State and Impact of Governance of Enterprise IT in Organizations

Key Findings of an International Study

Given the centrality of IT for enterprise risk management and value generation, a specific focus on governance of enterprise IT (GEIT) has arisen over the last two decades. Enterprises are increasingly making investments in GEIT and are often drawing upon the practical relevance of generally accepted good-practice frameworks, such as COBIT® 5.

This article presents some key results of a recent international study on how organizations are adopting GEIT using COBIT 5 and whether these adoptions deliver enterprise value to these organizations.

THE RESEARCH

Investments in improving GEIT are often perceived as costly and complex, while their return in stakeholder value is difficult to measure in tangible (often financial) outcomes. The recent Benchmarking and Business Value Assessment of COBIT® 5 report attempts to demonstrate the business value achieved by applying GEIT practices in organizations. Additionally, the results of the research establish an international benchmark on how organizations are progressing toward achieving IT-related goals and enterprise goals (see figure 1). The final survey was conducted between 24 July and 1 September 2014. In total, 896 respondents completed the survey, of which 894 were accepted as complete responses for the final analysis. As shown in figure 2, respondents were spread across all regions of the world.

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Figure 1—COBIT 5 Goals Cascade

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RESEARCH RESULTS
In the following sections, findings from the study are discussed and organized around key research questions.

What Is the Perceived Importance of the GEIT Enablers?
Each of the respondents in the survey was asked to rate the perceived importance of the GEIT enablers on a scale of 1 to 5, with 1 being unimportant and 5 being very important. Importance of a GEIT enabler is an indicator of how respondents assess the relevance of a particular enabler to achieving enterprise goals.

The survey results suggest that all of the enablers are considered to be very important, all having scored averages higher than 4 on a scale of 5 (see figure 3). This might suggest that the seven GEIT enablers, as proposed by COBIT 5, are also seen by the market as highly relevant as well as holistic and related to each other. Comparing the seven enablers relative to each other, it appears that the Information enabler and the People, Skills and Competencies enabler are perceived as the most important, closely followed by the Processes enabler.

Referring to the guidance ISACA provides in support of COBIT 5 adoption and use, there is already detailed guidance published regarding the Processes and Information enablers. There is no detailed guidance published by ISACA on the People, Skills and Competencies enabler; however, the Skills Framework for the Information Age (SFIA), currently in version 5 (2011) or the European e-Competence Framework provide sound guidance in support of the People, Skills and Competencies enabler.

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How Are Organizations Implementing and/or Managing GEIT Enablers?

The survey respondents were also asked to rate the status of the GEIT enablers’ implementation or management. For the Information; Culture, Ethics and Behavior; People, Skills and Competencies; and Services, Infrastructure and Applications enablers, the respondents were asked to assess the level of management on a scale of 1 to 5, with 1 being not managed and 5 being fully managed. The Principles, Policies and Frameworks; Organizational Structures; and Processes enablers were assessed on a scale of 1 to 5, with 1 being not implemented and 5 being fully implemented.

Figure 4 shows that, on average, the Services, Infrastructure and Applications (average score of 3.88) and Structures (average score of 3.70) enablers are considered to be “managed the best” as compared to other enablers. Organizations also seem to struggle with managing more human-side enablers, especially the Culture, Ethics and Behavior enabler, which received the lowest score. This result might be explained by the fact that managing infrastructure and applications (i.e., infrastructure and applications that relate to GEIT) is much more tangible compared to managing culture and ethics and, as such, is likely easier to adopt.

The study also included in-depth analysis, focusing on the Processes enabler specifically. Respondents assessed the status of implementation of the 37 COBIT 5 processes on a five-point scale with a “Do not know” option. The scale ranged from 1, “not implemented,” to 5, “fully implemented.”

Figure 5 presents the domain-level scores for the five domains of the COBIT 5 Process Reference Model (PRM). The average score for each domain is above 3.0, which suggests that respondents perceived that their organizations have, on average, “partly” implemented processes for the five domains. Figure 5 also shows that for the Deliver, Service and Support (DSS) domain processes, the real executonal type of operational and support processes, the implementation level is higher compared to other domains.

Respondents indicated that the process implementation level for the Evaluate, Direct and Monitor (EDM) domain is lower compared to other domains. This might be explained by the fact that these processes require high-level executive and nonexecutive board involvement. From the COBIT 5 process reference model view, the findings suggest that the implementation level of governance processes, in general, is perceived to be relatively lower when compared to management processes, which aligns with other international studies that report the low involvement of boards in GEIT. However, other studies underline the importance of board involvement, demonstrating a clear association between board-level involvement in GEIT and organizational performance. As such, these results are a call to action for board members in the area of GEIT.

### Figure 4—Level of Implementation/Management

<table>
<thead>
<tr>
<th>Processes</th>
<th>Organisational structures</th>
<th>Services, infrastructure and applications</th>
<th>People, skills and competencies</th>
<th>Culture, ethics and behaviour</th>
<th>Principles, policies and frameworks</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.10</td>
<td>3.20</td>
<td>3.30</td>
<td>3.40</td>
<td>3.50</td>
<td>3.60</td>
<td>3.70</td>
</tr>
</tbody>
</table>

1 = not implemented/managed, 2 = somewhat, 3 = partly, 4 = mainly, 5 = fully implemented/managed

Blue = implemented, Orange = managed

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At the level of the detailed processes within these domains, the relatively better implemented COBIT 5 processes are DSS02 Manage service request and incidents and Manage costs and budgets. The relatively weakly implemented COBIT 5 processes are APO06 Manage innovation, Ensure benefits delivery and Manage knowledge. In general, many processes that required more business involvement achieved lower implementation scores (e.g., managing organizational changes, business process controls). This, again, is a call to action, as the importance of business involvement in IT-enabled value creation has been stressed by many researchers.9, 10, 11 As Weill and Ross note, “If senior managers do not accept accountability for IT, the company will inevitably throw its IT money to multiple tactical initiatives with no clear impact on the organizational capabilities. IT becomes a liability instead of a strategic asset.”12

WHAT IS THE PERCEIVED EASE OF IMPLEMENTATION AND/OR MANAGEMENT OF THE GEIT ENABLERS?

Acknowledging that each enabler requires distinct enterprise resources to manage or implement, the survey respondents were requested to assess the perceived ease of implementation of each of the GEIT enablers. The respondents rated the ease of implementation for the seven enablers on a five-point scale, with 1 being very difficult and 5 being very easy.

The findings in figure 6 indicate that the Organizational Structures enabler and Services, Infrastructure and Applications enabler scored the highest, with scores ranging from 2.70 to 2.90. The other enablers scored in the range of 2.50 to 2.70, indicating a slightly lower perceived ease of implementation.
Applications enabler are considered to be easy to implement and/or manage.13 The results are consistent with the results in figure 4, where both the Organizational Structures enabler and the Services, Infrastructure and Applications enabler were reported as being the best implemented and managed, as compared to other enablers. However, also in line with figure 4, culture is perceived as more difficult to manage/implement, and the Information enabler received the lowest score in terms of ease of implementing management practices.

DO GEIT ENABLERS CONTRIBUTE TO THE ACHIEVEMENT OF IT-RELATED GOALS AND, BY EXTENSION, ENTERPRISE GOALS?

As represented in figure 1, COBIT 5 has introduced the goals cascade, which specifically describes an expected association between GEIT enablers and the achievement of IT-related and enterprise goals. Specifically, the goal cascade suggests that the successful implementation or management of enablers is positively associated with achieving IT-related goals, which further cascades to achieving enterprise goals. Using the sample of 894 respondents, who also assessed how they are progressing toward the achievement of IT-related goals and enterprise goals (scale of 1, not achieved, to 5, fully achieved), this study finds a strong positive association between the overall average score of implementation or management of seven enablers and the overall reported average score of IT-related goals achievement (figure 7). The line in the graph implies a positive correlation between the enablers’ implementation or management to the IT-related goals. The findings are consistent with the proposed COBIT 5 cascade. This positive relationship is also confirmed for the 37 process enabler scores. Figure 8 indicates a strong positive association between the overall average process enabler score and IT-related goals’ achievement. Finally, this study also confirms a strong positive association between achievement of IT-related goals and achievement of overall enterprise goals, which suggests that IT-related outcomes positively link to the goals of the enterprise (figure 9).

CONCLUSIONS

Firms often perceive governance and management investments for their information and related technology as costly and complex. To acknowledge and address these topics, this research project used the COBIT 5 goals cascade overview to assess GEIT enablers and their relationship with achieving IT-related goals and enterprise goals.

The findings suggest that professionals do perceive and experience the enablers proposed in COBIT 5 as valuable for implementing GEIT. Each of the COBIT 5 enablers is seen as highly important, and better implementation rates with the GEIT enablers clearly show positive correlations with the
achievement of IT-related goals. The findings also suggest that achieving these IT-related goals is strongly associated with the achievement of enterprise goals, which confirms the proposed conceptual cascade model in COBIT 5.

By offering empirical evidence that governing and managing those enablers does have a positive impact on enterprise value creation, management will find it easier to support investment propositions related to GEIT. Additionally, the results of this research will contribute to the relatively new domain of knowledge and theory being built, and it will assist practitioners by providing an international benchmark and more guidance on how governance and management frameworks, such as COBIT 5, can lead to higher enterprise value creation from their IT assets and resources.

ENDNOTES

3 This article summarizes the key findings and results of a fully elaborated research report titled Benchmarking and Business Value Assessment of COBIT® 5, which includes detailed benchmarking results and has filtered data by sector, geography and company size. Find the full report at www.isaca.org/benchmarking-and-business-value-assessment-COBIT-5.
6 Op cit, De Haes and Van Grembergen
9 Weill; Ross; IT Governance: How Top-performers Manage IT Decision Rights for Super Results, Harvard Business School Press, USA, 2004
10 Op cit, De Haes and Van Grembergen
11 Op cit, Turel and Bart
12 Weill; Ross; IT Savvy: What Top Executives Must Know to Go From Pain to Gain, Harvard Business Press, USA, 2009
13 Op cit, De Haes and Van Grembergen. This result is in line with the study of De Haes and Van Grembergen (2015), which also reported that IT governance structures are typically reported as being the easiest to adopt.