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Exploring the Function and Value of IT Advisory Boards in Higher Education

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ABSTRACT

Recent advances in artificial intelligence have created a need for diverse leadership perspectives in higher education technology programs. IT faculty and administrators at universities are held accountable to the relevancy of their programs in this ever-changing technological landscape. IT advisory boards provide a mechanism for universities to build partnerships with industry leaders to build relevant programs and provide avenues for student success both during and after graduation. This paper examines the purpose, authority, benefits, requirements, and other elements of successful advisory boards. A case study of a private university with three IT programs is used as an example of the process used to research, build, and derive benefits from an advisory board.

Keywords: advisory board, case study, assessment

INTRODUCTION

IT faculty and administrators are required to build relevant IT programs with deep connections to industry leaders and potential employers. Further, recent advances in areas such as artificial intelligence have caused an increasing need for a diversity of perspectives at the most senior levels (Berndsten, n.d.; Ganser, 2022; Smith, 2020). To address these changes head on, our nation has established advisory boards that are responsible for reporting diverse perspectives to our leaders on changes in the technological landscape as it relates to AI ("Strengthening and Democratizing the US Artificial Intelligence Innovation Ecosystem", 2023). In the same way, advisory boards can benefit higher education by aligning the common interests of disparate groups including faculty, technological leaders, students, and alumni to provide diverse perspectives of IT changes within programs offered at universities. Yet, there appears to be a significant lack of advisory boards within technology or engineering programs functioning at today's universities (Rooney & Puerzer, 2002). The purpose of this case study is to better understand the evolution of an IT academic advisory board from conception to implementation. To that end, the following research question was used to guide the investigation:

What are IT the purposes, authority levels, benefits, member requirements, and elements of successful IT advisory boards?

The method used was the analysis of the process used to adopt an advisory board at a private university. The results solidified and formed new partnerships between IT faculty, administrators, and technological leaders.

METHODS

This study relies on a case study of a private university with three IT academic programs housed within the business department: BS in Computer Information Technology, BS in Cybersecurity, and a MS in Information Technology Management. Data collection included review of secondary data including academic publications, interviews with potential board members, and a virtual meeting with all board members. The decision to adopt an academic advisory board for this case was based on a detailed program review performed two years before the board was created which identified the benefits of the board to all three academic programs.

Data collection occurred during three phases. First, research from secondary data sources including academic publications was conducted to learn more about the type and purpose of advisory boards. Second, potential board members were identified by program directors and faculty administrators. The list of board members was created based on faculty suggestions of individuals that meet the qualifications identified in the literature and have expressed interest in serving on a board. Third, the board members were interviewed and selected. Finally, data was collected during the virtual board meeting in which each board

member was able to discuss items related to the purposes of the board. Prior to this meeting, questions were sent to the board for consideration regarding matters related to program curriculum strengths and weaknesses, opportunities for student internships, certifications which should be included in the program, and general advice for the programs to become more effective.

Eisenhardt (1989) advises multiple investigators be used in case studies in order to enhance the study and data collection methodologies. To that end, two researchers independently took notes during the virtual meetings and interviews. The data was evaluated using qualitative methods in order to allow unique patterns to emerge. Following this step, the literature was enfolded by researchers comparing emerging concepts to extant literature. This process continued until theoretical saturation was reached for each construct.

RESULTS / DISCUSSION

Results of this data analysis provided important information related to advisory boards in terms of board purposes, authority, benefits, member requirements, and elements of successful boards.

Board Composition & Purpose

The Advisory Board is comprised of a group of university and community stakeholders from various local, regional, and national institutions. These individuals offer innovative advice and dynamic perspectives (Rauh et. al., 2023; Stautberg & Green, 2007) on topics related to the board. Memberships in the board consist of the following demographics:

- Alumni with degrees from technology related disciplines,
- Industry experts in the field of IT,
- Industry leaders with IT leadership experience,
- Program directors from the university,
- Academic leaders.

The focus is to align common interests in active participation, shared mission, and direct influence with students, faculty, and other board members (Raun et al., 2023; Schmidt, 2022; Taylor, et al., 2010). The top four purposes of advisory boards, according to Rooney & Puerzer, 2002, are defining the mission statement for the academic unit, serving as a liaison for job placement, reviewing content of key courses, and enhancing the visibility of the academic unit. The interests in this case were to improve the overall quality and reach of three technology programs within a private regional, university. To that end, four purposes were identified for the board members:

- Provide advice regarding subject areas and certifications with growing market demand,
- Identify knowledge and skills that will make students in the represented ID programs more employable,
- Promote opportunities for student success during their studies and after graduation,
- Provide recommendations on program content.

Board Authority

The authority and power to effect change in boards can vary based on differences in the institution and reporting structures. To that end, this study evaluated three types of boards with varying levels of authority. See table 1 for a summary of each type of board.

- Governing boards provide authority to lead the organization from the top down (Carter, 2006). Governing boards typically meet at least four times a year and committees can increase this even more ("Role and value", n.d.). In this case study, the governing board was ruled out due to the time required and to ensure the role of program director at the university was not dependent on the board for authority to make decisions.
- Working boards function, as the name suggests, as working groups of individuals who 'work' in often unpaid, voluntary roles to perform actions related to board decisions (Carter, 2006). In this case study, the working board was rejected due to unrealistic expectations required of board members.
- Advisory boards are designed to support the institution and, in this case faculty, by offering guidance. In the current case, the model was adopted as specified by Conroy, Lefever, & Witham (1996). Specifically, the board was not expected to lead all elements of the programs. The board offers support to institution administrators and faculty and

are generally less time-consuming than a governing board. A typical advisory board will meet only once or twice a year ("Role and value", n.d.).

Benefits of Advisory Boards

The advisory board offers distinct benefits to students, faculty and the program, and advisory board members.

- Student benefits: For students, board members' discussion of the successes and needs of their agency provides direction on curriculum choices and decisions to enhance the rigor of coursework. As a result, students graduate from a program that is viewed as credible and useful to community organizations and agencies.
- Faculty/program benefits: Faculty gain additional credibility with students as the board provides an efficient mechanism for learning about changes in technology as it relates to academic programs. In addition, the programs are improved as a result of input from the board.
- Board benefits: The advisory board ensures the program meets the entry level requirements for board member employment needs, as appropriate. Board members will witness their contributions resulting in program changes that directly benefit the needs of the board member. Another benefit is the benefit of being able to both report and learn from others on best practices in information technology. Finally, all board members act as ambassadors for one another promoting the IT programs at the university, guiding students to agencies represented in the board, and beyond.

Member Requirements

While the timing of meeting requirements can vary, the decision was made for this case to meet in the Fall and Spring semesters in a virtual format. During the meetings the advisory board provides strategic direction, guide quality improvement, and assesses program effectiveness (Schmidt, 2022; Taylor et. al, 2010). Members' diverse range of knowledge(s), skills and abilities inform boards that are receptive to the 'culture of accepting outside ideas' (Stautberg & Green, 2007). In the current study, board members were expected to attend and participate in meetings (held virtually), and provide input regarding topics as they pertain to the member's expertise and background.

Elements of successful boards

Successful boards consistently adopt four fundamentals: 1) communication regarding program development; 2) student representation; 3) implementation of board recommendations when possible; and 4) continuous review of board objectives (Schmidt, 2022; Taylor, et al., 2010). Topics for board meetings should include updates regarding programmatic changes, curriculum reviews, IT trends as they relate to the three target IT programs, potential for new programs, employment opportunities, and the mission and objectives are regularly reviewed (Schmidt, 2022; Taylor, et al., 2010), implementing board recommendations, when appropriate, is a prime focus.

LIMITATIONS & FUTURE RESEARCH

The present study has two limitations which also serve as opportunities for future research. First, this study reflects the experience of one university in implementing an academic advisory board. Case studies such as this one provide a method to provide valuable insights but do not offer scientific generalizability. Future studies are, therefore, needed to document the varied types and purposes of academic advisory boards used in technology related academic programs. Secondly, since the advisory board in this study is relatively immature, no conclusions have yet been made as to the effectiveness of the board in relation to improving the technology programs. Thus, future research endeavors are currently planned to track board initiatives, validate successful elements for advisory boards, and document improvements in the programs as a result of board initiatives.

CONCLUSION

In summary, advisory boards offer faculty and university leaders a powerful mechanism to ensure technology related programs are relevant, connected to industry leaders, and provide opportunities for student success both during and after graduation. A case study was used to examine the experience of one university with three technology programs in researching, building, and implementing an academic advisory board. Data was collected using qualitative methods, enfolded with the extant literature, and ultimately revealed important insights on academic advisory boards including board purposes, authority, benefits, member requirements, and elements of successful boards.

REFERENCES

1. Berndtson, O. (n.d.). What's behind the rise of the Technology Advisory Board? Odgers Berndtson. Retrieved February 21, 2023, from https://www.odgersberndtson.com/en-us/insights/whats-behind-the-rise-of-the-technology-advisory-board
2. Carver, J. (2006). *Boards that make a difference.* San Francisco, CA: John Wiley& Sons
3. Conroy, P. A., Lafever, M. M., & Withiam, G. (1996). The value of college advisory boards. Cornell Hotel and Restaurant Administration Quarterly, 37(4), 85-89.
4. Eisenhardt, K. M. (1989). Building Theories from Case Study Research. Academy of Management Review, 14(4), Article 4. https://doi.org/10.5465/amr.1989.4308385
5. Ganser, S. E. (2022). Tech Radar for the Automated Detection of Software Technology Trends / Author Sebastian Ganser, BSc. http://epub.jku.at/obvulihs/7866090
6. The Role and Value of an Advisory Board. (n.d.). Ivey Business Journal. Retrieved December 9, 2022, from https://iveybusinessjournal.com/publication/the-role-and-value-of-an-effective-advisory-board/
7. Rauh, L., Manze, M. G., & Watnick, D. (2023). Collaborating With Student Parents as Participatory Researchers in a Qualitative Study. Health Promotion Practice, 24(1), 133–143. https://doi.org/10.1177/15248399211046578
8. Rooney, D. M., & Puerzer, R. J. (2002). The smaller engineering school and its industrial advisory board: An effective partnership? 32nd Annual Frontiers in Education, 2, F1B-F1B.
9. Schmidt, G. B. (2022). Considerations When Creating a Department Advisory Board or Council. The Department Chair, 32(4), 16–17. https://doi.org/10.1002/dch.30444
10. Stautberg, S., & Green, N (2007). How an advisory board drives innovation. Boards and Directors, 52-54. Retrieved from http://www.partner-com.com/files/Design_Advisory_Board_022607.pdf
11. Strengthening and Democratizing the U.S. Artificial Intelligence Innovation Ecosystem: An Implementation Plan for a National Artificial Intelligence Research Resource. (n.d.).
12. Taylor, E., Marino, D. Rasor-Greenhalgh, S & Hudak, S. (2010). Navigating practice and academic change in collaborative partnership with a community advisory board. Journal of Allied Health, 39(3), 103-110.