A Greeting Toward Connectivity

Welcome to the Barton School Research Connection and this, the inaugural issue. The purpose of this publication is to provide access by our business constituency and others to the research findings and knowledge creation taking place in the W. Frank Barton School of Business. Wichita State University is an urban serving research institution and the fundamental mission of the university is to provide support to the Wichita region and beyond via a number of conduits. One of those is the essential learning tool of research.

Barton School faculty members are very productive in research and research publication. Most of this research is published in academic journals where the submissions are reviewed by peers in the discipline. The norm for this review is “double blind” meaning that neither the author nor the reviewer are aware of the identity of their counterpart. This provides a degree of objectivity about the quality and currency of the research.

In academic journal form, articles published by Barton School faculty can be lengthy and tedious. Because of this, we have endeavored to cut to the chase in providing research results in an accessible form to our business constituents, articles in the Barton School Research Connection that are brief and to the point. We hope we are successful in doing so and appreciate any feedback you can provide.

In this the first issue, the lead article (Dr. Gaylen Chandler and colleagues) compares and contrasts family owned businesses with non family businesses for characteristics of opportunity identification and venture creation. The article characterizes families as working in the role of social networks in business, and the constraints and opportunities that presents. On the surface, some may wish to pass by this article, but by extension the article provides insights into cluster activities within large corporations where clusters may be conducting their activities in a pseudo family way.

Extending the social network discussion, the second article (Dr. Mehmet Barut and colleague) maps the concepts of social networks onto supply chains. The article applies four network measures from social network research to supply chains. The authors research suggests that managers should go beyond historical measures of cost and efficiency to analyze supply chains.

Using contingency theory (a broad performance related framework encompassing interactions between strategy, context, environment and organizational structure), the third article (Dr. Cindy Claycomb and colleagues) addresses supply chain integration from a “fit” perspective. The research finds that greater supply chain integration results in improvements in operational and financial performance. Stock market performance does not follow. The research also finds that product/service market environmental stability is an important consideration in designing the level of integration into the supply chain.

The fourth article (Dr. Atul Rai and colleague) addresses company use of internet financial reporting, including outsourcing investor relations and reports websites to a third party. In the recent past, there has been a migration of firms to using third party websites to provide investor relations website design, maintenance and hosting.

We recognize that many of our business constituents are also Shocker sports boosters. So, the final article of this issue (Dr. Marty Perline and colleagues) addresses whether or not public universities have a competitive advantage over private universities in sports. Using a recent ten year period in the Missouri Valley Conference, the authors find that in five of the individual sports no difference exists, while in overall winning percentage and in conference championships MVC public universities have the advantage.

We are very grateful to the authors for allowing us to distill their research for you and to Dotty Harpool who artfully developed and edited this publication. We are also grateful to Dennis Dodd and Larry Nichols of Wichita Press, Inc. for their presentation suggestions.

Dr. Douglas Hensler
Dean of W. Frank Barton School of Business at
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Family businesses may just be the first true application of the role of social networking in business. W. Frank Barton Distinguished Chair in Entrepreneurship, Gaylen Chandler has explored how the social network that is a family business creates differences between family and non-family firms during the venture creation process. Gaylen analyzed this interesting topic with James C. Hayton, Bocconi University, Milan, Italy, and Dawn R. DeTienne, of Colorado State University.

Family business is the most common form of business organization throughout the world. Previous research shows that the family firm organizational structure possesses higher levels of financial and market performance than non-family firms. However, there is a lack of research in the area of how an organizational structure (family vs. non-family) may play a role in the identification of opportunities, the venture development process, and discovery of new innovations. The family firm is an excellent example of a social network and thus how social networking may play a role in opportunity identification and business success.

There are two different perspectives to explain opportunity identification. Some researchers believe that opportunity identification is based on an entrepreneur “discovering” new opportunities. Others believe that entrepreneurs create their own opportunities. This research explored which process a family firm is likely to follow and also whether a family firm is more or less likely to use a creative process when looking for new opportunity.

The research examines whether family and non-family businesses differ in the venture development process. Does a family business create a new business differently than a non-family firm? The study explores whether a family firm uses a systematic, formal approach to venture creation or a more informal process.

Finally, Gaylen and his colleagues explore innovation across the two firm types. As family businesses possess established family-based social networks, innovation may be hampered by the “kinship” of those involved in the firms. Thus, kin in the firm may “all think alike” and may not be as likely to seek information or innovation opportunities from outside the family.

After collecting and analyzing data from over 180 family and non-family firms, the authors found that entrepreneurs from family businesses are less likely to use a creative process when identifying new opportunities and developing new ventures. But family firms do not seem to use a gradual methodical approach to new opportunities either. Rather, based on the family firm’s social network, information about new opportunities may come from many different family members. However, as the family business is based on family ties, an individual member of the family may be much less likely to engage in a business opportunity in a sudden manner,
resulting in a lost opportunity. Understanding these tendencies would allow family members to either overcome that tendency and allow more innovative ideas to reach fruition, or alternatively to recognize the limitation and seek to extract more value from less innovative ideas.

The research also shows that family firms are more likely to follow an effectual (producing or able to produce a desired effect) approach to venture development. Rather, family firms are more likely than non-family firms to formalize less quickly. This would include less formal organizational structures, strategic planning and human resource management strategies.

Finally, the research finds that family firms come up with less innovative products and services. This may be the result of a “closed” social network present within family businesses that restricts the flow of new, innovative information from outside sources.

In summary, the research reveals differences between family and non family firms in terms of entrepreneurial strategy formulation and opportunity identification. Understanding these differences and the role of social networking in entrepreneurial firms should lead to a better understanding and implementation of entrepreneurial processes.

The article “Entrepreneurial Opportunity Identification and New Firm Development Processes: A Comparison of Family and Non-Family New Ventures” was published in the International Journal of Entrepreneurship and Innovation. For more information on this research, contact Gaylen.Chandler@wichita.edu.

Dr. Gaylen Chandler, W. Frank Barton Distinguished Chair in Entrepreneurship, received his PhD from the University of Utah. His research focuses on entrepreneurship specifically in the areas of start-up strategies, opportunity identification, and family business topics. He teaches courses in business plan development, new venture feasibility, entrepreneurial finance, and corporate entrepreneurship. Dr. Chandler can be reached at (316) 978-5253 or Gaylen.Chandler@wichita.edu.
Social networking has implications in many areas of business. In this journal article, Barton Fellow Mehmet Barut and his co-author Ahmet Ozkul of the University of New Haven, explore the concept of social networking and how the analysis of how social networking works may be useful in developing successful supply chains.

As defined by the authors, a social network is “a set of actors linked by a set of social relationships.” The application of this concept to supply chain management is a relatively new research area. Much supply chain and information systems research examines how physical materials or electronic data are transferred. In this article, Mehmet and his coauthor encourage supply chain managers to include a social networks perspective in analyzing and developing the chains. The goal of the research is to present measurements that can help determine if proper alignment exists in supply chain relationships, and if firms are connected with others by actively participating in common supply chain initiatives.

This initial project in this research area by the authors selects four network measures from social network analysis. The measures are degree, density, connectedness, and centrality. The degree of a firm measures the amount of firms with which a supply chain member interrelates. Density is the amount of relationships in the supply chain compared to the maximum number of relationships possible. For example, a low density number may indicate less communication, collaboration, or interaction among all chain members. The connectedness measures whether firms in a supply chain can be reached (directly or through intermediary firms) by the other chain members. The centrality measurement relates to the firm in the supply chain that is most important or prominent for the success of the chain, not necessarily the largest firm.

In addition to these measures, the authors suggest that supply chains be analyzed in terms of the relative distance of supply chain members from a focal company. This measure addresses differences in supply chain initiatives participation, for example, a supplier can be very close (participating) in terms of material deliveries, yet very distant (not participating) in product development efforts. Included in this measurement are mean distance, variance of distances, individual relative distance, sum of relative distances, average relative distances, and aggregate relative distances to provide an overall picture of the entire supply chain from a focal firm’s perspective. If large distance differences occur in a supply chain, initiatives like product design, supplier development, and quality improvement may be negatively impacted.
Recent supply chain research indicates that measuring supply chain success should not be limited to traditional cost and efficiency measures. This research study extends that by presenting the idea that using social networking metrics and measurement tools should be included in the development and improvement of supply chains. The next step in this research stream is to develop survey instruments, the deployment of these instruments in the field, and the assessment of performance using empirical data from industry.

“Measuring Supply Chain Relationships: A Social Network Approach” was published in a recent issue of the *International Journal of Integrated Supply Management*. For more information about this research contact Mehmet.Barut@wichita.edu.

**Dr. Mehmet Barut**, received his PhD from Clemson University. His research interests include supply chain integration, demand and capacity management, and optimization. Dr. Barut specializes in teaching operations management, project management, and management science for the Barton School. Dr. Barut can be reached at (316) 978-6930 or via email Mehmet.Barut@wichita.edu.
At the Barton School, faculty members are constantly looking at how past academic research can be applied to new business situations. Barton School Marketing Professor Cindy Claycomb, Neff Family Faculty Fellow in Business, along with co-authors Karthik Lyer, of the University of Northern Iowa and Richard Germain, of the University of Louisville, utilize contingency theory, in exploring the relationship between B2B e-commerce supply chain integration and firm performance.

Contingency theory is defined as a broad framework that encompasses the interrelations and “fit” among strategy, context and environment, and organizational structure in determining performance. Cindy’s research studies two important B2B supply chain concepts. First, what are the main effects of B2B supply chain integration on performance? Then the authors explored the role of the “fit” of B2B integration with the environment in predicting performance.

Utilizing The Council of Supply Chain Management Professionals membership list, a survey was administered to strategic level managers of a wide variety of organizations. All respondents were involved in or had knowledge of supply chain management and e-commerce process integration. The wide range of firms and industries participating in the survey increases the adaptability of the findings to many organizational types.

The research findings show that the higher the firm’s level of supply chain integration, the better the financial and operational performance of that firm. However, supply integration did not predict product or service market performance.

The environment appears to play a significant role in the degree to which supply chain integration contributes to the performance measures. If a company is functioning in a stable and predictable environment, an integrated supply chain increases the financial and operational performance of that firm. Repetitive procedures (including data transfer) under routine and predictable environments suit e-business well. Thus, supply chain integration technologies such as transaction processing, routine data storage and retrieval, supply chain collaboration, and real-time information sharing enhance a firm’s performance under “normal” environmental conditions.

However not all firms work in a stable and predictable environment. A chaotic and unpredictable environment weakens the relationship of B2B supply chain integration with company performance. The more volatile the environment, the more the role of supply chain integration on performance diminishes. This may be attributable to typical integrated supply chains that lack any flexibility in procedures and supplier and customer bases. These supply chain characteristics restrict firms from responding to a changing environment.
Managers should understand that environmental uncertainty is an important consideration when developing supply chain and IT functions. Firms should explore the inclusion of flexibility in their supply chains to prepare for changes in the environment. In concert, managers should also investigate reliable forecasting tools and better environmental information collection methods to try to reduce the effect of environmental changes on their organization. Managers who know that, within turbulent environments, superior forecasting and the ability of the supply chain to respond to uncertainty, may realize performance improvement from their firm’s B2B e-commerce processes.

“B2B E-Commerce Supply Chain Integration and Performance: A Contingency Fit Perspective on the Role of Environment” was published in a recent issue of *The International Journal of Information Systems Applications*. For more information, please contact Cindy.Claycomb@wichita.edu

**Dr. Cindy Claycomb** is an award winning Barton School professor and researcher. She teaches marketing classes in areas of selling and sales force management and marketing strategy. Dr. Claycomb received her PhD from Oklahoma State University. Her current research interests include distribution channels, supply chain management, services marketing, and customer satisfaction. She can be reached at (316) 978-6938 or via email: Cindy.Claycomb@wichita.edu.
At its inception, Internet financial reporting (IFR) was projected to be an extremely useful tool for both businesses and investors. The practice of providing financial data on the Internet is now a well-established practice. Corporate web sites provide a wealth of financial information. This information is most commonly found in the “investor relations” section of a website. Companies hope that providing this information will enhance corporate image and serve as a public relations tool.

In a recent study, Atul Rai, Larry and Anita Jones Fellow in Corporate Governance, and co-author John Pendley of the University of Alabama at Huntsville review what financial information is contained on these web sites and how outsourcing is playing a role in today’s IFR practice. The study also examines how companies are now using the Internet for financial reporting and how that may differ from past practices as documented in earlier research studies.

Using Standard Industrial Classification (SIC) codes, fifty randomly selected technology firms, one hundred large firms, and fifty randomly selected commercial firms were used as the sample for this research project. The data spans from July 2006 to July 2007. The web sites for these firms were examined for the presence or absence of a list of financial related characteristics.

The study found that almost all sites place financial data in an “investor relations” section. However, internet reporting choices differed across the sample groups. The study finds that the number of firms that have websites, have websites with no financial information, and that have websites with financial information does not seem to have changed from the ten years prior to the study. Also, the incidence rate for excerpted financial data has not changed during this period. Large firms had the highest rate of providing data on the Internet (100%) followed by the technology firm sample (89.9%). The lowest incidence of IFR occurs with the commercial firm sample (70.8%). Some firms also provide links to the SEC’s website EDGAR, rather than providing details themselves. Commercial firms are most likely to link to EDGAR (35%) followed by technology firms (22.5%) and large firms (4%).

The most significant finding of the study relates to the use of outsourcing services in the delivery of IFR. Though only infrequently used in the past, the study found that more than 50 percent of the firms in the sample outsourced their investor relations web site design, maintenance and hosting. Outsourcing services in the delivery of Internet-based financial data is a relatively new phenomenon. A common feature of outsourced web sites is the use of third-party proprietary databases of financial reports and integrated Web-based tools to deliver the reports to end users. As supplying this information to users is a relatively complex task, outsourcing seems to be a good choice for firms.

Though there may be issues in regulation,
assurance, and delivery of digitized financial data, the outsourcing firms can be a good source of future technologies that may increase the value they provide. Increasing use of third-parties to provide internet financial reporting can have some negative outcomes. Investor relations websites could begin to look very similar as outsourcing firms use “boiler-plate” pages for their clients. Outsourcing could also reduce innovation in how companies supply financial information to outsiders.

Another interesting finding of the study is the occurrence rates for financial statement excerpts. The percent of firms using excerpts has not changed in last 10 years. As excerpts from financial statements without associated notes and opinions can potentially increase the risk of litigation, the researchers expectation is that the use of excerpts would have decreased over the years. The research does not support that hypothesis. In addition, most outsourced sites link to a Web service for historical stock prices and contain a calendar of relevant corporate events.

In summary, there have been some changes in companies’ use of IFR but the number of firms using the internet for financial reporting has remained stable. But it is the concept of outsourcing in the delivery of internet-based financial data may be the most significant finding of the study and the basis of further research.

The article, “Internet Financial Reporting: An Examination of Current Practice”, was recently published in the International Journal of Disclosure and Governance. For more information about this research, contact Atul.Rai@wichita.edu.

Dr. Atul Rai, Larry and Anita Jones Fellow in Corporate Governance, received his PhD from New York University’s Stern School of Business. His research focuses on capital markets, financial accounting and several other accounting sub-fields. In the classroom, he teaches courses in financial reporting. Dr. Rai also serves as a mentor to the Barton International Group (BIG), an innovative undergraduate student consulting program. 
At the Barton School, faculty members recognize that their research skills are useful in analyzing topics in many areas not just those directly related to business concepts. In one such case, a Barton School faculty member explored the questions, “Do public universities have a competitive advantage over private universities in the world of NCAA sports?” Barton School Economics Professor Martin Perline, Bloomfield Foundation Faculty Fellow in Business, reviewed this subject with WSU Sport Management Professors, G. Clayton Stoldt and Mark Vermillion.

The purpose of the research is to gauge whether public universities have an advantage over private universities within an NCAA Division I athletic conference. As all of the authors are Wichita State University faculty members, the ‘home conference” of Wichita State, the Missouri Valley Conference (MVC), is the basis of the research study. The MVC contains 6 public universities and 4 private universities and it is the nation’s second oldest NCAA Division I conference. The MVC ten team membership has remained stable since 1996 and thus makes an excellent subject for this type of research.

Based on a ten year period, the winning percentages for each of the MVC institutions in five different team sports, the overall winning percentages of the schools, and the number of championships won by each school is the basis of the analysis. The five sports analyzed were women’s basketball, volleyball, softball, men’s basketball, and baseball. Though baseball is only played by 9 of the 10 MVC schools, the other sports are played by all schools and each culminates in a conference championship.

In terms of individual sport winning percentages, only in women’s basketball was there a higher winning percentage for private schools than public schools. In volleyball, public schools dominated the conference in terms of winning percentage. Winning percentages of public and private schools in the remaining three sports were slightly higher for public schools. However, formal tests to determine if there is a difference show that there is no difference.

For overall winning percentage of league members, the public institutions possess a higher winning percentage (.523 vs. .461). Out of 50 potential championships and accounting for co-champion situations, public schools won 37.8 championships and the private institutions on 12.2. There were no sports during the ten year period where the private schools are more successful in winning the conference championship than the public schools. The best performance of any private school in terms of championships was Drake which won the women’s basketball championship 4 of the 10 years.
Though the research seems to give a slight edge to the public schools, the data does indicate that not every MVC public school is more successful than each private institution. In fact, the data illustrates that in any particular year, the private schools can experience more success than the public schools. The authors’ findings seem to illustrate the old adage, “it’s anyone’s ball game!”

“An Analysis if Competitive Athletic Success Between Public and Private Institutions: The Case of the Missouri Valley Conference” appeared in a recent volume of the Journal of Contemporary Athletics. For more information, please contact Martin.Perline@wichita.edu.

Economics Professor, Dr. Marty Perline, Bloomfield Foundation Faculty Fellow, received his PhD from Arizona State University. He is the Barton School’s authority on sports economics both in the classroom and in his research. He currently serves as Wichita State’s NCAA Faculty Representative and also represents the WSU Faculty for the Missouri Valley Athletic Conference.
The Barton School believes that students learn not just in the classroom but also through innovative programs that allow students to experience real-world business situations. One example of this "learning by doing" philosophy is the MBA International Experience program. This unique program created by the Barton School and the Berlin School of Economics and Law, Berlin, Germany recently completed its sixth year. The program is based on an entrepreneurship international project that is completed during each spring semester by 2-3 Barton School MBA students teamed with 2-3 BSEL MBA’s. The projects are conducted for a real small or medium company company (located in Wichita or Berlin) that is exploring internationalizing to the other country. Companies participating in this year’s project included two Wichita-area companies, Vornado and Galaxy Tools, and several Berlin companies. One of the 2010 Berlin companies is the largest manufacturer of frozen pizzas in Europe who is very interested in competing in the U.S. market. Students start work on the project in January when the Barton group visits Berlin. The project is completed in late March/early April when the Berlin students visit Wichita. Participating companies are then presented a formal written and oral report of the consulting team’s findings. Dr. Tim Pett is the faculty coordinator/instructor for the academic aspects of the program and Dotty Harpool is the coordinator of the international experience program. For more information about this program or if your company is interested in participating in 2011, please contact Dotty Harpool, Director of Student and Community Initiatives, Dorothy.Harpool@wichita.edu.

Barton School MBA International Experience

Wichita State University

Wichita State is the only Urban Serving Research University in the State of Kansas. Through academic and research programs, WSU works in collaboration with the government, business, non-profit and educational sectors in the greater Wichita area to develop human capital for the global economy, support educational innovation at all levels, promote public health and sustain communities. In 2009, WSU personnel were awarded more than 250 competitive sponsored research and outreach awards valued at over $43 million. Wichita State, which is classified by the Carnegie Foundation as a doctoral granting, high research institution, offers undergraduate and graduate degree programs in more than 200 areas of study.

W. Frank Barton School of Business

The W. Frank Barton School of Business at Wichita State has been the driving force behind some of the brightest minds and biggest ideas of the past 100 years. Consistent with Wichita State’s role as an urban-serving institution, the Barton School aggressively pursues regional and national prominence for its academic and professional programs. The Barton School is one of only 12% of business schools worldwide that have achieved dual AACSB accreditation and offers fourteen undergraduate and four graduate degree programs. The school is home to Center for Economic Development, the region’s leading source for business, economic and demographic information, and the nationally recognized Center for Entrepreneurship.
Barton School MBA Programs

**MBA**

WSU’s MBA, offered through the W. Frank Barton School of Business, is the oldest and most established of its kind in the state. As a part-time, evening option, students have the flexibility to work full-time while obtaining their Master’s degree. The program can be completed in as little as two years or as many as six, depending on an individual’s needs. More than 250 students are currently enrolled and the average age is 28. We are the only MBA in Wichita and South-Central Kansas to hold the distinct recognition as being an AACSB accredited program – the seal of approval for the best business schools in the world.

Program details:
- 36 to 48 hours
- Evenings, part-time
- GMAT is required; 530 is average score of applicants
- Admit twice a year -- July 1st for Fall; December 1st for Spring
- Class size ranges from 25 to 40.
- Two prerequisites are required: Business Calculus and Statistics
- For non-business undergraduates, three preparatory courses are required: MBA 800 (Financial and Managerial Accounting / Finance); MBA 801 (Marketing / Management) and Econ 800 (Macro and Micro Economics).
- Business experience is not required but preferred.
- [www.wichita.edu/mba](http://www.wichita.edu/mba) for more details.

**EMBA**

The Executive MBA degree program is the premier option for professionals to obtain the MBA credential while continuing to work. The program was developed exclusively for high-potential individuals. The EMBA program focuses on the needs of professionals as well as the demands of the globally-competitive business community.

Program details:
- 36 credit hours
- 20 months for degree completion
- Small class size of 24 accepted students
- Saturday-only (typically three Saturdays/month)
- A minimum of 5 years of practical professional work experience is required
- No pre-requisites or preparatory course required
- GMAT is not required
- Tuition includes a week-long global experience, all course materials, food on class days, and social events for students and alumni.
- [www.wichita.edu/emba](http://www.wichita.edu/emba) for more details.
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