



## THE INTEGRATION OF INDUSTRIAL GLASS DESIGN AND MARKETING COURSES FOR ENHANCING COMPETITIVENESS OF THE GRADUATE DESIGNER

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### Introduction: -

The present century was marked by increased specializations and the rapid evolution of technology and increased global competition at all levels of scientific, technical, artistic and humanitarian. But winning is to who is able to link between sciences, and benefit from details available for the production of concepts that integrated together to create a harmonious blend of different applications. Despite of the creativity and workmanship that design includes it is always requiring other sciences providing it life, to reach the fullest of the world around it as a technological Sciences, engineering and management ... Etc. Marketing is the science that enables the design of sustainability growth, development and competition in line with the changing global trends in fashions, tastes and technological and scientific changes.

Teaching industrial design glass was depending on the taste of those who teach it, thinking that their experience was sufficient to satisfy the desires and needs of consumers; and therefore graduates was largely separate from reality. So the Course of production and marketing management was added, the marketing section of it aims to connect the student to the market variables. But it looked similar to the course that taught in marketing principles in business schools. Not benefited the department students and does not relieve the burden of intensive courses. So, because FACULTY OF APPLIED ARTS students graduate as designers not marketers, they have to understand the origins and principles of marketing, not all marketing skills. But marketing is required to be learnt to the level that advances their skills as designers.

so the researcher resorted to develop this course since 2010 began taking the trend to serve students during the study and prepare them for after graduation to get acquainted with market mechanisms and requirements. This research has displayed some of what has been done during these years of activities, research and studies on industrial glass design Course in the third year to preface them to study marketing in the fourth year, as well as displaying some of the activities they had completed.

Through former interviews with the glass industry men, we identified their expectations of the glass dep. graduates since they must be aware of and knowledgeable enough in the market with providing skills that allow competition. This research has come to equilibrium and integration between labor market vision and academically side through a strategy methodology that can help getting a designer who is able to compete.

From the above the Search Problem was identified in the lack of researches interface between marketing and industrial glass design courses that create integral relationship between them,

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when applied on the students will affect their performance in the labor market after graduation.

The Search aims to manage the integrative role of design and marketing to produce designer who is able to compete locally and regionally.

The importance of this search is enhancing undergraduate students and distinguished developing for them to be prepared for the labor market. By linking administrative Sciences relevant to the science of design

And the Limits are "Industrial Glass Design" course for the third year and "The Production Management and Marketing" for the Fourth year, in Glass Department.

This research follows the applied methodology where the researcher applies the methodology of strategic thinking on the two courses during the last six years.

**Keywords:** -

Course, design, marketing, competition, integration.

**Abstract:** -

Industrial design is important for all glass products, such as tableware, lighting units and containers Etc. These products are mass-produced in factories, and consumers use them in daily life. So notable error rates during product design preparation phase are not sustainable, due to the effort, time, and money consumed. The same applies during the production phase, which consumes a lot of raw materials, energy, time, and money. Finally, there is marketing these products, and developing advertising and promotion policies, as well as market studies. If any of these stages were not based on careful market consumer desires and needs, this will lead to significant financial losses.

Therefore, *Strategic Thinking* was the methodology adopted in this research, which is defined as: "a holistic process or technique of thinking in solving complex problems. It is also applicable in achieving systemic objective; or identifying new solutions in areas where novelty is a key ingredient; such as design, invention, research and institutional renewal." Strategic Thinking is thus a knowledge creation or building process. This is because It is an integrated process that depends on the ability to use the tools as well as the mental skills, and understand the workings of complex systems, in the context of defining the problem to be resolved and then reaching a strategic solution.

Strategic thinking helps clarifying the problematic relationship among the sciences taught in the glass section, which the students must comprehend and benefit from. The relationships between the subjects, and the impact they have on each other may not be clear to the student; so these linkages and the effect of its use should be clarified during teaching each course separately. The absence of such intellectual methodology does not stop students' progress but makes it less efficient. Where the successful activation of taught courses this way and taking advantage of the overlap leads to action and activity in the right direction. Therefore, this idea can be applied to the whole course by clarifying the respective impact on



the final result to the future graduate. The contrast between student results is driven by how efficiently they use this methodology more than their contrast in skill aspects.

This was done over six years of research on both courses; where the researcher taught the two courses in the department. Students are given tasks that would help them achieving this integration. A brief description of the courses “industrial glass design”, for 3rd grade students during the academic year 2014-2015, and “production management and marketing” to the 4<sup>th</sup> grade in the same academic year; is presented. In addition, analysis and extraction of interdependence between the two courses, in order to explain the overlaps; were carried out. This was achieved by setting the learning outputs for each course to be integrated with the other. For instance, one of the outputs in the marketing course is for the student to explain the relationship between marketing and product design in glass industry. Yet another example of learning outputs is in industrial glass design course of the 3<sup>rd</sup> grade; where the student should be able to innovate new designs for all kinds of glass containers in accordance with the domestic market requirements, and production givens. In other words, innovating new designs must satisfy the local market requirements. Samples were given of student activities at both courses, to stress the effectiveness and importance of identifying the links between the courses.

\* in the marketing course there are many activities to be performed: -

- Field research for existing products.
- Feasibility studies for future projects.
- Preparation of scientific courses.
- Periodic examinations.

the researcher converts the research during these years from theoretical research to field research with marketing application of concepts to the field of glass. Instead of being a cultural toll at more than just the student turned into a realistic market for studying the variables and changing consumer tastes and their impact on the glass in all its products and production techniques, which had a great impact on changing students' concepts to aim at in designs to satisfy customers, producers and the marketplace. An example, one of the research has been shown its title was (case study of an existing product (Cup) to increase its competitive abilities) extensively to illustrate the extent of student take advantages of search, so she knew the properties displayed in the markets of glass cups in various disparate market segments, as well as the requirements of consumers of cups in each level and came to develop a plan to increase the competitiveness of the Egyptian Cup. That follow this pattern in marketing research adds to the designer a lot of expertise that is indispensable for him on the ground as it lightens his way to access to effective and sustainable designs linked to customer satisfaction.

And important activities carried out by students and also increase the balance of expertise is the work of marketing feasibility studies for future projects every student is dealing with whatever product is not required to be industrial products, covered in terms of the strengths and weaknesses of the project and the opportunities and threats of the environment and external variables that may affect it and marketing strategies related to the life cycle of the product.



In former preparations for marketing subjects, students explain parts of them which are listed in the course with examples relevant to the glass. This is one of the ways to run the mind on applications for glass products marketing concepts.

\* As for the course of industrial glass design of the third party there are several activities including has linked to marketing: -

- gather data from target consumers according to the type of packaging.
- Glass containers searches.
- workshops.

Industrial glass design courses always starts by collecting some of the targeted products or images from all available sources, but in this implementation the student should collect data from another sources, that is the consumer. As students go to consumers and ask them about the products they prefer, why and in what capacity and how it is used and why they like it, And so on. They obtain information and then analyze them and come up with data turning into a work group designs volumetric models they test them and then present them to the same consumers to see the extent of their conviction.

As for glass containers research in every search five students participate to clarify more details collected from glass containers, plus what the data collected to complete requirements for designing and marketing glass containers, at the end of the search they are requested to hand over drawings for their designs.

workshops considered to be one of the activities that shows the role of marketing in design, where students play the roles of employees in companies to produce in the end some designs after passing several stages, the most important one is marketing research.

After displaying these activities in both courses, we find that the student can link between creativity and market with its variables to benefit from design which aims primarily at industrial glass products case as any commodity is presented in the market designed to customer's attention and raise product competitiveness and ultimately increase demand and achieve customer loyalty for this product. So we have got a designer with multiple competencies and skills.

#### **Strategic planning methodology for integration between the two courses: -**

It is clear from the foregoing that the application of a specific methodology for training students to work style as in the practice of integration between the departments of design, marketing and production. There is no doubt that this strategic thinking of linking courses has a direct impact on the formation of the designer and his performance. Figure (1). explains the methodology implemented and modified more than once while teaching industrial design glass for third year and marketing for fourth year.

At the beginning of the design course we find initially expected always which is gathering information but this time will be different as will also be linked to an in-depth ways of marketing research in marketing a mutually beneficial relationship with each other. Then continue the steps of design that take into account market and customer demands and compete until preparing documentation in accordance with production requirements. And here



interference in marketing course stage to train students to apply marketing in glass products to come out of the marketing course to design customer-driven marketing strategy.

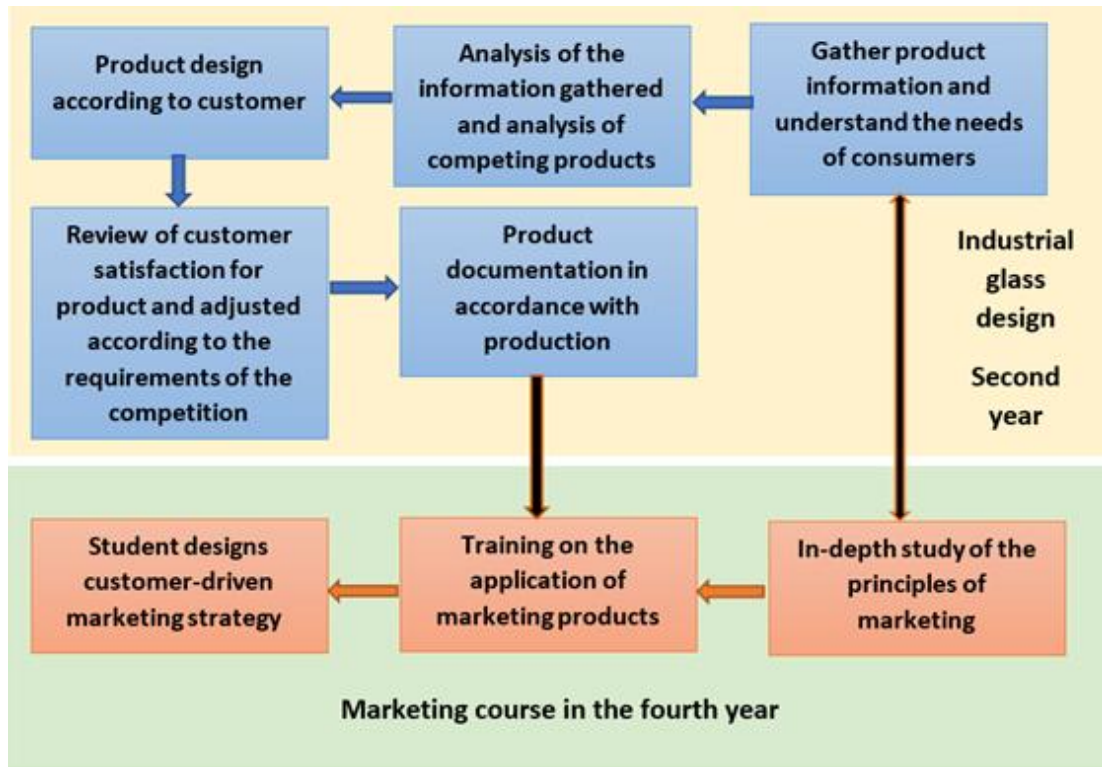


figure (1)

strategic methodology for the overlap between design industrial glass and marketing courses

To benefit more from the strategic way of thinking had to be tested in larger scale. Since the course of industrial glass design is taught in three years in glass dep. in the second year students are taught (glass tableware), in the third year (glass containers and tiles) finally in the last year they are studied (lighting units). whilst studying marketing in a term only one year with the production management course to close interdependent and their importance for the production process but that is not enough. however, to reach the maximum benefit from the integration of marketing and design proposes adding another marketing course in the second year to achieve higher interest for higher efficiency of this integration. In this case could be the contents of courses as shown in figure (2).

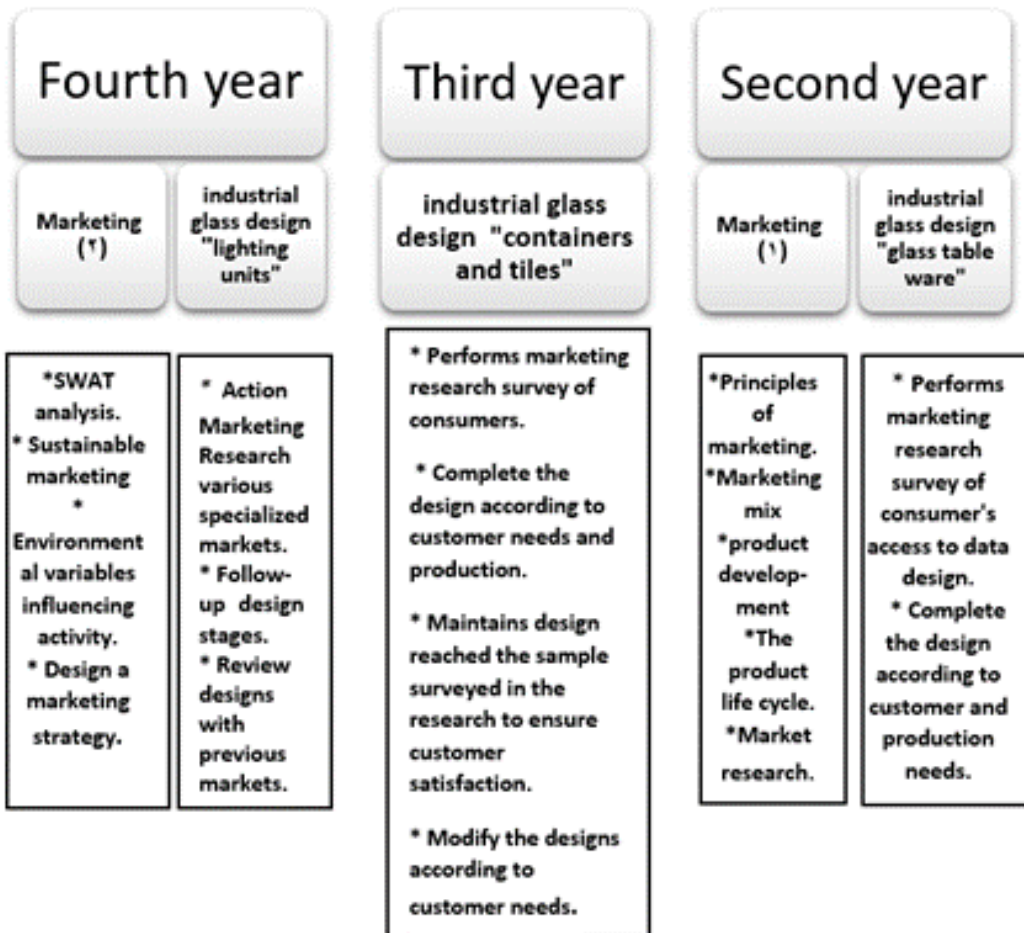


figure (2)

strategic methodology between courses of industrial glass design and marketing

### The most important results: -

- The achievement of competitiveness by building integrated designers, and increasing their design and marketing skills.
- Reaching a strategic planning methodology for integrating industrial glass design course of the third year and production management and marketing course of the Fourth year. And that can be useful when applied to marketing and design of artistic and architectural glass.
- Graduate designers who have received these courses with the methodology strategic thinking resulted in benefitting graduates of these scientific inputs into their work after graduation which saves effort, time and money. As well as access their places of their skills.
- Open new business fields for designers in marketing jobs in glass industry and they were better because they were more aware than professional marketers in terms of understanding the glass industry and its alternatives with the customers.



### The most important references: -

1. Philip Kotler, "Kotler talking about marketing – how to create markets and invaded and controlled", Jarir, 2010
2. Hamid M. Raouf. "Thinking strategically". Academic library. 2002.
3. Kotler P., Armstrong G., " Principles Of Marketing " ,Pearson Education Limited , 2012
4. Richard B. Chase, Nicholas J. Aquilano, F. Robert Jacobs. "Production and Operation Management Manufacturing and Services". Irwin Macgrow – Hill. 1998

