

The Career Trajectories and Skills of Higher Education IT Workforce Leadership

Jeffrey Pomerantz¹

¹EDUCAUSE Center for Analysis and Research, 282 Century Place, Suite 500, Louisville, CO, USA 80027, jpomerantz@educause.edu

Keywords

Leadership, Management, Staff, Workforce, Career trajectory, Skills

1. SUMMARY / ABSTRACT

This presentation expands on recent reports about the IT workforce in higher education, conducted by the EDUCAUSE Center for Analysis and Research. We trace the career trajectories of four “C-suite” IT leadership positions to identify the paths individuals took to arrive at these leadership positions. Next we identify the skills that these individuals say are important for their success, and the skills that they believe they possess (or not).

2. CAREER TRAJECTORIES

In 2015-16, the EDUCAUSE Center for Analysis and Research (ECAR) conducted a series of studies of the IT workforce in higher education. The first of these was a comprehensive research study of the IT workforce as a whole, including Chief Information Officers, other IT managers, and nonmanagerial staff. This was followed by a set of four studies of specific IT leadership positions: Chief Information Officers, Enterprise Architects, Chief Data Officers, and Chief Information Security Officers. The first of these reports, on the IT workforce as a whole, has already been published as of this writing. The set of four reports on specific IT leadership positions will all be published by the time of the EUNIS Congress.

This presentation will expand on these published reports. First, the career trajectories of these four IT leadership positions will be investigated. Data on these leaders’ previous two jobs is used to identify the general paths they took to arrive at their present positions. Next, the skill sets required by these four IT leadership positions will be investigated. What skills do the individuals in these positions say are important for their success in these positions, and what skills do they themselves believe that they possess?

Many institutions like to “grow their own” leadership, by grooming employees over their career at the institution to fill progressively higher positions. Three of our four studies (EA, CDO, and CISO) found that these IT leadership positions are predominantly hired from within the institution. CIOs are the exception here, more than half being hired from outside their current institution. This finding probably comes as a surprise to no one, as it is well-known that CIO is a difficult position to hire for, in higher education as well as in other sectors. Despite being hired from outside, however, CIOs predominantly come from within higher education. In other words, CIOs are being “poached” from other institutions of higher education. CISOs, on the other hand, are hired more frequently from industries other than higher education.

The fact that CIOs are poached from other institutions and CISOs come from outside of higher education, begs the question of what positions these IT leaders come from. Because the range of positions that individuals currently in IT leadership positions had previously is extremely broad, we therefore categorized these positions into several broad themes.

Perhaps unsurprisingly, current CIOs' previous positions were most commonly IT executive leadership positions. Or, to put that the other way around: most individuals who previously were in an IT executive leadership position, went on to be current CIOs. Similarly, most individuals who previously were in an information security position went on to be CISOs, and most individuals who previously were in an enterprise IT position went on to be EAs. In other words, when people change jobs, they tend to take a position that's related to their last job. Given this consistency between IT leaders' previous and current positions, the specific positions that feed into IT leadership positions will be discussed in more depth during the Congress.

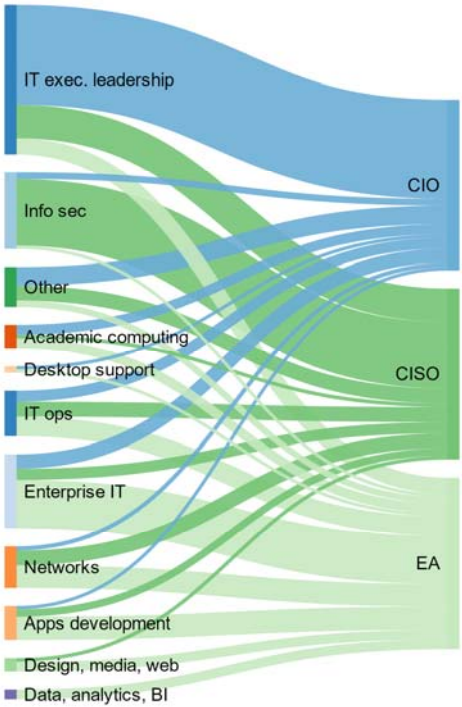


Figure 1: Career trajectories of IT leadership positions

3. SKILLS

EDUCAUSE and Jisc recently collaborated on two reports that present the findings from discussions among working groups of CIOs and other IT leaders, addressing common concerns: understanding the skills required by technology leaders in higher education, and helping mid-career IT professionals prepare to become the next generation of IT leadership. A number of issues reappeared time and again during the course of those discussions, which were articulated in the reports as key roles played by IT leaders. Those key roles, and the skills necessary for these roles, became the starting point for the questions asked of IT leaders in our set of four studies.

The specific skills necessary for success naturally varies with each leadership role. These specific skills will be discussed during the Congress. However, these skills all roll up into a set of categories shared across roles. Three skill categories emerged as absolutely critical to IT leadership: greater than 95% of respondents in all four roles agree that the following skill categories are either very or extremely important: thinking skills (e.g., identifying trends before one's peers, synthesizing vast quantities of information quickly); communication skills (e.g., effectively presenting ideas in writing

and orally, effectively presenting to a variety of audiences); and networking skills (e.g., building relationships across the institution, having networks that span institutions). These three skill categories are closely followed by two more, for which greater than 90% of respondents in all four roles agree that the skill categories are either very or extremely important: collaboration skills and leadership skills. These five skill categories are probably critical to any leadership position.

The skill category that was rated far and away the lowest, by respondents in all four roles, was technical skills (e.g., expertise with data governance, expertise with statistical analysis). This is understandable for CIOs, as this role is about institutional strategy as much as it is about technical expertise. But this was more of a surprise for the other three positions, which are more technically oriented.

While the skill categories are shared across roles, the specific skills within each category naturally vary across leadership roles. Respondents were also asked to assess the extent to which they themselves possess these specific skills. These findings will be discussed during the Congress, given these differences across roles and the resulting complexity of the findings. Among the most interesting of these findings, however, is this: while CIOs believe themselves to possess almost all of these skills, respondents in the other three roles generally assess their personal expertise in specific skills lower than their assessment of the importance of the skill in question. In other words, either CIOs think very highly of themselves and those in other IT leadership roles are more modest, or there are considerable opportunities for professional development among IT leaders, and perhaps both.

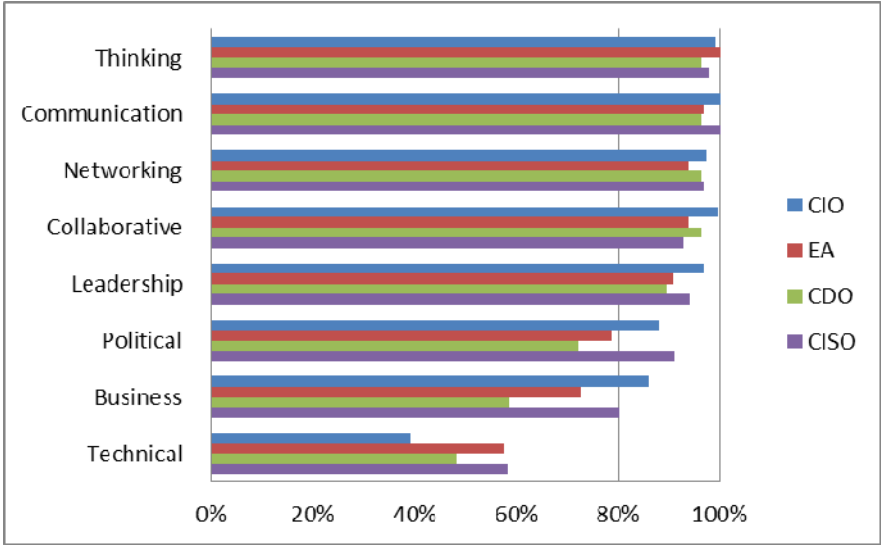


Figure 2: Percentage of IT leaders rating skill categories as very or extremely important

4. COPYRIGHT NOTICE

The author of papers, abstracts, presentations, etc. for the EUNIS 2017 Congress retains the copyright of such material. EUNIS may publish such papers, abstracts, and enclosures on websites, in print and on other media for non-commercial purposes.

The papers and extended abstracts are protected by German Law and are subject to the ownership rights of the author. All papers and extended abstracts were reviewed by members of the Scientific Committee. However, the responsibility for the contents of the papers and extended abstracts rests solely upon the authors.

5. REFERENCES

- EDUCAUSE & JISC. (2015). *Technology in Higher Education: Defining the Strategic Leader*. Louisville, CO: EDUCAUSE in partnership with JISC. Retrieved from <https://library.educause.edu/resources/2015/3/technology-in-higher-education-defining-the-strategic-leader>
- EDUCAUSE & JISC. (2016). *Technology in Higher Education: Guiding Aspiring Leaders*. Louisville, CO: EDUCAUSE in partnership with JISC. Retrieved from <https://library.educause.edu/resources/2016/2/technology-in-higher-education-guiding-aspiring-leaders>
- Pomerantz, J., & Brooks, D. C. (2016). *The Higher Education IT Workforce Landscape, 2016*. Louisville, CO: ECAR. Retrieved from <https://library.educause.edu/resources/2016/4/the-higher-education-it-workforce-landscape-report-2016>
- Pomerantz, J. (Forthcoming). IT Leadership in Higher Education, 2016: The Chief Information Officer. Louisville, CO: ECAR. Retrieved from <https://library.educause.edu/resources/2016/3/the-it-workforce-in-higher-education-2016>
- Pomerantz, J. (Forthcoming). IT Leadership in Higher Education, 2016: The Enterprise Architect. Louisville, CO: ECAR. Retrieved from <https://library.educause.edu/resources/2016/3/the-it-workforce-in-higher-education-2016>
- Pomerantz, J. (Forthcoming). IT Leadership in Higher Education, 2016: The Chief Data Officer. Louisville, CO: ECAR. Retrieved from <https://library.educause.edu/resources/2016/3/the-it-workforce-in-higher-education-2016>
- Pomerantz, J. (Forthcoming). IT Leadership in Higher Education, 2016: The Chief Information Security Officer. Louisville, CO: ECAR. Retrieved from <https://library.educause.edu/resources/2016/3/the-it-workforce-in-higher-education-2016>

6. AUTHOR'S BIOGRAPHY



Jeffrey Pomerantz is a Senior Research Analyst for the EDUCAUSE Center for Analysis and Research. He is a principal investigator on a number of ECAR research projects, including the annual Faculty and Information Technology, and Student and Information Technology studies, the bi-annual studies of the IT workforce in higher education, and others. Prior to joining ECAR, Dr. Pomerantz was a tenured Associate Professor in the School of Information and Library Science at the University of North Carolina at Chapel Hill; he has also been an adjunct instructor for a significant percentage of the other Information Science programs around the world. Pomerantz is the author of the book *Metadata*, part of the MIT Press Essential Knowledge series, and developed and taught a popular Coursera MOOC about metadata. He is an Associate Editor of the Open Access Directory, a project of the Berkman Center's Harvard Open Access Project. Pomerantz earned his Ph.D. from the School of Information Studies at Syracuse University in 2003, and his Masters in Library and Information Science from Simmons College in 1997. See <https://www.linkedin.com/in/jeffreypomerantz/>