addressing technical needs for organizartions, Farhoomand and Hrycyk (1985) reported that small to mid-sized companies lack adequate technical staff for IS endeavors.

Considering application types, Melone (1985) found small to mid-sized organizations place a greater emphasis on accounting and inventory control, but identified that inventory controlling software is highly problematic in such organizations. Nickel and Seado (1986) concur aforementioned findings using 121 small businesses stating that budgeting and inventory control were the primary uses of IS in small organizations.

A study by Cooley et al. (1987) of mid-sized organizations identified user-friendly interfaces as a key factor for end users' satisfaction, while lower implementation costs were the most important for management. Moreover, Montazemi (1988), investigating the aforementioned preposition, confirmed the impact of organization size on end user satisfaction, claiming that users of large organizations deemed more satisfied with Information Systems than the small organizations. Harrison (1997), using the Theory of Planned Behaviour (TPB), explained technology adoption suggesting a positively proportionate relationship between business size and the importance of expectations from the [social] environment. Hong and Kim (2001) explored the '*fit perspective'* in 34 Enterprise System installations where organizational size was implicitly considered as a critical contingency variable.

Investigating on IS acquisition in medium and large organizations, Turner (1992) hypothesized a positive relationship between firm size and software sophistication, suggesting that small to mid-tier organizations require assistance from external sources in IS adoption and management. Turner (1992) also recommended SMEs develop applications in-house, rather than opting for packaged applications. Similarly, Raymond (1985) found that SMEs are better placed for developing, implementing and administering their own applications in-house, compared to their larger counterparts, specifying that medium-sized organizations could maintain an IS with minimal financial, technical and personnel requirements. It is also noted that, resource constraints has made SMEs to follow an incremental approach to IT investments, which, in turn, may result in isolated and incompatible systems, as well as limited flexibility (Levy and Powell 1998). .

Some researchers have investigated the relationship between consultant engagement in information systems and organizational size (Bilili and Raymond 1993; Levy and Powell 1998; Mitev and Marsh 1998). Laukkanen et al. (2007) suggest that the resource constraints faced by SMEs may hinder their ability to maintain technology up to date, while at the same time forcing them to consider their IT investments long term (Levy and Powell 1998). Soh et al. (1992) and Gable et al. (1998) allude to the importance of seeking expert assistance from external consultants on computerization success in small businesses. They concluded that the system usage in small businesses where consultants were used is higher than that of small businesses did not. However, they revealed that small businesses are less likely to complete IS projects on time and within budget, when consultants are engaged in.

In IS research, guidelines for classifying organizations into small, medium and large are somewhat arbitrary, with many researchers using the 'number of employees' as the sole classification in placing organizations in the small → medium → large continuum. For example, in a recent study (Laukkanen, Sarpola et al. 2007), 'medium' is defined as enterprises with less than 250 employees, wherein the organizations with less than 50 employees are classified as small. Traditionally, organizations with more than 250 employees are classified as 'large' (Chau 1994; Chau 1995). Though the number of employees in a company may provide some indication of the size of the organizations from an IS viewpoint, at times this could be be misleading. In many organizations, where the number of 'users' of an IS is not proportionate to the total number of employees. For example, in a Health and Pharmaceutical organization – where the majority of the staff is on medical duties (e.g. doctors and nurses) – the actual Enterprise System users will be a small proportion of the total number of employees. As a contribution to IS research, we explore the possibility of employing the *number of user licenses* to usefully classify organizations.

## THE STUDY CONTEXT

The study gathered data from 27 organizations running a market leading Enterprise System for more than a decade. The 27 organizations, belonging to a state Government in Australia, were the first Australian state government to have implemented a common financial management software state-wide. In 1995 the state Government commenced implementation of the Financials module across all state Government agencies (later followed by Controlling, Materials Management and in some agencies Human Resources) and soon became one of the largest Enterprise System installations in Australia. The state Government approach was very much focused on using the Enterprise System as a common reporting and financial management tool. The broad objectives of the new Enterprise System were to: (1) support the 'Managing for Outcomes' (MFO) framework and financial management improvement activities, (2) encourage best practice resource management across state Government, (3) facilitate the consolidation of state Government financial information, (4) meet the business needs of agencies and (5) achieve economies of scale in main operations. Moreover, all organizations having: (1) the same Enterprise System software application, (2) the similar versions of the Enterprise System, (3) in the same phase of the ES life cycle, and (4) installed Financial Accounting and Controlling, Materials Management modules created a unique homogeneous environment increasing the comparability of the data.

In recent times, despite much anticipated benefits, a relatively small agency that provides corporate services to a group of other small agencies demonstrated their dissatisfaction with the Enterprise System. It is believed that, even though the Enterprise System provided with much rich functionality to this organization, the senior management purportedly believed that the system was too complex and too expensive for a small organization. After three years of using the implemented Enterprise System, the agency decided to replace that with a locally-owned, small scaled Enterprise System. This contextual background further questions the preposition in the literature discussion on whether the small organizations receive adequate benefits from Enterprise System investments.

## THE SURVEY INSTRUMENT

ES-success is measured as per Gable et al., (2008) using the dimensions of ES-success using four dimensions of ES performance: Individual Impact, Organizational Impact, System Quality and Information Quality. The survey instrument included the validated 27 measures of ES-success depicted in table 1 (See details in (Gable, Sedera et al. 2008) for details of construct validity). The instrument employed in summary is available in Appendix A. In addition to the 27 items of table 3, the questionnaire included two criterion items aimed at gauging the respondent's perception of overall ES-success: (1) 'overall…the impact of [the name of the Enterprise System] on *the organization* has been positive' and (2) 'overall… the impact of [the name of the Enterprise System] *on me* has been positive'. All items were scored on a seven-point Likert scale with the end values (1) 'Strongly disagree' and (7) 'Strongly Agree', and the middle value (4) 'Neutral'. The draft survey instrument was pilot tested with a selected sample of staff of the state Government Treasury Department. Feedback from the pilot round respondents resulted in minor modifications to survey items. The survey gathered additional demographic details on respondents' employment title (e.g. Director, Business Analyst, Application programmer). Furthermore, the respondents were asked to provide a brief description of their involvement with the Enterprise System. Supplementary information on the organizational structure, characteristics of the Enterprise System (i.e. modules, hardware in place and the number of user licenses in each agency) was gathered from objective sources.

| | System Quality | | Information Quality | | Individual Impact | | Organisational Impact |
|---|---|---|---|---|---|---|---|
| SQ1 | Ease of use | IQ1 | Availability | II1 | Learning | OI1 | Organisational costs |
| SQ2 | Ease of learning | IQ2 | Usability | II2 | Awareness / Recall | OI2 | Staff requirements |
| SQ3 | User requirements | IQ3 | Understandability | II3 | Decision effectiveness | OI3 | Cost reduction |
| SQ4 | System features | IQ4 | Relevance | II4 | Individual productivity | OI4 | Overall productivity |
| SQ5 | System accuracy | IQ5 | Format | | | OI5 | Improved outcomes/outputs |
| SQ6 | Flexibility | IQ6 | Conciseness | | | OI6 | Increased capacity |
| SQ7 | Sophistication | | | | | OI7 | e-business |
| SQ8 | Integration | | | | | OI8 | Business Process Change |
| SQ9 | Customisation | | | | | | |

Table 1: The measures of the ES-success Measurement Model

In addition to the 27 items reflected in table 1, we included three criterion measures in a separate section of the survey instrument[2] as listed below pertaining to Individual Impact, Organizational Impact, System Quality and Information Quality respectively.

- Overall, the impact of SAP (Financials) on me has been positive.
- Overall, the impact of SAP (Financials) on the agency has been positive.
- Overall, SAP is satisfactory

## RESULTS AND ANALYSIS

A total of three hundred and nineteen (319) responses from twenty-seven (27) organizations were gathered using a web-survey instrument. Nine responses were removed from the analysis due to missing values and perceived frivolity. Using statistical techniques, this section attempts to

[2] The four criterion measures for the four dimensions were included at the end of the instrument, separate from the 27 items, in attention to possible common method variance.

achieve the following objectives: (1) to determine a classification guideline for measuring ES performance, (2) to assess whether the different organizational sizes have different views on success dimensions, and (3) to assess whether certain organizational sizes places a greater emphasis on particular success dimensions when evaluating ES performance.

**Cluster Analysis:** One key objective of the study is to determine a plausible and a repeatable criterion to classify organizations for evaluating system performance. In order to explore the 'natural' classifications and to identify the 'common traits' of the respondent organizations, a criterion item ('overall…the impact of [the name of the Enterprise System] on *the organization* has been positive') was subjected to cluster analysis using two-step cluster method. The Two-Step Cluster Analysis procedure is an exploratory tool designed to reveal natural groupings (or clusters) within a dataset that would otherwise not be apparent. The cluster analysis revealed three classes and using a new variable inserted at the analysis, each respondent was denoted with a cluster classification. Though this initial result of a three-grouped classification that implied a natural classification of Small, Medium and Large organizations was heartening, we were eager to further investigate the cluster analysis results with the supplementary information gathered during data collection. Exploring relationships between supplementary information and the three clusters, we found that there is a strong relationship between the number of user licenses and the three clusters derived above. It was revealed that organizations with more than 1000 user licenses matched 100% with the cluster 1, organizations with 200-999 user licenses matched 95% with cluster 2, while the organizations with less than 200 user licenses matched 100% with cluster 3. Results reported in table 2 columns A, B and C suggests that this distribution of the organizations (table 2, column C) is representative of the organizations in terms of the Enterprise System Application in the state Government.

| A | B | C | D | | | E |
|---|---|---|---|---|---|---|
| **Cluster** | **N** | **% of Total** | **Mean Values for Criterion Items** | | | **# of User Licenses** |
| | | | C1 | C2 | C3 | |
| 1 | 66 | 21.29 | 5.00 | 5.23 | 4.77 | Greater than 1000 |
| 2 | 196 | 63.23 | 4.36 | 4.46 | 4.26 | 200 or greater |
| 3 | 48 | 15.48 | 4.67 | 4.73 | 4.48 | Less than 199 |
| Combined | 310 | 100 | | | | |

Table 2: The cluster analysis results

Observing the mean values for the three criterion items (table 2 column D), it is noted that of the three categories of organizations, the medium organizations report the lowest mean score for all three criterion items, while the large organizations reported the highest mean values for all three criterion measures. It was noted with interest that the small organizations reported mean values higher than the medium-sized organizations.

## DESCRIPTIVE AND COMPARATIVE STATISTICS

The following discussion provides a detailed view of ES performance across the four dimensions. Analysis below first reports the quality dimensions (System and Information Quality) followed by the Impact dimensions (Individual and Organizational Impacts). Each analysis begins with a

summary discussion of the descriptive statistics and followed by a t-test to compare the mean scores (See t-tests results in Appendix B).

## SYSTEM QUALITY

The quality of a system under investigation is a multifaceted phenomenon that is designed to capture how the system performs from a technical and design perspective. Employing the nine measures of the IS-impact model, it was evident that, with the exception of two measures, large organizations reported the largest mean scores for the measures of System Quality. For those two measures (SQ 5 'System Accuracy' and SQ 8 'System Integration') the small organizations reported the highest mean scores. Moreover, contrary to the popular belief – but consistent with our findings reported in table 2, the small organizations reported higher mean scores than the mid-sized organizations in 8 of the 9 measures of System Quality, wherein SQ 2 ('Ease of Learning') the mean score of small organizations was lower than the mid-sized. It was also noted with interest that SQ 2 Ease of Learning, SQ 6 'Flexibility' and SQ 9 'Customization' recorded mean values below the scale-median of 4 by all three organizations highlighting some traditional issues encountered by all types of organizations in Enterprise System lifecycle-wide management.

## INFORMATION QUALITY

Measures of Information Quality relate to the output – both *on-screen and reports* – produced by the system, and the value, usefulness or relative importance attributed to the output by the users. The Gable Sedera Chan (2008) IS-Impact model employs six validated measures stated in table 1 gauging the Quality of Information. Similar to System Quality, large organizations demonstrate the highest mean scores for all measures of Information Quality except one measure (Small organizations reported the highest mean scores for IQ 2 'Usability of Information'). Further similarities were noted where the mean scores of Small organizations surpassed the mid-sized organizations in 5 of the 6 measures. It was also observed that, IQ 1 'Information Availability', IQ 3 'Information Understandability' and IQ 5 'Format of Information' reported below median scores by all three organizational groups.

## INDIVIDUAL IMPACT

Individual Impact is concerned with how the Enterprise System influences the performance of the individual user. Individual impact tends to encompass a broad range of subjective measures such as: confidence in decisions made, improvements in decision-making, and the time to reach a decision

Similar patters continue to exist with the measures of Individual Impact measures where the Large organizations demonstrate larger mean scores than its smaller counterparts. It was also noted that the second highest mean scores were reported by the Small organizations except in a single measure. Unlike the two 'Quality' dimensions, all measures in Individual Impacts across the three groups report above median scores.

## ORGANIZATIONAL IMPACTS

The organizational Impacts dimension of the IS-Impact model refers to impacts of SAP at a broader level. Here, the interest exist in: costs of organizational resources dedicated to run SAP, number of applications replaced / introduced, changes in staff requirements, and changes in business processes, due to the introduction of SAP. Similar to the Individual Impacts, the Large

organizations reported the strongest mean-scores for all measures of Organizational Impacts. For the three measures on cost reduction (OI 1 'Organizational Costs'; OI 2 – 'Reduction of Staff Requirements' and OI 3 'Cost Reductions'), the Small Organizations reported the lowest results. Moreover, all organizations received below median scores for the aforementioned 'cost related' measures.

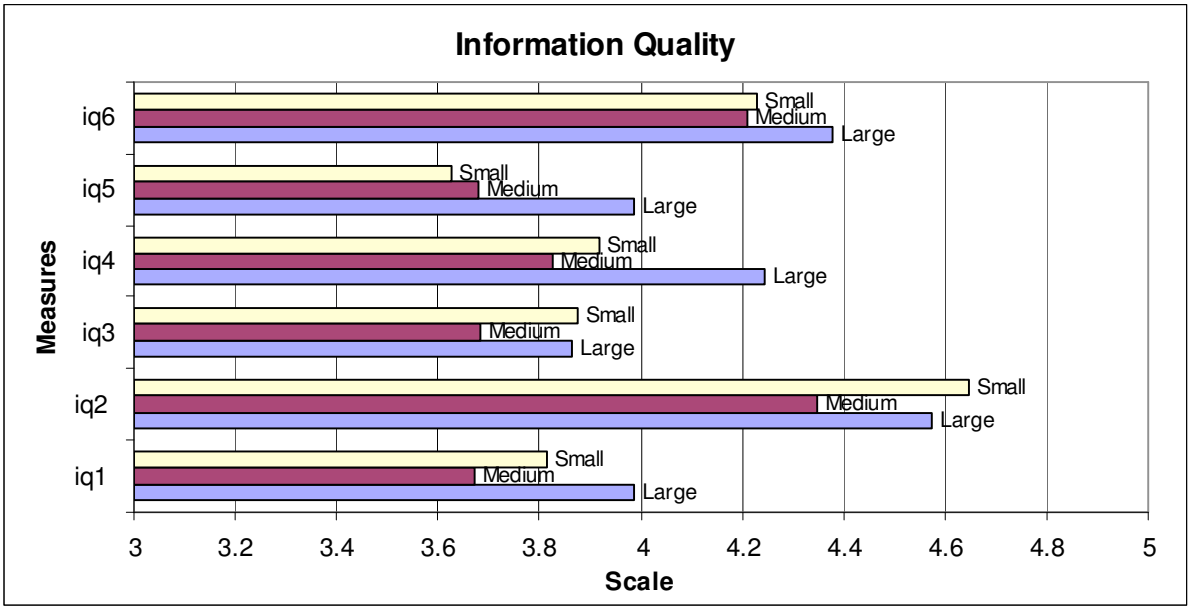


Figure 1: Information Quality

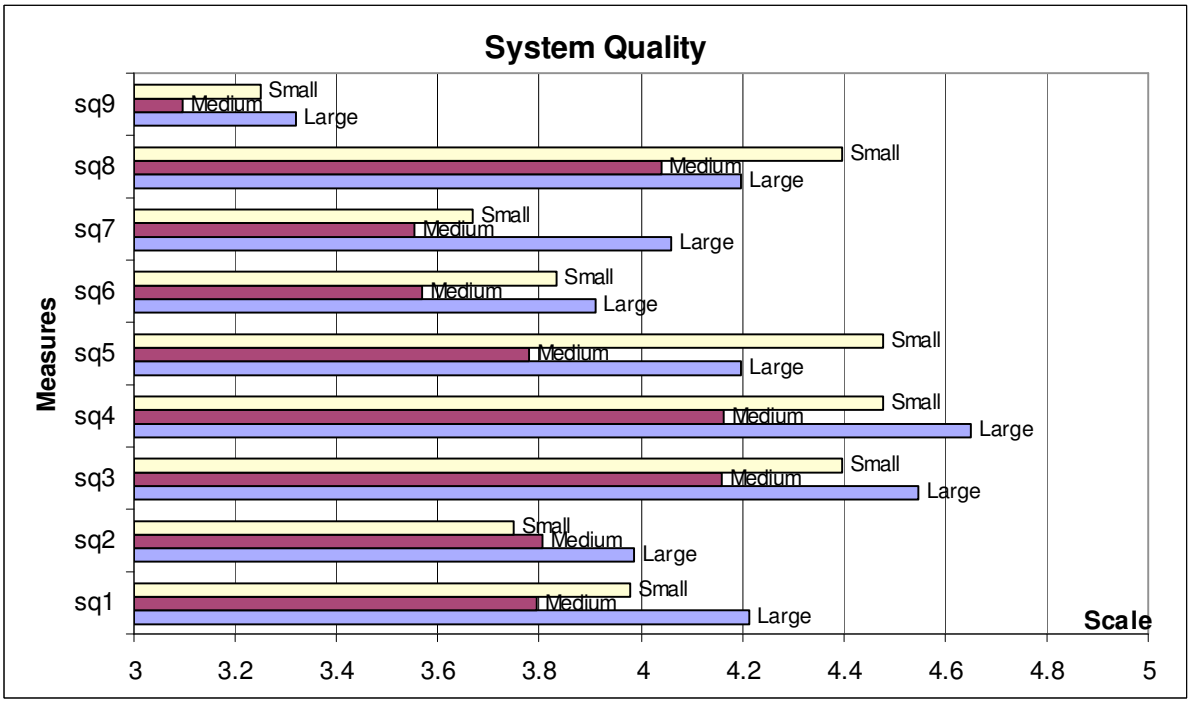


Figure 2: System Quality

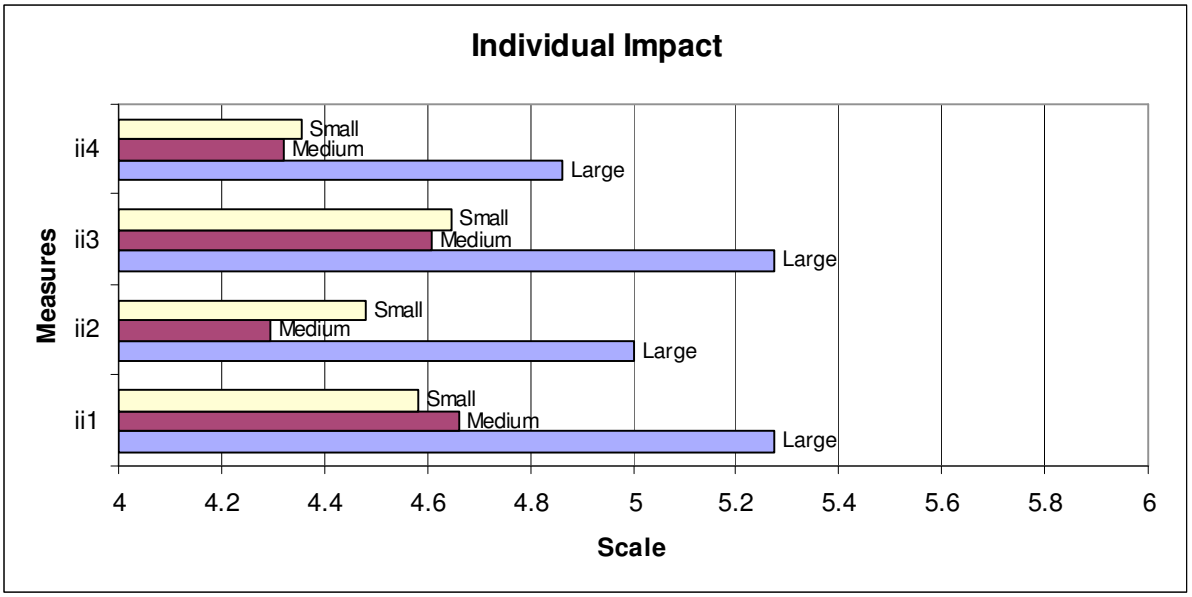


Figure 3: Individual Impact

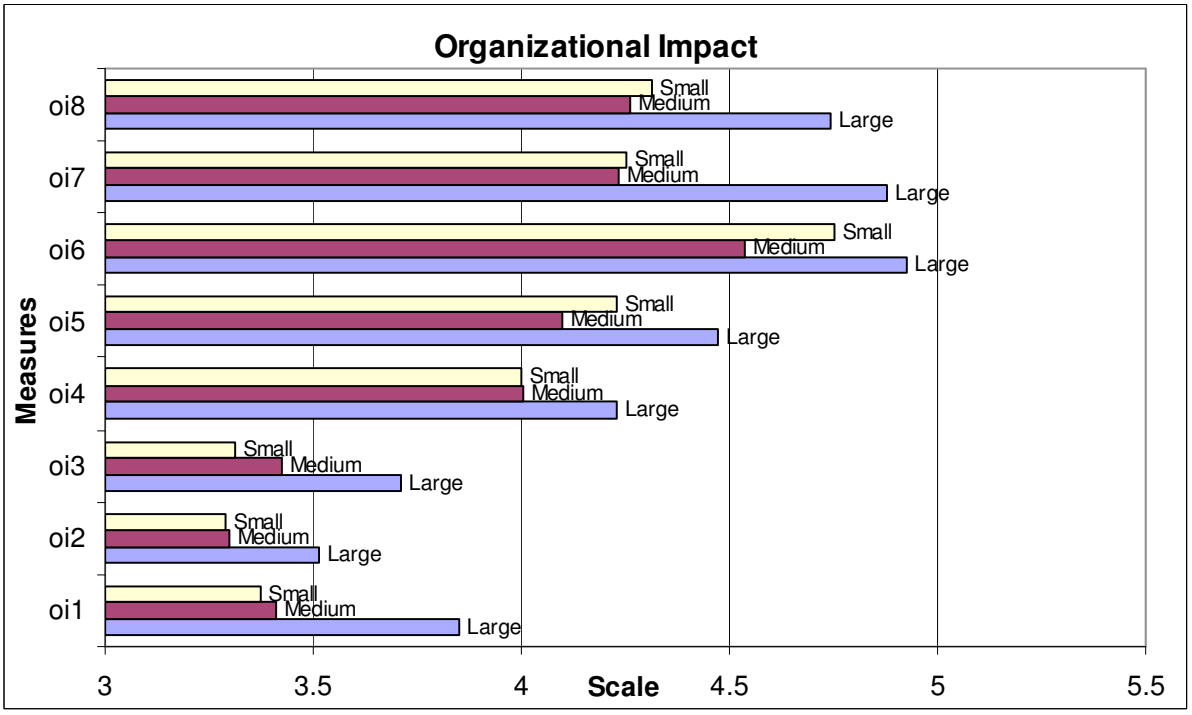


Figure 4: Organizational Impact

## PLACING EMPHASIS ON DIMENSIONS OF SUCCESS

Having established a useful criterion for classifying organizations based on the number of user licenses and having discussed descriptive and comparative statistics in relation to the four success dimensions, we now test the correlations between (1) the success dimensions and (2) the average of the three criterion measures for each organization size.

| | Small | Medium | Large |
|---|---|---|---|
| System Quality | 0.832 | 0.806 | 0.784 |
| Information Quality | 0.795 | 0.696 | 0.686 |
| Individual Impact | 0.839 | 0.768 | 0.560 |
| Organizational Impact | 0.823 | 0.806 | 0.636 |

Table 3: Correlation Analysis

Table 3 reports the correlations between the four dimensions and the criterion average for the three organizational sizes. Using results in table 3, we observe that the all three classes of organizations demonstrate a reasonably strong correlation between the success dimensions and overall success. Moreover, we note that the magnitude of the correlation within a dimension decreases with the decreasing organizational size. In other words, the smaller organizations place a relatively greater emphasis on all of the four dimensions compared to its counterparts, when providing an assessment of ES-success.

## CONCLUSION

This research investigated the common belief that Enterprise Systems are better suited for large organizations and perhaps ill-suited for small and medium enterprises. The study included 66 respondents representing small organizations, 198 respondents from medium and 66 respondents from large organizations from 27 organizations that had implemented a market leading Enterprise System in the second half of 1990. The benefits and impact of the Enterprise System received by the organizations were empirically assessed using an extensively validated survey instrument (Gable, Sedera et al. 2003; Sedera, Gable et al. 2004; Gable, Sedera et al. 2008). The homogeneity of the study context – where all the sampled organization having implemented the same Enterprise System, similar modules and are at the same phase of the lifecycle – provided a distinct strength to the study, where the results are less vulnerable to extraneous factors.

One of the key contributions of the study was derivation of a repeatable and easy-to-use classification method for grouping organizations into Small, Medium and Large classes. The classification was derived through a triangulation of the results extrapolated by comparing results from a cluster analysis with SAP user licenses. The perfect mapping of the cluster-based 'natural classification' and the industry benchmark for classification provides both rigor and relevance to the classification method.

The empirical results support a popular anecdote that traditional Enterprise Systems are better suited for Large Organizations, with for majority of the measures reporting in-favor of the large organizations. However, this research provides counter evidence to the popular belief that Enterprise Systems are unsuitable for Small organizations, demonstrating similar benefits and impacts to their larger counterparts. Moreover, for most of the measures of ES-success, it was noted that Small organizations reported larger mean scores than those of the mid-sized.

In analyzing data in table 3 applying to the research context, we argue that the high correlations observed with Small organizations with the success dimensions and criterion measures suggest that the small organizations plays a great importance on the system and have received adequate benefits from it. If low and insignificant correlations were observed between the dimensions and the criterion items for small organizations, then it would have suggested that the success dimensions were unsuitable or/and irrelevant for the research context. It is also conceivable that, having demonstrated reasonably high mean scores for the success dimensions earlier and now demonstrating a strong positive correlations that the small are reasonably content with their Enterprise Systems.

In analyzing mean scores for the measures, figure 4 revealed that the measures relating to cost savings in Organizational Impacts dimension having a low mean scores especially for the SMEs. Given that many prior assessments have a myopic financial view of assessing Enterprise System success; it is not a surprise that Enterprise Systems were deemed unsuitable for the Small and Medium Enterprises. However, having considered both tangible and intangible benefits (both short and long term), it is clear that Small and Medium organizations do receive adequate benefits from even the large Enterprise System applications.

The results demonstrated significant differences between the medium and large organizations in relation to Enterprise System Quality, Impacts to the Individuals, and Impacts to the Organization. No differences were observed in relation to the Quality of Information derived from the system.

Substantial differences between the organizations were observed in relation to Individual and Organizational impacts. The result also demonstrated that some of the common system related issues, such as customization, are equally deterrent to both organizational types. Similarly, the innate Enterprise System advantages like the integration are equally beneficial to all types of organizations.

These findings provide insights to IT practitioners (and IS academia alike) in understanding the diversity of impacts received from Enterprise System and the importance of contextual factors. At a time where the Enterprise System vendors are moving aggressively towards scaled-down systems specifically targeting at small organizations, the study results provide some caution over the claimed benefits of Enterprise Systems.

The study also makes an ancillary contribution by further validating the IS-Impact model (Gable et al. 2008) as a credible measurement model for all organizational sizes.

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