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On The Alliance of Executive Education and Research in Information Management at the University of Amsterdam

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Abstract

Over the past fifteen years, Information Management (IM) has emerged as a management sub discipline, both in academic research and in practice. The creation of an Information Management Chair at the University of Amsterdam reflects the importance. What started as a chair in Information Systems on the periphery of the Faculties of Economics and Computer Science, now incorporates a fully integrated discipline in the Amsterdam graduate Business School. Its main activities are the running of Bachelors and Masters programs in Business Studies and Information Studies (both with a major in IM), the Executive Master in Information Management (EMIM) program and the PrimaVera (a playful acronym for "PRogram in Information MAnagement at the uniVERsity of Amsterdam") research program. This research note predominantly deals with the combination of the latter two. IM is a young discipline, still struggling with its theoretical identity and its role and place in organizations. Our approach to IM is primarily aimed at keeping the significance of IM to practice (and hence overcoming the common belief that 'academic' stands for being 'impractical'), yet conforming to and applying academic rigor to the discipline. This approach was shaped by 15 years of experience in aligning executive education and research. The incessant interaction of education and research and of university and business simultaneously is noticeably helpful in highlighting the very concept of IM and its constituent parts. Teaching at the frontline of an emerging discipline give rise to innovative combinations of learning and research in which the specific expertise of executive students as "reflective practitioners" is exploited. These observations are in line with the often-heard appeals to study and develop IM in innovative, generative and action-based ways. In this respect, traditional academic "ivory tower" approaches are too distant to be relevant to practice. This research note gives an account of the (as far as we are aware of: unique) combination of executive education and research in IM as it is practiced at the University of Amsterdam. To this end, we first elaborate on the joint learning model and notion of IM, after which we discuss the EMIM program in brief and the PrimaVera research program more at length.

On The Alliance of Executive Education and Research in Information Management at the University of Amsterdam

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INDEX

1. Information management at the University of Amsterdam

Over the past fifteen years, Information Management (IM) has emerged as a management sub discipline, both in academic research and in practice. The creation of an Information Management Chair at the University of Amsterdam reflects the importance. What started as a chair in Information Systems on the periphery of the Faculties of Economics and Computer Science, now incorporates a fully integrated discipline in the Amsterdam graduate Business School. Its main activities are the running of Bachelors and Masters programs in Business Studies and Information Studies (both with a major in IM), the Executive Master in Information Management (EMIM) program and the PrimaVera (a playful acronym for "PRogram in Information MAnagement at the uniVERsity of Amsterdam") research program. This research note predominantly deals with the combination of the latter two.

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This research note gives an account of the (as far as we are aware of: unique) combination of executive education and research in IM as it is practiced at the University of Amsterdam. To this end, we first elaborate on the joint learning model and notion of IM, after which we discuss the EMIM program in brief and the PrimaVera research program more at length.

2. A common learning model

Our joint executive education/research exploration of IM started in the euphoria of the mid-eighties based on strategic (so-called "killer") applications of information technology. IM was positioned at the crossroad of strategy, organization and information technology. The approach was classical, but in retrospect featuring the seeds for the future joint learning model:

?? **Theory-based**: unlike a lot of traditional MBA's, the EMIM program is not conceived as a collection of case studies mainly resulting in recipe-like solutions for temporary problems. From the very beginning, our belief was that innovative approaches to IM should be anchored in firm, interdisciplinary research; the EMIM program is the breeding ground as well as the test lab for this research.

?? **Action-oriented**: learning takes place through action in practice; care for organizations should be integral part of any (information) managerial learning process, just as patient care is part of any medical training program. This is true for teachers/researchers no less than for students/practitioners. In this respect, the active link between EMIM and PrimaVera has turned out to be a tremendous advantage.

?? **Common frame of reference**: our understanding of IM as a developing discipline was very much guided by a common frame of reference that was *simultaneously* elaborated through fundamental research and testing in practice.

?? **Open staffing**: the nucleus of the EMIM faculty is from the University of Amsterdam, but it is generously complemented with external (mostly: academic) teachers. Non-academic members are "reflective practitioners" ensuring practical relevance beyond the issues of the day. Gradually, a significant number of non-University of Amsterdam teachers is also involved in the research activities of the chair. Our underlying belief is that the contribution of a research group should not be evaluated bookkeeping-wise or by only counting publications of internal staff, but via the contribution of its "community of practice" (Wenger et. al., 2002) at large to practice as well as to theory.

Step by step, these guiding principles were articulated and worked out, resulting in the implementation of the comprehensive *"learning by sharing"* model (see figure 1). This model is an adaptation of an earlier learning model (Thijssen et. al., 2002).
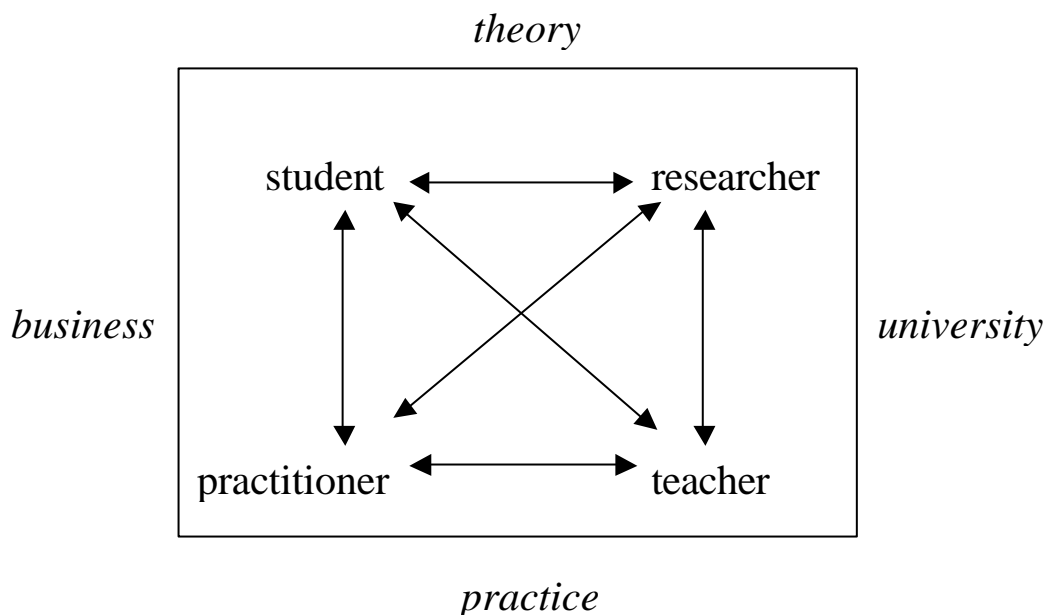

Figure 1: learning by sharing

Key to this model is the redefinition of the partnership between academics, business people and their organizations: every participant's dual role (teacher/researcher correspondingly practitioner/student) is made explicit and addressed, as indicated in figure 1, and they are *actively* involved in the mutual exchange of knowledge, experience etc. In effect, each person in each role is a co-learner!

Looking at the "learning by sharing" model from the point of view of the researcher, makes clear that the teacher/student axis (the heart of any educational program) adds valuable extra options for interaction with the practice, both in terms of observing and formulating hypotheses as of testing these hypotheses and the evolved theories. In addition, it may be an arena to further consider in order to bring together rigor (associated with the researcher) and relevance (associated with the practitioner).

Fully explaining the "learning by sharing" model is beyond the scope of this research note. However, adhering to this model means that one is constantly triggered to consider the bilateral interaction between theoretical developments and practical effectiveness, as is the case for the EMIM and PrimaVera programs.

3. A common understanding of information management

IM can be considered as a discipline in its adolescence. This 'teenager phase' is further accentuated by the extremely volatile environment in which IM is supposed to grow up. Hence, developing an understanding of IM is not only a question of time and patience (as is allegedly the best stance vis-à-vis adolescents), but it is above all a joint effort of all parties involved. Our early conception of IM, being the (ill-defined) management in the triangle linking strategy, organization and information technology, was further advanced through research, teaching, application in real-life organizations and above all constantly (re)designing the EMIM program itself: learning by sharing in optima forma! Finally, an elaborated model of IM, represented in figure 2, was adopted; this model (Abcouwer, Maes & Truijens, 1997, Maes, 1998 and Maes, 1999) is concurrently serving as the reference framework for the PrimaVera research program and for the EMIM executive education program.
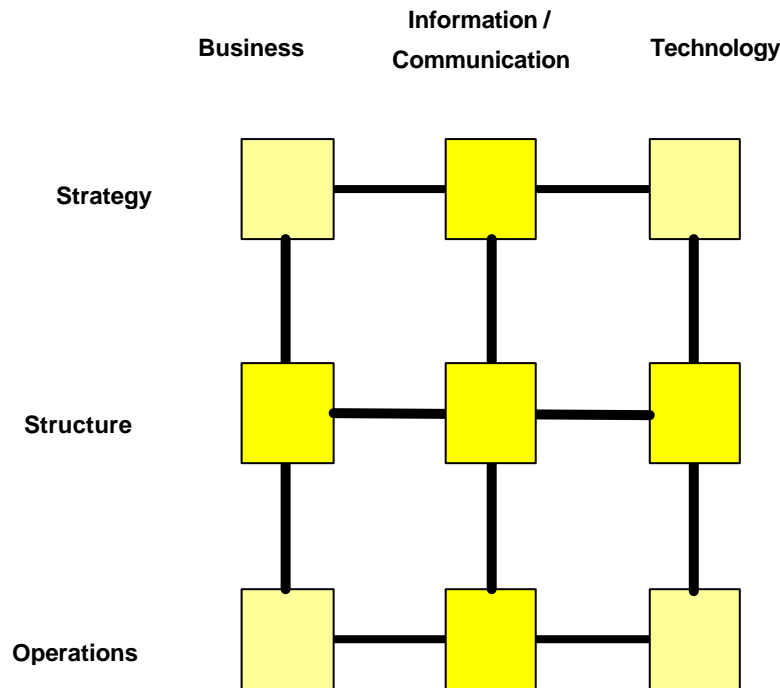
Figure 2: a model of IM

The model relates the (external and internal) processes of information and communication to their supporting technology and to the business aspects (the horizontal dimension of the model); these relationships occur at the strategy, structure and operations level (the vertical dimension). Remark that information/communication processes (the middle column) and structural elements (the middle row) are made explicit, contrary to the well-known model of Henderson and Venkatraman (1993) for strategic business – IT alignment. A working definition of IM is "the interrelated management of the different elements of this enneahedron".

The model enables the clear positioning and elucidating of the actual problem (and research!) areas in IM. Joint observation of actual practice through the EMIM program and analysis through PrimaVera research projects, revealed that in particular the central axes of the enneahedron are becoming more and more crucial and leading in IM. This emerging evidence was the reason why the PrimaVera research program as well as the EMIM education program were (being) organized according to these central axes. The same observation also led to a more restricted definition of IM as "the interrelated management of the central axes of the enneahedron geared to its vertices".

Again, describing this model in full detail is beyond the scope of a research note. However, its theoretical usefulness and practical application will be made clear when we discuss the PrimaVera and EMIM programs.

4. The Executive Master in Information Management program

The EMIM program is an intensive (equivalent of 1 year full-time study), small-scale (max. 24 participants/year) and privately funded executive masters program in information management. The program is spread over 15 modules, covering two years. The target audience are either general managers taking responsibility for information (technology) or IT managers willing to extend their scope. This multi-faceted group is further enriched with consultants, large scale project managers etc. The age range is between 30 and 50 with an average of 10 years of relevant experience. Participants are from large business and governmental organizations, or from consultancy firms. Teachers are professors from different, internationally-spread universities (80%) and experts from practice (20%). The program is now in its 15th year.

The organization as regards contents is along the IM model introduced above. The present modules are organized according to the sides of the enneahedron, successively dealing with (business, informational and technological) strategic issues (the top), business and organizational issues (the left side), technological and innovative issues (the right side) and operational issues (the bottom). The last five modules deal with mind expanding issues, e.g. IM and sense making in organizations, IM and entrepreneurial thinking, confrontation with the world of arts and design, etc.

We are currently in the process of reshaping the program. The main reason for this thorough redesign is the conviction that (1) the central axes of the enneahedron are crucial in IM (e.g. to the detriment of business strategy), as has been indicated in the previous section, (2) implementation issues are quite often real obstacles and should be addressed accordingly and (3) the mind expanding subject matters should be more intertwined with the mainstream matters and hence should be scheduled earlier in the program. The new program will in essence be based on a sequence of modules successively dealing with the information and communication issues (middle column), the architectural/infrastructural issues (middle row) and implementation/change issues. In this way, the program will be more adapted to present-day and foreseeable problems in IM and more personally confrontational as from the very beginning. It is our experience that the enneahedron acts as a tremendously guiding and uniting factor during this major redesign process (Maes & Abcouwer, 2002).

Participation in the program, either as student or as teacher, is demanding: EMIM learning is quintessentially a personal transformation process, where long-standing personal visions and principles are fundamentally disputed; taking part is "reflection in action" (Argyris & Schön, 1996). The evident teacher-student relationship, in essence a co-learning one, is enriched through the active introduction of the other relationships of the "learning by sharing" approach:

   ?? Academic teachers are purposefully challenged to introduce the newest, even hesitant insights from their research and to question these insights through open dialogue with practitioners.

?? Non-academic teachers are chosen based on their reflective power more than on their intrinsic knowledge. They are combining, in their own way and through confrontation with researchers, practical experience with a research frame of mind.

?? The expertise of the students as practitioners is actively used to frame subject matters, to assist in removing specific shortcomings in presupposed knowledge of their colleagues etc.

?? Students are supposed to confront their new insights with their own organization through thought-provoking (typically: non-consultant like) group assignments.

?? The masters thesis is no longer a *final* test of competence, but starts from the very beginning of the program. This thought through process is in fact a stepwise getting acquainted with research skills, knowledge, attitudes etc.

?? Students and (non-academic as well as external academic) teachers are invited to participate in the PrimaVera research program, e.g. through joint publications with PrimaVera researchers. In the case of students and non-academic teachers, this can eventually lead to starting a Ph. D. project.

Finally, the EMIM program is an excellent vehicle to make the impact of PrimaVera decisive and durable. More and more, the students' and alumni's organizations are engaging in structural relationships with participative research, a common EMIM/PrimaVera Fellows program for continuing study, access to a high quality and associatively accessible IM knowledge base, the transfer of the basic PrimaVera/EMIM ideas such as the enneahedron to other management development programs, etc.

5. The PrimaVera research program

PrimaVera research aims at long-lasting practical relevance through academic rigor. Its main outlets are scientific and application-oriented publications, the PrimaVera Working Paper series, a vivid PrimaVera seminar program, presentations at scientific and business meetings and through participation in regular and executive (especially the EMIM) masters programs.

PrimaVera research is concentrated on the codification and testing of a specific IM language, which is capable of articulating and addressing the traditional gaps between business and IT as well as between strategy and operations in a novel way. Nowadays, such a language is lacking or, at best, highly incomplete, leading to recurrent problems in framing organizational
issues both theoretically and practically, and obstructing the maturing of IM as a productive field of interest. The central axes of the abovementioned enneahedron indicate that an enriched language should and could evolve around the notions of 'information' and 'communication' and 'architecture' and 'infrastructure'.

Consequently, PrimaVera's foci are the two axes of the enneahedron of figure 2:

Middle column

Traditionally, research in IM has paid (and is still paying) a lot of attention to IT and to the direct business-IT link, e.g. in terms of strategic alignment. Evidence, greatly gathered through the EMIM program, indicates that these approaches miss a crucial link for IT to add value to business, or for business to exploit the dematerialization of economic activity: 'information and communication' as intermediary, mediating concepts bridging business and IT. The importance of these concepts has recently been augmented by IT being put at a certain distance of the business (e.g. by outsourcing), as a result of what the organization of the information "demand side" (the middle column) has become paramount; the middle column of the IM model has apparently moved in the direction of the business column. A further consequence is that new, immaterial concepts such as emotion, learning, sense making, experience, trust etc. are gaining importance in IM as they do in economic activities in general (Choo, 1998; Pine & Gilmore, 1999; Huizing & Bouman, 2002).

PrimaVera, in combination with EMIM, is studying these phenomena in a great number of projects, to name a few:

- ?? *CIO: from "Career Is Over" to "Chief Imagination Officer".* Dutch organizations (e.g. the Dutch Police Organization, KLM, Centraal Beheer/Achmea, the Dutch Tax Authorities etc.) are organizing their IM function according to and using the PrimaVera/EMIM IM model; consultancy firms (e.g. Het Expertise Centrum) use the model in their daily advisory work. PrimaVera researchers are engaged in a number of these projects through participative research. Research questions basically deal with the IT-independent definition of the function and role of the CIO and the information manager. A preliminary classification of these roles based on the IM model is presented in Maes (2003).
- ?? *Information-based business models: a designer's classification.* Information is actively intervening in the support of existing business models and as driver of new business models. PrimaVera research, starting from an (organizational) designer's rather than from an economic perspective, suggests that these quite divergent information-based business models can be classified in three categories (chameleonic, foyer-like and innovator-supportive) (Jansen et. al., 2001).
- ?? *From information economy to emotion economy.* PrimaVera researchers are studying the raising impact of emotional factors in the information economy and in information-intensive organizations. Themes addressed concern the economical and informational substantiation of loosely defined terms as "experiences", "attention" etc. (which will, from all appearances, lead to a substantial deepening and redefinition of classical concepts as "experience economy") and the development of an integrative and transformational model based on the subdivision of business realities in physical, informational and emotional sub worlds and enabling us to explain in depth phenomena such as the stagnation of knowledge management as we know it.

Further projects deal with the development of an information and knowledge based theory of the firm (Huizing & Bouman, 2002), the study of information strategy departing from micro economic theories of information asymmetries (Truijens, 2001), the study of information strategy in terms of political theories, investigation of the concept of IM based on classifications and interpretations of "information", etc. Expectations are that this research area will result in four dissertations to be defended in the first year.

Middle row

Organizations are finally discovering that IM is not exclusively aimed at the support of business strategy (upper left corner in the enneahedron) yet at least as much at that of business operations (bottom left corner and the raison d'être of organizations). The volatility of present-day strategy and the conclusion that strategy is only indirectly influencing operations further add to the importance of the concepts 'infrastructure and architecture' as linking pins.

We limit our brief discussions to the following PrimaVera projects:

?? *The information architecture of front offices.* This project deals with the distribution of services through multichannel strategies. Services are classified according to their degree of customization. Based on observations made amongst others during a great number of EMIM projects, it is hypothesized that the information architecture of the front office is a determining factor enabling or limiting the strategy of service providers in terms of specification of services. The hypotheses are tested through in-depth case research. (De Vries & Brijder, 2000 and De Vries, 2001).

?? *Information infrastructure and the quality of the information services.* This project explicitly deals with the managerial relevance of the very concept of "information infrastructure" in information-intensive organizations. The use of this concept as a management tool and the reciprocal consequences for the concept are investigated. It is investigated how the partner-concept "information architecture", to be differentiated from IS or IT architecture, can add to the business value and business alignment of IT, especially in the case of substantial reorganizations of the IT services. In this sense, "information architecture" is a key concept in the IM language, to be situated in the heart of the IM model and contributing to horizontal as well as to vertical tuning in the IM model. (Truijens & De Gouw, 2002).

Further projects deal with the establishment of inter-organizational infrastructures, with the development of integrating frameworks for business, information and systems modeling (Maes & Dedene, 2001) and with the added value of the concepts "business and information architecture". Expectations are that this research area will result in three dissertations to be defended in the first year.

6. Concluding remarks

At the University of Amsterdam, research in IM has a number of characteristics which, combined, makes it unique: (1) it emphasizes lasting practical relevance, trying to accomplish this through academic quality, (2) it is based on a unifying view on IM, and (3) and above all: it has a strong, mutually enriching alliance with executive education.

More information on PrimaVera, including all working papers, can be found at: http://primavera.fee.uva.nl/. Information on the EMIM program (mostly in Dutch) can be found at: http://www.ienm.nl/. Research groups interested in exchanging information and/or considering cooperation and organizations interested in applying the IM model are invited to contact either Rik Maes at maestro@fee.uva.nl, or Ard Huizing at huizing@fee.uva.nl. Practitioners interested in participating in the EMIM course are invited to contact the program manager, Toon Abcouwer, at abcouwer@fee.uva.nl.

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