

## SUMMARY

- Alternative approaches to governance of information systems organization are possible. One approach is based on where IS decisions are made in the organization's structure. Centralized IS organizations place IT staff, hardware, software, and data in one location to promote control and efficiency. At the other end of the continuum, decentralized IS organizations with distributed resources can best meet the needs of local users. Federalism in IS organizations is in the middle of the centralization/decentralization continuum.
- A second governance approach involves decision rights. In this approach, IT governance specifies how to allocate decision rights in such a way as to encourage desirable behavior in the use of IT. The allocation of decision rights can be broken down into six archetypes (business monarchy, IT monarchy, feudal, federal, IT duopoly, and anarchy). High-performing companies use the proper decision rights allocation patterns for each of the five major categories of IT decisions.
- A third governance approach recognizes the power of combining complementary technologies in ways that were not predicted or controlled by an organization. This so-called digital ecosystem represents formal recognition of a firm's healthy adaptation and synergistic adoption to new hardware, applications, and connections with customers, employees, and other firms. Much of this has been driven by consumerization of technology.
- A fourth governance approach is based on controls. The Sarbanes–Oxley Act (2002) was enacted to improve organizations' internal controls. COBIT is an IT governance framework based on control that can be used to promote IT-related internal controls and Sarbanes–Oxley compliance.

## KEY TERMS

archetype (p. 196)

centralized IS organizations (p. 193)

COBIT (Control Objectives for Information and Related Technology) (p. 202)

Consumerization (p. 191)

decentralized IS organizations (p. 193)

digital ecosystem (p. 197)

federalism (p. 194)

governance (p. 192)

Information Technology Infrastructure

Library (ITIL) (p. 203)

IT governance (p. 195)

review board (p. 199)

Sarbanes–Oxley Act (SoX) (p. 200)

steering committee (p. 199)

## DISCUSSION QUESTIONS

1. The debate about centralization and decentralization is heating up again with the advent of BYOD and the increasing use of the Web. Why does the Internet make this debate topical?
2. Why is the discussion of decision rights among managers in a firm important?
3. Why can an IT governance archetype be good for one type of IS decision but not for another?

### ■ CASE STUDY 9-1 IT Governance at University of the Southeast

University of the Southeast<sup>25</sup> was (and still is) one of the largest universities in the United States. It had been growing rapidly; that growth was spurred, in part, by information technology. The university embraced lecture capture technologies that allowed lectures to be streamed to students in a classroom, in dorm rooms, on the grass near the main campus central fountain, and at a variety of other places of the students' choosing whenever they chose to watch. This made it possible to have sections of classes with over 1,000 students without having to build physical classrooms with enough seats to accommodate each person enrolled. It also made it possible to offer classes that were streamed to students at remote campuses. Each student was charged a technology fee (i.e., \$5.16 for undergraduates and \$13.85 for graduates per credit hour each semester), which was administered by the Information Technologies and Resources (IT&R) Office to help fund the costs of providing IT to students and faculty.

<sup>25</sup> The name University of the Southeast is made up but the school and situation were real.

IT&R was responsible for providing computer services, technologies, and telecommunications across the campus (Computer Services and Technology), helping faculty with their instructional delivery and multimedia support (Office of Instructional Resources), helping faculty develop and deliver Web-based and lecture capture courses (Center for Distributed Learning), and the library. The IT&R Office developed IT-related policies with very little input from the faculty and was responsible for deciding and implementing decisions concerning IT architecture and infrastructure. IT&R worked with the university president and other top administrators in making IT investment decisions. IT&R staff also worked with the various colleges, administrative offices, and an advisory board in making decisions about applications that needed to be developed. However, faculty were not consulted at all when the lecture capture system was selected.

As was often the case at large universities, many decision rights on a wide range of issues had been allocated to the colleges. The College of Business Administration had its own server and Technology Support Department (TSD). A recent survey of faculty and staff in the college indicated a high level of satisfaction with the TSD but far less satisfaction with the services provided by the university-level IT&R. Some college respondents indicated their displeasure about IT&R's support of the technology for the lecture capture courses, help desk, and classroom technologies.

The problems with the technology support for lecture capture software were particularly troublesome. The software would not authenticate students who had paid to enroll in some lecture capture courses, making it impossible for them to download the lectures even though they were registered in the course. Further, some university-affiliated housing did not have adequate network bandwidth to allow students to download the lectures. When problems occurred—which they did on a daily basis—the IT&R help desk often referred the students to instructors who could not resolve their problems. One faculty member who was teaching a lecture class with 1,400 students exclaimed, “It is utter chaos for me when something goes wrong with the system and hundreds of my students are trying to call, see or email me in panic to get me to fix something that I can't fix.”

To fix some of these issues, the CIO argued that all e-mail accounts should be placed on one central server. This would allow the IT&R greater control and make maintenance easier and more efficient. It also would considerably improve security. But it was not ideal for the faculty. A faculty meeting about e-mail revealed some concerns with this move. First, faculty wanted e-mails sent to the central university server to be forwarded to their accounts on their other university-based servers (i.e., the college, department, or institute servers) but found that this was impossible to do so. Second, faculty wanted to retain their control over archiving e-mails. Third, faculty wanted to have control over their preferred e-mail address. In some cases, the faculty e-mail addresses that they had used for a decade had been changed in the printed university directory to the e-mail address on the central university server without their knowledge. This meant that faculty did not receive (or even know about) messages sent to them via the address on the university server. They could not change the printed e-mail address in the university directory to the address on the college server that they had been using or forward the mail sent to the central server to a different account.

The IT&R spokesman said that having a centralized server for e-mail accounts was more secure, reliable and efficient. He said that faculty shouldn't have control over their preferred e-mail address, even if it were on a campus server, because of the identity management problems that it would create. A frustrated faculty member at the meeting asked the IT&R spokesman to describe one time when issues about ease of use and functionality of the system by the user were weighted more than security in decisions about e-mail. The IT&R spokesman could not think of an example.

#### *Discussion Questions*

1. Describe the IT governance system that was in place at the University of the Southeast using both decision rights and structure as the bases of governance.
  2. The CIO wanted to implement a centralized IT governance system. As demonstrated in this case, what are the advantages of a centralized IT governance system? What are the disadvantages?
  3. In your opinion, what assignment of decision rights would be best for University of the Southeast? Please explain.
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