



Towards
a New Agenda
for Design
in the
Mediterranean
Region



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Towards a New Agenda for Design in the Mediterranean Region

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Towards a New Agenda for Design in the Mediterranean Region

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DESIGN FOR SOCIAL AND ENTREPRENEURIAL INNOVATION

Design Entrepreneurs' Challenges in Cairo's Ecosystem

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Keywords

Design Entrepreneurs, Designers, Cairo, Grounded theory

Abstract

This paper investigates the struggles faced by Design Entrepreneurs in Cairo. After using grounded theory, general challenges arose from the codes, yet in depth understanding of the communication problems between the entrepreneurs, the designers and manufacturers in a start-up. The study took place in Cairo, where the entrepreneurial ecosystem is still emerging along the past couple of years. Six entrepreneurs were interviewed. The results exhibit most of the problems faced within the start-up and the ecosystem, also challenges emerged in terms of dealing with designers and makers in the product development phases. Understanding the struggles and the failed and successful methods of solving them helps create a foundation for design entrepreneurship. When this foundation is better established, hopefully would allow the economic status in Cairo to flourish. Due to lack of documentation, this study aims to guide design entrepreneurs struggling in Cairo, acting as reference for some of the problems and their possible solutions.

1. Overview

After the 25th of January revolution and over the past eight years the entrepreneurial ecosystem continued to grow. Some argue this has started due to the motivated energy after the revolution, pushing hundreds of enthusiastic youth to build their country. However, due to the economic turbulence, a lot of challenges took place. This paper focuses on the designers' problems. It aims to understand the problems faced by the designers when they decided to be entrepreneurs.

1.1. Overview of Designers and clients' roles

As per the Boland's elegant description, during earlier centuries, while building the pyramids of Giza, designers ordered massive efforts of numerous workers over decades. Same applies to Syria's and Iraq's ancient irrigation systems, and the Mayan empire's temple cities, among many others. Each of these mentioned efforts was "managed." Boland adds that all types of organizations – either profiting or non-profit-ing, government or nongovernmental, voluntary or coercive – are not robots. Their components prove to be reactive, and creative in their support of the stated vision, in this context Boland refers to humans as components of the organization. However, they are not the organization's organisms either; their components change. Evidently since people flow in and out, and as groups are made. Yet there isn't a concise natural life cycle, and organizations often refresh themselves with energy to pursue new goals and objectives (Boland, 2008, pp. 113-114). Donald A. Schön (1983) argues that the existence of the "profession" in society is due to the professional-client relationship. This is seconded by professions where identifying

the client's role is challenging. In cases where the professional's role of authority is debatable and vague, then it is controversial to label the objects of professional attention "clients". The controversy is clear in the way by which the term "client" is used for authoritative roles in a specialized task system (Schön, 1983, pp. 290-291).

Brigitte Wolf states: "Design must not be expensive" (2008, p.12). Explaining to non-designers the importance of design is challenging and consequently more challenging to convince them to pay for it. The Design Centre Parana in Curitiba, Brazil created a design competence program where it investigates the problems faced by SMEs. The program conducts seminars to help these SMEs climb up the design ladder. Unfortunately, no such initiative is taking place in Cairo. Wolf continues; miscommunication and interpersonal conflicts take place regularly between SMEs and designers. And consequently result in failure (Wolf, 2008). Designers often try to bridge the clients' requirements and their aims, however these requirements are not always clearly stated from the beginning (Lutzenkirchen, 2016). The relationship between the design consultant and the client can be successful or not based on the chemistry, trust and language barriers (Bruce & Docherty, 1993).

Lockwood claims, somehow designers are rational when it comes to emotions. Yet communication challenges take place when they communicate these thought to their clients. Sadly, design-aware leaders do not commonly take part in managerial roles, thus maintaining the vagueness of design. Lockwood continues to suggest that the design disciple promotes itself in the business field to allow executives to better

understand it, thus smoothening the communication between designers and leaders (Lockwood, 2007). While Lockwood makes a promising point, however these challenges are far from being solved in this manner in Cairo. This is due to the fact that design is already dispositioned for young designers and educators to begin with, let alone company executives. And therefore this research aims to first identify these challenges even if between design entrepreneurs and designers.

The design management handbook argues that design discipline has a lot to offer for management educators. The design profession developed user centered design in order to better identify the users' needs. Not only does the UCD focused on understanding the human experience but also makes it the foundation when creating products, services and experiences. Moreover, the management education is also accused of not relating enough to the real world. Mintzberg also adds that MBAs teach the science of management but not the craft. On the other hand, it is argued that designers are characterized by understanding problems and using their processes to solving them and thus enhancing business education (Cooper, Junginger, & Lockwood, 2017, pp. 128-129). Whereas in Cairo where design is not used enough in start-ups, it is mainly due to the following reasons; misunderstanding and misuse of the term design, Design as an emerging discipline in Cairo is only known as Graphic and Interior design and entrepreneurs have more faith in business processes than in Design Thinking processes.

Alternatively, on the bright side as per Mark Oakley's discussing the above mentioned issues in his paper in 1986, the

disciplines of arts and humanities started to engage in management curriculum. Nowadays, the management curriculums are negotiating which skills to pass on to their young learners, therefore similar developments are slowing down. Evidently, the design and management models of work are being cross-examined (Cooper, Junginger, & Lockwood, 2017, p. 108). It would be interesting to see more research done on these examinations and comparisons in the MENA region's entrepreneurial ecosystems.

Consistently does the designer engage more creatives to contribute, such as photographers, illustrators, animators, computer programmers, calligraphers, and draftsmen. Moreover, other less related profession to design are also required. However, the designer in these cases has to evaluate the communication methods to use to ease the collaboration. Finally, designers are expected to be communication experts (Frascara, 2004, p. 3). Unfortunately, in Cairo the design profession has not branched out to create several experts as per the examples of calligraphers and illustrators. Due to the economic challenges, clients prefer to hire one person to do all the work. And therefore, more communication disputes take place, and the designer and the clients' role interchange accordingly.

This research investigates the challenges that take place between designers and design entrepreneur in Cairo's emerging entrepreneurial ecosystem. A good example of a previous attempt similar to the research presented in this paper is a model constructed by Lutzenkirchen. The model illustrates the main

skills, activities and relations involved in the relation between individual designers and their clients (Figure 1). It focuses on various relation experiences as per the diagram below.

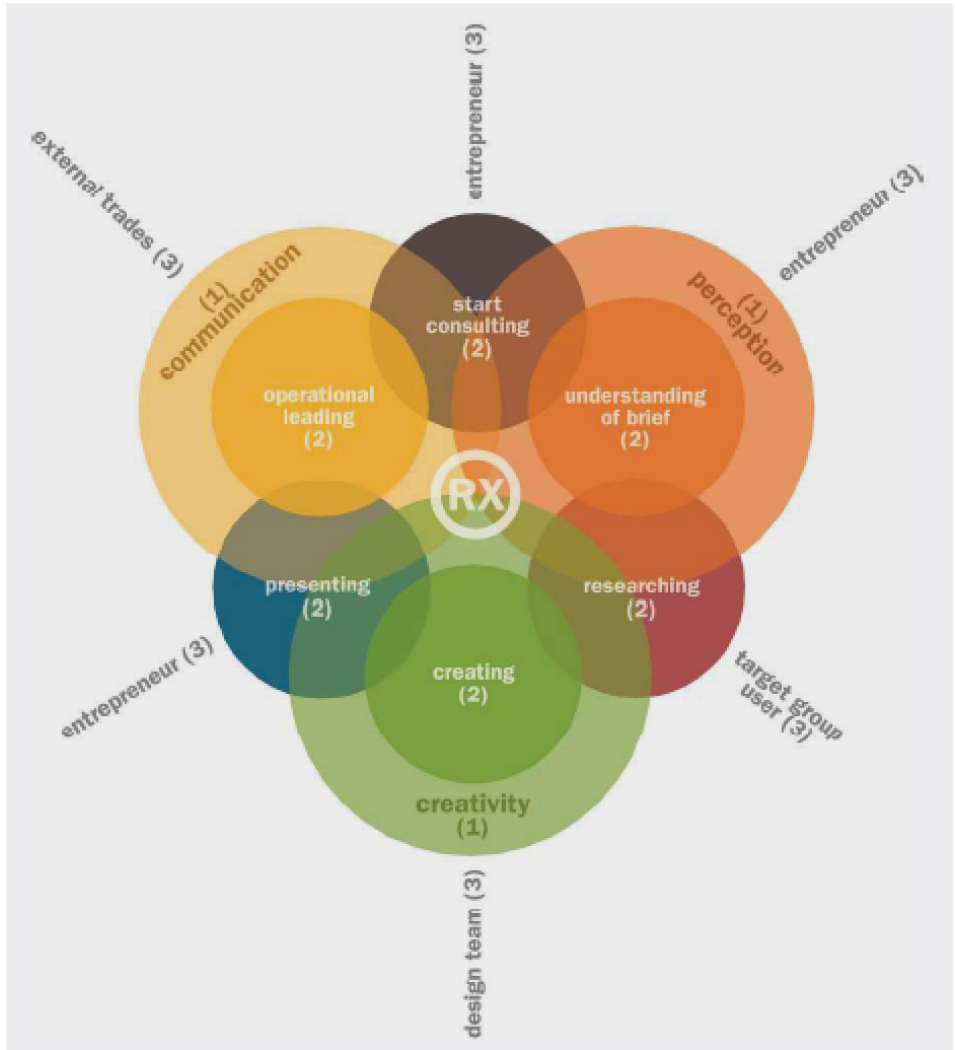


Figure 1. Relation experience (RX) model in three levels: skills (1), activities (2), relations (3), Adapted from Design for Entrepreneurship: the value of relation experience (RX) for enhanced cooperation in Design Processes, (p. 1596), S. Lutzenkirchen, (2016), 20th DMI: Academic Design Management Conference, Inflection Point: Design research meets design practice, Boston, USA..

The figure shows in the first stage the skills are perception, creativity and communication which lead to the activities such as consulting, research, and briefing, creating and presenting. Finally leading to the relations needed to conduct the above, which are summarized within the design team, entrepreneur and the target group (Lutzenkirchen, 2016).

1.2. Overview of Entrepreneurial Ecosystem in Cairo

Among many others, Innovation Collaborative attempted to illustrate the entrepreneurial ecosystem. As shown below, this ecosystem is composed of storytellers, resource providers, educational institutes, idea creators, sources of risk capital and entrepreneurs (Figure 2).

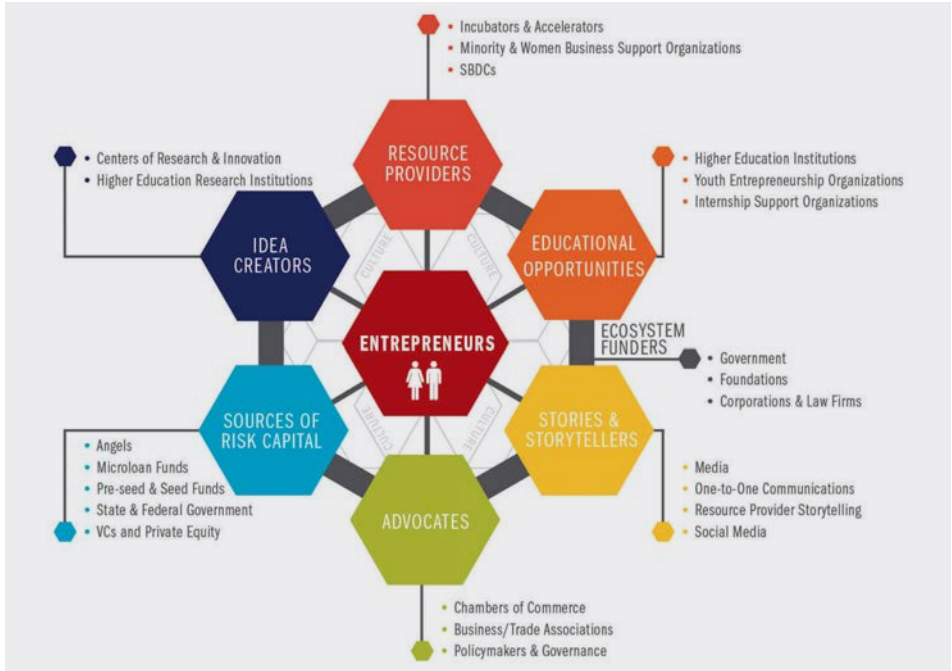


Figure 2. Illustration of Entrepreneurial Ecosystem, Source: Innovation Collaborative, Retrieved 2 July 2019, from <https://innovationcollaborators.com/>.

Moreover, 73% of Egyptians believe entrepreneurship is a good career option yet the rest do not as they fear risk of failure. However, 46% of the Egyptian adult population recognize good market opportunities thus proving they are good entrepreneurial calibers (AUC, 2017). According to AngelList, the average start-up valuation is \$2.6M (46.6M EGP) in Egypt (AngelList, 2018). Yet, despite this growing trend, serious obstacles remain for Egyptians to start a business. According to the following diagram, it is clear that different terms of design aren't as googled as compared to entrepreneurship (Figure 3).

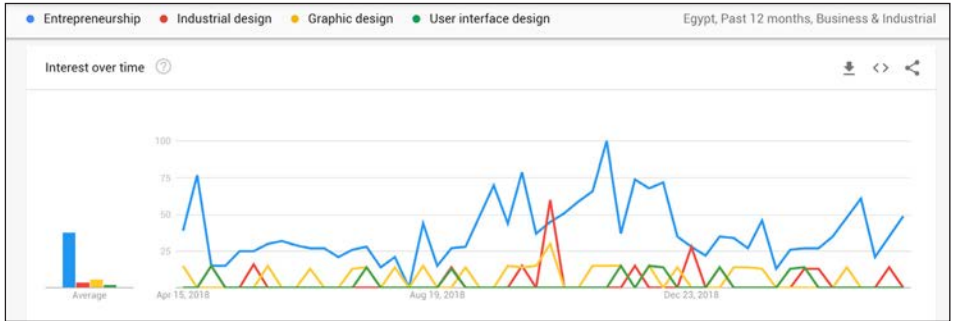


Figure 3. Interest over time in Entrepreneurship, Industrial Design, Graphic Design and User interface design, Source: Google Trends.

The only two announced design related initiatives taking place currently are the GIZ initiative to send trained youth coaches to Hasso-Plattner Institute for a one-week Design Thinking Coaching workshop to come back to Egypt and spread the knowledge. The second that only appeared in 2017 was establishing a Creative Stage in the annual Rise Up summit, where discussions on various design disciplines are discussed between Egyptian and European participants. Culture socialization among others is one of the differentiators of attitude.

Furthermore, not involving design is expected from SME leaders who do not pay attention to their employee and customer satisfaction (Wolf, 2008, p. 20). Therefore, according to Gantum and Blessing, the engineering designers influence their design process, yet the culture is not considered. Different cultures of designers trigger their ability to collaborate and work together, which is a success factor as per design research. There is lack of know-how when it comes to cultural influences in the design process, in spite of the increasing intercultural design (Gantum & Blessing, 2007). This paper aims to initiate bridging this gap by first understanding the challenges faced from the design entrepreneurs' side.

2. Empirical research: Grounded theory

2.1. Grounded theory

As per Strauss; grounded theory aims to investigate the real world in all its twists, however it is known that it cannot be 100% successful (Glaser & Strauss, 1967). This research cannot be undertaken without understanding the twists underlying within the start-ups and accordingly, during this study, grounded theory was the main method used. Since this particular area of research tackles communication and interpersonal skills, the analysis can easily be biased and thus grounded theory was chosen to eliminate any initial hypothesis. In depth individual interviews were held with each entrepreneur. Most of the interviews conducted were around 60-75 minutes long. Four interviews were conducted with six entrepreneurs (two of the interviews were conducted with both founders at the same time), two are amateur yet experienced designers, one

is not a designer but runs a design business, two are bag designers and the last one is a textile designer. Two of the interviews were conducted with both founders of the start-up. All the interviews were conducted with the main founder and/or idea initiator. All the interviewees are between the ages of 23 and 28 years old. Two of these start-ups conduct more than 50% of their production in either informal areas of rural areas. All the interviewees have a university degree and all of their start-ups have either won competitions, went through an entrepreneurial incubation program and/or gathered crowd-funding. In addition, three of the start-ups have a direct publicly announced social cause. Finally, all of them are well connected in the Cairo entrepreneurial ecosystem.

Furthermore, the program used to establish the codes, code categories and code document table is Atlasi.ti 8¹. The qualitative data analysis program allowed smoother comparison between samples due to its friendly user experience. The below screenshots were extracted from the program. The codes presented below summarize the struggles faced and the solutions offered by the entrepreneurs. It was important during the interviews to identify design's role in the start-up scene, however the results were not enough to define the role.

2.2. Sampling criteria

Setting criteria by which the entrepreneurs were chosen was essential to keep the research focused. More 10 interviews were conducted but were not included in this study due to

1. Retrieved February 4, 2019, from <https://atlasti.com/product/v8-windows/>.

their irrelevance. The following are the criteria by which the entrepreneurs were chosen.

- Owning a start-up for more than 1-2 years;
- Start-up is still working even if it is not making revenue;
- Either the founder is a designer or the products sold are design related;
- The start-up has gone through at least one innovative product development phase;
- Has collaborated with designers either in house, part time or outsource;
- Has five or more employees;
- Has more than ten makers.

2.3. Limitations

In this section some of the challenges while using grounded theory are explained. Firstly, the respondents were not comfortable with an open ended interview, they asked for more specific questions. This is caused due to them being used to fully structured interviews from the media. Secondly, some respondents felt insecure to discuss their failure openly, it took effort to encourage them to open up. To help them share their experiences openly, the author focused on putting them in a situation where they give advice to fellow entrepreneurs during the interview. Thirdly, they communicated out of context information due to the open ended questions.

And fourthly, interviewing respondents in their workplace might be distracting for them and thus leads to their trying to finish off the questions rather than be more engaged and open to answering.

3. Empirical findings Phase I: Design entrepreneurship in Cairo

3.1. Entrepreneurship's perception

According to several references the definition of entrepreneurship and how it is perceived differs. The way entrepreneurs define it has also varied depending on their struggles, achievements and entrepreneurial ecosystem influences. The sample interviewed argued; an entrepreneur is a problem solver yet due to the ecosystem influences, being an entrepreneur has become a fun trend over the past couple of years, thus not all entrepreneurs actually solve problems. Alternatively, despite this trend, others perceive entrepreneurship as a sustainable on going innovative business. In total, entrepreneurship represents personal values for each entrepreneur, either reflected in her/his passion or reason for existence. Furthermore, Cairo is viewed as a community with lots of problems, and as a result several opportunities emerge for start-ups.

3.2. Entrepreneurial education for young designers

Evidently, most of the entrepreneurs tackled the existing entrepreneurial education. One of the main struggles is lacking know-how in finance and inventory keeping. Due to the fact that they are forced to start with a small team, these tasks are conducted independently which consequently caused bigger problems. Moreover, going through an incubation program has helped in various ways, either in terms of know how or in terms of seed funding. However, these incubation trainings require a lot of time and commitment which makes it harder for them to focus on their actual businesses.

Being a designer in Cairo only leads to either of the following three options; freelancing, working for an agency or a corporate. Being a freelancer in most cases is not stable income, working at an agency or a corporate eliminates the work-life balance that some seek. As a result, being an entrepreneur would be a preferable choice for some due to the struggles faced in each of these options and due to the well positioned image of entrepreneurship in Cairo.

In spite of the above mentioned challenges, some solutions are undertaken. Learning by doing, which in most cases could be time consuming yet this is due to lack of role models.

Likewise, some educate themselves and their teams via online and offline short courses either paid or for free. And finally, since university education is offered during the ages of 18-21 – where it would be difficult to relate to on ground work for some students – it is suggested offer entrepreneurial education at an earlier stage, in schools. On the other hand, when working practically in the market, being an entrepreneur is to be acquired not taught.

3.3. Ecosystem impact

Over the past years the Cairo entrepreneurial ecosystem has continued not only to grow inside Cairo but to branch out in other governorates including upper Egypt. For the involved parties, it is indeed invigorating not only to witness but to experience as well. Nonetheless, this ecosystem faces and causes several problems. Initially, the parties involved were working hard on maintaining the ecosystem and allowing it to flourish, however this backfired by creating a trend of becoming an entrepreneur.

Being an entrepreneur is currently perceived as “cool and fancy” rather than hard working. Whereas, the existing ecosystem has established a steadily growing network that continues to support opportunities. Meanwhile, more is still expected in terms of governmental and legal support.

4. Empirical findings Phase II: Challenges facing Design Entrepreneurs

Taking the entrepreneurial route as a career path has its pros and cons. According to the sample, a lot of stress was experienced in terms of working in teams, collaborating with other parties and actually implementing the business.

The expression of stress can be easily linked to collaborating with makers, workshops and designers. The challenges are not only linked to communication in terms of understanding one another, but also in terms of being keen on doing the assigned tasks and aligning both parties' objectives together. Unfortunately, these parties order their priorities differently causing this miscommunication and hence being stressed.

4.1. Design Entrepreneurs' General Challenges

After conducting open coding and categorising coding, the problems facing the entrepreneurs were visible and hence categorised. Firstly, the general challenges that have faced them along their journey, some of which have been solved and some are still problematic. As per the table below, being stressed and receiving destructive criticism is a constant struggle that they face, however they establish ways to overcome it (Figure 4). On the other hand, lack of governmental support is considered less of a struggle, due to the ease of

finding alternatives to the support needed. Other challenges entail managing conflicts, risk, resources and confidentiality.

Challenge Categorization	Interpersonal challenges	Technical challenges
	Weak workers communication	Maintaining financial stability
	Being stressed	Risk management
	Destructive criticism	Lack of governmental support
	Managing conflicts	Resource management
	Lack of role models	Maintaining confidentiality

Figure 4. J. G. Attia, Interpersonal and technical challenges facing design entrepreneurs.

In the below figure, Atlas.ti helped create a code/document table to view the code categories used per interview (Figure 5).

	D3:X1	D4:X2	D6:X3	D7:X4	Totals
Challenges	8	8	1	17	34
Design's role	9	1	8	8	26
Entrepreneurial Ecosystem	7	7		7	21
Market	2	5	10	11	28
Solutions	5		6	2	13
Totals	31	21	25	45	122

Figure 5. J. G. Attia, Codes - Document Table.

As viewed below the challenges faced by X4 were more when compared to the rest due to the founders' increased stress levels while collaborating with the makers.

Furthermore, despite the fact that the co-founder of X2 is a graphic and textile designer, her use of design thinking was only subconscious not intentional and thus the lowest design role. When the entrepreneurial ecosystem was discussed in the interviews, X3 showed the lowest categories since he believes the ecosystem is relevant to his needs. More beneficial knowledge is found in focused smaller events than in the ones offered by the famous ecosystem. Finally, the interpersonal and logistical challenges while collaborating with the makers as mentioned in more details in the following sections.

4.2. Makers' related challenges

Entrepreneurs' face challenges with manufacturers on daily basis in logistics, communication and finances. These challenges affect their start-ups' internal efficiency. Initially locating the workshops is difficult in Cairo due to the lack of documentation, thus the entrepreneurs are forced to either consult others or roam the streets looking to locate the workshops. Yet when founded, the areas they are located in are mostly dangerous for people from different social economical classes to access. Consequently, fraud and harassment are limitations to communicating inside these communities.

This gap in documentation also negatively affects access to materials. Moreover, the manufacturers having limited technical skills thus limited problem solving skills and not controlling quality causes challenges in the product development phases. Evidently, lack of introducing new techniques limits the design intervention in terms of solving existing problems in the production phase or product development. In terms of finance, entrepreneurs struggle with the fact that the more

quantities they order, the higher price they get, thus they suffer from the amount of hassle financially and logistically they face to produce small quantities. Furthermore, in cases of collaborating craftsmen and designers, there is a struggle between following a pre-planned design and freestyle. The use of freestyle when implementing products is not suitable for the entrepreneurs' business model. Finally, the interviewed entrepreneurs are challenged by innovating more features or new product lines due to these challenges, yet they act as a motivator to develop their methods.

4.3. Designers' related challenges

High turnover of designers could be due to several reasons, specially in a frequently changing economic climate in Cairo. However, this study focuses on the human related reasons behind conflicts between designers and design entrepreneurs. The designers' related challenges involved lack of flexibility in design amendments and adequate skill set thus directly affecting the start-ups' products in terms of delay and quality. The entrepreneurs' set deadlines that are sometimes pushed due to the time spent discussing the amendments needed from the designers. It is concluded that these discussions lead to conflicts that affect the work flow. The designers' lack of the needed skill set or performing tasks slowly causes frustration when dealing with the rest of the start-ups' team.

Moreover, designers displaying increased ownership towards the designs made in progress acts as a constraint from communicating amendments. In this sequence, both parties – the designer and the design entrepreneur – don't share the same intentions while collaborating.

The designer in this scenario seeks ownership of her/his idea and the entrepreneur seeks “getting the job done”. The above mentioned challenges cause a behavioral problem when communicating with designers thus leading to personal conflicts between both parties, consequently leading to a high turnover.

5. Conclusion

Although the above mentioned challenges seem to cause stress, the sample found ways to manage. As per their trial and error iterative phases, improvising when collaborating with different parties proved to solve problems in a timely manner. Nonetheless, generating cultural change in spite of the surrounding continuous destructive criticism proved to be ambitious. Cultural change would be reflected in creating a trend in some cases, proving the role of design in change.

Despite the significant contrast between designers and makers in terms of education, social economic class and skills set, they share some attributes as mentioned in the below figure (Figure 4). These results tackle the struggles faced while interacting with the parties involved in the implementation phase of the product development process. Whether the interviewed sample are working with designers or makers, they struggled to find a relevant role model to follow as mentioned above. This not only increased their stress levels but also forces them to solve each problem in terms of trial and error.

5.1. Breakdown of challenges

The below map showcases the challenges faced in general by design entrepreneurs. The challenges are first categorised into interpersonal and technical, these were general findings

from the overall study. However, when further categorising the “weak worker’s communication” inside the interpersonal categories, one finds specific issues. As per the map, the start-ups being design start-ups collaborate with designers and makers either consecutively or alternatively (Figure 6).

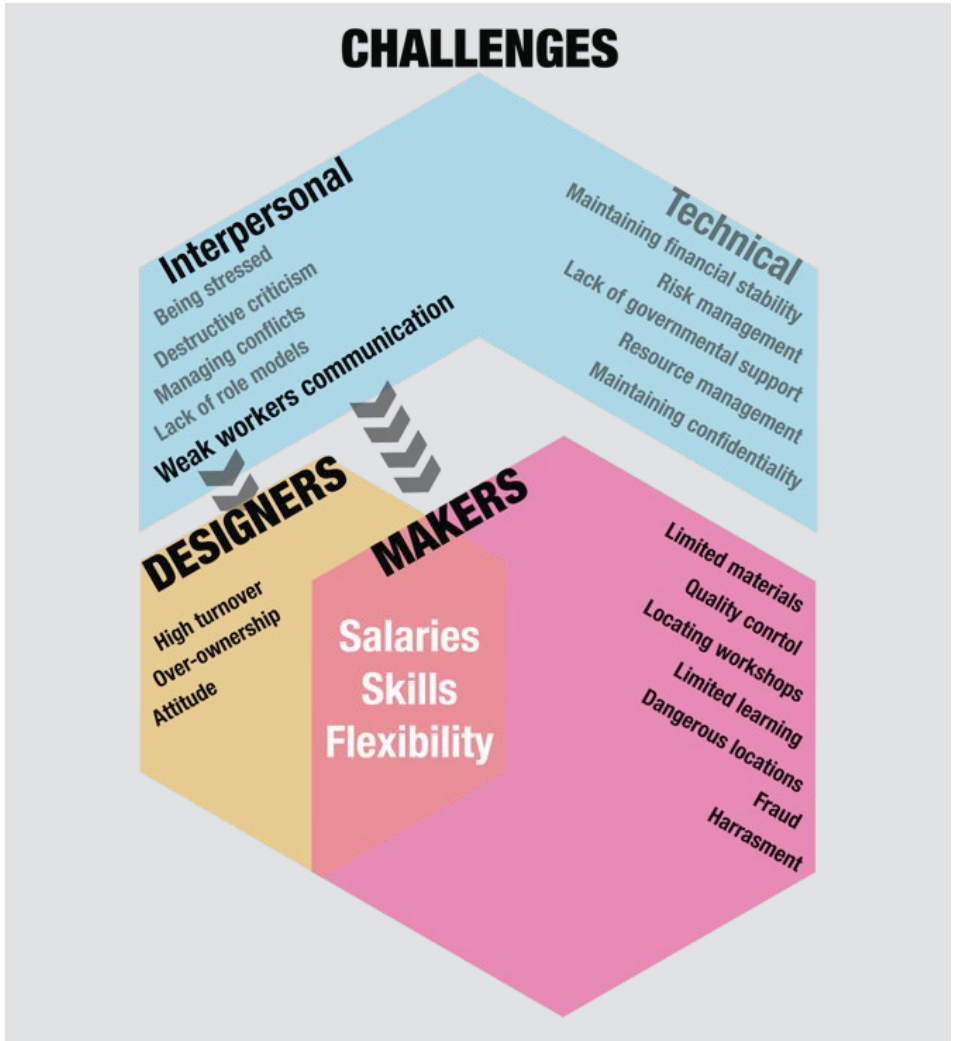


Figure 6. J. G. Attia, Breakdown of challenges faced by design entrepreneurs.

According to field research and observations, the designers and the makers in these scenarios have different backgrounds, designers have university degrees, get distinctively higher salaries, on the other hand the makers do not have any university education and are paid in lower wages. However, similarities in the communication issues took place such as flexibility while amending the work, negotiations over salaries and finally not having the required skill set. The latter seems to cause the most conflict, since most of the time neither parties aspire to expand their skills.

These findings allow us to observe that the roles of designers, entrepreneurs and makers are not clearly defined. Not in the sense that they do not understand what is expected from one another but neither parties understand their own role. Provided that these roles are defined, evaluating the salaries and wages would be easier. Moreover, these definitions of roles will also inform the parties who is in the authoritative position and when. And finally, bridging the educational gap either through university education or via trainings is a need to smoothen the communication channels.

5.2. Future steps

This study only revealed the underlying obstacles faced by design entrepreneurs in the existing ecosystem. It also analyses some similarities when dealing with different types of employees. Admittedly, more research is needed to further understand the cause of these issues, starting with university education. Research might question the methods by which young designers are guided into communicating while working on group projects.

Consequently, investigating the communication barriers between makers and designers in terms of implementation and establishing authority in the workplace. Moreover, more research is needed on the design job opportunities in Cairo either inside or outside the entrepreneurial scene. Undoubtedly, since the training field is becoming more constructed as an integral part of the ecosystem, research on the expected trainings makers and designers could attend together to enhance their communication on both the technical and interpersonal levels. The following bullets summarize the above mentioned research into questions:

- What are the communication barriers between designers and makers in Cairo's entrepreneurial ecosystem while in the implementation?
- How can authority be managed between the designer and the maker in the implementation process within a startup?
- How can designing a workshop for designers and makers help them communicate better?

To reciprocate, there is a lot of action taking place in the ecosystem that would go to waste if not constantly documented, compared and analyzed for the uprising design generations. Understanding the struggles and the failed and successful methods of solving them helps create a foundation for design entrepreneurship. When this foundation is better established, the economic status in Cairo will flourish.

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BIOGRAPHIES

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Bilge Merve Aktas is a maker-designer and doctoral candidate at the Department of Design at Aalto University. Her research interests cover issues like textile crafts, making, materiality and nonhuman agency. Her master thesis examined ways to build a bridge between traditional woman crafts and contemporary design. In her practice-led doctoral research, she examines the interaction between human material interaction during making processes to understand how material actively affects making. From a nonhuman agency perspective, she explores the field of design as an entanglement and examines material's participation in that landscape. For her research, she examines her own felt making processes and observes expert makers.

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Jomana G. Attia

M.Sc. degree in Design from the German University of Cairo-Egypt. Attia has experience in Marketing, Marketing Consulting and Market research. She has worked with several NGOs and SMEs in the areas of participatory design, branding and communication. She is currently teaching in the Design Theory department at the GUC, while working on her Ph.D.

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Dina Bahgat

Dina Bahgat is an industrial product designer, after graduating university with highest honors, she worked as a junior designer in the Egyptian household appliances company Universal Group. After gaining practical experience from the market she applied to work at the German university in Cairo as a Teaching Assistant in the Product design department. Bahgat is currently working on her Master's degree with topic "Low-income Amputees in Egypt" exploring the difficulties that they face and how to optimize solutions fitting to the context and Amputees situation.

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Paola Barcarolo

She is a researcher, professional consultant and designer working in the field of Design for Social Inclusion and ICTs. She got a Ph.D. in Civil-Environmental Engineering and Architecture – Industrial Design curriculum – and graduated with honours in Architecture-Building Engineering at the University of Udine. Her main research interests concern: a) Strategic-sustainable enhancement of physical and virtual environments, b) Multisensory environmental accessibility, c) Breaking down of physical and sense-perceptive architectural barriers, d) Inclusive and participative communication design, e) Tourist enjoyment and f) inclusive education, also in the field of visual and cognitive disability, in the context of ergonomic and photogrammetric aspects related to the accessibility of UNESCO Heritage Sites and to the 2.5/3D augmented modelling "for All" of parts of the same heritage. Her studies have been published in several scientific publication, with which she participated to national and international research projects. In addition, she is a certified specialist and she carries out professional activities and applied researches in Design, Research and Innovation as: Disability and Case Manager, Typhology Advisor, Professional in Design for All, Euro-Project Designer and Manager and Visual Merchandiser.

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Sara Coscarelli

is a PHD Fellow Professor at EINA since 2011, Centre Universitari de Disseny i Art de Barcelona, at the UAB. She is doctorate in Humanities (2023), at UPF, and Graduate in Interior Design (2004) at EINA. She combines teaching and researching in Space Design Bachelor at university. She coordinates the Master in Space Design and also she has her own studio of space design Sara Coscarelli Creación de Espacios (2008). Her researches are related with Interior Domestic and Commercial Architecture in the Mediterranean context during the Post War II. She is developing consequences of the Mediterranean Critical Regionalism concept. She has published in many international conference.

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Serena Del Puglia

Architect, PhD in "Disegno Industriale. Arti Figurative e Applicate". She carries out research at the Department of Architecture of Palermo. She deals with Light Design and Exhibit Design, with particular reference to the field of Design

for cultural heritage, subjects that she writes articles about and took her to attend several international congresses and meetings. She takes care of the design and construction of museum systems, with particular attention to the relapse that technological innovations and the use of digital tools have in the exhibition design. Since 2011, she has been Contract Professor in Interior Design, Scenography, Industrial Design Laboratory and Industrial Design Laboratory II in degree courses in Architecture and Industrial Design at the University of Palermo.

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Valentina Frosini

Valentina Frosini is a Designer with a remarkable experience in work, Research and Academy. Design Degree and PhD in Design (focused on Design and Sustainability), she has 5 years of field intercultural experience in European Design-driven projects around the Mediterranean area. ADI Targa Giovani Award in 2016 with the project Ninananna®, she works in Design and Sustainability with a special focus on the relationship between Design and Education. Currently she's working on a training for Didacta "Design for Education: a call for a middle-long term co-design project between designers and teachers to re-thinking tools teaching".

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Laura Galluzzo

PhD, Research Fellow and Contract Professor in Spatial and Service Design at Design Department, Politecnico di Milano. She is part of POLIMI-DESI Lab within the DESIS Network (Design for Social Innovation and Sustainability). She works for research on public spaces, community centered design project, design for social innovation with a particular focus on spaces and services. She is the coordinator of the research ADESSO, Aesthetics for Design of Social Innovation. She works in different research programs dealing with Design for Social Innovation. In the last years she worked on campUS, a local research that was awarded of the XXV Compasso d'Oro (2018) and Human Cities- Challenging the City Scale, a European research project funded by the Creative Programme (2014-18). She was part of the Editorial Team of the Italian Pavillon for the XXII Triennale (2019).

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Nariman G. Lotfi

Lotfi is an instructor at the German University in Cairo where she was awarded a Master's degree in Product Design in 2014 focusing on Design and Bionics. She has focused on research in the fields of Product design, Biomimicry, and Sustainability which she presented in workshops and talks including a TEDx talk at Zewail City University in 2017. She was awarded the Grand Prize by the Biomimicry Institute for an irrigation solution for Fayoum's agriculture in 2013. She is currently working on her PhD degree focused on Design Education and the future of the industrial design scene in Egypt.

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Mona A. Marie

Mona A. Marie graduated in 2009 from the faculty of Fine Arts, Graphic design - animation department, Helwan University in Cairo. She Obtained a M.Sc. degree in Graphic design from the German university in Cairo- Egypt (GUC) in 2015. She is currently teaching in the graphic design department at the GUC since 2010, while working on her PH.D. Also she had the chance to be a TEDx speaker.

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Emilio Rossi

He until recently was the Director of Emilio Rossi Design Consulting (Italy) and an Adjunct Professor in Industrial Design at the Department of Architecture, University of Chieti-Pescara (Italy). From October 23 rd, 2019, he joined as a Senior Lecturer in Product Design (equivalent to Associate Professor) in the Lincoln School of Design at the University of Lincoln (UK). He got a Ph.D. in Architecture and Urban Planning, with curriculum in Industrial Design, at the University of Chieti-Pescara (Italy) in 2014. He carries out advanced studies in the area of industrial design and on products' technological innovations; specific areas of research and work are: Design for Social Inclusion, Sustainable Human Centred Design, Knowledge Sharing, 3D Printing and Innovation Design in/for SMEs. His researches have been published in several publications, including: books (as

an editor), conference proceedings, peer-reviewed journal articles, book chapters; he also wrote six encyclopaedic entries for The Bloomsbury Encyclopaedia of Design. Since 2010 he is member of the Technical Committee on 'Human Factors and Sustainable Development'; at the International Ergonomics Association (IEA) and, from 2017, he co-chairs the International Conference on 'Additive Manufacturing, Digital Modelling and 3D Prototyping' at Applied Human Factors and Ergonomics (AHFE).

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V. M. Viviana Trapani

Architect and designer, associate professor in Industrial Design. She is member of the Department of Architecture of Palermo. She is Coordinator of the Master's Degree in Design and Culture of the Territory. She carried out an intense didactic and research activity in the fields of design for sustainable development in the Mediterranean areas, design strategies for territorial resources and the art-design relationship. Now she is mainly developing a research on design for the Cultural Heritage enhancement and fruition, through forms of technological and social innovation that make it possible to activate and communicate in particular the intangible aspects of cultural heritage.

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Ahmed Wahby

Graduated in 1992 with a degree in Architecture from Ain Shams University, Cairo Egypt. In 2000 he obtained an MA degree in Islamic Art and Architecture from the American University in Cairo, AUC where he had worked as a research assistant for almost 4 years. In 2008 he was awarded his Ph. D degree in Islamic Art, Architecture and Archaeology from the Oriental Department of the Otto-Friedrich University, School of Human Sciences, Art and Culture, in Bamberg, Germany. Dr. Wahby has been teaching since 2008 at the German University in Cairo GUC, the Faculty of Applied Sciences and Arts in the Design Theory Department. He has also served as the Faculty's Vice Dean for 8 years. He has numerous publications in local and international journals.

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Progetto grafico is an international graphic design magazine founded in 2003 and published by Aiap, the Italian association of visual communication design. A point of reference for such design in Italy from its start, it has also been fully translated into English since 2012. • In December 2017, Jonathan Pierini and Gianluca Camillini became the current editors. • The new *Progetto grafico* offers a critical look at graphics and visuals through a narrative broken up into fragments. Its aim is to offer articles connected in different ways so as to foster a series of transdisciplinary, historical and contemporary considerations. This multiple viewpoint, ranging from very distant to very close, seeks to look at the real both in the broadest terms as well as in a more specialist context. Our belief is that observation, whether of artifacts or representations, as well as production of visuals or graphics can add to today's cultural debate. • Contributions can include visual material, essays and interviews. Each issue intends to explore the storytelling opportunities of the journal.



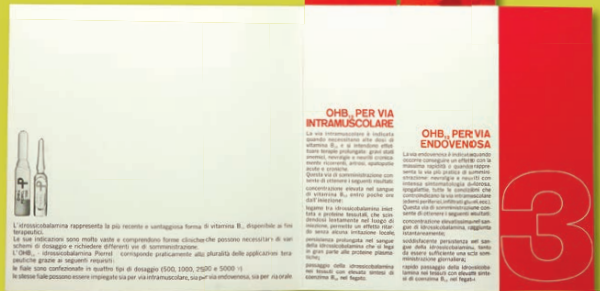
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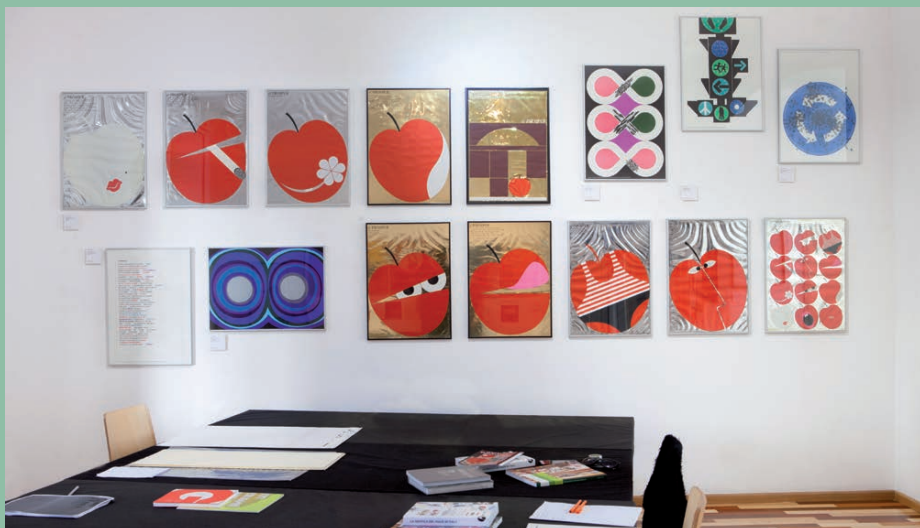
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