

BOOK REVIEW

IT Governance: How Top Performers Manage IT Decision Rights for Superior Results

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IT Governance: How Top Performers Manage IT Decision Rights for Superior Results

by Peter Weill and Jeanne W. Ross

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Successful electronic government requires the successful implementation of technology. This book lays out a framework for understanding a system of decision processes that have been shown to be associated with the successful use of technology. Peter Weill and Jeanne Ross are based at the Center for Information Systems Research at MIT's Sloan School of Management, which has been doing research on the management of information technology since 1974. Understanding how to make decisions about information technology has been a primary focus of the Center for decades.

Weill and Ross' book is based on two primary studies and a number of related projects. The more recent study is a survey of 256 organizations from the Americas, Europe, and Asia Pacific that was led by Peter Weill between 2001 and 2003. This work also included 32 case studies. The second study is a set of 40 case studies developed by Jeanne Ross between 1999 and 2003 that focused on the relationship between information technology (IT) architecture and business strategy. This work identified governance issues associated with IT and organizational change efforts. Three other projects undertaken by Weill, Ross, and others between 1998 and 2001 also contributed to the material described in the book. Most of this work is available through the CISR Web site, <http://mitsloan.mit.edu/cisr/r-main.php>. Taken together, these studies represent a substantial body of work on which to base the development of a frame-

work for understanding IT governance. While most of their sample is drawn from the private sector (the Metropolitan Police Service — Scotland Yard, Tennessee Valley Authority, and UNICEF — were the only public sector case studies in the sample), the authors did commit Chapter 7 to describing how their work would apply to these sectors.

The authors describe IT governance as “specifying the decision rights and accountability to encourage desirable behavior in the use of IT” (p. 8). Their definition includes establishing a set of processes and delegation of authorities for providing input and making decisions. Certainly, there is nothing in this description of IT governance that would make it seem any less appropriate for the public sector than for the private sector. Clearly, some drivers may change, but the fundamental definition works.

Weill and Ross lay out three questions that must be addressed by any effective approach to IT governance:

1. What decisions must be made to ensure effective management and use of IT?
2. Who should make these decisions?
3. How will these decisions be made and monitored? (p. 10)

To begin to answer these questions, they provide a matrix that relates five types of IT decisions and six archetypes of decision-making structures and provides the foundation for both the analysis of existing governance structures and the development of more effective structures. The matrix is used extensively throughout the

book. The types of IT decisions are the following:

- IT principles: Clarifying the business role of IT
- IT architecture: Defining integration and standardization requirements
- IT infrastructure: Determining shared and enabling services
- Business application needs: Specifying the business need for purchased or internally developed IT applications
- IT investment and prioritization: Choosing which initiatives to fund and how much to spend (pp. 10-11)

These five types of decisions are related and tend to flow from IT principles to IT investment and prioritization. For example, decisions regarding the organization’s notion of IT’s role (e.g., enabler of integrated services for the citizen) will inform how the organization approaches its IT architecture (e.g., an integrated data model), which then provides a foundation for the IT infrastructure (e.g., a single, organization-wide data warehouse or citizen relationship management system). This all provides the necessary strategic and technical underpinnings for developing systems to meet business needs (e.g., a unified portal for all services). According to the authors’ approach, taken together the first four decision types provide the basis for resolving the three essential questions critical to IT investment in any organization: how much to spend on IT overall, how to spread it across initiatives, and how to appropriately address the needs of the various constituencies.

Six decision archetypes describe the participants in a given IT decision. They are:

- **Business Monarchy:** A group of business executives or individual executives (CxOs). Includes committees of senior business executives (may include CIO). Excludes IT executives acting independently.
- **IT Monarchy:** Individuals or groups of IT executives
- **Feudal:** Business unit leaders, key process owners, or their delegates
- **Federal:** C-level executives and business groups (e.g., business units or processes); may also include IT executives as additional participants. Equivalent of the central and state governments working together.
- **IT Duopoly:** IT executives and one other group (e.g., CxO, business unit, or process leaders)
- **Anarchy:** Each individual user (p. 59)

In their analysis, the authors use these same archetypes to describe the parties that provide input to decisions.

By building a matrix with decision types along the horizontal and archetypes along the vertical, the authors use their model to analyze their survey data. They use this same matrix to describe the governance processes at several of their case study sites and provide a tool for practitioners to both assess their organizations' governance structures and compare them to what the authors found in similar organizations. For example, the authors found that the federal archetype was, by far, the most common approach used to provide

input to decisions. Over 80% of the firms surveyed were using a federal model for the more business-oriented IT decisions (principles, business application needs, and investments). Even in the more technically oriented decisions (architecture and infrastructure), about half of the firms used the federal approach. The authors point out that of the six archetypes, the federal approach is the most broad-based, while still maintaining a differentiation between central and distributed authorities. The empirical results for actual decision authority are less consistent. Decisions about IT principles tended somewhat to be made in a duopoly archetype (36%), where IT executives make the decision with either the business executives or corporate executives but not both. The business monarchy, where IT principles are decided by corporate executives alone, also was common (27%). The more technologically oriented decisions tended to be made in an IT monarchy (architecture, 73%; infrastructure, 59%), where the IT organization made the decision with broad-based input (as described previously). Decision structures for business application needs and investments tended to resemble each other with the federal and duopoly archetypes being common for both at about 30% each. For IT investments, the business monarchy archetype also was common, again at about 30%.

By now, readers of this review must be thinking that there must be other drivers that influence the approach that organizations choose to make their IT decisions. In fact, the authors' research has provided five general factors:

1. Strategic and performance goals
2. Organizational structure
3. Governance experience
4. Size and diversity
5. Industry and regional differences

A great deal of the balance of the book addresses these factors through detailed discussion and specific illustrative case studies. Of particular interest to readers of this review may be Chapter 7, which specifically addresses government and not-for-profit organizations. In this chapter, the authors use the Metropolitan Police Service-Scotland Yard, the Tennessee Valley Authority, and UNICEF to illustrate the use (and adaptation) of their framework in the public sector. The difficulty of measuring value in the public sector is addressed, and a value framework is developed by Mark Moore and others (in *Creating Public Value: Strategic Management in Government*, Cambridge, MA: Harvard University Press, 1995); others are utilized to help make inroads in this difficult area. Based on their survey, the authors found that governance performance in not-for-profit (including public sector) organizations is about 10% less than in for-profit enterprises (based on a four-factor measure provided by the CIO). They suggest that this difference may result from the greater difficulty in measuring performance and setting goals in not-for-profits. The same survey revealed that not-for-profits tended to be more like than unlike for-profits in their patterns of IT governance, but there were five notable differences that not-for-profits exhibited:

- More business monarchies in all decisions except architecture
- Significantly fewer IT monarchies in all decisions
- More federal arrangements in all decisions except investments
- More federal arrangements for inputs to all decisions
- More duopolies for IT architecture (pp. 201-202)

These differences are attributed to broader representation in decision making that has been adopted by not-for-profit organizations in order to balance the challenges in developing performance measures and goals. Certainly, further thought about these differences between private and public sector organizations would be interesting.

Weill and Ross offer five guidelines for not-for-profit organizations in order to improve their IT governance performance. These five are the following:

- Use joint business and IT decision making for principles in order to combine senior management's input on strategic decisions with IT management's insights on technological and organizational capabilities.
- Consider IT infrastructure principles to be strategic business decisions, since these decisions underlie an organization's capability to provide the unified services that have become so critical to governmental organizations.
- Don't use a feudal model for business application needs, even though there may be pressure to focus on local constituencies.

- Use joint decision making for IT investments in order to capture the same combination of strengths described previously for principles (pp. 203-205).

In summary, the concepts and frameworks developed in *IT Governance: How Top Performers Manage IT Decision Right for Superior Results* provide both an analytic model and a normative framework that managers and academics can use to better understand IT governance. The book is well written, and the concepts are clearly presented. There is sufficient detail that public managers can use the matrix and find analogies to their own organization in the case studies. The discussion of the challenges of measuring value in the public sector is not nearly well enough developed to resolve all of the issues involved in that area, but this is a challenge that public administrators have been dealing with for many years. Any progress

made in addressing the value of public services can be used productively with the ideas presented in this book. Academics working in public administration may find use in the model on a couple fronts. First of all, the framework provides a valuable starting point for describing approaches to public sector IT governance. While the authors offered a few suggestions for applying the framework in the public sector, the existing public administration literature may offer other opportunities for better understanding the application of the framework outside the private sector. In addition, the framework may provide an analytic tool for comparing organizations to each other. In any case, this is an interesting and valuable book that also may stimulate new thinking about similarities and differences between private and public sector management approaches. It should find good use by public administration practitioners and academics.

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