

SALARY COMPARISON STUDY OF CENTRAL MICHIGAN UNIVERSITY'S COLLEGE OF BUSINESS ADMINISTRATION GRADUATES WHO HAVE AND HAVE NOT TAKEN SAP R/3 SUPPORTED CLASSES

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ABSTRACT

Central Michigan University signed in 1997 an alliance with SAP becoming one of the first universities to begin educating its students about the SAP R/3 software. CMU offers more than a dozen business courses that integrate enterprise resource planning (ERP) concepts into its business curriculum in finance, accounting, information systems, supply chain management, human resources, and logistics. These SAP R/3 supported courses provide students a better understanding of how technology-enabled companies operate in the real world while enhancing their knowledge, skills, and abilities in the integration of business functions. This study surveyed CMU's business graduates over the past six years to determine if there was a significant difference in starting salaries for those who had taken one or more SAP R/3 supported classes versus those graduates who had not taken any SAP R/3 supported classes. The results of the study indicate that the graduates with SAP R/3 supported classes received statistically significantly higher starting salaries than those graduates who had not taken any SAP R/3 supported classes. The average starting salary of SAP graduates was \$5,000 greater than the non-SAP graduates, and for some majors the differential was as great as \$10,000.

Key words: SAP, education alliance, salaries, curriculum.

INTRODUCTION

The purpose of this study was to determine if there was a significant difference in starting salaries for those CMU graduates who had taken one or more SAP R/3 supported classes versus those CMU graduates who had not taken any SAP R/3 supported classes. The study is based on data obtained from the Career Service's Office and the Registrar's Office. Data was collected on those students who have graduated from the College of Business Administration over the period of 1998 to 2003. The study was carried out in two phases. The first phase included data from 1998 to 2001. The second phase included data from 2002 and 2003. The Objectives of the study were to: 1) obtain information on the starting salaries of students graduating with an undergraduate degree from the College of Business Administration, 2) compare the starting salaries between the SAP graduates and non-SAP graduates, and 3) compare the starting salaries among the various majors offered by the CBA. For the purposes of this study, SAP graduates were students graduating with one or more SAP R/3 related classes and non-SAP graduates were students graduating with no SAP R/3 related classes.

The study includes all graduates who have disclosed their starting salaries in the official survey conducted by the Career Service's Office. A total of 475 graduates reported their starting salaries, employer, and job title to the Career Service's Office for the period of 1998 to 2001. For

the 2002 to 2003 period there were a total of 355 graduates who reported their salary information. Along with the assistance from the Registrar's office and access to the SAP University Alliance Program's student database, additional demographic information was obtained including GPA, graduation date, gender, major, and whether or not the graduates had taken any SAP supported classes, and the number of SAP classes they had taken.

FINDINGS

In the 1998 to 2001 phase of the study, from the sample of 475 graduates who reported their salaries to the Career Service's office, 258 graduates (54%) had taken at least one SAP class and the remaining 217 graduates (46%) had not. Among the SAP graduates, there were 188 graduates who had taken one SAP class, 57 had taken two SAP classes, and the remaining 13 had taken three or more SAP classes.

In the 2002 to 2003 phase of the study, from the sample of 355 graduates who reported their salaries to the Career Service's office, 194 graduates (54%) had taken at least one SAP class and the remaining 161 graduates (46%) had not. Among the SAP graduates, there were 162 graduates who had taken at least one SAP classes, 22 had taken two SAP classes, 7 graduates had taken three SAP classes, 2 had taken four SAP classes and 1 student had taken five SAP classes.

The sample for the 1998 to 2001 comparison consisted of 116 male and 142 female graduates with one or more SAP R/3 supported classes. There were 95 male and 122 female non-SAP graduates. The sample for the 2002 to 2003 study consisted of 76 male and 66 female graduates with one or more SAP R/3 supported classes. There were 118 male and 95 female non-SAP graduates

Salary Comparisons

The findings show that the SAP graduates enjoy a better starting salary than the non-SAP graduates. The average starting salary of SAP graduates between the 1998 to 2001 period was \$38,348, which is \$5,254 greater than the non-SAP graduates with an average starting salary of \$33,094. The average starting salary of SAP graduates between the 2002 to 2003 period was \$35,325, which is \$1,777 greater than the non-SAP graduates with an average starting salary of \$33,548.

Salary Comparisons by Gender SAP vs. Non-SAP

For the 1998 to 2001 comparison, among the male population, the average starting salary of SAP graduates was \$38,720. For the non-SAP male graduates, the average starting salary was \$35,314. The female SAP graduates earn \$6,680 more than the female non-SAP graduates. For the 2002 to 2003 comparison, among the male population, the average starting salary of SAP graduates was \$36,146. For the non-SAP male graduates, the average starting salary was \$35,679. The female SAP graduates earn \$2,729 more than the female non-SAP graduates.

Salary Comparisons by Major SAP vs. Non-SAP (1998-2001)

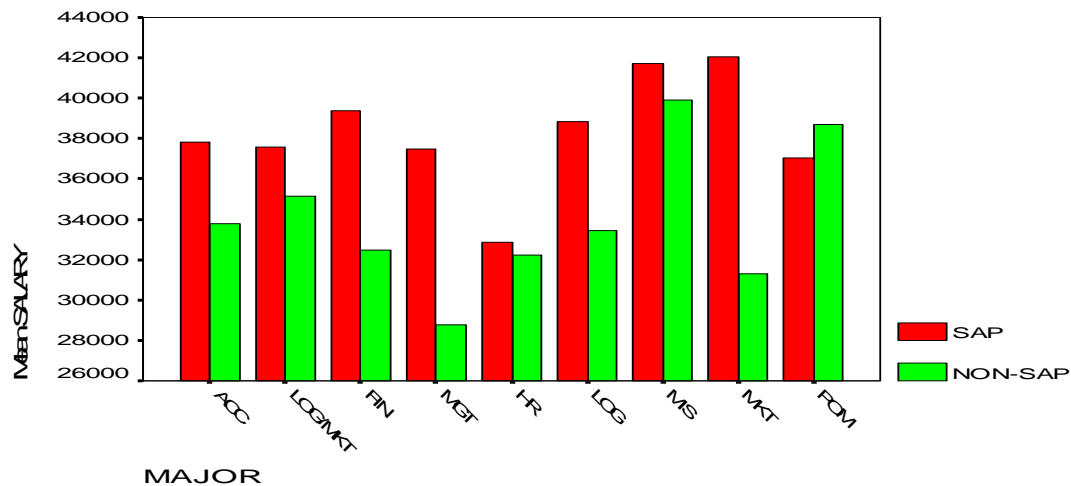
Figure 1 compares the average starting salary of SAP graduates vs. non-SAP graduates grouped by major for the 1998 to 2001 study. For all of the majors reporting their starting salaries, all of the SAP graduates were paid a higher starting salary than non-SAP graduates except for the Production Operations Management major. The results reflect that the greatest differential (\$10,729) between SAP and non-SAP graduates within a major was the Marketing major. The average starting salary for the SAP Marketing major was \$42,050 and for the non-SAP Marketing major the average starting salary was \$31,321. The Marketing major was the highest paid major for SAP graduates.

The second greatest differential (\$8,712) between SAP and non-SAP graduates within a major was the Management major. The average starting salary for the SAP Management major was \$37,495 and for the non-SAP Management major the average starting salary was \$28,783.

The third greatest differential (\$6,942) between SAP and non-SAP graduates within a major was the Finance major. The average starting salary for the SAP Finance major was \$39,400 and for the non-SAP Finance major the average starting salary was \$32,458.

The fourth greatest differential (\$5,395) between SAP and non-SAP graduates within a major was the Logistics Management major. The average starting salary for the SAP Logistics Management major was \$38,832 and for the non-SAP Logistics Management major the average starting salary was \$33,437. The only major where the non-SAP graduates' average starting salary was greater than the SAP graduate was the Production Operations Management major with a differential of \$1,608.

FIGURE 1
Salary Comparisons of Graduates by Majors
SAP vs. Non-SAP 1998 - 2001



Salary Comparisons by Major SAP vs. Non-SAP (2002 - 2003)

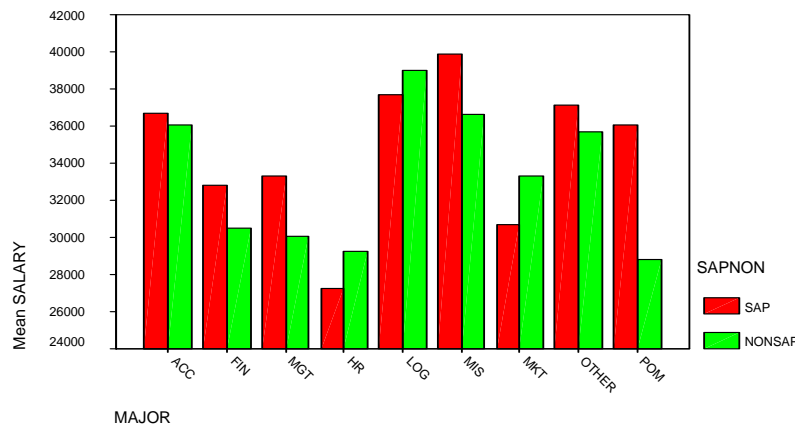
Figure 2 compares the average starting salary of SAP graduates vs. non-SAP graduates grouped by Major for the 2002 to 2003 study. For all of the majors reporting their starting salaries, the SAP graduates were paid a higher starting salary than non-sap graduates except for the Human Resources, Logistics and Marketing majors. The results reflect that the greatest differential (\$7,240) between SAP and non-SAP graduates within a major was the Production Operations Management major. The average starting salary for the SAP Production Operations Management major was \$36,040 and for the non-sap Production Operations Management major the average starting salary was \$28,000.

The second greatest differential (\$3,216) between SAP and non-SAP graduates within a major was the Management major. The average starting salary for the SAP Management major was \$33,294 and for the non-sap Management major the average starting salary was \$30,078.

The third greatest differential (\$3,211) between SAP and non-SAP graduates within a major was the Management Information Systems major. The average starting salary for the SAP Management Information System major was \$39,853 and for the non-sap Management Information System major the average starting salary was \$36,642.

The fourth greatest differential (\$2,323) between SAP and non-SAP graduates within a major was the Finance major. The average starting salary for the SAP Finance major was \$33,816 and for the non-sap Finance major the average starting salary was \$30,493. The majors where the non-SAP graduates' average starting salary was greater than the SAP graduate were the Human Resource, Logistics and the Management major with a differential of \$1,949, \$1,274 and \$2,664 respectively.

FIGURE 2
Salary Comparisons of Graduates by Majors
SAP vs. Non-SAP 2002 - 2003



Salary Comparisons by year of Graduation SAP vs. Non-SAP

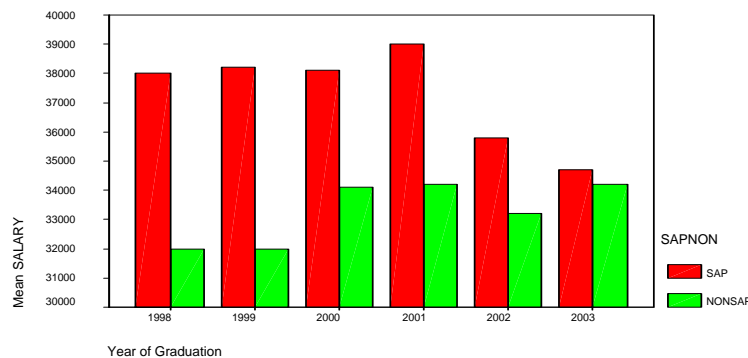
Figure 3 shows that starting salary for SAP graduates continues to remain greater than the non-SAP graduates for all of the six years 1998-2002. The greatest differential (\$6,735) between SAP and non-SAP graduates was in the year 1999. The average starting salary for the SAP 1999 graduates was \$38,520 and for the non-SAP 1999 graduates the average starting salary was \$31,785.

The second greatest differential (\$5,937) between SAP and non-SAP graduates was in the year 1998. The average starting salary for the SAP 1998 graduates was \$37,800 and for the non-SAP 1998 graduates the average starting salary was \$31,863.

The third greatest differential (\$5,151) between SAP and non-SAP graduates was in the year 2001. The average starting salary for the SAP 2001 graduates was \$39,260 and for the non-SAP 2001 graduates the average starting salary was \$34,109.

In the year 2002 although there was significant drop in the starting salaries for any major, but SAP graduates were still earning more than the non-SAP graduates. The average starting salary for the SAP 2002 graduates was \$35,800 and for the non-SAP 2002 graduates the average starting salary was \$33,200. The trend seemed to continue in the year 2003 where once again the starting salary was below that of 2002. The average starting salary for the SAP 2003 graduates was \$34,700 and for the non-SAP 2003 graduates the average starting salary was \$34,200.

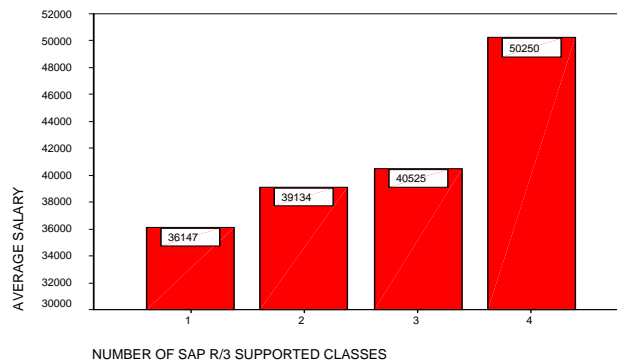
FIGURE 3
Salary Comparisons of Graduates by Year of Graduation
SAP vs. Non-SAP 1998 – 2003



Salary Comparisons by Number of SAP R/3 Supported Classes

Figure 4 portrays the average salary of graduates between 1998 and 2003 grouped by the number of SAP R/3 supported classes they have taken. The results indicate that the greater the number of SAP courses taken the greater the salary. The average salary of graduates who have taken one SAP supported class was \$36,147, for two classes taken the average salary was \$39,134, for three classes taken the average salary was \$40,525, and for four classes taken the average salary was \$50,250.

FIGURE 4
Salary Comparisons of Graduates
By Number of SAP R/3 Supported Classes 1998 - 2003



SUMMARY

The results of this study indicate that for those CMU graduates who have taken one or more SAP R/3 supported classes, these graduates have received on average a greater starting salary than those graduates who had not taken any SAP R/3 supported classes. The average starting salary of SAP graduates was \$5,254 greater than the non-SAP graduates. The average starting salary for SAP female graduates was \$6,680 greater than the non-SAP female graduates.

The greatest differential between SAP and non-sap graduates within a major was the Marketing major who experienced an average \$10,729 greater starting salary than the non-SAP Marketing major. The second greatest differential between SAP and non-SAP graduates within a major was the Management major with a differential of \$8,712, for the Finance major the differential was \$6,942, and for the Logistics Management major the differential was \$5,395. The average starting salary of SAP graduates was significantly higher than the average starting salary of non-SAP students graduating with Accounting, Finance, Management, Logistics Management, and Marketing majors.

From 1998 to 2001, the average starting salaries for SAP graduates continued to remain greater than the non-SAP graduates with the greatest differential of \$6,735 in 1999, \$5,938 in 1998, and \$5,151 in 2001.

Finally, the results indicate that as students take additional SAP course work, their average starting salary increases. The average salary of graduates who have taken one SAP supported class was \$37,904, for two classes taken the average salary was \$38,664, for three classes taken the average salary was \$42,836, and for four classes taken the average salary was \$50,000.

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