A WHOLE NEW BREED? DESIGNER'SCOMPETENCIES IN THE TECHNOLOGY ENHANCED, CROSS-CULTURAL GLOBALIZED WORLD

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ABSTRACT

This paper looks into the current challenges that design profession and education are confronting under the technology enhanced global economy and business market. Framing design practices into the technology, globalization/glocalization and cross-cultural management discourses, this paper addresses these impacts on design profession and education. This paper also aims to explore the new competencies of designers and to exam how design curricula cope with the sector changes. Views and perspectives on the issues were collected from a representative of a leading international brand consultancy company, a multimedia design consultant/representative of a Hong Kong designer membership accreditation association; and an experienced art director of a Hong Kong advertising agency/former representative of a British designer chartered body. In response to their views, one of Hong Kong's leading design institute's curricula was studied to explore its strategies on nurturing the new breed of designers. Last but not least, this paper also purports to shed light to design educators and practitioners for the purpose to enhance designer's competencies and thus to increase their competencies in order to work in the globalized cross-cultural markets.

Keywords: Design Education, Designer's Competencies, Globalization/Glocalization, Cross-Cultural Management

INTRODUCTION

Changes in economic, cultural, social-political and technology have shaped and re-shaped our world over the past decades. Guttal (2007) once states that "advancements in applied sciences, technology, and communications have played central roles in making globalization possible" (Guttal, 2007, p. 524). As design practices are strongly situated and influenced by social, technological and cultural context (Frayling, 1993); it has come to noticed that the design industry and competencies of designers are drastically challenged by the rapid changes from an industrial to post-industrial society; and from a modern to postmodern culture and currently, the changes from a globalized to a glocalized market. The raise of globalization and glocalization initiated new and important challenges on the design industry and designer's competencies. As the stage of globalization is hardly static, glocalization is being adapted as an act to resist; to subvert or to revolt the globalization hegemony by "a growing, worldwide movement whose base is made up of a wide diversity of people, ideas, cultures, languages, ages, professions, and competencies" (Guttal, 2007, p. 530). Giulianotti and Robertson (2007) state that "the very creation of localities is a standard component of globalization" (Giulianotti and Robertson, 2007, p. 134). Imbesi (2011) mentions design industry is growing, expanding and entering new geographical areas under globalization; while at the same time, there is a need for a "cultural asethetization and semantization of products for competitiveness" (Imbesi, 2011, p.1). The above indicated that in order to cope with the diversified users, design has to regard cultural issue as the major consideration. In another aspect, Norman (2011) points to the point that nowadays designers should be able to work "in broadly based, multidisciplinary teams with engineers, social scientists, economists, and business people" and "the two major missing components are social science and business" (Norman, 2011, p.3). In a similar vein, Pink (2006) opines that nowadays, the graduate attributes of Master of Business and Administration (MBA) and Master of Fine Arts (MFA) are equally important; this kind of cross disciplinary mind is what current entrepreneurs and designers needed to generate business strategies and creative ideas (Pink, 2006). Presumably, this new breed of designers on one hand are design professionals possess with strong practical, design knowledge, skills and innovative design ideas while on the other equipped with competencies such as cross-cultural awareness, communication and management literacy in order to cope with the rapid changing design industry and the diversified clients in the globalized and glocalized markets. To cope with the changes, there is an urge need to articulate the designer's competencies whilst the

design curricular, modules and the specialties being taught in design schools to be taken into review so as to align with the industry's needs.

It is of interest to know the new professional competencies and qualities that a designer needs to possess under the rapid changing global and local markets. The questions remain, what are the designer's new competencies to work in the globalized cross-cultural markets? How do design curricular cope with the with the design industry's needs in the global and local markets? A close look into the above questions may reveal how design industry and education response to the rapid sector changes.

THE DESIGNER'S NEW COMPETENCIES

Simon (1969) in his classic "The Science of the Artificial" mentions that design is changing existing situations into preferred ones (Simon, 1969). Design as seen by Kress (2000) is an "essential textual and pedagogic/political goal for periods characterized by intense and far-reaching changes…. [it is] a metaphor for planning, organizing, and bringing to term a project realized within a set of revolving parameters" (Kress, 2000, p.157). Doloughan (2002) states notions of design incorporate the process of designing together with the designed product can be used as analytical tool to examine the problematic of re-presentation; that is to say that design practices stress "emphasis on cultural context and subjective motivations of much scientific enquiry" (Doloughan, 2002, p.60). Likewise, Friedman (2003) opines that process, goal-oriented along with problem solving, are the three significant attributes of design to create new and useful deliverables to meet needs and improve situations (Friedman, 2003). From a sociologist's perspective, Frascara (2004) views design profession as knowledge creation in relation to social norms, value, culture, experience, belief and emotion (Frascara, 2004). Margolin (1988) claims that "design studies is an interpretive practice, rooted firmly in the techniques of humanities and the social science" (Margolin, 1988, p. 43 to 47) and opines that design should play a broad role in society; and it will "make a place for design discourse within the larger debates about social theory" (Margolin, 1988, p. 6) especially under the rapid societal changes. He urges designers to equip with interdisciplinary knowledge such as social science, engineering and management (Margolin, 1988). Margloin further proposes other than the foundation knowledge of art and design, the hand and technological skills, the research, problem-solving and presentation skills, designer nowadays are in need of cross-disciplinary knowledge such as social science, engineering and management (Margolin, 1988). The merging of technologies and designs indeed produced successful products such as iphone, Dyson vacuum cleaner and air multiplier, Smart car and PS3, to name just a few. These products changed our life styles and behaviors significantly but giving it another thought revealed that globalization awareness and marketing strategies are the underlying key elements for success. Furthermore, it is of

knowledge that in some of the prominent designer membership accreditation bodies, the professional membership assessment criteria mostly stressed on the designer's "aesthetic treatment, execution technique, and technological capabilities such as typographic treatment, colour senses, treatment of graphic space, art direction, designers' personal styles and the eminence of design awards" (Cheung, 2011, p.6). It is quite surprised that the assessment criteria still rests on the visual application and process level and have not yet extended into the use of cross-disciplinary and cross-cultural knowledge in design practices. A number of studies have addressed the increasing needs of the cross-disciplinary and cross-cultural knowledge in design practices. Other than looking at design on the process and application levels, Anderson (1995) draws designer's attention to culture's different interpretations on artwork and reminds that the share of design and composition features may not bear the same universal meanings amongst cultures. He proposes a sequential model for the examination of cross-cultural artwork through the cycle of reaction, perceptual analysis and contextual examination followed by interpretations and synthesis to salient the hidden cultural meanings (Anderson, 1995). It is not surprised that very often, design share the same forms, compositions whereas the connoted meanings vary amount cultures, a good understanding of particular living and visual culture is the challenge that designer constantly confronting in cross-cultural design project. A well awareness of the cross-cultural differences has been regarded as the key to ensure smooth project planning, implementation and execution. Various studies have been conducted to examine cultural variations and dimensions in the cross-cultural context; for instance, Klukhohn and Strotbeck's five core dimensions in cultural differences (Klukhohn and Strotbeck, 1961), Hall's high-and low-context cultures (Hall, 1967), Hofestede's examination of international differences in work-related values (Hofestede, 1980) and Trompenaars' cultural taxonomy (Trompenaars, 1993) are just a few. In views of the above, cross-disciplinary knowledge such as sociology, management, marketing and cross-cultural awareness seems to be the new knowledge to broaden designer's competencies in order to cope with the client's needs in the global and glocal markets. In sum, the above reveals that the drastic changes in the design industry are resulted from three major factors, a) technological advancement, b) globalization/glocalization and c) cross-cultural practices; these factors have constituted the new design work competencies (Figure 1).

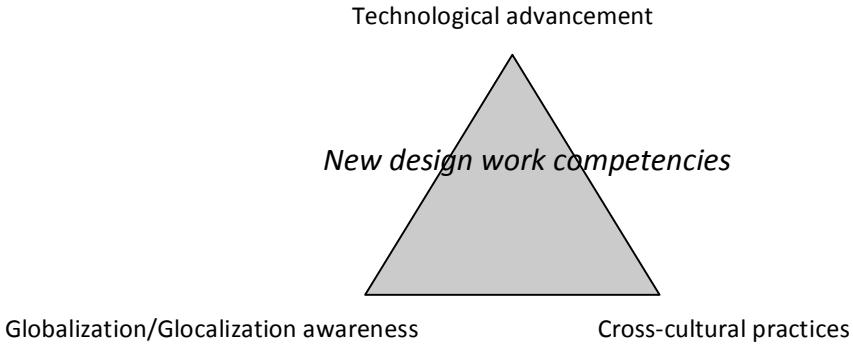

Figure 1: New design work competencies

THE SHAPE OF THINGS TO COME: VIEWS FROM THE PRACTITIONERS

A number of notable suggestions to enhance designer's competencies for working in the globalized cross-cultural markets were addressed by the panel speakers in SCAD's Cross-cultural Design Mini Conference: Designer's Professionalism in Global and Local Market (SCAD, 2011). The panel was formed by a representative of a leading international brand consultancy company, a multimedia design consultant/representative of a Hong Kong designer membership accreditation association; and an experienced art director of a Hong Kong advertising agency/former representative of a British designer chartered body while the writer of this essay, a design educator/researcher, was the convener and moderator. With an aim to address the designer's competencies under the rapid changing global and glocal markets, the views of the conference's panel speakers are being drawn to articulate the three major factors a) technological advancement, b) globalization/glocalization and c) cross-cultural practices summarized from the literature.

TECHNOLOGICAL ADVANCEMENT

In the SCAD conference, the multimedia consultant opines that the emerging and the profusion of textual and visual information are the results of the advancement of information technologies. The interactivity and instant nature of the world-wide-web benefits designers to think big and designing for a large global population on the internet. The technological advancement enabled design to reach a vast amount of users from different countries and cultures; for instance, there are 6,930,055,154 internet users as of March, 2011 (Internet World Stats, 2011). The statistic shows that designers, taking advantages of the technological advancement are now designing for a global population. In addition to keep abreast of technological advancements to cope with the user's behavioral changes, it is also important for designers to pay attention to the globalized and

glocalized markets for better understanding of the users' experiences and life styles changes. Given the societal role of the design in the globalization era and the extent of the worldwide web as a means of design to enhance cross-boundary communications; the boundary crossing on internet is not merely a geographical one. Regardless of geographical constraints, the technological enabled time-based design also has significant impacts on the global and glocal markets. It is also presumably that additional attentions should be given to consumer behaviors, user-centered experiences in a cross-cultural context when designing for the vast internet population in the global and glocal markets. Roth (1999) opines that "[In the world of Internet], usability issues are the key to successful interface design and interactive communications" (Roth, 1999, p.21). It is also suggested that for a better understanding of the users' cultures, experiences, life styles, consumer behaviors etc., designer should turn him/herself from a design specialist into a generalist, knowing a range of issues related to sociology, psychology, business and marketing, to name just a few in order to accommodate the cross-boundary users' needs.

GLOBALIZATION / GLOCALIZATION AWARENESS

The open of the global markets; especially the flourishing China market in the 1990's has created promising business opportunities to a number of foreign design companies. Taking advantages of the chances and China's open door policy, foreign design companies had begun to open up branches in Hong Kong and Mainland China to better cater their clients in China. The challenges for these foreign design companies are keen right from the very beginning because of the competitions from a number of local china design companies. The consumer's glocalized culture and experience are the key challenges confronting the foreign design companies. One of the panel speakers shared her views by stating the fact that a certain degree of glocalization is essential for an international company to maintain its competitiveness in the China market. Glocalization in her company starts from the composition of the employees; her company's employees include 5% of Westerners, 35 % of Asians while 60 % are Hong Kong and Mainland Chinese. The mixture of the cross-cultural talents possesses the advantages to generate multi-perspective and multi-dimensional design solutions for the glocal markets and better catering of the diversified clientele. Using one of her company's recent projects in Mainland China as example, it is learnt that designers have to get good knowledge of the customer's consumption behaviors, emotional and psychological feelings, consumer's rights as well as the official regulations and the industry's common practices. For example, in packaging design, simplified Chinese are essential to convey messages; the contents of the products must be clearly listed; any falsifying of the content information will lead to serious offenses not only to the manufacturer but also to the celebrities and speakers representing the brand and the product. Apparently, a good grip of the local societal knowledge and the glocalized culture is the key to success for designers to work in the globalized cross-cultural markets.

CROSS-CULTURAL PRACTICES

Hofstede once states that culture is the collective programming of the mind which distinguishes the members of one human group from another that shapes our different perceptions and behaviors to our everyday life (Hofstede, 1980). It is a déjà vu that the discrepancies in business practices exist between Western and Asian cultures. As designers, we all known that when tackling a design problem, a scientific analysis is preferred and there is a strong emphasis on the designing process to generate ideas. To Westerners, design idea generation rests on a diagnostic level of 'what and why' while to Asian and mostly to Chinese, very often, it falls into the application level of 'what and how'. Why a certain type of design successes and how to make a success is two sets of philosophies (Cheung, 2011). The speaker representing an international design company in the SCAD mini-conference recalled once worked with a Mainland Chinese client and experienced the toughest moment in her career to educate her client the importance of the design process. In surprise, her client complained that her scientific design process to analyze and generate ideas is too systematic, lack of flexibilities and time consuming, last but not least, the prolonged engagement of the client in the design process such as survey and presentations are not necessary. Her client reacted by telling her that he/she know his/her company's products and services thoroughly inside and out and endeavour to provide her with his/her perspectives for the design directions. Communication is the curial element in design practices, especially when collaborating with cross-cultural clients. It is believe that Hofstede's Cultural Dimension Model (1972) provides valuable references to cross-cultural communications when working with clients from different cultural backgrounds. His most famous Cultural Dimension Model resulted from the survey undertaken around 1968 and 1972 within IBM subsidiaries in 66 countries of 11, 6000 employees sheds insights and draws awareness to consider the importance of cross-cultural context in the areas of 1) Power distance, 2) Uncertainty avoidance, 3) Individualism versus collectivism and 4) Masculinity versus femininity (Hofstede, 1972). Rather than strategies to please and appease the clients, cross-cultural communications are acts of mutual understandings with respect to one another's cultural practices so as to accommodate, to assimilate, to transform one another's needs. The speakers in the SCAD mini-conference in general stressed the importance of considering the cross-cultural factors in design services, claiming that a well awareness of cross-cultural management and industry practices are in need to better work with the clients not only in the globalized, but also in the glocalized markets. Knowing the cross-cultural differences is the key to ensure smooth project collaboration. As a matter of fact, it is common to see that international design and advertising campaigns are always glocalized to a certain degree in order to cope with the particular cultural for success. Given the views of the above, it is a burning issue for design educators to response to the industry changes and reconsiders their curricula in order to generate a whole new breed of designers.

A PARADIGM SHIFT IN DESIGN EDUCATION

It is not surprised that traditionally, design curricula are designed to produce industry practitioners with strong practical skills to cater the needs for the industrial society. Other than the need of specific skills workers, vocational education and training also stressed on generic skills to cope with the mobility of occupation. Some argue that design education not merely develops students' skill-based craftsmanship, but also nurtures creativity, analytical thinking, problem solving and communication skills through academic development. In the recent years, western developed countries such as Australia, England, and United States of America have a strong tendency of applying the concept of competence-based education to vocational education to cope with the rapid economic and technological changes in the 1980s to 1990s. In the past decade, design education has gradually become a discipline of "permanent learning" to better cope with the constant changes enhanced by technological innovation and social transformation (Imbesi, 2008). The situation is no exceptions in the Asia countries, the technologies enhanced global changes in the design industry have accelerated the needs of not merely high competence and skilled designers but also strategic planners with cross-cultural awareness, communication and management literacy. In a similar path, design education in Hong Kong has gone through more or less the same passage as other foreign countries, started from industrial, technical training and modified into higher, vocational and professional education in the 1990's; stressed on production skill and aesthetic as well as additional knowledge in criticism for the reflections of works using problem solving and critical thinking skills (Indiana Academic Standards 2000 for Visual Arts, 2000). In views of the above, it is understood that the designer's professionalism and competencies are challenged by the social, political, economic, technological and cultural context under the globalized and glocalized markets. It is also learnt that with the increasing emphasis on key skills, work competency and the launching of qualification framework, the key competencies of knowledge, skills and attitudes together with the fundamental dispositions that designer once possessed are experiencing different degree of reformations. With the advancement in technologies and changes in economic social infrastructure, design curricular is under major paradigm shift from technical production training to the development of transferable skills such as problem solving, communication, critical thinking, creativity and analytic visual education (Leung, 2002). Referring to Pink's (2006) idea of utilizing cross-disciplinary mind set to generate creative ideas and business strategies (Pink, 2006), the well balancing of generic skills, design specialties, advance technologies, cross-cultural awareness and business strategies may contribute to a promising curricula to nurture the new breed of designers.

CURRICULAR FOR A BRAVE NEW WORLD

Curricula of one of Hong Kong's single largest design programme provider was reviewed and see how the institute's curricular aligns with the new needs of the design industry in order to nurture a new breed of designers. A look into the curricular shows its aims to produce high competent designers by developing their design knowledge and skills, as well as creativity and interests in design professions. The design of the curricular was based on two major components and they are the generic skills modules and the design subjects modules. Figure 2 is a visualization of the curricular's philosophy and components.

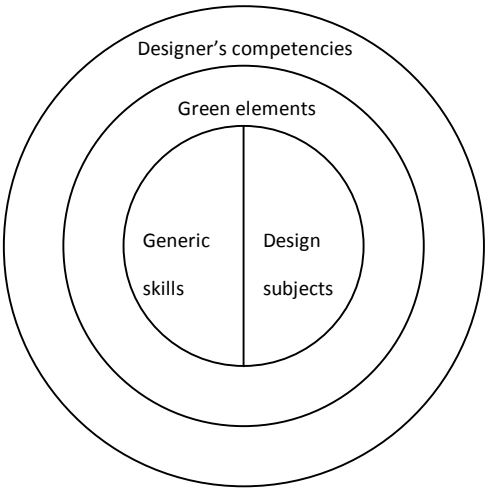

Figure 2. Visualization of the curricular's philosophy and components

At a first glance, the dividing of generic skills subjects and design subjects into two major components is a rather conservative model of curricula design; further look into the modules' details reveal that the modules in the curricular have been devised in discreet combinations to cater the need of new designer's competencies in the globalized and glocalised markets. The emphasis on generic skills such as languages (English, Chinese and the spoken Putonghua) equips students with a competitive standard on communication with cross-cultural clients. The information and technology modules keep abreast with the technological advancements to raise awareness of social implications and contemporary issues on the use of information technology, for examples, usability, user behaviors, cross-boundary communications and ethnics. The elements of life-long learning provide a number of knowledge and soft skills such as sociology, self and time management and

creative thinking etc. to enhance students' work attitudes, problem solving skills as well as self-confidence. The industrial attachment further highlights understanding of the workplace professionalism and enables the application of learnt knowledge in a real life context.
Cross-cultural elements are contextualized in the design subjects and the generic skills modules to facilitate the understanding of the design industries, the business practices, the specific cultures, living and working environments in the global and glocal markets. In addition to the above, it is delighted to see the embedding of the green environmental and sustainable development elements in the generic subjects. The global awareness of sustainable design, green consumerism and engineering for sustainability are also the essential elements in the curricular. It was noticed that the institute's curricula has well aware of the new design competencies needed and hoping to nurture a new breed of designers possess with strong practical design knowledge, skills and innovative ideas as well as cross-cultural awareness, communication and management competencies to cope with the rapid changing design industry and the diversified clients in the globalized and glocalized markets.
In response to the above and referring to the "T" shape concept as stated by Norman (Norman, 2011), the nurturing of 'design specialist' with in depth specific skills and 'knowledge generalist' with a broad interdisciplinary knowledge seems to be the focus of contemporary design curricula. However, it is questionable that the "T" shape concept of nurturing a new breed of designers merely rests in the curricula and in school context. Very often, students are stop being nurtured and assessed after they graduate and it is always of interest to see how students perform at work after their pre-vocational school years. Follow on Imbesi's (2008) view that design education is "permanent learning" to cope with the constant technological and social changes, an suggestion of an "I" shape concept of putting an additional horizontal line in the bottom to the original "T" shape as the continuum of continuous professional development (CPD) may able to tackle the issue. CPD is not new in a number of professions such as engineering, medical, architectural, accountancy etc. Given that, further collaborations between pre and post vocational training providers, design professional and industry bodies are in need to the promotion of CPD to in-service designers for the updating of professional knowledge, cross-cultural awareness, communication and management competencies as well as the chartered and licensing matters to enhance the designer's status and competitiveness in the globalized and glocalized markets. It is also interesting to indicate that the alphabet "I" resemblances to the Chinese character of "工" with the meanings of "job" and "work", symbolically, it is the additional line in the bottom that enables the sustainability and currency of the designer's profession.

FINDINGS AND IMPLICATIONS

The findings of this paper shed insights to designers to articulate new design competencies and

professionalism in order to enhance their design practices in the global and glocal markets. It is suggested designers should utilize the use of cross-boundary technology as enabler to reach for the vast global population. It is realized that cross-boundary technology certainly raised cross-cultural awareness while a good understanding of the social and cultural context is essential in designing for the global population. Additional attentions to consumer behaviors, life styles and experiences in a cross-cultural context not merely enhance communications and collaborations with clients across cultures but also generate better and more preferable designs. The application of cross-disciplinary knowledge such as sociology, cross-cultural management practices and marketing strategies are the major components to address the globlaized and glocalized shifts in the consumer society for a successful campaign. Apparently, a good grip of technological advancement, globalization/glocalization awareness and cross-cultural practices seems to be the designers' new competencies to work in the globalized cross-cultural markets. In view of the above, design curricula in one hand should stress on the deepening of specific design skills while at the other, to broaden other competencies such as cross-cultural awareness, communication and management literacy and thus to generate the new breed of designers.

CONCLUSION

This paper aims to explore the current challenges that design profession and education are confronting under the globalized economy and business. This paper has reviewed, discussed and proposed the use of new technologies, cross-cultural design strategies and management practices with a desire to generate new design competencies. Casting design profession into the discourses of globalization and cross-cultural management, this paper argued the possibility of applying cross-cultural design strategies and business practices to better cater for the client's needs in the international and local markets. Curricular of a design institute was reviewed to see how it copes with the global and glocal design markets in order to nurture a new breed of designers. Further empirical studies on the effectiveness of the curricula are awaited to be conducted to explore the feasibilities of the proposed new design competencies to further advance the knowledge of design education and practices.

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