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A Marriage of Business and Design in a new Master Program

by

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Abstract

Both research and experience have confirmed the need to better integrate design in the strategic business development process. One step to promote such a development would be to better integrate the education among designers and others involved in the design process. Such education would move design to the strategic level and to an earlier stage in product development and marketing. In this paper such an endeavour is discussed. A two-year Master program in Business & Design with a mix of students will be launched this year at the University of Gothenburg. Different minds, rationalities, and knowledge will be integrated in a process that will present some challenges.

Key concepts: Problem based learning, group dynamics, practice theory, design thinking

Introduction

The significance of design and the design process as a strategic instrument for companies and organisations' growth is now both publicly recognised (see for example Business Week the last year) and demonstrated by research (Cooper and Press 1995, Svengren 1995, Bruce and Bessant 2002, Borja de Mozota 2003). However, this insight is far from being put into practice. There is much more to be gained through a better integration of design, strategy and business development – and this applies to trade and industry as well as in education.

One reason for the difficulties in taking advantage of design and design methods in the strategic development process is related to designers and business people having different sense-making processes (Mead 1934, Blumer 1969, Weick 2001) or “figures of thought” (Asplund 1970, Edeholt 2004), and institutionalized ways to approach problems. Furthermore, we fear that there are impediments for communication and co-operation between the two populations in culturally anchored, prejudiced ideas about each other and about each other's interests.

To use the full potential of design, we need to strengthen the standing of designers and their role, as well as their ability to cooperate with other competencies. Education plays a central role here, because taken-for-granted behaviours and values are created in the making of professionalism. Some business, design and engineering schools have started courses and/or programs where students with different backgrounds in design, business and technology can study in an interdisciplinary and integrated manner. However, these opportunities are quite rare and limited in time and extent. The most renowned one, the D-school at Stanford University, has only short courses where students combine training in design methods with their basic subjects, up to a maximum of one year. Students at the IBDM-program in Helsinki combine studies in technology, business administration and design with a common project as a part of their master exam in their respective schools. As far as we know, to now there is not a cohesive and two-year master program with a common exam at an advanced level open to students from various disciplines.

The School of Design and Crafts, in association with the School of Business, Economics and Law at Göteborg University, Sweden, will introduce a joint two-year master program in Business & Design. The program is designed for students and professionals who have different educational backgrounds but a common interest in working strategically with design. The program will be run in close co-operation with regional trade and business companies and organizations. In the program students will cope with different roles (designers, managers etc) studying together and contributing their various experiences and knowledge. They will improve their ability to communicate and to take advantage of each another's expertise.

The paper consists of the following sections: We 1) start with a short overview of the relationship between design and management from an epistemological perspective. We then 2) discuss the relationship between education, research and experiments before 3) discussing the place of values within design and management, followed by 4) a

description of the basic principles and the pedagogical layout of the master program. Finally we 5) discuss the expected difficulties and challenges and how we are preparing for them.

The epistemological foundation for the program in design and management

This section lays out our understanding of the nature of knowledge in design and management, in particular their foundations, scope, and validity. Our Master program in Business & Design has been designed bearing in mind the different epistemological foundations of design and management.

Academic researchers have discussed the epistemological differences between design and other sciences have been discussed in a number of different ways. The Nobel laureate Herbert Simon (1975) defines design as the mental creation of what has not existed before, while social science (which includes management at this level of discourse) is the critical voice of the existing society. Buchanan (1992) focuses on the different ways designers and other professions approach a problem. Using Burrell and Morgan's (1969) sociological framework, Johansson and Woodilla (2008) discuss the similarities and differences among the current design, management, and design management discourses, and find some that closest agreement among the three disciplines occurs within the functionalist paradigm, with design extending into the interpretive paradigm, and design management extending into other functionalist areas.

Professionals construct themselves differently as well. Johansson and Svengren (2008) in an empirical study of the relations between designers, marketers and engineers, found that the professional groups constructed themselves as having "different ways of thinking"; something that caused both problems and interesting openings for complementary cooperation. In another empirical study of design and innovation projects in companies that had not previously had contact with designers, CEOs often claimed the most interesting and important part of the project was that they had been confronted with "design thinking" as they themselves phrased it (Johansson 2006).

These two logics will confront each other in both practice and theory within the master program of design and management, because students from both the world of management and the world of design will enter the program. This is expected to present some challenges – which will be discussed in detail further on.

Recognizing and confronting the two logics is an important principle for our program. Metaphorically, we can represent the relationship between the two logics and male and female ways of thinking. The male way of thinking has become the dominant norm in society, particularly in the public society. Although there are as many men as women, female thinking is taken for granted and culturally subordinated to male ways of thinking. Many researchers within art and management argue that artistic knowledge is a domain that relates to the female culture and thereby is also subordinated so that it can

be neither appreciated nor even seen. We do not know the extent to which this premise is also valid for design. However, because we expect students to cooperate and work together under similar conditions we will pay attention to how designers and other professionals, men and women, draw upon taken-for-granted (by them) ways of thinking and behaving.

Values in management and design discourse.

Values and intentions are treated quite differently within design and management. Again using the sociological discourse of Burrell and Morgan (1979), management includes research that takes an objective, external view for granted as well as the opposite – those who take subjective interpretations for granted. Management includes research with the aim to contribute to radical change as well as research for regulation of the existing society. However, having said this, main stream management, with its centre in US top management schools and now spread around the world, has its core in the functionalist paradigm where objectivity and regulation are defining values (Johansson and Woodilla 2008). Design, on the other hand, may value objectivity, but is more likely to place an emphasis on subjectivity and radical change. Design is likely to embrace humanistic values of inclusivity, gender equality, and sustainability. The current design management discourse follows the lead of main stream management and values objectivity and regulation (Johansson and Woodilla 2008).

Many economists (more than management researchers) have the opinion that values should not even be talked about within economics – but be handled over to the market to take care of. Conversely, Edeholt (2004) claims that the main differences between the “figures of thought”¹ in social sciences and design, is that design is dealing with how the reality *ought to be* constructed, value judgement, while the social science is concerned with how it *is* constructed. In a grammatical sense, design constructs a “subjunctive reality” while social sciences construct the “present, past and future”.

We do NOT agree with the view that values should be decided by the market rather than being explicitly stated by business. Instead, a number of values are explicitly declared in the Gothenburg University Business & Design master program, the most important being sustainability, gender issues and respect for people with disabilities.

The relation between education, research and experiments.

In academia, few people would deny that research and education are intertwined. However, the relation between education and research is mostly thought of – and practiced – as one where the results of research are presented to students. The espoused model for master education is for the researcher to present his or her own results to

¹ The term “figures of thought” comes from the Swedish sociologist Asplund, who in turn is inspired by symbolic interactionism.

students. In practice, this model is infrequently realized; at best professors use results from the work of colleagues or published in academic sources.

In the area of design management, or business and design as it is called it in this program, there are two major problems related to this original model for research and education. We will explicitly deal with each problem in our master program.

First, if the education is restricted to what is already known through research, the effect will be limited and irrelevant learning. Research in design management is just beginning and quite scarce. Instead, in the Business & Design master program the faculty will start with what is important for the students to know, and then, if research does not exist, research the area together with them.

Second, many problems in both the management and design areas are of a kind that yield quite diverse knowledge depending on whether the research starts from an analysis of academic perspectives or whether it starts by listening to what is said and practiced in the market and reflecting on that. Reflexions, defined by Alvesson and Sköldböck (2007) as a matter of stepping back and critically analyzing one's own interpretations of the situation or text, is probably one of the most important characteristics for research in the emerging area of design management. Building on this idea, we believe that intellectual dialogue and cooperation between academia and the world of practice should take place at all levels, between students, teachers and researchers, and everyone should be seen as resources in the exploration of the design possibilities for organizational and societal change. Our master program has such dialogue, cooperation, and research as a foundational principle.

The foundational principles and the pedagogical design of the master program.

In this section we present the foundational principles and the lay out for the two year Master program that will start in Gothenburg, Sweden, autumn 2008. The following seven points are the foundational principles of the program:

1. Bilingual understanding and experiences from the world of business and the world of design.

As said before, the epistemological differences between the world of design and the world of business and management are theoretically interesting but practically problematic. One of our main aims is to make the students feel comfortable with the culture and language of both these worlds.

The primary purpose of the program is to prepare the students for careers in the arenas of business development, marketing, branding, and product and service development on a strategic as well as on an operational level. More specifically, they will also use design and design thinking as instruments in these endeavours and be able to work with different people, perspectives, and interests throughout the process. This includes the ability to use

innovative and creative thinking combined with the capacity for a down-to-earth implementation of ideas, and a readiness to continuously acquire and apply new knowledge.

2. Intertwined knowledge development rather than hybrids

When students from design and from management work in the same class, the result can easily be “hybrids”, for example, students who know design management but not enough design to be called designers. Certainly some students probably will become interesting hybrids, however, this is not what we seek. Rather, we want the education to strengthen students’ identity and training as “designers with good knowledge and comfortable working with others in the management world” or “managers with insights into the world of design and its specific characteristics”.

3. The relationship between education and research – partly inverted from the traditional model

The university traditionally has two different tasks, research and education. The first normally proceeds the second, meaning that we teach students about what we know from research.

However, in this special program, the situation is different. For example, we want to teach the students about the relations between accounting and value creation and design. But almost no research exists in this area. So we plan to engage the students in starting to create knowledge. We will let the need for knowledge from the students’ perspective become the grounds for research; the research can start in the classroom and maybe later turn into formal discipline-based academic research.

4. Simultaneously internationally and regionally anchored

Naturally the education must be anchored in the leading edge of international academic programs; that has become a prerequisite for teaching around the world. But we also want to anchor the education in the regional area and its development. Within the Business & Design Lab we work with three intertwined activities: research, education, and experiments. In our experiments we conduct much collaborative work with companies and organizations within the region of Gothenburg. Collaborations with these companies are also an important anchor for our program.

5. Close cooperation between companies and society

The collaborative work mentioned above also provides students with possibilities to gain both theoretical and practical insights. All the courses during the second year, and most of the courses during the first year, will have a close cooperation with companies and associations. This means that we will have real cases and theoretical studies mixed in a dynamic way.

6. Both a traditional master program and continuing education at the same time

The program is a traditional two year master program. However, we have combined it with a continuing education program in a very simple way. All the courses during the first year are taught on a half-time basis and we allow both designers and other professionals to take a single course. Thus individuals can study a single course or a number of courses in order to improve their knowledge in design management. This opportunity emerged from discussions about the need for an executive program for designers and resulted in providing continuing education opportunities through this integrated program.

7. Problem based learning pedagogy as a tool that enables some of the other principles to be carried out

Students with diverse backgrounds and the aim of self-directed learning based on students' individual goals create a challenging pedagogical situation. We have chosen problem based learning (PBL) (Savin-Baden & Howell Major 2004) as the pedagogical strategy because this not only allows individual differences but also encourages the students to learn together and from each other.

Students are trained to search for knowledge on their own and are expected to be able to explain their reasons and motivations for choosing a certain theory, model or method. At the beginning of the program, students themselves initiate and plan their work according to their own interests in a particular subject. They will receive feedback and support from the teachers as well as from visiting researchers and practitioners. As the learning process advances the work will become more and more practice-based, that is, students will work with current problems presented by the companies and organizations co-operating with the university in the Business & Design area.

The Design of the Program

The program sequence is laid out below. A student must study full-time, complete 30 units per semester, and take all modules for the two year Master degree; however, a student can also complete the degree on a part-time basis or take single courses for continuing education.

FIRST YEAR	
First Semester	
Crashcourse in Business Administration OR Crashcourse in Design (7,5 units) Philosophy (7,5 units)	Design and Society (9 units) Design and Marketing (6 units)
Second Semester	
Design and Accounting and Business Law (6 units) Design, Strategy and Innovation (9 units)	Integrated project (15 units)

SECOND YEAR
Third Semester
Applied project work in collaboration with companies and organizations (30 units) OR Study abroad in partner universities (30 units)
Fourth Semester
Master thesis (2-year master) (30 units)

The first year has three different types of courses and a final integration. (1) First there are the crash courses where students become familiar with basic knowledge that they have not gained earlier. (2) Second is the philosophy course that covers epistemology and methodology. From this the students should understand the very character of the difference between design and business. (3) A third type of course is Design and ethics. This course covers design and sustainability, universal design, design and gender etc. (4) The fourth type of courses relate the design area to different areas within management. Design and marketing includes branding, corporate identity, how to communicate and construct the customer/user, design and emotions, trends etc. The course about Design, strategy and innovation includes design as a strategic device, design and innovation and service design. The third one of this type includes how to measure the value of design and immaterial rights. The second year is divided between one semester with practical work and one with the thesis.

Expected challenges and how we plan to meet them.

We have identified four main areas where we expect challenges, and have prepared ourselves to meet them. These are:

1. Differences between the worlds of design and management

We know from both research and experiences that the social orders of design and management are different. Dimensions of difference between the two worlds include:

- Design and management students speak two different languages
- Design and management students belong to two different subcultures within the university, with different interpretations of our symbolic world
- The professional worlds of designers and managers have quite diverse values. Within the dominant management paradigm, many people believe that management concentrates solely on economic values. For most designers, aesthetic and ethical values (like sustainability etc) are regarded as integrated parts of the profession.
- Design and management practices rely on different rationalities, and follow different logics and different mental figures.

These differences are, of course, in reality quite complicated and not always clear. For example, many management scholars believe that values and management are permeated; such as the existence of critical management studies both as a separate annual conference and as an interest group within Academy of Management. Also, sustainability has become a core concept not only in design research but also within both management and

economics. Moreover, there are designers who are very well aware of the economic aspects of design.

There are two different risks concerning the picture we have drawn above. If we are not prepared to cope with the differences, conflicts and misunderstanding may undermine cooperation between the students and thus also the learning process. The students may end the program with even stronger prejudices about each other. On the other hand, if we are too eager to stress and highlight differences, the instruments used to cope with differences will increase the possibility of students becoming trapped into reification of the differences.

According to the practice turn in contemporary social theory, “it is through action and interaction within practices that mind, rationality and knowledge are constituted and social life is organized, reproduced and transformed” (Schatzki, Knorr Cetina & Von Savigny, 2001). The program connects to this view and assumes that by joining and building a common practice and discourse the students will develop mutual understanding and approach to each other’s mind, rationality, and knowledge. Allocating most of the program time and other resources to action and activities in mixed groups will provide the students with this opportunity. However – the intention is not to achieve a common professional identity – but for designers, managers and business people to find, respect and take advantage of each other’s role and competence in a strategic design process.

2. Positive group processes as prerequisites for learning

The basic entities for the learning and training process are the *working groups* of 4-5 students from different background and competence. It is most important that the dynamics in these groups develop in ways that promote cooperation, understanding, safety and creativity i.e. a good learning process. We know from earlier experience and theory that groups that are allowed to grow wildly and are under pressure can develop quite destructive working climate and ways of coping with conflicts and differences (Granström, 1998). It is not unusual for group work in university settings to be used without attention to the group itself and that students are left without any process support; here groups serve to minimize the teacher’s time and efforts.

We believe it is very important to take measures to prevent negative group processes in our program. Therefore a group facilitating process is built into the course schedule as a mandatory part of the structure. Considerable resources are used to have psychologists facilitating the group’s teamwork. The aim for this is two-fold. Primarily it is a way to ensure that the group work provides a good environment for learning and as such, it is something all student groups would benefit from. Secondly, this program intends to prepare students for a profession where they will work together with other competencies in a design-, marketing- or product development process. Thus it is important for students to acquire knowledge about group dynamics as well as to develop their own abilities as team members. By giving the students specific training in team work and project planning, and by facilitating the group process at regular intervals during the time the

groups are working, the students will become well prepared for their future professional work in all kinds of small groups.

3. The collaboration with the society and companies

The central part of the program is a dynamic engagement with the external environment through the use of open cases and problems anchored in current needs. This process provides many opportunities and interesting learning activities but also a lack of control. (It is the opposite of the Harvard method with well defined, established cases, well-controlled but also with a high risk of just re-cycling earlier knowledge). Earlier experience shows that it is important to take measures to avoid some particular problems which can surface when students work with “live” material.

It is not uncommon that students are disappointed and feel that they have been used. Companies may take advantage of the students who work for free or with very little payment. Sometimes companies are disappointed because they haven't got what they expected. Therefore it is very important to be extremely clear both towards students and companies about what is expected and which rights and obligations apply to each side.

Early in the assessment process the students are told about the terms for co-operation with companies and other organizations. This concerns both what is expected from the students in terms of time and efforts but also how they will be rewarded. Some, and particularly the design students, are used to working more individually but throughout this program everybody is supposed to work in a team requiring both physical presence and strong commitment to the planned work.

Clear agreements have to be made with involved external actors although the terms can differ according to the nature of the project. The fundamental principle is that the companies pay for what they get. They can do this in different ways – in money, by supervising, in providing material and housing, paying travel expenses, and so on.

Before the program starts there focus-groups are held with small and big companies and with designers and representatives for associations, to present the program's intentions but above all to listen to presumptive partners about what they expect and how they want to participate.

Throughout the program there are both verbal and written evaluations for the students and teachers as well as for the external actors. This process is important to enhance a continuous open dialogue focused on improvement and development of the program and of the collaboration.

4. Problems and strategies for cross-disciplinary cooperation within the university

The University of Gothenburg is a large university with more than 50 000 students and about 5 500 employees. The University is organized according to different disciplines in

faculties with quite sharp borders between them, culturally as well as geographically. All kinds of cross-disciplinary research and education encounter some problems – not only the cultural and practical ones but also problems concerning allocating of resources. All university education in Sweden is financed mainly by national taxes (and most of the research by national research funds). Simply put, the education is free for the students and the school is paid by the state according to how many students pass a course. In a cross-disciplinary program there is always the question about how to allocate the resources to carry it through. Who owns the students?

The School of Business, Economics and Law constitute an autonomous faculty (close to the faculty of Social Science) and the School of Design and Crafts belongs to the faculty of Fine, Applied and Performing Arts. The differences between the students described in the first paragraph mirror the differences between the two schools, rather than originating from innate different personalities or priorities among individual students. The clearly distinguished social order, constituting mind, rationalities, and knowledge results in different structures for education, evaluation of students and election of teachers. There are many opportunities for conflicts and misunderstanding, and not all have been settled and probably some have not even been discovered. So far some important prerequisites exist:

The first and fundamental one was a mutual agreement by the two deans from the schools who also took the first initiative, clearly encouraged by the university management. The management also allotted resources to facilitate the planning and formulating of the idea.

The next step was to set up a new organization, the Business & Design Lab, literally between the two schools, located in a house within walking distance from both of them. The Lab was staffed with people representing both disciplines and moreover, the director was recruited from another university in order not to give extra weight to either of the existing schools.

The implementation of the program is organized by two program directors, one from each school, and they are working together in preparing the syllabus and the schedule. Two teachers run most of the courses in order to integrate the business and the design aspects and theories in the course content.

Due to a much higher remuneration from the state for a student of art compared with that for a student of business (more than twice as much) the program is formally run by the School of Design and Crafts. But, because some of the courses are run by the School of Business, Economics, and Law, this calls for clear contracts between the schools about the money, about the responsibility and about the terms for the teachers contributing to the program.

What final exams will the students take? The program is housed by the Faculty of Fine, Applied and Performing Arts, which normally renders some kind of exam in Arts. This is not possible for a student who is not accepted by ARBETSPROV and who doesn't present an individual artwork portfolio. At least half of the students in the Business and

Design program will be accepted based on other credentials and they will not present any individual artwork. Thus, the final exam from the program will differ among the students. Some will get a Master of Art in Business & Design and some will get a Master of Philosophy in Business & Design.

Finally

Much effort has gone into developing this new program. Starting with the problem of better integrating business and design in the strategic business development process, we have brought together resources from different faculty of the university and surrounding companies, and have designed the program so as to gather feedback from all those involved. We have developed plans in anticipation of challenges still to be faced, and are confident that when faced with new and different challenges we will find resources to help us solve and learn from them.

The program is staffed by teachers from the two schools together with professionals from surrounding companies and other organizations. All are very enthusiastic and devoted to the idea of an integrated program. To keep the spirit and to prepare the teachers for the upcoming challenges, resources also are allotted to the development of a common vision of the program and of a common pedagogic approach. By introducing the PBL model the teachers involved are put on a same base and level of familiarity.

The program is still under construction, both in details and in a deeper understanding of how to handle the integration between design and management. This is an integration that is paradoxical since it is probably not an integration of two entities that equals, but rather a matter of building bridges between two worlds.

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