

Augsburg University

Idun

Faculty Authored Articles

3-26-2019

The Management of Knowledge-Sharing in College Business Departments: A Study of the Perceptions of Business Department Faculty Regarding Knowledge-Sharing Practices

David Conrad

Augsburg University, conradd@augsb.org

George Dierberger

Augsburg University, dierberg@augsb.org

Marc Isaacson

Augsburg University, isaacson@augsb.org

Follow this and additional works at: https://idun.augsburg.edu/faculty_scholarship



Part of the [Business Commons](#), and the [Higher Education Administration Commons](#)

Recommended Citation

Conrad, D., Dierberger, G., & Isaacson, M. (2019). The Management of Knowledge-Sharing in College Business Departments: A Study of the Perceptions of Business Department Faculty Regarding Knowledge-Sharing Practices. *American Journal of Management*, 19(1). <https://doi.org/10.33423/ajm.v19i1.1337>

This Article is brought to you for free and open access by Idun. It has been accepted for inclusion in Faculty Authored Articles by an authorized administrator of Idun. For more information, please contact bloomber@augsb.org.

The Management of Knowledge-Sharing in College Business Departments: A Study of the Perceptions of Business Department Faculty Regarding Knowledge-Sharing Practices

Dr. David Conrad
Associate Professor

Dr. George Dierberger
Assistant Professor

Marc Isaacson
Assistant Professor

Despite the importance of faculty knowledge-sharing, as revealed in the review of literature, no study was found that explored the knowledge-sharing practices and beliefs among university business department faculty. For this study, university business professors were surveyed to elicit their perceptions about whether or not they believe knowledge-sharing practices are thriving within their departments. Professors rated their department knowledge-sharing practices decidedly low in three vital areas: teaching, scholarship, and culture awareness and understanding. Recommendations are made to enhance business department knowledge sharing.

INTRODUCTION

The flow of data and information is vital for organizations and numerous studies have addressed issues related to knowledge-sharing at various levels within organizations and between types of organizations. The purpose of this study is to determine if knowledge is shared by business department faculty within university business departments in the areas of teaching, scholarship, and department awareness and understanding.

REVIEW OF THE LITERATURE

Knowledge-sharing serves as the backbone of an organization, if knowledgeable organizational members are aware of knowledge needs, disseminate knowledge to others, and build an infrastructure and system to efficiently deliver knowledge when needed according to Seonghee and Boryung (2008). They describe knowledge-sharing (KS) as the process of being aware of knowledge needs and making knowledge available to others by constructing and providing a technical and systematic infrastructure.

Knowledge-sharing is a core part of a larger system of managing knowledge. Yang and Chen (2007) report that concerns about the issue of “knowledge management” (KM) within an organization have accentuated the need for more efficient and effective knowledge-sharing - that is, knowledge-sharing plays an increasingly significant role in determining the outcomes of knowledge management. In a similar vein, Ackerman (2002) reports that organizations are required to learn continuously and reinvent their

processes and products. Ackerman explains that employees' individual skills and their ability to share and generate knowledge within their communities and social networks increasingly play a vital role in the success of their organizations.

Knowledge-sharing increases the competitiveness of organizations. Fileri (2010) states that managing knowledge for improving the efficiency and effectiveness of processes and for accelerating innovations is widely recognized as a major source of sustained competitive advantage. Fileri reports that the growing importance of knowledge-sharing has fostered the development of a growing body of research in different disciplinary areas and in different sectors, and the analyses of the barriers that obstruct knowledge-flows are paramount for improving organizational performance. Dixon (2000) concurs with this belief, reporting that organizations interested in developing knowledge-sharing as a core part of their organizations' strategy must create communication systems and information networks to increase the flow of vital information. Along this same line of thinking, Hatten and Rosenthal (2001) state that the concept of knowledge management is emerging from the haze of theory and abstraction to achieve new prominence for its practical application in business. They state that companies are realizing that what they know has a direct bearing on where they're going and how fast they'll get there. They report that knowledge is a key source of competitive strength and the backbone of intelligent strategy, asking, how can a company accurately define and assemble the knowledge that really matters to it most to use that knowledge strategically? They state that this is the challenge organizations face and that savvy organizations assess, prioritize, and disseminate information and knowledge that can and should be used to help achieve strategic objectives. To this end, Hsu (2008) examines a model of organizational knowledge-sharing that improves organizational performance. Hsu argues that continually practicing effective organizational knowledge-sharing practices, as a core part of an organization's strategy, will encourage and facilitate knowledge sharing, and is hypothesized to have a positive relationship with organizational human capital (employee competencies), which is hypothesized to have a positive relationship with organizational performance.

Leistner (2010) advises organizations to get their organization's expertise out of its silos and make it flow freely among organizational members. Leistner puts the proper emphasis on non-technical issues, as knowledge is deeply connected to humans, moving away from the burned-out term "knowledge management" to the better-suited term "knowledge flow management." Concurring with Leister's assertions, Van den Hooff, and De Ridder (2004) found that knowledge-collecting influences knowledge-donating in a positive sense – the more knowledge a person collects, the more knowledge he or she is willing to also donate knowledge to others.

Building on the value of knowledge-sharing, Yang (2006) empirically explored how organizational culture with a focus on collaboration, and certain types of leadership roles significantly affect knowledge-sharing. The sample of the study was drawn from 1,200 employees working in international tourist hotels in Taiwan. The findings reveal that there was a strong and positive relationship between a collaborative culture and the effectiveness of knowledge-sharing. Also, facilitator, mentor, and innovator roles were positively correlated with knowledge-sharing effectiveness, and there was a negative relationship between a stricter monitor role and knowledge-sharing.

Despite beliefs that knowledge-sharing is crucial to an organization's success, it may not be a widespread organizational practice. Connelly, Zweig, Webster, and Trougakos (2012) found that even though there are efforts to enhance knowledge transfer in organizations, success has been elusive and it is becoming clear that in many instances, employees are unwilling to share their knowledge, even when organizational practices are designed to facilitate transfer and employees are encouraged to disseminate knowledge.

KNOWLEDGE SHARING IN ACADEMIA

Knowledge-sharing is considered to be a valued core function in academic institutions. Cheng, Ho, and Lau (2009) studied knowledge-sharing in Malaysia and state that knowledge-sharing is envisioned as a natural activity of the academic institutions as the number of seminars, conferences, and publications by academics far exceeds any other profession, signifying the eagerness of academics to share knowledge. However, they found that instead of knowledge-sharing, “knowledge hoarding” could be more prevalent in many academic institutions. In this same vein, Maponya (2005) suggests that, in order for higher education institutions to improve academic excellence and innovation in research, they need to recognize and value the knowledge created within and to encourage the sharing of best practices, lessons learned, and knowledge among academic staff. Maponya also states that trust is a significant factor in the sharing of knowledge when he examined the dynamics of knowledge-sharing, and found that a culture of low trust inhibits the sharing of knowledge within higher education.

An absence of knowledge-sharing systems and infrastructures in academic institutions are inhibitors to knowledge-sharing. Khalil and Shea (2012) state that in most of today’s academic circles, faculty knowledge is rarely shared with colleagues in the same institution in any meaningful or systematic way. Khalil and Shea investigated knowledge-sharing barriers using a data set that was collected from 76 faculty members. The analysis revealed four key knowledge-sharing barriers: bounded individual knowledge dissemination expertise is the most widely-perceived barrier to knowledge-sharing, followed by inadequate organizational capability, fear of knowledge revelation, and knowledge nature. Singularly, fear of knowledge revelation is considered to be a unique inhibitor as it influences Khalil and Shea’s three vital knowledge-sharing success measures, namely, awareness of research activities in one’s department, sharing of research knowledge with others in the institution, and satisfaction with sharing research knowledge with others in the institution. These findings contribute to the growing empirical knowledge-sharing research and provide an appropriate foundation for decision-making and policy formulation aimed at fostering knowledge-sharing effectiveness in academe. Building on these findings, Esmailpanah and Moghadam (2013) surveyed 435 faculty members to identify the factors that can positively affect faculty attitudes toward sharing knowledge. The results indicate that, organizational culture, information technology, efficacy, collaboration (teamwork), sense of altruism, interpersonal trust, and perceived relevant benefit have significant positive impact on the attitudes of faculty members toward sharing knowledge.

Tan (2016) probed deeper into uncovering the issues and factors that may impede or expedite knowledge-sharing in universities. He found in a survey of 421 college professors that, although knowledge-sharing has been acknowledged as important, universities face issues that may hinder active knowledge-sharing among its faculty members, most importantly, the absence of trust among its members or insufficient incentives rewarded to those who deserved it. The findings revealed that members' knowledge-sharing is influenced by trust, organizational rewards, organizational culture, knowledge-management system quality, openness in communication and face-to-face interactive communication, whereas research collaboration is strongly and positively influenced by knowledge-sharing.

Beyond the impact knowledge-sharing has on teaching and learning effectiveness, knowledge-sharing also influences the business performance of academic institutions. Jundale and Navale (2009) state there is tremendous value to educational institutions that develop initiatives to share knowledge to achieve business objectives. If done effectively, it can lead to better decision-making capabilities, reduced “product” development cycle time (for example, curriculum development and research), improved academic and administrative services, and reduced costs. They report that the challenge is to convert the information that currently resides in the individuals of the institution to become widely and easily available to any faculty member, staff person, or other constituent. Building on these assertions, Norris, Mason, Robson, Lefrere, and Collier (2003) discuss why new best practices in information-sharing are substantially reinventing all organizations, including academic institutions. They believe knowledge-sharing, if it sparks innovation, changes organizational efficiency, provides new sources of value, and can offer strategic differentiation in both traditional and e-learning.

PURPOSE OF THE STUDY

Despite the importance of knowledge-sharing revealed in the review of literature, no study was found that specifically explored the knowledge-sharing practices and beliefs among university business department faculty in the areas of teaching, scholarship, and department culture-awareness and understanding. While the sharing of vital information is important to enhance teaching and learning, it is also important to find out whether or not knowledge-sharing is specifically targeted at developing faculty in distinct and vital teaching, scholarship, and department culture-building capability areas. Failure to build and enhance knowledge-sharing effectiveness among faculty in the core areas of teaching, scholarship, and department culture building could negatively impact the strategic and academic goals of both universities as a whole and the various departments making up the universities.

For this study, university business professors were surveyed to elicit their perceptions about whether or not they believe knowledge-sharing practices are thriving within their departments. Business departments were chosen for this study, because the sharing of knowledge is an integral part of what business strives to achieve to create effectiveness, and is taught in management classes as well as business classes that are specifically designed to teach and enhance communication skills. The perceptions of business department faculty were analyzed to determine if there was agreement of knowledge-sharing being a core function of the business department. Low ratings by faculty could impact the department in three fundamental ways: 1. From a practical perspective, a lack of knowledge-sharing could affect the flow of vital information that can be used to enhance teaching and learning, scholarship, and culture-building effectiveness 2. From a cultural perspective, a lack of information sharing could impede and adversely affect the collaboration and unity of the department, creating silos and knowledge-hoarding, and 3. From a leadership perspective, if business department faculty believe that knowledge-sharing is thriving - and it is not shared freely by professors - there may be a belief that no further attention and work by department faculty is needed to strengthen knowledge-sharing within the department.

This study investigates the knowledge-sharing perceptions of business department faculty at four-year college business departments in Minneapolis and St. Paul, Minnesota and the immediate surrounding area, which has many colleges and universities that offer undergraduate and graduate business degrees in both traditional and nontraditional programs. Specifically, the study will investigate whether knowledge sharing is considered to be a core activity strengthening department functionality by business department faculty. The primary research question is:

What are the perceptions of business faculty regarding the practice and importance of knowledge sharing in the areas of teaching, scholarship, and department culture-building?

The research methodology will detail the procedures employed to elicit business department faculty perceptions of knowledge-sharing.

RESEARCH METHODOLOGY AND DESIGN

This study employed a survey designed to gather information from a defined population within a defined geographical area, to collect quantitative evidence pertaining to the importance of business department knowledge-sharing. Research questions were developed by the authors and business communications faculty, and subjects responded to 14 survey questions. The survey responses were analyzed by the use of Minitab to determine if there was agreement on the extent knowledge was shared in all of the surveyed business departments.

PARTICIPATION SELECTION

The population studied was fully-inclusive and involved 1,193 faculty members in business departments in all seventeen 4-year colleges in Minneapolis and St. Paul, Minnesota and the immediate surrounding area. This includes full-time (tenured, tenure-track, and contracted year-by-year faculty,

emeritus faculty, and adjunct (part-time) faculty teaching in both undergraduate business degree programs and graduate business degree programs.

SURVEY DESIGN

The survey design was kept purposely simple allowing subjects the opportunity to make choices in an efficient manner. The survey contained 14 questions and used a 5-point Likert scale allowing for levels of agreement or disagreement for each question, with 1 being strongly disagree, 3 being neither agree or disagree, and 5 being strongly agree. The first 12 questions were grouped within three constructs that are the main components of faculty effectiveness and tenure achievement: scholarship, teaching, and business department cultural awareness and understanding. The last two of the 14 questions were titled “summary questions,” which allowed for general perceptions of knowledge-sharing importance and levels of practice. The survey questions were created using a review of the literature, knowledge of faculty effectiveness and tenure achievement, and perspectives and recommendations of a dedicated panel of five tenured business and communications faculty at Augsburg University.

To ensure that a common understanding of what “knowledge” was used, surveys opened with the following paragraph: For the purpose of this study, knowledge is defined as: "The information and data shared among business department professors that will enlighten each other regarding techniques in teaching, methods to enrich and design scholarship, and ways to function more effectively in committees and task forces."

The email containing the link to the survey included a welcome and thank you for agreeing to complete the short survey on business department knowledge-sharing and also offered a guarantee that responses will remain anonymous and only be used for this study.

The statements asked in the survey were:

Statements Regarding Scholarship

1. Business faculty in our department believe scholarship knowledge sharing is important.
2. The business department has a structure that promotes knowledge sharing for the purpose of publishing.
3. Business faculty in our department freely share scholarly advice on research.
4. Business faculty encourage and support faculty who are conducting research studies.

Questions Regarding Teaching

5. Business faculty share information with other faculty regarding effective teaching practices and methods.
6. There is a system of sharing best practices in teaching within the business department.
7. The business department shares teaching knowledge as a key part of the department mission.
8. New faculty receive guidance from senior faculty regarding course management tools and technology.

Questions about Department Culture Awareness and Understanding

9. Senior faculty demonstrate a road map for success and help faculty members gain the knowledge necessary to travel their own career paths successfully.
10. Business faculty familiarize other faculty with the communication means and practices that best link department faculty.
11. Business faculty familiarize other faculty with the values, vision, and traditions of the department,
12. Business faculty assist other faculty in developing visibility and prominence across the campus.

Summary Questions

13. Business faculty believe knowledge-sharing is important.
14. Business faculty share knowledge freely with other business faculty.

SURVEY VALIDITY

The review of the literature and information provided by business and communications professors helped produce the survey design and the questions that were included in the survey. A panel of five college professors were queried for their impressions of what should be included in the survey. The professors expressed there was a need for a survey that would measure knowledge-sharing levels within scholarship, teaching, and cultural questions designed to assess the level of knowledge-sharing engagement throughout the department. Once the questions were written by the study authors, the survey was shown again to the panel and they agreed the questions included the domains of study and the content needed to elicit required information.

The survey was also beta-tested with business faculty outside of the study population. There was agreement by the beta-tested group that the content of the survey was inclusive and clear and that choices could be made without concerns of ambiguity or anonymity. The test group agreed that the constructs of teaching, scholarship, and cultural awareness and understanding were appropriate and useful in the study and that the questions posed were face-valid for eliciting responses useful for the study. Unsolicited comments from the test group also showed a deep interest in the value of the study and asked for an opportunity to review findings once the study was completed.

RESULTS AND ANALYSIS

The survey was sent to all 1,193 business faculty at 17 Minneapolis and St. Paul, Minnesota and immediately surrounding colleges and universities the second week of November, 2017; and it was sent a second time the fourth week of November, 2017 by email asking for survey completion by December 1, 2017; it was sent a third time the first week of December asking for survey completion by December 10, 2017. The reception of surveys was closed on December 10th, 2017 and no further messages were sent to faculty asking for survey completion.

A total of 89 fully-completed surveys were received. This represents a 7.5 percent response rate. Minitab was used to tabulate and analyze completed surveys. The following table shows the number of respondents by college roles.

**TABLE 1
FACULTY RESPONSE DISPERSION**

Title	Total
Adjunct Business Professor	26
Clinical Faculty- non-tenured track	1
Emeritus Professor	1
Full-time Business Professor (contract)	14
Tenure Track Business Professor	10
Tenured Business Professor	37
Tenured Professor Emeritus	1
Total Responses	89

The largest proportion of respondents was tenured professors at 37 followed by adjunct faculty at 26. Another sizeable group included full-time professors under contract. Interestingly, 26 of the 89 respondents were adjunct professors, which may mean this group has a lot to say about knowledge-sharing within the business departments they teach for on a part-time basis.

The following table shows the knowledge-sharing perceptions of professors by mean, standard deviation, and median for each question:

TABLE 2
RESPONSE MEANS, STANDARD DEVIATIONS AND MEDIANS BY QUESTION

Question	Number	Mean	Standard Deviation	Median
Q1	89	3.578	1.307	4.0
Q2	89	3.044	1.306	3.0
Q3	89	3.278	1.390	3.0
Q4	89	3.533	1.317	4.0
Q5	89	3.60	1.364	4.0
Q6	89	3.40	1.380	4.0
Q7	89	3.189	1.348	3.0
Q8	89	3.278	1.406	3.0
Q9	89	3.333	1.281	3.50
Q10	89	3.022	1.171	3.0
Q11	89	3.178	1.195	3.0
Q12	89	2.922	1.274	3.0
Q13	89	3.522	1.274	4.0
Q14	89	3.478	1.238	4.0
Total Average	89	3.311	1.303	3.464

Of the fourteen questions in the survey, the lowest scores were given to questions: number 12, (2.922), developing visibility and prominence, number 10, (3.022), communication means, number 2, (3.044), publishing; and number 7, (3.189), teaching knowledge.

The highest ratings did not vary a great deal. The four highest scores were given to: number one, (3.578), publishing – the highest rated; number 4, (3.533), research study support; number 13, (3.522), knowledge-sharing importance; and number 14, (3.478), knowledge shared freely.

Interestingly, all mean and median response ratings for the individual questions and the mean score for all questions did not exceed the 4.0 mark. Generally speaking, scores that did not hit the mean score of 4.0 can be considered somewhat low. Also, it is surprising that standard deviations were somewhat low, possibly indicating that subjects tended to respond somewhat the same for each question. It can be surmised that - when viewing all question responses – subjects had measurably common views of knowledge-sharing practices for each question.

The total mean score for all 14 questions was 3.311 and is somewhat low on a 1 - 5 Likert scale with 1 being the lowest score, 3 being middle ground of neither agree nor disagree, and 5 being the highest rating. The median average for all 14 questions was 3.464, which, like the mean is relatively low. Interestingly, the standard deviation for all 14 questions was 1.303, showing that ratings were considerably close to the mean and that there was not a wide variance in question scores for all 14 questions.

CONCLUSIONS

The research questions in this study asked for the business department knowledge-sharing perceptions from business department professors. Quite possibly, the most significant findings are the relatively low ratings provided by a significant number of subjects for each and all questions. This may mean that there are numerous faculty who believe that knowledge-sharing is somewhat restricted in their departments and can be improved. In short, this study set out to find how business professors perceive the importance of knowledge-sharing in their departments. The results simply indicate that knowledge-sharing is less than ideal according to most of the faculty, but, also shows there is much that can be done

to improve the ratings by business faculty in several areas. In this vein, what many of the faculty in the study population may believe and say in private about knowledge-sharing and “knowledge-hoarding” within their departments has been suggestively confirmed by the survey inquiry.

However, any inference about seriously dismal beliefs by faculty in the knowledge-sharing questions realm must be carefully stated, and also must be viewed with reservation, due to a less than ideal number of responding subjects. To be clear, the ratings by professors were relatively low. Future study with a larger number of business department faculty may bear out what this study reveals, or come to different conclusions.

To emphasize a major point, “knowledge” must be factual and not contain personal bias and beliefs. Knowledge shared amongst faculty in business departments must be vetted and possess valid numerical data, accurate statements and descriptions, defensible evidence, and legitimate arguments and points. Otherwise, faculty may just be passing on half-truths, innuendo, propaganda, or lies to support and promote personal agendas, or to create the illusion of possessing vast and remarkable intelligence. It may be fair to state that a “culture of lies” could develop if faculty shared bogus data and information on a perpetual basis. It is also reasonable to state that these lies could find their way to the classroom and students would learn and pass on bad information when speaking with others and doing business in their future careers. In short, the sharing of bad information could become systemic and bad information could be passed between stakeholders with the belief that the information is factual.

Quite possibly, the days of knowledge-hoarding as a means to possess and use power are over, and the new paradigm is sharing knowledge as a means to increase one’s influence. Fullwood, Rowley, and Delbridge (2013) surveyed college professors about knowledge-sharing and found that respondents had positive attitudes towards knowledge-sharing and their intentions in this area were also good. This may be related to their belief that knowledge-sharing will improve and extend their relationships with colleagues, and offer opportunities for internal promotion and external appointments. Interestingly, respondents were relatively neutral regarding the way information technology played a key role in knowledge-sharing. This study reveals that many of the respondents had a high regard for sharing knowledge and that when knowledge-sharing occurred, professors were more effective in teaching, scholarship, and enhancing the culture of their business departments.

It also appears that survey respondents suggestively believe, to a large extent, that anyone who hoards information within the business department – and does not share it with those who can benefit from it – are negatively impacting the department. Also evident were the beliefs that departments [professors and administrators] should quite possibly encourage department members to realize knowledge should be shared.

It is fair to say that all professors did not overwhelmingly choose superior ratings for each and every question. There were many respondents who openly believe that knowledge could be shared better in their departments. Quite possibly, colleges and universities should follow the communication practices of well-functioning businesses. In this vein, and in the organizational context, Leistner (2010) advises organizations to get their organization's expertise out of its silos and make it flow freely between and among individuals, teams, departments, and entire organizations, ensuring that the right information is disseminated where and when it is needed. Accordingly, college business departments may be more productive and effective when knowledge-sharing is encouraged. It appears that business departments should make it a mission to ensure that knowledge-sharing is deliberately and unselfishly practiced.

Most importantly, this study shows that a large number of respondents believe that it is essential to create a culture of knowledge-sharing. It is perceived that sharing research knowledge is crucial and that there are knowledgeable people within the various business departments, who have valuable information that will benefit both the planning and implementation of sound department educational strategies - the challenge is to draw them out and have them share what they know. Only effective collaboration and communication - which spans across the whole department - will give knowledge management the emphasis and impact it deserves.

CREATING A KNOWLEDGE SHARING CULTURE

University business departments – and, as revealed by this study - need data and information to make sound decisions and solve problems. This requires a culture that thrives on using truth and legitimacy as its guide and a culture that does not guess or assume everyone has all of the information needed to make the right choices – they investigate things and share their findings.

In a recent study done by Kim and Adler (2016), evidence revealed that individual knowledge-sharing behaviors are mainly driven by personal motivations (i.e., perceived career benefit and risk, perceived effort, and attitude toward data sharing) and perceived normative pressure. This may mean that a department-wide knowledge-sharing strategy could be aimed at addressing and satisfying these personal motivations for each business department member to collectively motivate knowledge-sharing across the department.

Smith (2005) states that, to understand the way information is constructed and travels within an organization, it is first necessary to understand the different communities that are formed within it, by assessing their motivations, and the distribution of power among them. Accordingly, this may mean that the creation of a knowledge-sharing culture is dependent on department administrators, and professors as well, to first understand the dynamics and motivations business department individuals and groups may have and then to persuasively encourage other department members to work together more effectively, to collaborate, to share their knowledge and expertise, and to gather and store useful information and feedback as they do their work.

Al-Alawi, Al-Marzooqi, and Mohammed (2007) state that there are critical factors that will help build a culture of knowledge sharing. Such factors include interpersonal trust, communication between staff, information systems, rewards, and organization structure play an important role in defining the relationships between staff and, in turn, providing possibilities to break obstacles to knowledge sharing. Building on their beliefs, business department administrators and professors can try the following:

Model knowledge-sharing - This first step is to practice knowledge-sharing at the individual level. If department faculty and administrators preach the value of sharing knowledge, they must live the philosophy. When other professors come to them looking for information, they must not act like they are giving away power – rather, they should tell them what they need to know.

Incorporate knowledge sharing technology – Business department administrators can train and educate professors in the effective use of information technology for knowledge dissemination. It is reasonable to state that knowledge-sharing is made most effective through the combination of professors with the appropriate knowledge-sharing mindset, the possession of relevant and useful knowledge, and the appropriate knowledge sharing technology to support them. This combination may rapidly bring about a knowledge sharing culture that helps meet business department goals and objectives.

Motivate knowledge-sharing – Administrators and professors can help other professors realize and appreciate that knowledge-sharing is in their best personal interest. If professors understand that sharing their knowledge helps them do their jobs more effectively; helps them retain their positions; and helps them in their research projects, personal development, and academic career progression, then knowledge-sharing may possibly become a reality.

Reward knowledge-sharing – Both administrators and professors can make a concerted effort to catch other professors sharing their knowledge and expertise and recognize them appropriately for doing so. Administrators can make knowledge-sharing part of the professor appraisal process and then pay them for their performance.

As Wang, Noe, and Wang (2011) state, knowledge-sharing is critical, as it can contribute to knowledge application, innovation, and ultimately an organization's competitive advantage. They continue, knowledge-sharing involves providing other employees with explicit knowledge (such as formulas, processes, and routines) as well as tacit knowledge (sharing experiences and know-how) to help others accomplish goals, collaborate with others to solve problems, develop new ideas, or implement policies or procedures. In this vein, it is paramount that college administrators and faculty learn how to

share knowledge and are motivated to share knowledge in an unbridled sense to create a culture of knowledge-sharing.

RECOMMENDATIONS FOR FUTURE STUDY

The findings of this study may merit further research collecting perceptions from many more respondents in knowledge-sharing in college business departments. The following research should be considered for further study and may advance knowledge in the field:

1. Survey retired business faculty to find their views of knowledge-sharing. Their insight might add a dimension from a different perspective that can be used to design knowledge-sharing education.
2. Research perceptions from business leaders regarding if knowledge-sharing is done in business organizations and departments, how it is done, and to what extent knowledge is shared. Their insight might provide perspectives that can be used to develop education and training in knowledge-sharing practices.
3. Determine if information and communication technology skills are gaining more emphasis in knowledge-sharing than traditional verbal and written knowledge-sharing practices. Results may indicate the changing needs and priorities placed on providing business faculty and business administrators knowledge-sharing education in a changing technological environment.
4. Research college business departments to determine the news, information, and data that are most critical to the department. This knowledge may benefit the design of knowledge-sharing vehicles that expeditiously deliver what business department faculty and leadership need to hear.
5. Research college business departments in other parts of the U.S. or other countries to determine perspectives on the importance and use of knowledge-sharing. Knowledge can help to prepare U.S. business students, faculty, and department leaders in knowledge-sharing customs and traditions when they visit colleges in other countries and other parts of the U.S.
6. Research knowledge-sharing in other college departments, beyond just business departments, to determine if they share knowledge to a greater extent. This knowledge may benefit the design of knowledge-sharing practices that the business departments may not know about.

SUMMARY

In summary, to get the most things done in college business departments today requires a collaborative effort. If professors try only to work alone, they will not be as successful as they would be by engaging and collaborating with others – this is termed synergy. College business departments need to make knowledge-sharing a part of the work culture and an emphasis item when new professors start in the department.

ABOUT THE AUTHORS

Dr. Dave Conrad is an associate professor of business for the Augsburg University business department. He concentrates on instructing MBA students and has taught marketing management, strategic management, leadership, and business communications. He has 30 years of business experience in sales, marketing, and sales management. He has a B.A. in Psychology, an M.A. in Management, and an Ed.D. in Organizational Leadership.

Dr. George Dierberger is a tenure-track assistant professor of business for the Augsburg University business department. He focuses his teaching on entrepreneurship, innovation, leadership, and leadership

ethics. He has over 35 years of business experience primarily with 3M in Minnesota. He has a Masters in Business Administration from Fairleigh Dickinson University, a Masters in International Business and a doctorate in Organization Behavior from the University of St. Thomas.

Mr. Marc Isaacson is an assistant professor of business for the Augsburg University business department. He concentrates his teaching in the fields of statistics, research, and economics. He has 20 years of business experience and has been with the Augsburg University business department for 16 years. Marc has a B.A. in Economics from St Olaf College and an M.S. degree in Mfg Systems Engineering from Rensselaer Polytechnic Institute.

REFERENCES

- Ackerman, M., Pipek, V., & Wulf, V. (2003). *Sharing expertise: Beyond knowledge management*. Cambridge, Mass.: MIT Press. (2003). Retrieved November 7, 2018, from <https://ebookcentral-proquest.com.ezproxy.augsburg.edu/lib/augsburgcollege/detail.action?docID=3338818>.
- Al-Alawi, A., Al-Marzooqi, N., & Mohammed, Y. (2007). Organizational culture and knowledge sharing: critical success factors. *Journal of Knowledge Management*, 11(2), 22-42.
- Cheng, M. Y., Ho, J. S. Y., & Lau, P. M. (2009). Knowledge sharing in academic institutions: a Study of Multimedia University Malaysia. *Electronic Journal of Knowledge Management*, 7(3), 313-324.
- Connelly, C. E., Zweig, D., Webster, J., & Trougakos, J. P. (2012). Knowledge hiding in organizations. *Journal of Organizational Behavior*, 33(1), 64-88.
- Dixon, N. M. (2000). *Common knowledge: How companies thrive by sharing what they know*. Harvard Business School Press: Boston, Mass.
- Esmailpanah F., & Khayat Moghadam S. (2013). Identification of factors influencing on faculty members attitudes toward knowledge sharing. *Advances in Environmental Biology*, 7(10), 3131-3136.
- Filieri, R. (2010). Overcoming knowledge sharing barriers through communities of practice: Empirical evidence from a big automotive supplier. Newca upon Tyne: Cambridge Scholars. Retrieved October 7, 2018 from <http://public.eblib.com/choice/publicfullrecord.aspx?p=1133153>.
- Fullwood, R., Rowley, J. & Delbridge, R. (2013) "Knowledge sharing amongst academics in UK universities", *Journal of Knowledge Management*, 17(1), 123-136.
- Hatten, K. & Rosenthal, S. (2001) Reaching for the knowledge edge: How the knowing corporation seeks, shares and uses knowledge for strategic advantage. AMACOM: New York.
- Hsu, I-Chieh. (2008) Knowledge sharing practices as a facilitating factor for improving organizational performance through human capital: A preliminary test. *Expert Systems with Applications* 35(3), 1316-1326.
- Jundale, S., & Navale, G. S. (July, 2009). Knowledge management in education. *Intelligent Agent & Multi-Agent Systems, 2009. IAMA 2009. International Conference on* (pp. 1-3).
- Khalil, O. E., & Shea, T. (2012). Knowledge sharing barriers and effectiveness at a higher education institution. *International Journal of Knowledge Management*, 8(2), 43-64.
- Kim, Y., & Adler, M. (2015). Social scientists data sharing behaviors: Investigating the roles of individual motivations, institutional pressures, and data repositories. *International Journal of Information Management*, 35(4), 408-418.
- Leistner, F. (2010). *Mastering organizational knowledge flow: How to make knowledge sharing work* (Wiley & SAS business series). Hoboken, N.J. Retrieved July 19, 2018 from <http://www.books24x7.com/marc.asp?bookid=34864>.
- Maponya, P. M. (2005). Fostering the culture of knowledge sharing in higher education. *South African journal of higher education*, 19(5), 900-911.

- Norris, D. M., Mason, J., Robson, R., Lefrere, P., & Collier, G. (2003). A revolution in knowledge sharing. *Educause review*, 38(5), 14-26.
- Seonghee, K., & Boryung, J. (2008). An analysis of faculty perceptions: Attitudes toward knowledge sharing and collaboration in an academic institution. *Library & Information Science Research*, 30(4), 282-290.
- Smith, P. (2005). Knowledge sharing. *The Learning Organization: An International Journal*, 12(6) 563-574
- Tan, C. (2016). Enhancing knowledge sharing and research collaboration among academics: the role of knowledge management. *Higher Education*, 71(4), 525-556.
- Van Den Hooff, B., & De Ridder, J. A. (2004). Knowledge sharing in context: the influence of organizational commitment, communication climate and CMC use on knowledge sharing. *Journal of knowledge management*, 8(6), 117-130.
- Wang, S., Noe, R., & Wang, Z. (2011). Motivating knowledge sharing in knowledge management systems. *Journal of Management*, 40(4), 978-1009.
- Yang, C., & Chen, L. C. (2007). Can organizational knowledge capabilities affect knowledge-sharing behavior? *Journal of Information Science*, 33(1), 95-109.
- Yang, J. T. (2007). Knowledge sharing: Investigating appropriate leadership roles and collaborative culture. *Tourism management*, 28(2), 530-543.