

Is Supply Chain Management Replacing Operations Management in the Business Core Curriculum?

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ABSTRACT

This study reviews the core requirements in 447 business departments accredited by the Association to Advance Collegiate Schools of Business (AACSB) in order to understand the current status and changes of Operations Management and Supply Chain Management offerings in the business core. The field of SCM continues to grow in the 21st century in terms of both industry demand and academic offerings. After the 2000s, many institutes of higher education realized the importance of SCM and the demand for trained individuals in the area. SCM became a common elective course for many business schools. This study is interested in exploring the next stage of implementing SCM into business education curriculum. This study seeks to determine if SCM is becoming a core business class for the majority of the business schools, or, more dramatically, if SCM is on the path of replacing OM. We report our survey results in order to understand the motivation for the changes related to SCM in the business core curriculum, the student and faculty reaction to these changes, and its effect on student enrollment, internships and employment.

Keywords: *supply chain management, operations management, undergraduate core curriculum, business education, the association to advance collegiate schools of business.*

1. INTRODUCTION

Today, a large organization without a proper supply chain management (SCM) strategy cannot be envisaged. During the last 20 years, “SCM” has broadened the scope of logistics and is recently being recognized as a core business competency (Alfalla-Luque & Medina-Lopez, 2009; Korn, 2013). In response to the increasing interest and popularity, universities

continue to offer more classes in SCM than ever before (Ellram & Cooper, 2014). How to best incorporate SCM into the current undergraduate business curriculum remains a question. Institutes of higher education need to carefully consider the costs and benefits of integrating supply chain into the business core. In this study, we look at schools who have already implemented changes in their business core to accommodate more SC content, and we identify their experience during the implementation process and afterwards.

Many universities and colleges offer SCM related courses as electives for interested students. Additionally, some of these universities have started offering a fully designated undergraduate program in SCM similar to the well-established degrees in marketing, finance, operations management, and accounting. By having electives in SCM and specialized SCM degrees, business schools expect to provide new opportunities for their students to work in SCM and related areas while remaining competitive in the global education market. A third option is to make SCM a required course as a part of the business core curriculum. Having SCM as part of the business core would allow all students to have exposure to the field including those who do not plan a career in the SCM field. Adding a subject to already overly crowded business core curriculum may require dropping a “similar” subject from the core or combining SCM with a “similar” subject under single course. As the closest related subject in the business core, Operations Management is potentially the course most likely to be affected by the recent success of SCM. It is already a routine to find modern operations management courses with much more supply chain content (Chase & Zhang, 1998).

In this study, we conduct a survey of the universities/colleges that have made significant changes to

include SCM in their business core. In this paper, we attempt to answer the following questions.

- What percentage of US business schools offer OM, SCM or a combined OM & SCM related course in their curriculum?
- What is the main motivation to include SCM in the business core?
- Are their interesting similarities in the demographic data of the schools leading the charge of including additional SCM content in their business curriculum?
- What is the impact on student enrollment after this implementation?
- What was the reaction of stakeholders including students, business faculty and OM faculty towards the SCM related changes in the core curriculum?
- What were the costs of implementing these changes and where did the funding for these changes come from?
- How has the change to include more SCM in the business core affected student internships and employment?

This study is important because it is the first study to investigate the current state of SCM integration in the business core curriculum at AACSB accredited business schools and because there is an increasing need to understand the best ways to include SCM content in business schools. Our study will help business schools by bringing the real data that summarizes the general trend on how additional SCM content has been implemented into the business curriculum. One of the common reasons for new curriculum development is to synchronize with changes at the programs in other institutes (Grandzol & Grandzol, 2011). This study aims at bringing the aggregation in recent business core development in terms of SCM.

2. LITERATURE REVIEW

SCM is an interdisciplinary, process-based, and boundary-spanning activity (Bowersox, Closs, Cooper, & Bowersox, 2013; Jones, Cope, & Budden, 2009). In fact, a broad definition of SCM can include topics in traditional areas of business including marketing, finance, information systems, operations management, and accounting (Jones, Cope, & Budden, 2009). As a result, the curriculum development for SCM can be as diverse as the subject content itself (Neureuther & O'Neill, 2011). The Council of Supply Chain Management Professionals (CSCMP) (2013) defines SCM as follows.

Supply Chain Management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third-party service providers, and customers. In essence, supply chain

management integrates supply and demand management within and across companies. ... It includes all of the logistics management activities noted above, as well as manufacturing operations, and it drives coordination of processes and activities with and across marketing, sales, product design, finance, and information technology.

The definition of SCM provided by CSCMP is a very broad definition that not only includes core OM subjects such as manufacturing operations, but it is also an interdisciplinary subject requiring SCM professionals to understand and communicate well with other areas of the business, including marketing, sales, finance, information technology, etc. Thus, including SCM into the core curriculum can not only prepare students in one of the newest area of business, but also enable them to develop the interdisciplinary skills that contemporary business leaders are seeking from new graduates.

2.1 Operations Management vs. Supply Chain Management Curricula

By the end of the 1990s, the newest versions of operations management curricula included process analysis, production systems, operations strategy, and supply chain management (Chase & Zhang, 1998). SCM's addition into the OM course content in the 1990s was a continuation of the changing and innovative evolution of the Operations Management field (Chase & Zhang, 1998). In the 1970s, it was Material Requirement Planning (MRP); in the 1980s it was Total Quality Management (TQM) and Just in Time (JIT), which were added to the growing curriculum of OM (Chase & Zhang, 1998). In their paper, Chase and Zhang (1998) consider SCM as another tool in the larger OM toolbox, similar to forecasting techniques, Economic Order Quantity (EOQ), MRP, scheduling theory, and production planning. Kannan and Tan (2005) compared JIT, TQM and SCM, and claimed they were simply "alternate approaches to improving the effectiveness and efficiency of an organization's operations function" (p.153) and a part of the operations strategy of a business. Such views of SCM as a new tool in the larger OM literature are still widely shared by many in academia even though this would be considered as a very narrow definition compared to what the CSCMP described. Indeed, as late as 2006, Harland et al. claimed that SCM "is not yet a discipline, that there has been insufficient discipline and theory development" (Harland, et al., 2006, p. 730).

When Welborn and Singer conducted their research, published in 2013 on the contemporary OM textbook content, supply chain management was included in every OM textbook they analyzed. As textbook editions and curriculum changes extensively influence each other, 100% inclusion of SCM content in current OM textbooks shows that SCM and OM are related curriculums. According to some, contemporary SCM is nothing more than a simple relabeling of certain OM concepts under a SCM banner, with perhaps a broader systematic view (Johnson & Pyke, 2000). Surprisingly, Welborn and Singer (2013) noticed that only 36% of the jobs listed as OM positions included SCM as a requirement even though SCM is still most demanded skill for an OM job. They considered this as a

disparity between reality in the job market and the current curriculum of the business schools. It is likely that SCM and OM are two related and yet different fields from the business perspective. SCM and OM are related fields and this is why 36% of the jobs in OM demand a SCM knowledge and they are separate fields which explains why the remaining 64% of OM job listed do not require SCM knowledge.

2.2 Operations Management Related Subject Areas

Production management, management science, and operations research are usually subjects taught under the broad OM umbrella. Production management can be defined as managing the activities associated with transformation of commodities, materials, and services into the higher utility products (Mentzer, Stank, & Esper, 2008). OM is a more general term that incorporates operations research and management science tools in the decision making in business problems (Mentzer, Stank, & Esper, 2008). In a typical undergraduate OM course, many topics from production management, operations research, management science, and project management are included in order to use the available allocated time in the best way possible. In a recent study of management science in business schools, Palocsay and Markham (2014) draw a pessimistic view of the field and state management science has “limited visibility” at this point. In other words, management science is becoming a sub-subject of the general OM field. In this study, production management, management science, operations research, and project management are considered under the general umbrella of OM.

2.3 Supply Chain Management and Logistics

In order to meet the increasing demand for professionals in various companies there are far more logistics and SCM courses now than what was found in the 1990s (Tong, 2011). Another study counted 118 logistics courses in 77 schools from six countries (Lutz & Birou, 2013). In Tong’s study, logistics and SCM were considered as part of the same area. Also the Council of Supply Chain Management Professionals (CSCMP) (2013) SCM definition incorporates Logistics as a subsection of the larger SCM field. In contrast, another group of researchers state that “Supply chain risk management is one of the fastest growing areas in logistics research” which would equate SCM as a subarea of logistics management (Wang et al., 2014). However, there is little disagreement that logistics and SCM are very closely related areas with highly overlapping coverage. Indeed, some of the traditional logistics problems such as distribution planning are simply labeled as SCM problems (Das & Lashkari, 2015; Thormann, 2015).

Considering the limited resources of business schools in providing so many electives, combining SCM and logistics together seems a reasonable compromise in business education at this point. Many ranking organizations of business schools including U.S News categorize logistics and SCM under the same category (Ellram & Cooper, 2014). Hence, in this study, we also group logistics with SCM. For schools large enough in terms of student enrolment and program offerings, there are

separate logistics and supply chain classes as electives requiring similar prerequisites. However, none of the schools offers both a supply chain class and a logistics class in their business core curriculum at the same time. These subjects, logistics and SCM, are always combined if they are required in the core business curriculum. For instance, at PennState University, students first take a general SCM class then followed by specific courses in Transportation Systems, and Logistics System Analysis and Design. It appears that more universities are moving towards considering logistics as a specialized area of Supply Chain Management. We did not focus on looking at all the elective courses in these two areas since our focus is to determine the place of SCM in the core business area.

3. METHODOLOGY

3.1 Data Collection

This research was divided into two phases in order to develop a descriptive analysis of OM and SCM courses in the core business curriculum.

1. Examine the business core curriculum at AACSB (Association to Advance Collegiate Schools of Business) accredited school to see if they offer SCM in their business core as
 - a. A combined SCM and OM course
 - b. A single course of SCM alone without also offering OM
 - c. Two separate courses in SCM and OM.
2. Conduct a survey of the schools that have made significant changes to incorporate more SCM in their core business program to further analyze their reasons for doing so and whether or not these changes produced positive results.

In the first phase, we gathered the list of accredited U.S. business schools through the AACSB website. Even though AACSB includes U.S. and non-U.S. higher learning institutes, the number of non-U.S. institutes is much less than the number of U.S. schools accredited. Additionally, the approval process of a new curriculum from one country to another one can be different and may reflect the demand of a local job market. Although there are many higher education institutions in the U.S. that either do not seek AACSB accreditation or do not qualify, we exclude non-AACSB schools because it would be more difficult to assess the quality of their curriculum development. AACSB accreditation has become a “de facto quality standard” for business schools (Gundersen, et al., 2011). In October 2014 there were 716 accredited schools listed on the AACBC website; 510 of these 716 schools (71%) are in the U.S while the remaining 206 schools are located in 48 other countries. Appendix A gives a complete breakdown of AACSB accredited business schools by country. Among the international countries, only the UK and France have more than 20 schools with AACSB accreditation (see **Figure 1**).

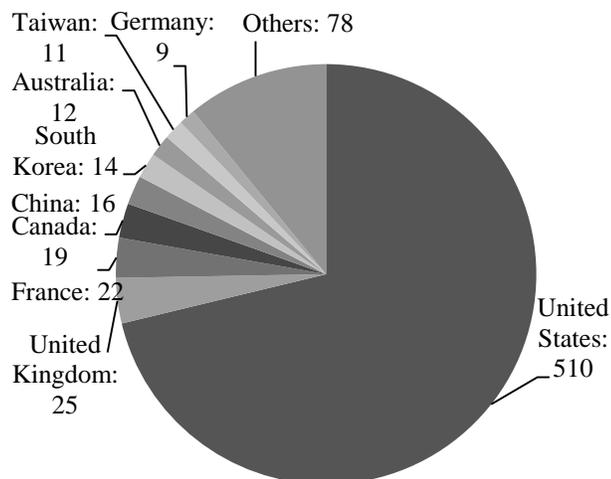


Figure 1: The number of AACSB business schools by country
 (Source: AACSB International, 2015)

Some of the 510 AACSB accredited US business schools do not offer a general management undergraduate program, and instead offer degrees such as Accounting and Marketing. Other business schools do not clearly state their core classes in the university catalog. After an exhaustive investigation of university website, we found 447 schools in the U.S. that have a clear list of core course requirements. This represents 87.6% of the AACSB accredited schools in the U.S. According to Farmer & Abdelsamad (2014), there are 1,653 business schools in the U.S., including both AACSB accredited and non-accredited institutions. Our study included 27% (or 447) of the U.S. business schools.

We created a profile for each listed business school, including whether the school offers OM, SCM, or combined course in their core business program. “Combined” refers to classes where a combined operations and supply chain management related subject is being taught. This is different from a typical operations management course where SCM is a small portion of the course subject matter. For our study, combined courses must include supply chain management in the course title. Some of the combined course may represent nothing deeper than simply a small adjustment of content. However, such changes show that the faculty at the school felt it was important to add supply chain to the title even if there was not a comprehensive change in term of the course content. In addition, some schools offer an OM or SCM related courses, even though their courses’ titles may not include the keywords of “operations management” or “supply chain management”. Courses, which have the nature of OM or SCM, are included in our analysis.

Examples for operations management related courses include management science, business process and systems, and production management. An example of the supply chain management related course is logistics. The distinction is made whenever a separate course for operations management or supply chain management in the business core is offered. For instance, if a school offers both operations management and

management science, their content is likely to be more divergent compared to a business school that has only a course of management science but no course in operations management. In the second case, there is likely to be a significant overlap between the content of the management science course and typical operations management content. For the majority of these cases, a syllabus or a catalog description of the course was examined to further clarify the content. There are also many instances, when business schools added terms like “international”, “service”, “production”, or “technology” to show their particular interest. They are also included as a part of OM or SCM courses.

The list of other names for OM courses and other names for SCM courses is provided in Appendix B and Appendix C respectively. For example, other OM names include introduction to management science, management of business process, managerial planning and decision-making, process and system management, and quantitative methods for management. Logistics is the most frequently found course title, which we include as a part of SCM. Appendix D contains the list of course names for combined OM and SCM courses.

In the second stage, we contacted the business schools from the first stage that had changes in their core business curriculum related to SCM. This stage is the continuation of the earlier stage with an aim to further understand why these schools made these changes and to determine whether these changes led to positive outcomes. Survey data collection started with identifying key personnel in each school and contacting them for the survey. Key personnel included chairs of operations management or a related area, or a chair/dean of the business school or an administrative/teaching person to whom we were directed by the school. We contacted 43 business schools during the spring 2015, and had 15 completed surveys. The response rate was 34.9%. Survey data was collected anonymously and no financial incentive was provided. We have no reason to believe the non-response rate created any bias. Survey results show similar demographics with the survey population.

3.2 Data Analysis

We used traditional survey methods to collect the data for the second stage of our study. The survey consisted mainly of five point Likert scaled questions, where 1 shows strong disagreement with the question being asked, 5 shows strong agreement, 3 shows neither disagreement nor agreement, 2 shows disagreement and 4 shows agreement. We calculated simple averages for the numerical survey questions. We later put data into cross sectional tabular format in order to further analyze the results. There were a few open-ended questions designed to gain further understanding of the issues relevant to the study. Those answers were analyzed and summarized collectively without using numerical scales.

3.3 Demographic Data

In terms of the schools surveyed and the responses received, we have business schools that vary in size: 42% of the

schools have between 1000-2000 students; 34% of the schools have more than 2000 students; whereas 25% of the remaining schools have less than 1000 students. This is fairly representative of the size of typical US business schools. 17% of the schools have Ph.D programs in Business, 67% of schools surveyed have specialized MA/MS degree in business related areas, 83% of the schools have MBA, and all of the schools have undergraduate business programs. Therefore, we have very top level schools with Ph.D. offerings as well as schools with only undergraduate programs in business. 42% of the

schools surveyed and responded have more than 60 faculty, the remaining business schools have less than 60 faculty.

4. RESULTS

Table 1 summarizes the findings from 447 AACSB accredited business schools in the United States in terms of OM and SCM offerings in their business core curriculum.

Table 1 Percentage of Universities that Offer OM, SCM, or combined OM & SCM Related Course in Their Core Curriculum.

Groups	OM Related Course in the Core	SCM Related Course in the Core	Combined OM & SCM Related Course in the Core	Frequencies	Percentage
1	YES	NO	NO	338	75.62%
2	NO	NO	NO	66	14.77%
3	NO	NO	YES	27	6.04%
4	NO	YES	NO	13	2.91%
5	YES	YES	NO	3	0.67%
Total:				447	100.00%

Universities in Group 1 comprise the majority of the universities. These universities offer a single OM course in their core curriculum, and account for 75.62% (338 universities). SCM is not included in the course title even though these OM courses are very likely to cover SCM in a few chapters as a part of their curriculum. We classify this large group of schools as the "traditional" group.

Group 2 is comprised of universities that do not require or offer operations management, supply chain management, or the combined subject in their core curriculum. This group represents 14.77% of the schools (66 universities). When we reviewed this list, these schools often fall into two major subgroups. One of them is populated by private, liberal arts, smaller (enrollment-wise) institutes that may not have enough resources to offer OM or prefer other subjects in their core business program instead of an OM course. For instance, the Department of Business, Management, and Accounting at the University of Maryland Eastern Shore, a public school, offered one undergraduate program and had 285 undergraduate and graduate students; McColl School of Business at the Queens University of Charlotte, a private school, offered one undergraduate program and had 242 undergraduate and graduate students (AACSB International, 2014). The second subgroup in Group 2 is sizeable schools that want to give more flexibility to their students in choosing their courses. Bahouth *et al.* (2014) noted that universities might omit one or two core classes to give flexibility and opportunity for their students to take slightly different set of courses. Some of the schools, which prefer more flexibility in their business core, require their students to take one quantitative subject from a list that also includes OM. For instance, College of Business and Public Administration at the Eastern Washington University, a public school, provides 9 undergraduate programs to 970 business

major students. In the upper-division courses, students can choose three courses from six available courses such as operations management, principle of marketing, and macroeconomics.

Group 3 schools offer a single combined course with both OM and SCM course in their course title. This group is 6.04% (27 universities) of all schools we researched. The title change in their course may reflect either a significant shift of SCM content or simply an adjustment to the new reality in the job market, which favors students with a SCM background. The next two groups of schools represent the most interesting cases. In Group 4, schools offer only a SCM course in the core and this course does not mention OM in their title, and Group 5 schools offer a SCM related course and an OM related course as two separate courses in their business core. Group 4 is 2.91% (13 schools) and Group 5 is only 0.67% (3 schools). Universities in Group 4 or Group 5 demonstrate a larger commitment to including supply chain concepts in the business core than do Group 3 schools. In Group 4 schools, the SCM course may include OM as a part of the curriculum, as there is a growing claim in academia and the business community that OM is a part of SCM and not vice versa. Group 5 schools offer OM and SCM as two separate courses in their business core, which is considered to be the best fit for their programs.

In **Table 2**, we look at the universities with the top 32 undergraduate programs in business according to the U.S. News Best Business Schools report. Comparing to **Table 1** and **Table 2**, it is clear that a smaller percentage of top business schools are in Group 1 (75.62% vs 68.75%), schools that require a single OM related course in their business core. However, the total percentage of schools in Groups 3, 4, and 5 is much higher for the top schools (9.62% vs 15.63%). Group 4 schools that have replaced OM with SCM have a remarkably

higher percentage (2.91 % vs 9.38 %) for the top schools as do the Group 5 schools (0.67% vs 3.13%) that offer both an OM and a SCM course. Group 2 schools that have neither OM nor SCM are at a similar percentage (15.63% vs 14.77%). We can

conclude that top schools show a stronger trend to switch to a SCM emphasis compared to the rest of the schools. This may show that the top schools are actually leading the changes, but that the change to SCM is still in its infancy.

Table 2 Percentage of Top 32 universities that offer OM, SCM, or a combined OM &SCM related course in their core curriculum.

Groups	OM Related Course in the Core	SCM Related Course in the Core	Combined OM & SCM Related Course in the Core	Frequencies	Percentage
1	YES	NO	NO	22	68.75%
2	NO	NO	NO	5	15.63%
3	NO	NO	YES	1	3.13%
4	NO	YES	NO	3	9.38%
5	YES	YES	NO	1	3.13%
Total:				32	100.00%

In the second stage, we sent surveys to the 43 schools in Group 3, 4, and 5, which have made changes related to integrating SCM into their business core curriculum. We have results from 15 schools who have responded our survey. Figure 2 shows the main motivations for the change. Survey respondents could choose as many of the multiple options as they felt applied.

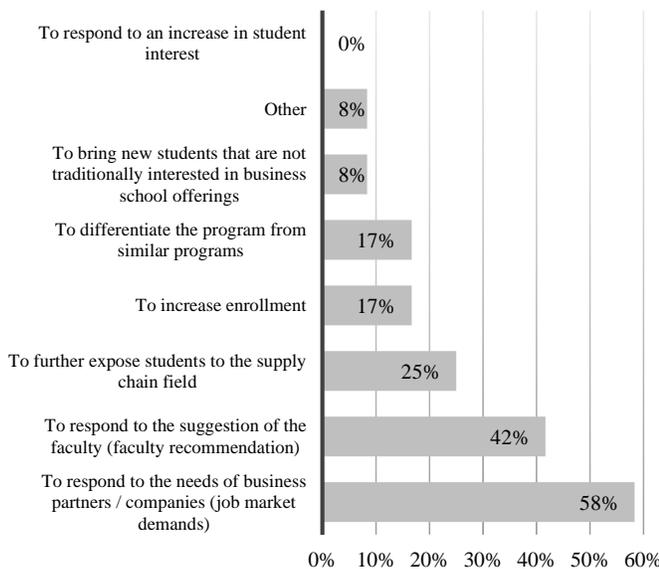


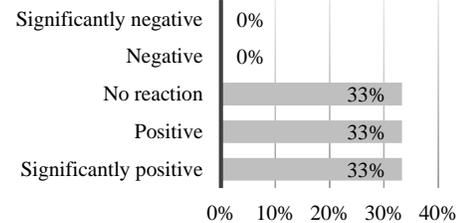
Figure 2 The main motivations for changes related to increasing the SCM content in the business core curriculum

It is interesting to see none of the respondents chose to respond to an increase in student interest. As SCM is a relatively new field, this is not surprising. It is difficult to imagine students who have graduated from a high school or who are in their freshmen or sophomore years who would know enough about the field to make requests to include more SCM in the business core at their schools. Faculty and the business partners are the main factors behind the changes with 42% and 58% of the schools reporting that these groups were main motivators for increasing the supply chain content of the business core. This shows a clear challenge of business schools related to SCM. Although there is a demand for SCM skills in

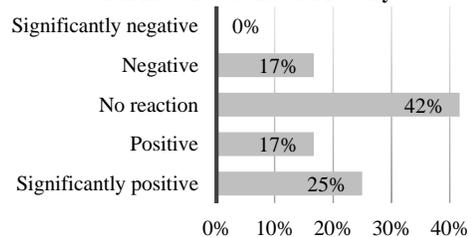
the business world, business students are less informed about the field and its increasing job opportunities. Offering an introductory class in the business core would arguably give adequate information about the SCM field before students choose their final graduation degree within the business school.

In terms of understanding the reaction to the changes related to increasing the SCM content in business curriculum, we sought input from three major stakeholders. These are students, business faculty and OM Faculty. **Figure 3** lists the reactions of these groups according to the survey respondents.

Students Reaction to the New SCM Content



Overall Reaction of the OM Faculty



Overall Reaction of the Business Faculty

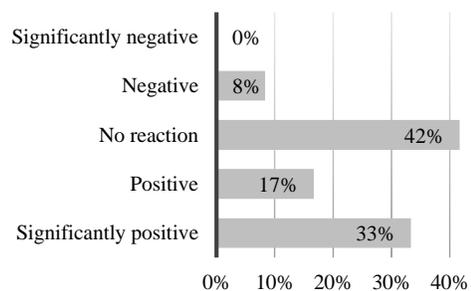


Figure 3 Reaction from students and faculty

Students in general show either no reaction or positive reaction according to survey respondents. It would appear that the business students were in general fine with the decisions that were made by their business school. The business faculty (non-OM) show less strong positive results, but the negative reaction is also limited to only 8% of the respondents who reported a negative reaction from the rest of the business faculty. Considering only 3 out of 43 schools had both SCM and OM in the business core, it is likely that most business faculty felt the changes were nothing more than updating of course content to be more relevant to the modern job market. There are 13 schools that replaced OM with SCM. For the business faculty in other disciplines this would not be seen as major changes from their perspective. Interestingly, OM faculty are the most negative among these three groups. OM and SCM are closely related fields so a large portion of the faculty would be trained to adequately teach both subjects. However, some OM faculty may feel that their jobs are threatened with the new changes or they may feel their favored subject of OM is being given a lower profile by becoming a part of the relatively new field of SCM. It is clear that OM faculty can be one of the obstacles in implementing more SCM into business curriculum. We now investigate how the business world reacted to these changes.

In terms of benefits to students in finding internships and jobs, SCM showed significant positive results. Figures 4a and 4b summarize the results.

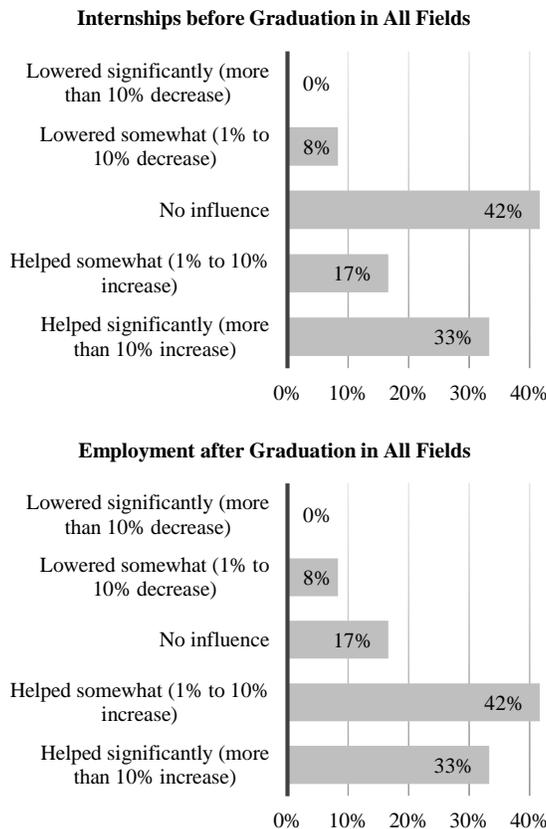
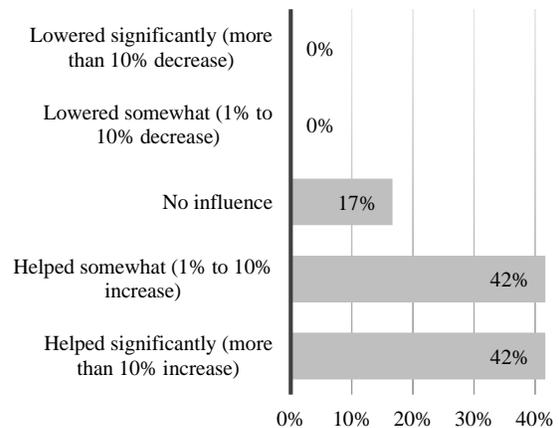


Figure 4a The effect of changes related to SCM in the business core in terms of internships and employment (all fields)

Figure 4a shows that increased SCM content was believed to have helped students to find internships before graduation or land jobs afterwards. Although we did not directly collect data on internships or jobs it is important to remember that most of the individuals polled do have access to the internship and employment data of their students. It is also interesting to note that employment after graduation (75% in the helped somewhat or helped significantly categories) was believed to be more positively affected than were internship before graduation (50% in the helped somewhat or helped significantly categories). Given that companies are trying to recruit more “well rounded” candidates in diverse areas such as SCM may help candidates whose primary jobs are in one of the traditional business area such as marketing. Internships are often more focused on using short-term skills in a primary area. Thus, this may explain the difference between the employment and internship data. Figure 4b shows that 84% of the respondents felt that increasing the SCM content in the business core helped students land internships in SCM before graduation or jobs in SCM after graduation.

Internships in the SCM Area before Graduation



Employment in the SCM Area after Graduation

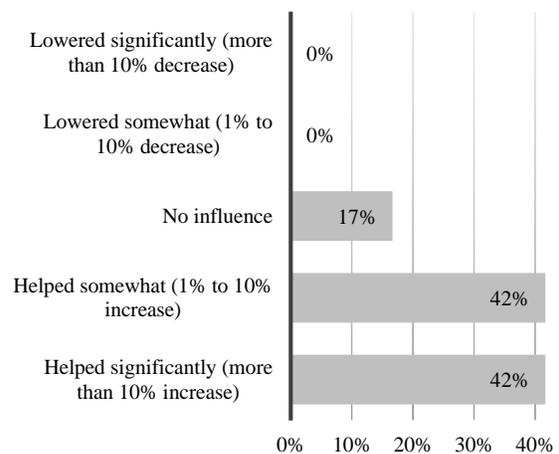


Figure 4b The effect of changes related to SCM in the business core in terms of internships and employment (SCM field)

It is also noteworthy that helped somewhat and helped significantly are equally distributed with 42% for both internship and employment data in **Figure 4b**. So the question is, if the changes are helpful, why do they not help significantly instead of just being somewhat helpful? **Figure 5** may give some explanation.

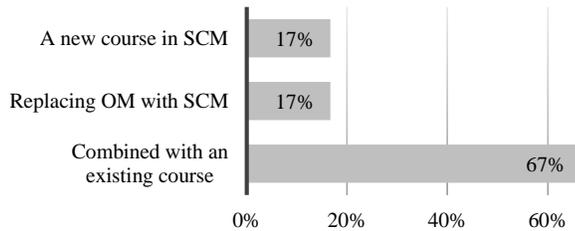


Figure 5 The format of having SCM content in the business core

Figure 5 shows that 2/3 of the schools, which responded to our survey simply combined SCM with an existing OM course. Only 17% replaced OM and 17% introduced a new course in SCM. With so little change in integrating SCM into the business curriculum, only so much benefit can be gained in terms of internships and employment in the SCM area.

Figure 6 shows increasing the SCM content in the business core did not increase the budget in 67% of the schools. In addition, in only 8% of the school the change significantly increased the budget (more than a 10% increase). This is good news for the schools considering similar changes.

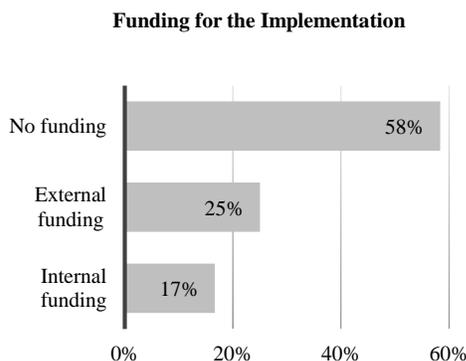
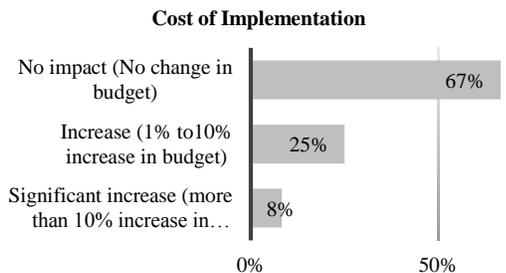


Figure 6 Cost and Funding

We also collected demographic data from the schools surveyed. **Figure 7** shows the schools surveyed included both smaller schools and much larger schools with many faculty members. Seventeen percent of the schools offer a PhD degree in business, while 17% only offer undergraduate degrees in business. We believe that SCM related changes can be implemented for practically all schools as long as there is a faculty support for these changes.

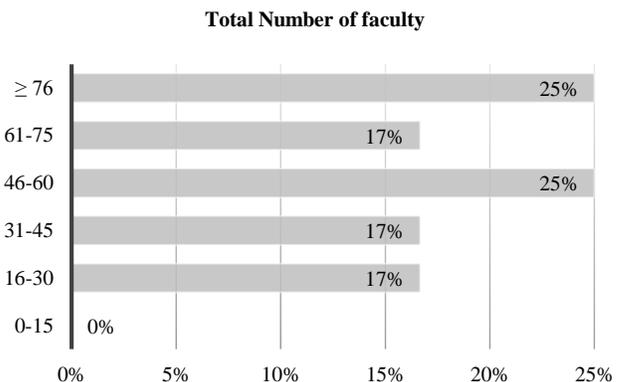
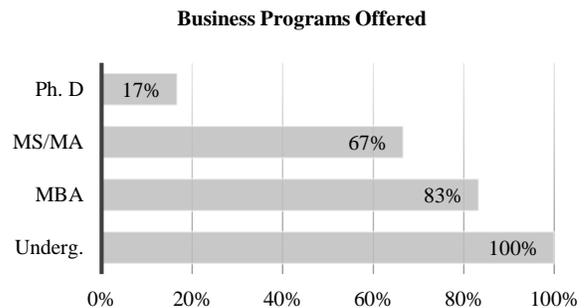
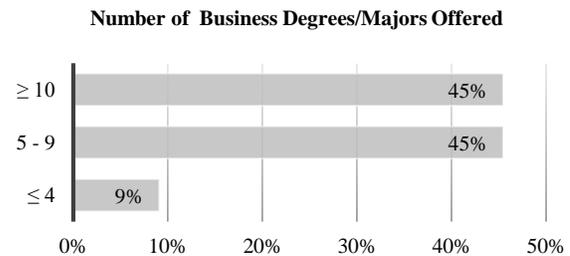
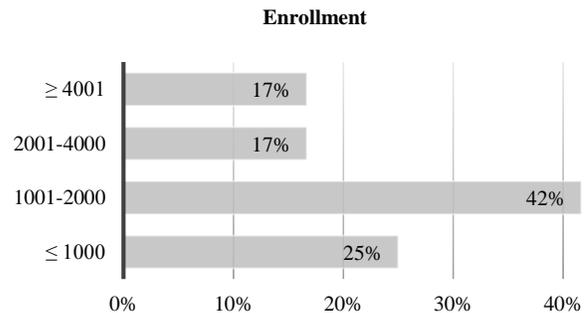


Figure 7 Demographics of the schools surveyed.

5. CONCLUSION

In this paper, we investigated 447 business schools with AACSB accreditation in the U.S., representing 87.6% of the 510 AACSB accredited business schools in the U.S. This study developed a descriptive analysis of OM and SCM courses in the core business curriculum: 75.62% of business schools offer OM only in their core curriculum; 14.77% of business schools do not offer operations management, supply chain management, or a combined subject in their core curriculum; 6.04% of business schools have a core course that combines OM and SCM, while 2.91% of business schools offer only SCM in their core curriculum and less than 1% of business schools offer both OM and SCM in their core curriculum.

We found that changing the title of the OM course to include SCM could be beneficial to most business schools as it increases the focus of the SCM content in the combined course. Students benefit in finding internships and jobs in their both primary area and in SCM area. Importantly such changes will not increase budgets significantly for the great majority of business schools. Their current faculty may be sufficient to implement these changes. However, small changes may not be enough for the SCM field in which there is growing need of highly educated students. For the future, business schools must consider including SCM as a separate required class, or offering a separate degree in SCM. This would also help to decrease the pressure for the OM faculty to cover so many subjects in a single OM class and help to decrease the potential impact for students who attempt to find jobs in traditional OM areas.

This study included only U.S. business schools with the AACSB accreditation, thus, we have screened out other business schools that offer OM, SCM and the combined subject. In total, there are about 1,653 business schools in the U.S., and 14,018 business schools in other countries (Farmer & Abdelsamad, 2014, p. 5). This study included approximately 27% (447) of business schools in the U.S. but it excluded all business schools outside the U.S. There is definitely a need for a future study to investigate international business schools to compare the similarities and differences to their U.S. counterparts in integrating supply chain management into the business curriculum.

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APPENDICES**APPENDIX A: NUMBER OF AACSB BUSINESS SCHOOLS (N=715) BY COUNTRY (OCTOBER 2014)**

United States (510, 71.4%)	Turkey (3, 0.5%)	Egypt (1, 0.2%)
United Kingdom (25, 3.5%)	United Arab Emirates (4, 0.6%)	Indonesia (1, 0.2%)
France (22, 3.1%)	Belgium (2, 0.3%)	Ireland (1, 0.2%)
Canada (19, 2.7%)	Brazil (2, 0.3%)	Israel (1, 0.2%)
China (16, 2.3%)	Chile (2, 0.3%)	Italy (1, 0.2%)
South Korea (14, 2%)	Colombia (2, 0.3%)	Kuwait (1, 0.2%)
Australia (12, 1.7%)	Denmark (2, 0.3%)	Lebanon (1, 0.2%)
Chinese Taipei (11, 1.6%)	Finland (2, 0.3%)	Malaysia (1, 0.2%)
Germany (9, 1.3%)	Japan (2, 0.3%)	Norway (1, 0.2%)
New Zealand (7, 1%)	Portugal (2, 0.3%)	Philippines (1, 0.2%)
Mexico (4, 0.6%)	South Africa (2, 0.3%)	Poland (1, 0.2%)
Netherlands (4, 0.6%)	Thailand (2, 0.3%)	Qatar (1, 0.2%)
Spain (4, 0.6%)	Argentina (1, 0.2%)	Saudi Arabia (1, 0.2%)
India (3, 0.5%)	Canada (1, 0.2%)	Slovenia (1, 0.2%)
Peru (3, 0.5%)	Costa Rica (1, 0.2%)	Venezuela (1, 0.2%)
Singapore (3, 0.5%)	Croatia (1, 0.2%)	
Switzerland (3, 0.5%)	Ecuador (1, 0.2%)	

Appendix A shows the number of AACSB accredited business schools broken down by country. Most of the AACSB accredited business schools are located in the United States, which accounts for 510 or 71.4% of all accredited schools. The second largest number of AACSB accredited business schools is in the United Kingdom, which accounts for 25 or 3.5% of all accredited business schools. 89% of the AACSB accredited business schools are located in the countries of United State, UK, France, Canada, China, South Korea, Australia, Chinese Taipei, Germany (see Figure 1).

APPENDIX B: OM LIST OF COURSE NAMES

Analyzing Business Operations
 Business Operation
 Business Processes and Systems
 Global Operations Management
 Integrated Functional Systems: Operations
 Introduction to Management Science
 Introduction to Production and Operations Management
 Introduction to Service and Operations Management
 Management of Business Process
 Management of Operation and Technology
 Management of Operations
 Management of Productions/Operations
 Management Science
 Management Science and Operations Management
 Management Science and Operations Technology
 Management, Operations & Technology Management
 Managerial Planning and Decision Making
 Managing Operation in a Competitive Environment

Managing Production and Operations
Marketing-Operations Fundamentals
Operation and Quality Management
Operation and Service Management
Operations Management and Quantitative Methods
Operations Management in Business
Operations & Project Management
Operations and Enterprise Management
Operations and Project Management
Operations and Quality Management
Operations and Technology Management
Operations Management and Strategy
Principles of Management and Operations
Principles of Operations Management
Principles of Operations Management and Introduction to Project Management
Process and Operations Management
Process and System Management
Production and Operations Management
Production Management
Production/Operations Management
Productions and Operations
Project & Operations Management
Quality and Operations Management
Quantitative Methods for Management
Service Operations Management
Technology and Operations Management

APPENDIX C: SCM LIST OF COURSE NAMES

Business Logistics Management
Global Supply Operations
Integrated Supply Chain Management
Introduction to Supply Chain
Introduction to Supply Chain Management
Logistics
Principles of Supply Chain Management

APPENDIX D: COMBINED LIST OF COURSE NAMES

Business Processes and Supply Chain Management
Integrated Operations and Supply Chain Management
Introduction to Operations and Supply Chain Management
Introduction to Supply Chain and Operations
Operations and Logistics Management
Operations and Supply Chain Management
Operations Research and Supply Chain Management
Principles of Supply Chain & Operations Management
Production, Supply Chain and Distribution Management
Supply Chain and Operations Management
Supply Chain Operations Management
Survey of Operations & Supply Management