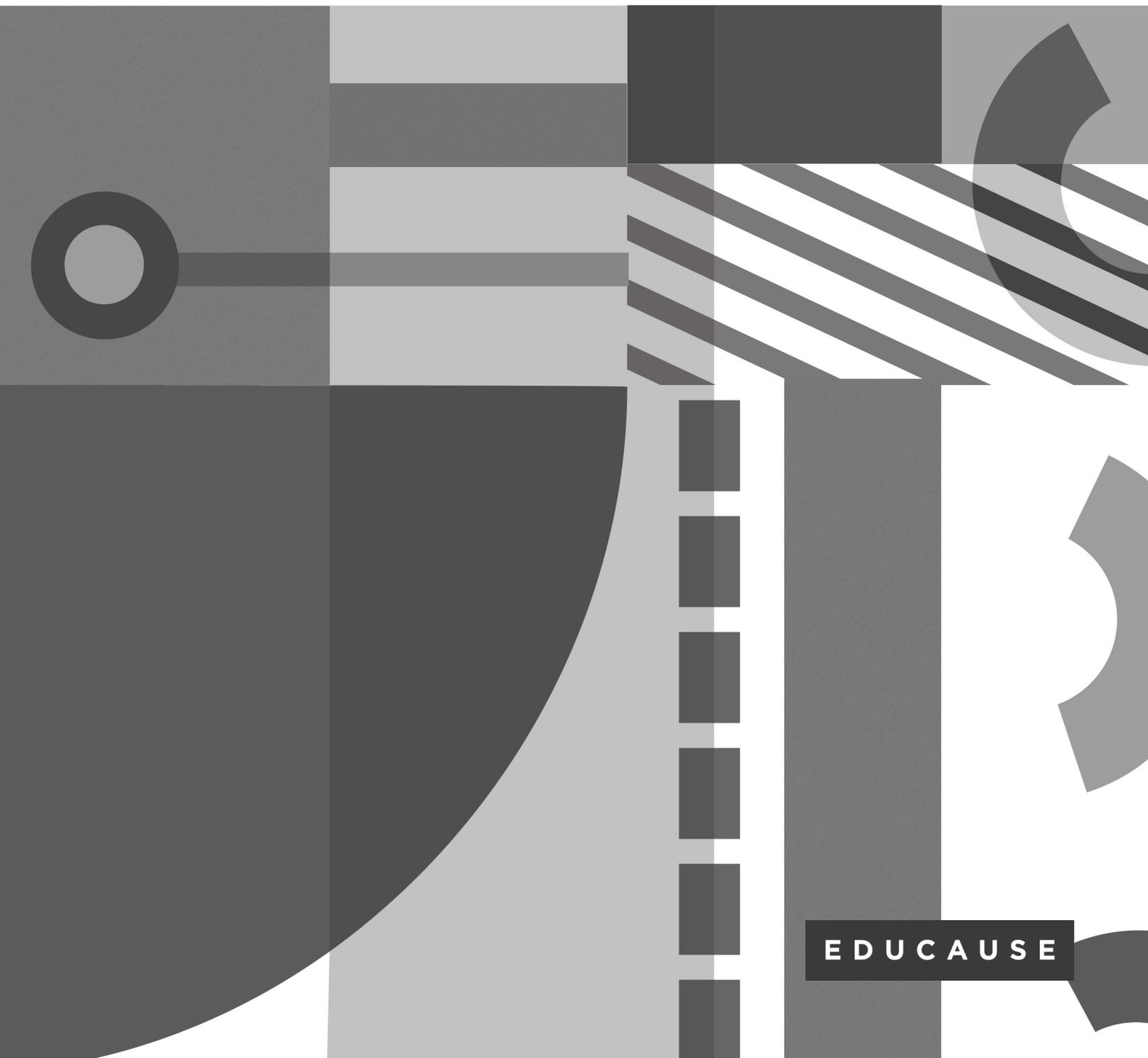


The Higher Education CIO, 2019



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Introduction

Year after year, it is crystal clear that technology plays a strategic role on campus. From enhancing the student experience to improving efficiency and effectiveness of operations, technology touches nearly every aspect of higher education. Far less clear is whether this fact is fully reflected in the leadership structure of our colleges and universities. EDUCAUSE has consistently made the case that IT leaders must be part of the strategic decision-making fabric of our institutions.¹ According to EDUCAUSE Core Data Service (CDS) data, about a third of campuses currently accomplish this straightforwardly with a direct reporting line from the senior IT leader to the president, and a growing percentage (currently 58%) of IT leaders sit on the cabinet.² As we advocate for growth in these numbers, this report makes the case by showing that when CIOs serve on the campus cabinet they engage in more strategic work, which we need now more than ever.

Fewer than half (42%) of the 246 CIOs in our workforce survey sample³ reported holding cabinet posts (figure 1). The ECAR higher education IT workforce data allow us to back up our argument about the importance of cabinet posts to CIO effectiveness with empirical evidence. In this report, we show how such an appointment shapes the daily work of CIOs, reflects actual or desired reporting lines, and enables CIOs to influence strategic institutional outcomes.

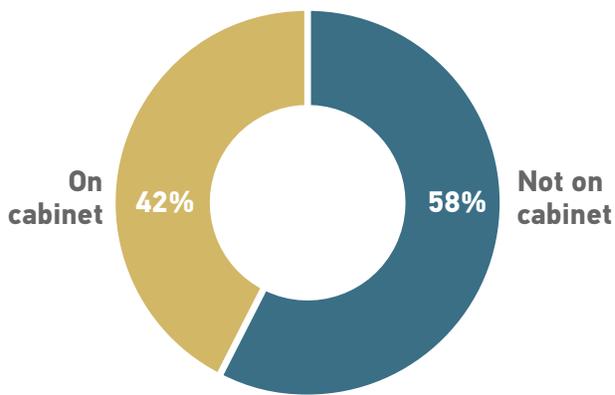


Figure 1. Percentage of CIOs who are members of the president's or the chancellor's cabinet

Key Findings

- **A plurality (29%) of CIOs currently report directly to the president, chancellor, or CEO of their respective institutions; a majority (56%) of CIOs think that they should be reporting to the president, chancellor, or CEO.** The desire for this reporting line is grounded in both pragmatic and strategic concerns: CIOs who report to the president, chancellor, or CEO have greater authority and influence to communicate the strategic importance of IT to the institution’s mission and serve the entire institution equally.
- **Non-cabinet CIOs spend more time managing IT operations and services.** CIOs who do not hold a cabinet appointment are more likely to spend their time on these activities than those who do. Those CIOs with cabinet posts are significantly more likely than those without such a role to be engaged with planning and innovation within the IT organization, business and academic units, and governing bodies.
- **CIOs who hold cabinet posts are three to five times as likely to “almost always” engage in strategic activities than are their counterparts without cabinet appointments.** The majority of cabinet-level CIOs are often to almost always involved with discussing the implications of IT decisions with senior leadership and shaping or influencing institutional administrative, strategic, and academic decisions.

Reporting Lines: Actual and Desired

Despite the generally standardized role of the CIO in higher education, the reporting lines associated with the position vary considerably. We asked CIOs to tell us which position best describes the person to whom they report, and we received at least one response to each of the 10 options offered. The overwhelming majority (87%) of respondents told us that they report to one of the top four positions at their respective institutions. A plurality (29%) of CIOs said that they report directly to the president, chancellor, or CEO of their institution. Another quarter (23%) report to the highest-ranking administrative officer (the administrative vice president/vice chancellor or the executive vice president). One-fifth (19%) report to the highest-ranking business officer (the vice president or vice chancellor, the business office, or chief financial officer), and 16% report to the highest-ranking academic officer (the provost, academic vice president or vice chancellor, or dean).⁴ The reporting lines of the remaining 13% of CIOs include second-level academic or administrative officers, joint reporting lines to combinations of the highest-ranking officers, or some other position.

These findings become even more interesting when we ask CIOs to whom they *think they should* report. One of the best predictors of whom CIOs believe they should report to is the person to whom they currently report (figure 2). All of the CIOs who currently report to the president, chancellor, or CEO told us that their reporting line is just as it should be. But approximately half of CIOs who reported to one of the other highest-ranking officer positions told us that they think they should be reporting to the president, chancellor, or CEO.

Which position do you think you should report to?	Which position best describes the person to whom you report?			
	President/chancellor/CEO	Highest-ranking academic officer	Highest-ranking administrative officer	Highest-ranking business officer
President/chancellor/CEO	36%	10%	9%	10%
Highest-ranking academic officer	0%	9%	3%	2%
Highest-ranking administrative officer	0%	0%	12%	1%
Highest-ranking business officer	0%	0%	1%	10%

Figure 2. Percentage of CIOs' actual versus desired reporting lines

To understand why CIOs tend to think they should report directly to the president, chancellor, or CEO, we provided respondents an opportunity to tell us in their own words. An analysis of those qualitative data reveals a largely consonant but wide-ranging set of reasons. One of the more practical sets of responses had to do with pragmatic aspects of the organizational chart. As one respondent put it, a “C-suite position should not report to a C-suite position.” Another pointed out that a “cabinet-level decision-maker should report to the cabinet chair.” These organizational concerns dovetailed with another set of concerns about maintaining organizational independence and institutional neutrality. Specifically, several CIOs told us that reporting to the CFO or provost could introduce bias in favor of one or the other when “the provost is as much our customer as the CFO is.” The conflicts of interest that emerge for an IT organization whose mission is to serve the entire institution but is governed by a more narrowly focused arm of the institution were cited by several as a reason for their preference that the CIO report to the president, chancellor, or CEO.

Another key justification for a presidential reporting line is the increasingly strategic importance of the role of IT for higher education, a principle articulated forcefully by the Association of Governing Boards (AGB) of Universities and Colleges in a recent report.⁵ In this report, the AGB Board of Directors take the position that “successful innovation demands the governing board’s attention to the strategic role of technology.” The AGB report maintains that since technology is foundational to practically every innovative strategy, boards need to ensure that technologists are involved in all stages of strategic projects. It concludes that the best way for presidents to guarantee the strategic prioritization of technology is to make sure the CIO is “at the table when key decisions are made at the cabinet level.”⁶

The strategic importance of IT for the institutional mission is not lost on current CIOs. Often alluding to the digital transformation that higher education is experiencing, several CIOs expressed a desire to report to the president/chancellor/CEO precisely because of the role technology plays in campus innovation. One respondent made this point explicitly: “IT is pervasive in an institution, and being at the strategic decision table is vitally important to using technology effectively, setting IT priorities, and influencing decisions.” This sentiment was also woven throughout many of the comments citing the responsibility of IT to support “all areas of the university” since “technology affects the entire campus community” and “creates value for the campus community.”

“The strategic direction and the selection and execution of initiatives happen at the most senior levels of an organization. If a university is truly committed to using IT to enable and change how [the] university function[s] and delivers service, the CIO must report to the president.”

—Anonymous CIO

A CIO who reports directly to the president, chancellor, or CEO is also in an authoritative position to communicate the strategic importance of technology initiatives to the administration, campus stakeholders, and end users. As one CIO told us, “The culture is such that reporting to the president is critical to my ability to execute, which is built in part on being seen as a cabinet member with the authority that role implies on my campus.” Another respondent hammered this point home: “The impact of technology services on all campus activities is enormous, and as the representative of that division I am uniquely qualified to provide the president with insight on various issues.”

Clearly, not every institution is organized in a manner that can accommodate a direct reporting line of the CIO to the president, chancellor, or CEO. However, those institutions that do not have this reporting line in place but have the organizational capacity to bring IT into the purview of the executive office should consider the potential benefits of doing so.

A Day in the Life of a CIO

To better understand what a typical day in the life of a CIO looks like, we asked respondents to tell us what percentage of their time they allocate to a host of activities associated with the role. We found that the typical CIO spends the most time (40%) managing IT operations and services—twice the time of the next closest activity, which is planning and innovation within the IT organization (20%) (figure 3). The remainder of the typical CIO’s time is divided among planning and innovation with business and academic units and governance bodies (15%); HR or staffing, including staff professional development (10%); serving the larger IT profession (5%); and other miscellaneous tasks (5%). Compared with data from 2016, the daily work of the typical CIO has not really changed.



Figure 3. Median percentage of time the typical CIO allocates to various activities

However, a day in the lives of the CIOs who have a cabinet post is different from those of their colleagues who are not in this position (figure 4). CIOs without cabinet posts spend significantly more time managing IT operations and services than do those on cabinets. Conversely, CIOs on cabinets are significantly more engaged with strategic endeavors than those not holding cabinet positions. In total, typical cabinet-level CIOs spend about 45% of their time planning and innovating within the IT organization and with business and academic units and governance bodies, while typical non-cabinet CIOs spend just 35% of their time on those activities.

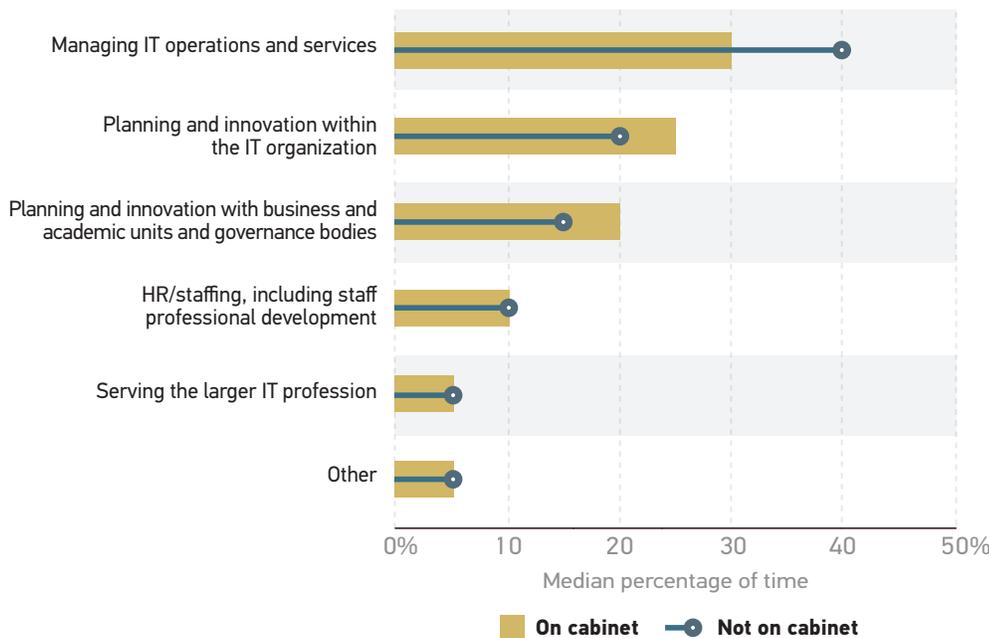


Figure 4. Median percentage of time CIOs allocate to various activities, by cabinet post

Being on the president’s or the chancellor’s cabinet does not appear to change fundamentally the job of *what* a CIO does. Indeed, there is little difference in the order of how the different CIO activities are prioritized; for example, managing IT operations and services is the main job for both the cabinet-level CIO and the non-cabinet-level CIO. But a cabinet position does result in a reallocation of some time to endeavors that are more strategically oriented for the institution. A typical cabinet-level CIO will be expected to be much more involved in campus planning and innovation initiatives.

Strategic Activities

While the main job of CIOs is to oversee the operations and management of the IT services and operations for their institution, their role as a member of the C-suite dictates that CIOs should also be engaged in strategic conversations and decision-making processes about the future of the institution. And EDUCAUSE has long recognized the strategic value and importance of information technology to higher education and has been advocating for a broader recognition and acceptance of IT as a strategic partner.⁷ But what empirical evidence can be brought to bear about the actual strategic impact the CIO has that will convince institutional leadership of IT’s strategic importance and open a seat on the cabinet for the CIO?

The good news is that a majority of CIOs already see themselves engaged in major strategic activities on their campuses (figure 5). A full two-thirds of CIOs reported that they discuss the IT implications of institutional decisions with senior leadership often (37%) or almost always (30%). A similar percentage (63%) of CIOs said that they often or almost always shape or influence the administrative directions of their institutions. Slightly fewer CIOs, but still a majority (57%), are at least often engaged with shaping or influencing the strategic directions of their institutions. When it comes to shaping or influencing the academic directions of the institutions, only about a third (36%) are involved often to almost always, a percentage that is counterbalanced by the 33% of CIOs who said that they are rarely to never involved in these endeavors. So while there is room for CIOs to step up their game (or for the institution to allow the CIO on the court), there is a critical mass of trailblazing CIOs who are already playing the strategic game and might be in a position to mentor CIOs who aspire to expand their strategic purview of their roles.

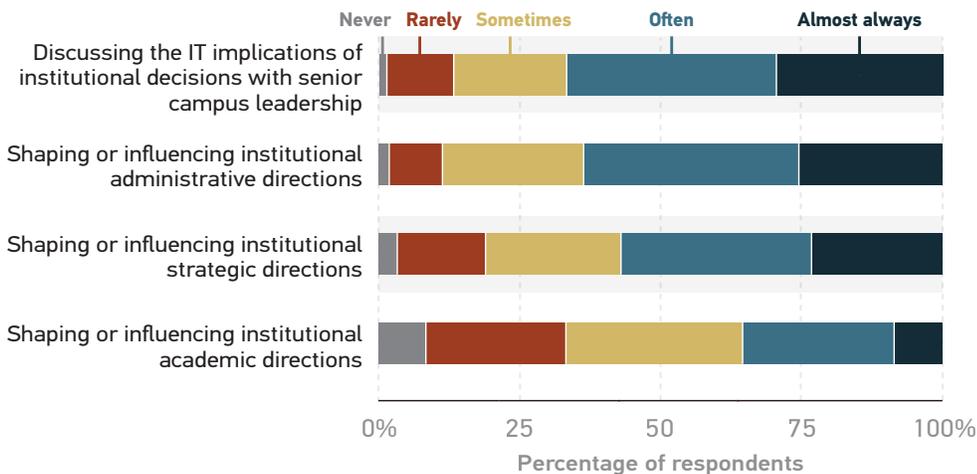


Figure 5. Frequency of CIOs’ engaging in strategic activities

But there is a clear and highly significant difference in the frequency with which CIOs who hold cabinet-level positions engaged in strategic activities compared with those who do not (figure 6). In fact, the magnitude of these differences is staggering. Compared with CIOs without cabinet posts, CIOs on presidential or chancellorial cabinets are:

- *Over four times* as likely to almost always discuss the implications of institutional decisions with senior campus leadership
- *Over three times* as likely to almost always shape or influence institutional *administrative* directions
- *Over five times* as likely to almost always shape or influence institutional *strategic* directions
- *Over four times* as likely to almost always shape or influence institutional *academic* directions

Conversely, CIOs without cabinet-level positions say they rarely to never exert strategic influence: for example, they range from 3 times more often than CIOs who sit on the cabinet to say they never discuss the implications of institutional decisions, to 9.5 times more often to say they never discuss institutional administrative directions with senior campus leadership.

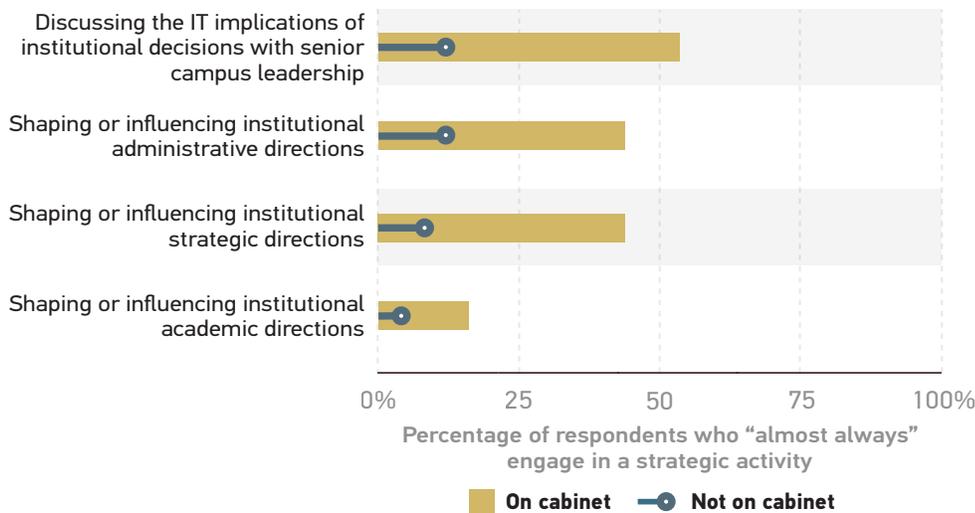


Figure 6. Frequency of CIOs’ engaging in strategic activities, by cabinet appointment

Conclusion

The CIOs with cabinet-level appointments basically have IT superpowers.⁸ They largely do the same things as CIOs who do not have a cabinet post, but the impact they have (or perceive themselves to have) on their campuses is considerably greater. And our research on salary suggests that they are handsomely compensated for these additional responsibilities and efforts; the increased influence that accompanies a seat on the president's or the chancellor's cabinet is associated with a salary increase of \$30,138. Our data suggest that for an institution to fully embrace IT as a strategic imperative, especially in the face of a looming digital transformation, presidents and chancellors need to make room on their cabinets and open up their wallets for their CIOs.

Recommendations

- **Reorganize the reporting structure of the institution so that the CIO reports directly and solely to the president, chancellor, or CEO.** A CIO whose organization resides within the purview of the executive office of the institution is in a more authoritative position to establish IT's strategic importance for campus-wide technology initiatives, effectively communicate the contributions of IT to the institutional mission, and provide leadership with the insight and expertise to shepherd the digital transformation of higher education at their institution.
- **Elevate the CIO to a cabinet-level position.** Cabinet-level CIOs will still do the work of the CIO but will be positioned to spend more of their time engaged in strategic activities such as planning and innovation across the institution and serving the larger IT profession. Moreover, CIOs with cabinet appointments have a great deal more impact on their campus. They are able to shape and influence institutional administrative directions, strategic directions, and institutional academic directions more than their peers without a cabinet post.

Methodology

Survey invitations were sent to 40,317 IT professionals in the EDUCAUSE database. A total of 1,592 respondents provided data that could be used for analysis, resulting in a response rate of 4%. Respondents were from all 50 US states (plus the District of Columbia, Puerto Rico, and Guam) and from 35 countries outside the United States; 815 institutions of higher education were represented. Non-US respondents made up 10% of the sample. Data collection took place in April and May of 2018. Among the total respondents, 246 self-identified as holding a position of CIO or equivalent at an institution of higher education. These respondents made up the sample from which our CIO findings are reported.

Acknowledgments

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Notes

1. John O'Brien, "IT: The New Strategic Imperative," *Trusteeship Magazine* 26, no. 2 (March/April 2018); and John O'Brien, "Strategic IT: What Got Us Here Won't Get Us There," *EDUCAUSE Review* 53, no. 6 (November/December 2018): 76–89.
2. EDUCAUSE Core Data Service (CDS), July 3, 2019.
3. EDUCAUSE Core Data Service statistics represent more than 750 US and non-US institutions. Results from the ECAR workforce survey represent responses from 246 CIOs, both within and outside the United States. Differences in the data are attributed to different samples and sample sizes.
4. These numbers are roughly similar to the actual reporting lines EDUCAUSE has documented in the 2018 Core Data Service (CDS) survey in which 34% of CIOs report to the president or the chancellor, 23% report to the highest-ranking administrative officer, 19% report to the highest-ranking business officer, and 17% report to the highest-ranking academic officer.
5. AGB Board of Directors, AGB Board of Directors' Statement on Innovation in Higher Education (Washington, D.C.: Association of Governing Boards of Universities and Colleges, November 7, 2017).
6. *Ibid.*, 14.
7. O'Brien, "IT: The New Strategic Imperative," and O'Brien, "Strategic IT: What Got Us Here."
8. EDUCAUSE Core Data Service.