

Adapting Australia's & New Zealand's MBA Programmes to the E-Business Age

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Abstract

The primary objective of an MBA programme is to obtain top quality management training in the field of business, in a conducive environment with all the necessary resources available, and easy access to faculty. It has the most up-to-date teaching methods and the knowledge transmitted is state of the art. This paper presents the interim results of a survey which was carried out to analyse the various efforts being undertaken by MBA programmes around the globe to adapt their curricula with the advent of the e-business age. It will particularly highlight the situation in Australia and New Zealand.

Keywords

IS Curriculum, Globalization of IS

INTRODUCTION

MBA programmes around the globe provide graduate management training in the field of business/management with the option to specialize in certain business areas. The training offered is most often intended to be very practical instead of highly theoretical. The curriculum is usually divided into two parts consisting of a core part, which covers the fundamental areas of business, (some of these courses may be waived for people having previously studied the subjects in question) and an elective part, where students can take courses of special interest and perhaps specialize in a major field of business. Possible areas of interest offered range from finance, marketing and accounting to health care management, arts management, etc. (Langer 1997).

The need for changes to the content of MBA courses has grown extensively. The business world is changing rapidly every year. New business models are adding to already-existing market forces. Many of the current developments are IS/IT based – consider the possibilities offered by the World Wide Web, end user computing, data warehouses, rapid application development, etc. - and are also changing the job market. Successful management in the e-business age is demanding new skills and new knowledge. Based on the theoretical framework derived from the common body of knowledge of the average MBA programme and the market needs for special knowledge to successfully manage e-business challenges, presented in the following chapter, a number of research questions on some of the necessities to adapt MBA curricula is developed. This paper will show

whether or not MBA programmes in Australia and New Zealand have already begun to adapt their curricula to react to market needs and expectations.

MANAGEMENT SKILLS FOR THE E-BUSINESS AGE

Recently, significant efforts have been made in the IS field to put forward general recommendations for curriculum guidelines for Master Programmes in Information Systems. These efforts are being spearheaded by the joint ACM/AIS Curriculum Committee on IS Curricula. This group suggests (Gorgone et al. 1998) that the output of any new programme should create people with the following characteristics:

- Broad business and real-world perspective
- Communication, interpersonal, and team skills
- Analytical and critical thinking skills
- Integrated IT and business foundations, a core of IS, and specific skills leading to a career.

As many important business issues are nowadays – at least to some extent - IS issues it is quite clear that efforts are being required to adopt current curricula. Figure 1 shows Wigands, Picots and Reichwalds assumption of the potential for innovation, competitive markets and innovation strategies.

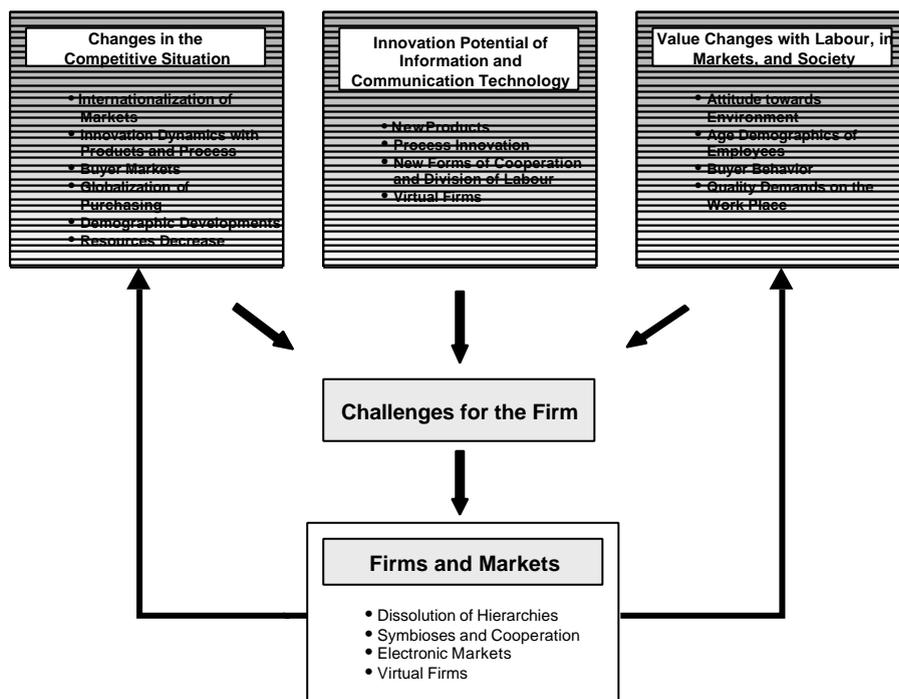


Figure 1: Changes in competitive environment and corporate structures (Wigand et al. 1997)

Nevertheless, the vast majority of general management jobs still have a strong business profile and career track (marketing & sales, finance, human resource management, etc.). Today the number of new market challenges is also placing new essential demands on the manager such as mastery of newer information and communication technologies (Wigand et al. 1997). As a result MBA curricula are also having to adapt to the challenges and requirements of the e-business age. The modern MBA graduate should be a general manager, capable of refreshing a company, communicating visions and

goals. He has to be flexible and open to new ideas and business models (IMD et al. 1998). With regard to skills and knowledge an MBA graduate should know about the relevant business potential of ERP systems and the Internet, know how to use executive information systems, have at least a strong knowledge of e-business issues and e-business based implications on different managerial areas. By collecting data from and combining the results of different research projects and surveys (Farwell et al. 1992; Baker et al. 1996; Stray et al. 1998; Embeoglou et al. 1998; Ellmaier et al. 1999; Clement et. al. 1999) we derived a checklist of prerequisites of IS/IT-skills and IS/IT related managerial topics for the e-business age. These e-business related IS/IT skills and topics – grouped and shown in figure 2 - can be seen as possible content requirements for MBA programmes in the future.

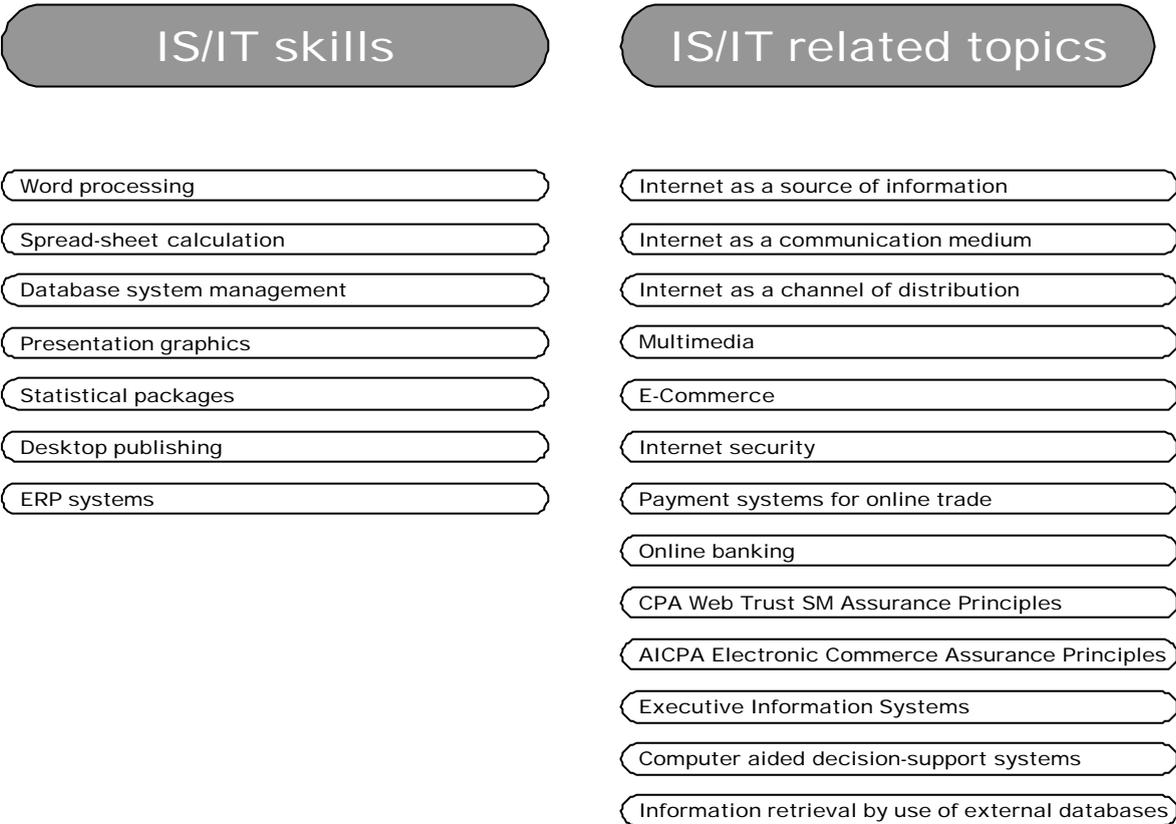


Figure 2: E-business related IS/IT skills and topics

RESEARCH QUESTIONS AND HYPOTHESES

Given the various economic changes and technological developments we assumed that the new managerial challenges and skills had to be identified by MBA programme managers and we therefore wanted to *analyze whether MBA programmes in Australia and New Zealand were already adapting their curricula or were intending to adapt their curricula with regard to IS/IT related issues in the near future.*

To analyze the situation in Australia and New Zealand we formulated the research question stated above taking into account some of the necessities and prerequisites to adapt MBA curricula in order to successfully react to market needs in the e-business age. We then operationalized our research question by deriving hypotheses to be tested in a survey covering MBA programmes in Australia and New Zealand – being part of a broader global survey.

This paper presents findings from the survey and will show whether or not MBA programmes in Australia and New Zealand are already adapting or are intending to adapt their curricula. To find answers to our research question we developed **7 hypotheses** to be tested during our study:

If the MBA programmes in Australia and New Zealand have identified the new managerial challenges and skills required for the e-business age then:

- The majority of all MBA programmes will rate as fairly high the IS/IT related influence for change of knowledge and qualification requirement for managers (**Hypothesis 1**)
- The majority of all MBA programmes will expand the use and teaching of IS/IT-skills in their curricula in the future. (**Hypothesis 2**)
- The majority of all MBA programmes will increase the coverage of Internet based applications and Internet based topics in their curricula in the future (**Hypothesis 3**)
- The majority of all MBA programmes will increase the coverage of multimedia based applications and topics in their curricula in the future (**Hypothesis 4**)
- The majority of all MBA programmes will increase the coverage of accounting and auditing related IS/IT applications and topics in their curricula in the future (**Hypothesis 5**)
- The majority of all MBA programmes will increase the coverage of finance related IS/IT applications and topics in their curricula in the future (**Hypothesis 6**)
- The majority of all MBA programmes will increase the coverage of marketing related IS/IT applications and topics in their curricula in the future (**Hypothesis 7**)

Before testing the hypotheses we felt it was important to determine whether or not each MBA programme was able and allowed to determine its own curriculum content.

RESEARCH METHOD - DESIGN OF THE STUDY

We decided that a survey with a detailed questionnaire would be the most appropriate method of collecting the required data to find answers to our research questions and to test our hypotheses. MBA programmes in Australia and New Zealand were defined as the unit of analysis of this part of the survey. Programme directors were addressed directly as far as possible.

Prior to sending out the questionnaire a pre-test was carried out with selected European MBA programme directors who were to resemble the actual respondents for the survey. On conducting

the pre-test we identified questions which had been difficult to interpret; we clarified terms and definitions; we eliminated unnecessary questions and identified the time required to go through all the questions.

The final version of the questionnaire was sent out to 46 MBA programmes in Australia (40) and New Zealand (6). By the deadline 11 completed questionnaires had been returned, giving an average response rate of 23.9%.

	Australia	New Zealand	Total
Sent out questionnaires	40	6	46
Returned questionnaires	9	2	11
Response rate	22.5%	33.33%	23.91%

Figure 3: Survey response rate

The survey also showed that all MBA programmes were able to determine the content of their curricula by themselves as seen in figure 4 (multiple answers possible). 27.27% of all schools are working together with an accrediting organization. There were no differences between the status quo and future procedures.

The curriculum is determined by	At present	In the future
The School	100%	100%
The Government	0%	0%
Accrediting Organization	27.27%	27.27%

Figure 4: Curriculum content determination

FINDINGS OF THE STUDY

Below we present some of the findings of our study concerning the hypotheses developed according to our research question. The testing of the hypotheses gave a good picture of the preparations and adoptions of MBA curricula for the electronic commerce age in Australia and New Zealand.

Hypothesis 1:

The majority of all MBA programmes will rate as fairly high the IS/IT related influence for change of knowledge and qualification requirement for managers

Statement: Information Technology is increasingly going to change the knowledge and qualification requirements for managers (on a scale from zero to 100)

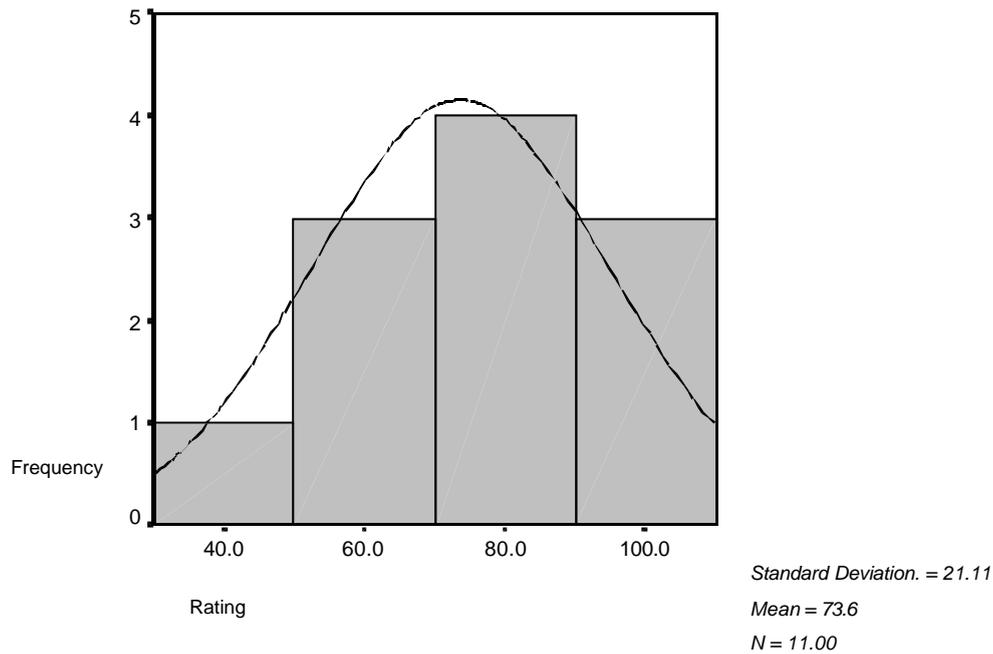


Figure 5: Importance of IS/IT for managers

As Figure 5 shows the majority of all MBA programme directors having ranked the change aspect of IS/IT for managers as fairly high with a mean of 73.6 (standard deviation of 21.11).

Hypothesis 2

The majority of all MBA programmes will expand the teaching of IS/IT-skills in their curricula in the future.

By asking what type of packaged software is currently being used or planned to be used in the MBAs curricula we tried to discover whether or not there was an enlargement in teaching IS/IT skills. The findings of the survey showed that there was an increase from present to future – with regard to the importance of the different types of packaged software - in the areas of database system management, and ERP systems, whereas there was a decrease in the areas of word processing, spread-sheet calculation, statistical packages and desktop publishing. In the area of presentation graphics there were no changes at all as seen in figure 6 and figure 7.

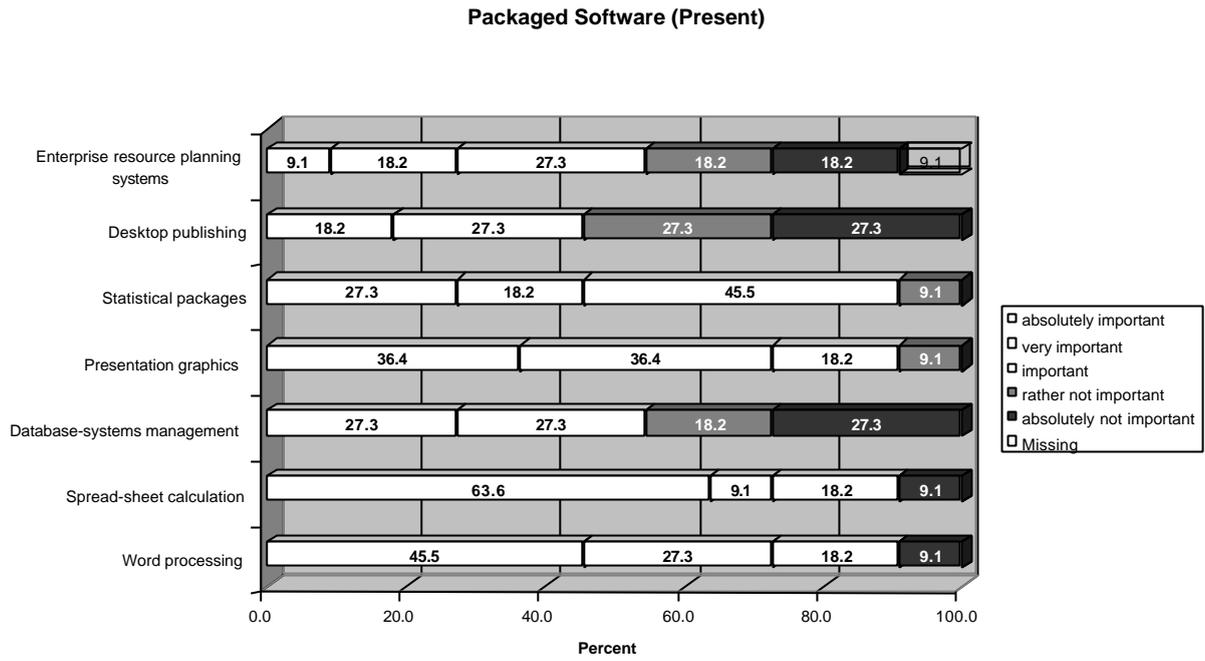


Figure 6: Importance of packaged software in the curriculum at present

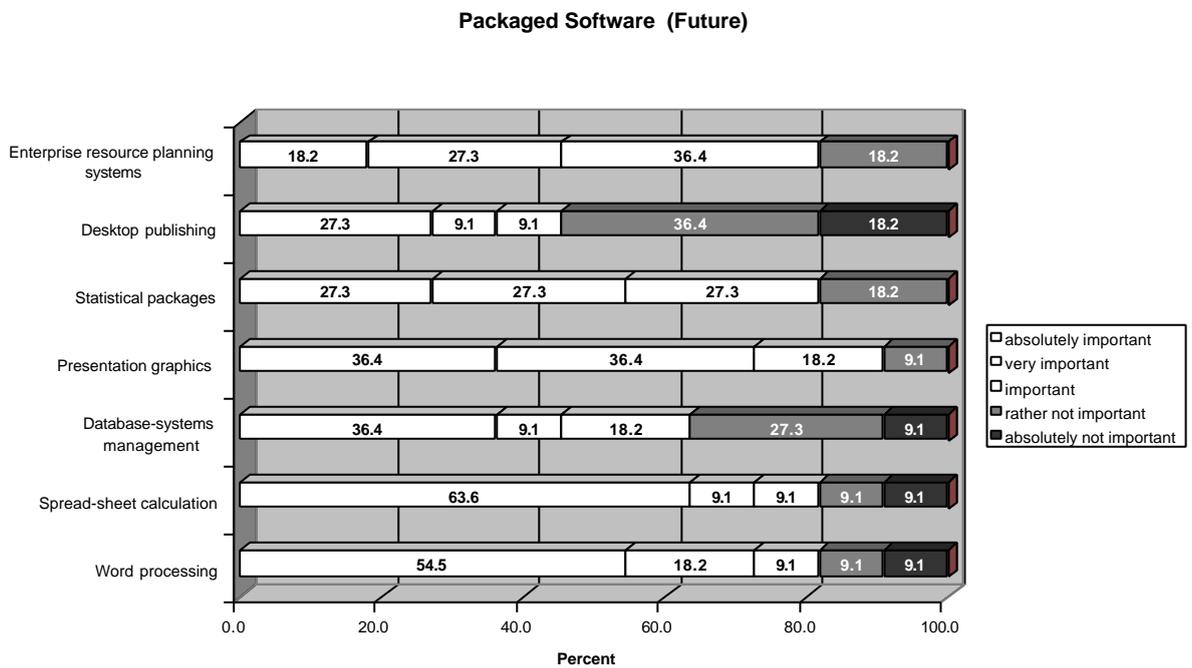


Figure 7: Importance of packaged software in the curriculum in the future

Hypothesis 3

The majority of all MBA programmes will increase the coverage of Internet based applications and Internet based topics in their curricula in the future.

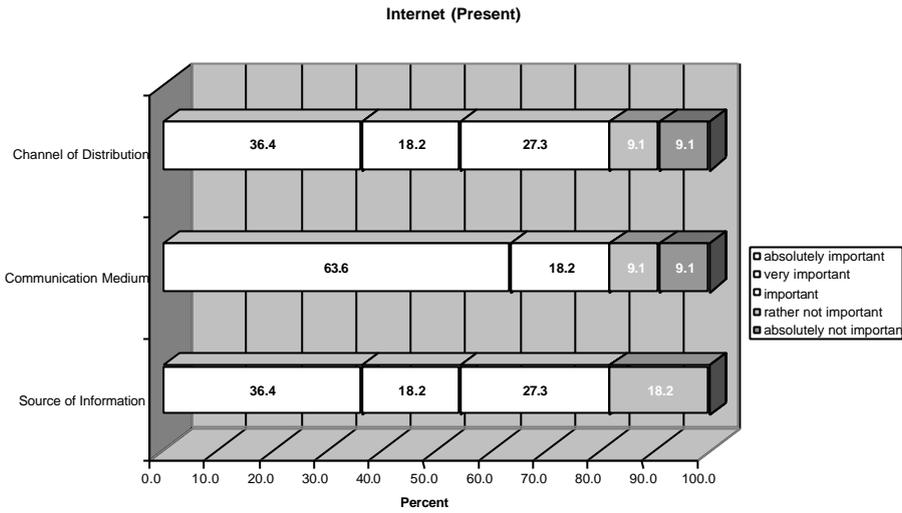


Figure 8: Importance of Internet based applications and topics in the curriculum at present

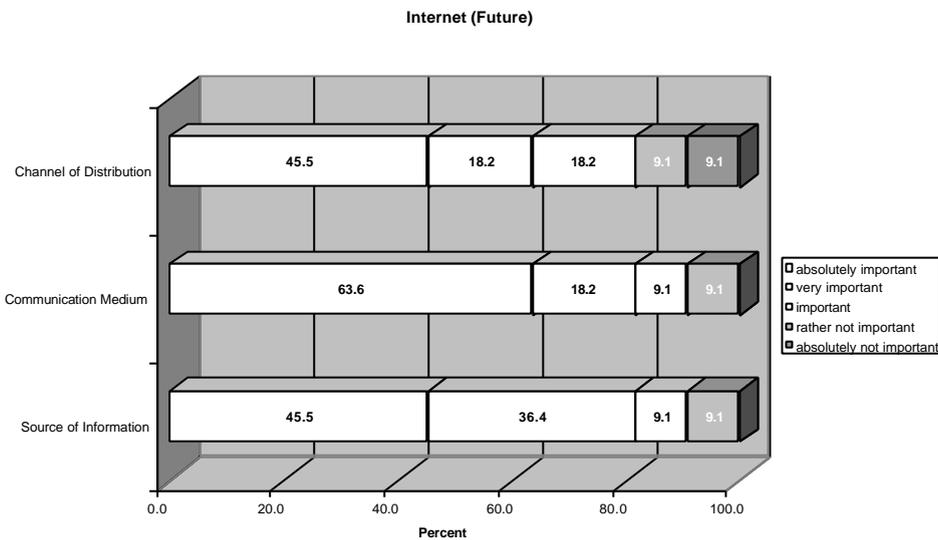


Figure 9: Importance of Internet-based applications and topics in the curriculum in the future

Our survey shows that there was a small increase in the importance of Internet-based applications and Internet based topics for the MBA curriculum from the present to the future. As can be seen in figure 8 the importance of Internet-based applications and Internet based topics was already very high at the current level.

Hypothesis 4

The majority of all MBA programmes will increase the coverage of multimedia based applications and topics in their curricula in the future.

By asking about the role of multimedia in the curricula of MBAs the findings of the survey show that there was a significant increase from the present to the future. The overall importance changed from 45.45% (present) to 72.73% (future).

Hypothesis 5

The majority of all MBA programmes will increase the coverage of accounting and auditing related IS/IT applications and topics in their curricula in the future.

In the field of accounting and auditing the importance of IS/IT related applications and topics for the curriculum has been slightly increasing. With regard to the general use of IS or executive information systems there is no change at all between the present and future rating with a ranking of importance of 90.9%. The CPA and AICPA principles are currently rather unimportant (both 90.9%) for the MBA curriculum with a small increase in importance in the future (CPA up to 18.2%; AICPA up to 27.3%).

Hypothesis 6

The majority of all MBA programmes will increase the coverage of finance related IS/IT applications and topics in their curricula in the future.

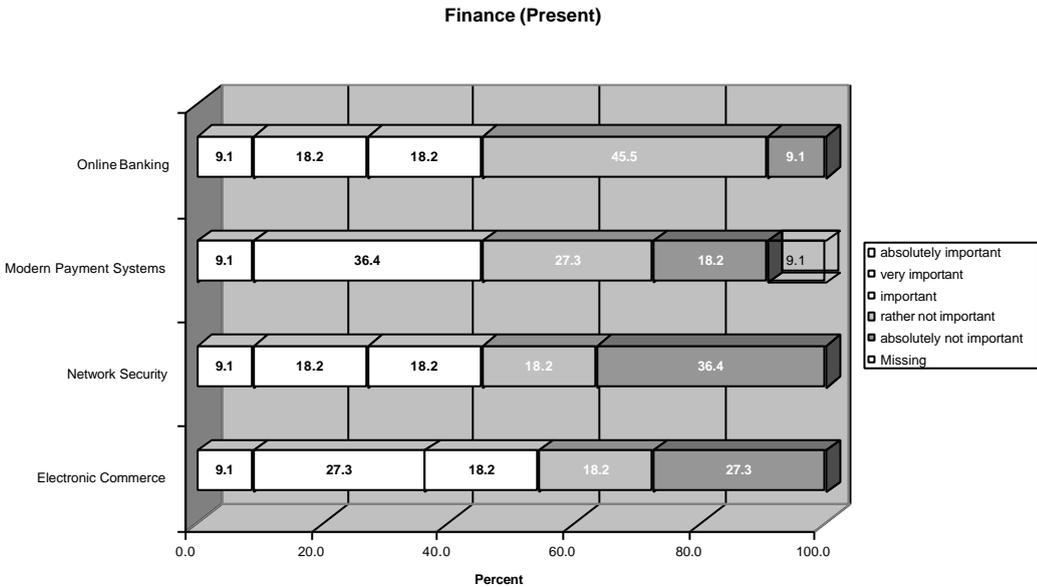


Figure 10: Importance of Finance based applications and topics in the curriculum at present

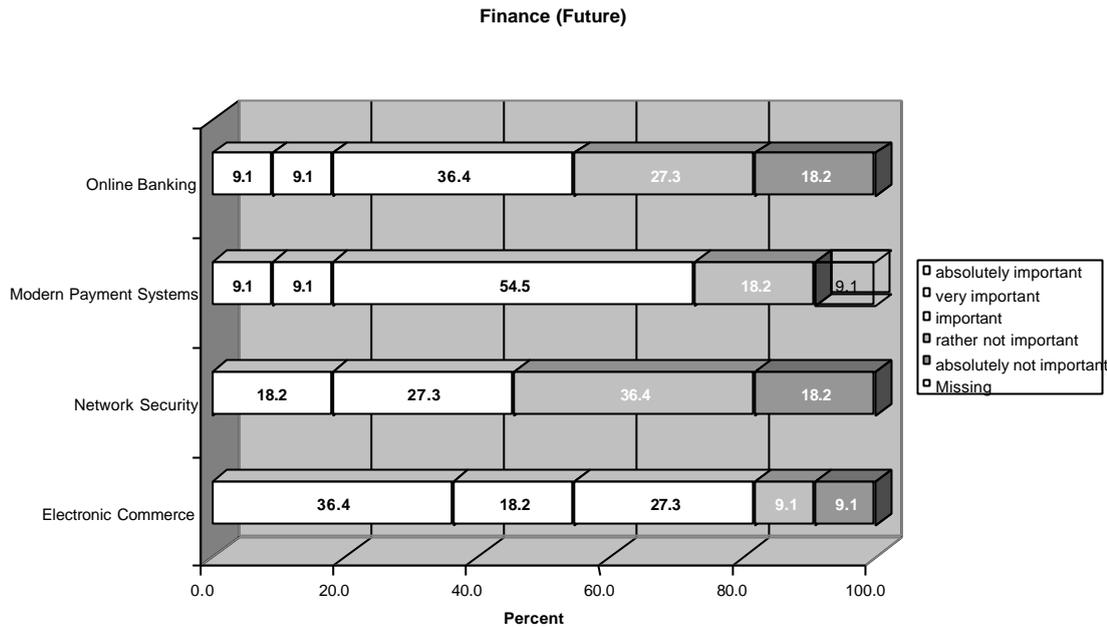


Figure 11: Importance of Finance-based applications and topics in the curriculum in the future

As can be seen in figure 10 and figure 11 there is a small increase in the importance of Online Banking (45.5% up to 54.5%), a substantial increase in the importance of modern payment systems (45.5% to 72.7%), and Electronic Commerce (54.5% to 81.8%). There is no overall change in the importance of network security for the MBA curriculum (present and future at 45.5%).

Hypothesis 7

The majority of all MBA programmes will increase the coverage of marketing related IS/IT applications and topics in their curricula in the future.

With regard to the importance of computer aided decision-support systems for the MBA curriculum there was no change from present to future (rating the importance at 63.8% at present and in the future). When it comes to the use of information retrieval in the area of marketing the findings showed an increase in importance from 54.5% at present to 72.7% in the future.

CONCLUSIONS

During the testing of our seven hypotheses five of them were confirmed – some of them showed indifferent results - as can be seen in Figure 12, giving us quite a clear answer to our research question. This study shows that there is at least some effort to change and adapt MBA curricula in Australia and New Zealand in the IS/IT related areas. As regards the IS/IT skills the findings presented a very heterogeneous picture. Some of the skills are becoming more important (usage of ERP systems and database management), some are becoming less important (usage of so- called office applications). As other surveys have already shown a majority of MBA programmes believe that these skills should not be taught as part of the programme at all. With a lot of other important IS/IT related topics appearing on the scene there could be a further shift towards downsizing the teaching of IS/IT skills in MBA programmes in the future. With regard to all Internet related topics

the findings of the survey confirmed the assumption that there was a significant change in the importance of curriculum content.

	confirmed	not confirmed
Hypothesis 1	X	
Hypothesis 2		X
Hypothesis 3	X	
Hypothesis 4	X	
Hypothesis 5	X	
Hypothesis 6	X	
Hypothesis 7		X

Figure 12: Hypotheses testing summary

As the survey has only 11 respondents the overall conclusions for the hypotheses could also be seen as very unconvincing. In total the findings can give a good picture of the current state of MBA programmes. A very interesting aspect which is not part of our research design is the question of integration of the new content in the MBA curriculum core: electives. By expanding our research project we are trying to gain more insight into the MBA curricula changes to find whether these IS/IT related topics which are becoming increasingly important are being integrated into existing core courses or are being taught in enrichment and elective courses (covering problems such as multidisciplinary or cross course integration). The findings of our follow-up project may also help to draw clear boundaries around different subjects. These boundaries seem to be necessary to outline the MBA curriculum to make it clear what content is being taught in which courses.

REFERENCES

- Baker, B.S.H.; Stray, S.J. and Galliers, R.D. (1996) What's in a Title? The Nature of Information Management/Systems/Technology courses in UK Fulltime Master of Business Administration Prorammes: Part I, *Proceedings of the 4th European Conference on Information Systems*, Lisbon, Portugal, July 2-4.
- Clement, A.; Löschenbrand, M.; Stangl, R. and Zehetmayer, P. (1999) *Prerequisites for European Managers in the E-Business Age*. Vienna University of Economics and Business Administration.
- Ellmaier, W.; Fried, M.; Mayerhofer, R. and Ulm, G. (1999) *Prerequisites for American Managers in the E-Business Age*. Vienna University of Economics and Business Administration.

- Embeoglou, N.; Prastacos, G.; Loebbecke C.; Baalen P.; Wassenhove, L. and Vlahos, K. (1998) Developing the MBA course for the information society, *Proceedings of the 6th European Conference on Information Systems*, Aix-en-Provence, France, June 4-6.
- Farwell, D.W.; Kuramoto, L.; Lee, D.; Trauth, E.M. and Winslow, C. (1992) A New Paradigm for IS: The Educational Implications, *Information Systems Management*, Spring, pp 7-14.
- IMD International Lausanne; London Business School and the Wharton School of the University of Pennsylvania (1998) *Mastering Management – the course content of leading business schools*, Schäffer Poeschel, Stuttgart.
- Langer, G. (1998) *The Decision process towards an MBA*, Servicefachverlag, Wien.
- Stray, S.J.; Baker, B.S.H.; and Galliers, R.D. (1998) What's in a Title? The Nature of Information Management/Systems/Technology courses in UK Fulltime Master of Business Administration Programmes: Part II, *Proceedings of the 6th European Conference on Information Systems*, Aix-en-Provence, France, June 4-6.
- Wigand, R.; Picot, A. and Reichwald, R. (1997) *Information, Organization and Management: Expanding Markets and Corporate Boundaries*. Wiley, Chichester.

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