

Design Thinking and Its Use in NGOs in Gaza Strip

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Abstract: *The study aimed to identify Design Thinking and its use in NGOs in Gaza Strip. In order to achieve the objectives of the study and to test its hypotheses, the analytical descriptive method was used, relying on the questionnaire as a main tool for data collection. The study society was one of the decision makers in the local NGOs in the Gaza Strip. The study population reached 78 local NGOs in Gaza Strip. The overall inventory of the possible study community was based mainly on the use of the SPSS in processing and analyzing the data obtained through the survey tool. Smart-PLS was also used to construct the structural equation model (SEM) Analyzing the relationship between study variables. The study found that Design Thinking mediates the relationship between the management of process design and decision making with a holistic effect. The study showed the interest of local NGOs in creating a good mental image in the local community. And the ownership of local NGOs to the expertise and technical skills required to implement the projects, and showed the adoption of local NGOs in their activities to meet the needs of the beneficiaries and their wishes, and local NGOs analyze the problem, and causes, through data relevant to the decision, based on reference data for decision-making. The main recommendations of the study are: The need for senior management in the local NGOs in Gaza Strip to adopt the methodology of design thinking because of its impact on the sustainability of the projects, design the technical feasibility study and meet the wishes of the beneficiaries.*

Keywords: Process Design Management, Decision Making, Design Thinking, NGOs, Gaza Strip, Palestine.

1. INTRODUCTION

The business world and organizations live in a technology age filled with opportunities and challenges. Opportunities, challenges, and quality management are key to executives. Accordingly, the Process Design Management (PDM) emerged as a methodology based on the human axis, which works to build the vision and strategic plans of the organizations. The design thinking model derived from PDM is considered as a tool of designer thought, which the manager can use to generate creative ideas, engineering ideas, to sustain projects, develop strategic plans, meet the desires of the beneficiaries. The world of management, in order to seize opportunities, meet challenges, and make effective decisions that transform them from affiliated organizations into creative organizations.

After several research in the field, it was found that those who adopted the design methodology were more capable of strategic leadership, decision-making, increased capacity for team building and management of initiatives, and also contributed to supporting staff development, technology upgrading and inclusion within FAO budgets. Therefore, the researchers studied design thinking and its use in the NGOs in Gaza Strip by reviewing the problem, the objectives and the importance of the study through the desk and field research.

2. PROBLEM STATEMENT

The researchers noted the extent of the challenges and obstacles faced by managers who need to be intuitive and inclusive of so-called wisdom in decision making through their project management work in several different NGOs. Therefore, the researchers studied the NGO sector and the international reports issued in particular, showing that NGOs provide about 90% of the social services of the local community in Palestine, due to the ability of organizations to maintain the most experienced and knowledgeable Palestinian human resources (Costanini et al., 2015) (Athamna and Al Husseini, 2011). Accordingly, the results of the survey of civil society organizations in Palestine for the year 2015 by the European Union and civil society organizations in the Gaza Strip need to:

1. Create an appropriate environment for launching innovation processes.
2. Need to support existing organizations functionally to ensure working structures and activities, and develop sustainability plans.

Based on previous indicators, the main question for the study was constructed as follows:

What is the use of design thinking in its dimensions (sustainability of projects, technical feasibility study, and beneficiary's desire) in local NGOs in Gaza Strip?

3. RESEARCH IMPORTANCE

The importance of the study and its justifications can be summarized as follows:

The subject of the study derives its importance from the fact that it highlights the design thinking and its use in NGOs in Gaza Strip. This is a new approach for many organizations to achieve their goals efficiently and effectively. A Danish design center survey conducted between 1998 and 2003 showed that Danish companies, which adopted decisions on design thinking and management of science design, increased their total revenues by 22% and grew much faster than other companies. (Melander, 2001). The importance of the study for NGOs is: The study provides a scientific reference that can guide the employees of NGOs, especially those with higher levels of management, to solve the challenges they face and make strategic decisions. The study will also contribute to activating the building of design thinking in complex decision making in Palestinian NGOs.

4. RESEARCH OBJECTIVES

The main objective of this study is to identify the reality of the use of design thinking in its societal dimensions (sustainability of projects, feasibility study, and beneficiary's desire) in NGOs.

5. RESEARCH HYPOTHESIS

Ho 1: There were statistically significant differences at the level of significance of 0.05 in the responses of the respondents on the axis of design thinking in its societal dimensions (sustainability of projects, technical feasibility study, and beneficiary desire) due to demographic variables in NGOs.

6. THEORETICAL FRAMEWORK

Design thinking

Design thinking is a human-centered approach, processes used to investigate ambiguous problems, to acquire information, to analyze knowledge, and to bring solutions through the designer's toolkit to integrate people's needs and the potential of technology in planning and business.

Concept of design thinking

Design thinking is a tool that connects man to creativity in the generation of logical visions and solutions through the use of different ways of thinking, including empathy with

problem conditions, observation, cooperation, rapid learning, conceptualization of ideas and rapid conceptual models. Its main objective is to involve the consumer, the designer and the employer in an integrative process to reach a high quality product or service that satisfies all parties. (Jansson, Viklund, & Lidelöw, 2016)

Based on the above, Sarah Gibbons' definition of design thinking, which is the ideology that follows the practical approach, is based on problem solving that leads to creativity. Creativity can lead to differentiation and competitiveness. It also contains six distinct stages specifically (GIBBONS, 2016) the concept of design thinking as an application of the intuition of designers and ways of solving problems, regardless of what the problem. It cannot be considered as a substitute for professional design or art and craft in design, but it is a methodology of creativity and empowerment. (Lockwood, 2009). Tim Brown described design thinking in an article in the Harvard Business Journal (HBR) as a discipline that uses intuition, designer styles to suit the needs of people with technological capabilities, and also how strategic management can turn them into value for customers. (Brown, 2008), and Brown defined it as a human-centered approach to creativity derived from the designer's toolkit to integrate people's needs, technology potential, and business success requirements (Brown, 2008).

In light of the above, the procedural definition of the study can be deduced as: a thought based on the designer's different thought to design a tool to study the negatives and positives that the organization can face and contribute to solving obstacles in creative and different ways that satisfy the beneficiary mainly because it is built on the side Humanitarian assistance.

Historical development of design thinking

The concept of design was conceived as a "way of thinking" in science to Herbert A. Simon (1969) and in design engineering to Robert McKim (1973). The design was adapted for commercial purposes by David Kelly, who founded IDEO in 1991. The former worked with the idea of thinking On the basis of design, but not as a methodological term but as a way of thinking, so we see that design thinking is influenced by a number of different disciplines such as architecture, industrial design, management, software development, engineering (eg system theory and design methodologies) Different disciplines (Savić, 2009).

Table 1: Historical development of design thinking

Period	Main Perspective	Role of design	Design management focus	Pioneer of the intellectual school
1950-1940	Design as a style	Quality of communication	Project management	Alessi Braun
1960 - 1970	Design as a process	creativity	Creative Management (NPD)	Philips, Sony
1980 - 1990	Design as leader	Creative strategy	trade mark	Apple
2000 - 2010	Design thinking	New business model	Creative organization	IDEO

The importance of design thinking

Based on an article with Andrea Nowia, CEO of PepsiCo in the Harvard Business Journal, "How Andrea Nowia transformed design thinking into strategy, an interview with CEO of Pacey," Nowia said: "Design thinking brings the company to innovation, in 2012 Mauro Porcini was appointed as the first head of the design department at Bessie, now design has become the most important voice in decision making in the company, adding that design is more than a packaging process, we have to rethink the process as a whole supply chain. (Ignatius, 2015) In recognition of the importance of design management, Harvard Business School highlighted design and design management in a series of articles entitled "Design Thinking Revolution" in its September 2015 edition. The themes of the articles were as follows: (C) The maturity of design thinking within the organization's culture (Kolko, 2015); (e) How Samsung became powerful by adopting the design strategy (Brown, Martin, 2015), (Yoo & Kim, 2015); (d) Chief Executive Officer of Pacey, creating the organization where design grows within team leadership (Vries, 2015) Finally, as discussed earlier, Andra Nuoya transformed design thinking into strategy: an interview with the CEO of BISI within the strategy (Ignatius, 2015). We conclude from this that it is important to integrate design thinking into the core of strategy development and organizational change to create a culture that focuses on the solution (Ursrey, 2014). The following are the most important points that must be taken into account for the importance of design thinking (Shapland, 2017):

- Focuses on end-user needs.
- Encourages new perspectives, and examines all possible solutions.
- Demonstrates initial errors, and shows possible solutions.
- Improves finished product continuously.

Local NGOs

NGOs play an important role in societies. The more they have an active role in society, the better and faster the society develops. Therefore, civilized societies tend to integrate NGOs into political dialogue, governance, and other matters of importance in the country. Organizations often turn to the spirit of starting, innovating, experimenting, innovating in implementation, and also making voluntary efforts in Individuals who have a national spirit in building the nation, are organized into the efforts of law and legislation governing voluntary social action.

Definition of NGOs

Organizations that aim to provide services either directly or indirectly; to meet the needs of people, especially marginalized groups in societies, based on voluntary and non-profit voluntary efforts. On the other hand, it is the link between societies and the government through awareness and support of individuals in political, social, educational, health, economic and other issues. The United Nations has

also defined them legally as follows: "Organizations with a specific vision that provide services to groups and individuals, Improving the situation of groups that are beyond or adversely affected by development trends, and whose work is determined in the fields of development projects, emergency and rehabilitation, as well as the culture of society and the defense of economic and social rights"

7. LITERATURE REVIEW

- Study of (Mosley, Wright, & Wrigley, 2018). The aim of the study was to explore the experience of the facilitator and his level of design processes in lectures and workshops. On the other hand, the study dealt with the role of design thinking in solving the problems involved, Experience in design thinking using the analytical description methodology. The in-depth case study was used as a tool in institutions of higher learning in Australia and the Netherlands to discover the role of design thinking in helping the facilitator. The most important results of the study: The impact of complex problems, and the level of facilitator experience, showed that workshops based on the methodology of design thinking were facilitated.
- The study of (Chou, 2017), which aims to provide the methodology of design thinking and applied in the field of social entrepreneurship projects, and discuss the basic standards of the methodology of design thinking in social entrepreneurship. In addition to the analysis of the theories of social entrepreneurship, the details of the method of design thinking, the determination of the process of design of social entrepreneurship projects, and the identification of the relationship between social entrepreneurship and the way of design thinking, using the case study as a tool to support the methodology of design thinking in leading social projects. One of the most important findings of the study is that it has shown successful collaboration between design experts and social entrepreneurs to reduce poverty in the community in the case of the Hever International Foundation, the Bill Foundation, and Melinda Gates. The Institute of Social Enterprise at Northeastern University demonstrated the impact of teaching design methodology in classroom and practice in the real world to solve social problems.
- Study of (Ewin, Luck, Chugh, & Jarvis, 2017). The aim of the study was to identify the importance of design thinking as a new concept in project management education and its role in shaping future project managers. Creative solutions to problems, and capturing opportunities. The main findings of the study were: re-examination of project management education and integration of design thinking to prepare better project managers; to reduce project failure in the future; and the results of the project's failure as a weak link between the project team and key project stakeholders. Relationships and the development of soft skills for managers by

including them in the project management curriculum. The tedious methodology of the study is the literary narrative which aims to review all the literature on the concepts of study. The purpose of this review is to consider the intersection of these concepts, identify gaps in literature and propose future research.

- The study of (Ali, Boks, & Bey, 2016) The aim of the study was to look at the intersection points between design and sustainability workshops in projects, and to reveal possible knowledge in project management; to improve, develop, and implement efficiency and effectiveness in the design of sustainability tools; the project management study reviewed the " Sustainability. The exploratory approach was used based on deep literature review in project management, process design management and sustainability implementation. The main findings of the study were: Project management focused on design in sustainability. The results showed that the systematic use of design contributes to the sustainability of projects and that their effective use leads to the achievement of the desired objectives.
- The study of (Glen, Suci, Baughn, & Anson, 2015). The study aims to provide guidance to faculty members of higher education institutions who seek to integrate design thinking projects into their classrooms. The study illustrates the process of design thinking to include six stages: Observation, visualization, empathy, thinking, prototyping, testing, designing a business model that seeks creativity, and has been based on the experimental approach. One of the most important results of the study: showed that design thinking is a new approach in the process of education, where it depends on understanding the process of thinking the beneficiary and the stakeholders to design processes related to them and meet their needs. The results also confirmed that design thinking helps students to develop knowledge in a variety of activities. It helps business teachers to develop a more active and relevant curriculum to emphasize behavioral skills, with a focus on classic disciplinary content.
- Study of (Shapira, Ketchie, & Nehe, 2015). The study aimed to study potential contributors to projects, identify obstacles to the design process in relation to the development strategy, and create a prototype of an integrated process that could help achieve a more sustainable strategy. Relying on the development of a questionnaire, interviews with experts, and the development of an initial case study model as study tools. Among the most important findings of the study: participants in procedural research and experts indicated that the proposed prototype could help to reach strategic results and develop sustainable development goals. The study recommended: Exploration and development is a model, an examination of its applicability, its practical use, and exploration of the challenges that we may face

in applying the model of design thinking in sustainable development strategies.

- The study of (Johansson-Sköldberg, Woodilla, & Çetinkaya, 2013). The aim of the study was to discuss design thinking, the difference in its meaning based on context, and to identify design thinking as a means of creating an atmosphere of creativity and innovation. One of the most important results of the study: The presence of different views of the design thinking from the perspective of designers who practice design, and ways to exercise it, cannot be considered that these differences from a competitive perspective, but are parallel with each other. The study noted that from the point of view of the administrators there are three distinct aspects and the origins of design thinking, but generally in the world of management has not been focused academically or practically.
- Study of (Matthews & Wrigley, 2017). The aim of the study was to investigate concepts of process design management and design thinking, and to use these concepts to identify appropriate topics in business design science, to become part of higher education programs. The analytical descriptive approach, the use of focus groups, and interviews were used as a data collection tool. The most important results of the study: Many universities have established postgraduate programs in business management specialized in the management of design processes and design thinking within the lectures and workshops to solve problems and issues existing, and after reviewing all the information obtained, the study found that there are four areas overlap in these programs (2) integrative thinking; (3) process design management; and (4) design as a strategy.
- The study (Volkova & Jakobson, 2016) aimed at analyzing and raising awareness of the application of ODM in Latvia, highlighting the possibility of these methods and tools of creative management to build new organizational capacity, and maintain competitiveness in difficult working conditions; the well-being of society and the creation of a better environment for living. The descriptive approach was relied upon and the questionnaire relied on data collection. One of the most important results of the study: the need to change the business thinking model; to develop skills and abilities; to identify new driving forces in creativity through design thinking, to ensure continued value generation and sustainable competitiveness.
- The study of (Muratovski, 2015), which aimed to identify a number of large companies that invested in design, and the impact of design phenomenon in a wider scope, and aimed to focus on the main trend indicators that determine design, and its impact on the changing role of business and society. The analytical descriptive approach was relied upon and the case study was based on data collection. One of the most important findings is

that design management has become an essential part of complex decision making. Design management has played an important role within strategic management, as well as in decision making and strategic planning. The study added that design is an advantage for the business sector. Using this methodology within its work, such as Apple, Nike, Coca-Cola, IBM, to become an advantage of the company.

- The study of (P.Roberts, Fisher, Trowbridge, & Bent, 2015). The aim of the study was to learn how to apply design thinking as a challenge to health care management, to learn how systems work to benefit from proven decision-making, A new approach to decision-making in complex health care management, sustained through human-centered research, collective teams, practical diversity, rapid prototyping, identifying key elements of design thinking for the healthcare public, and demonstrating the integration of current health care management through creativity and practice. The descriptive analytical approach was adopted, and the questionnaire tool was used in data collection. One of the main findings of the study is that expanding the capacity and application of design thinking approaches in health care can help drive the necessary innovation in health care delivery models. The study shows that there is no clear and correct answer to the challenges facing health care now or in the future. , And the design thinking framework provides a new approach that is accessible and recognized; to discover, develop, and deliver old and new services that are better aligned with the individual.

8. METHODOLOGY AND PROCEDURES:

Methodology of the study

The research is based on analytical descriptive procedures. This approach is used as a method of scientific research that depends on the study of research phenomena as it exists in fact and it is concerned as and how to express them quantitatively or qualitatively or both. The qualitative expression describes the phenomenon or the studied feature and clarifies its characteristics, the quantitative expression gives us a descriptive description of this attribute or its size (AL-Askary, 2006). The researchers used this approach to study "the impact of PDM on local NGOs in Gaza Strip.

Study Society

The study aims to shed light on the community of local NGOs working in Gaza Strip, which numbered (667) organizations according to the statistics of the General Administration of Public Affairs and NGOs in the Ministry of the Interior on October 30, 2017, which represents the theoretical study society. As the study is interested in highlighting the local organizations that submit administrative and financial reports annually, while it is clear that a large number of these organizations are not active in society, so the researchers tended to choose the society style possible from the theoretical society by getting a list of most

Of the 100 active organizations of the Ministry of the Interior - Gaza, based on the largest annual expenditure of 1,221,762 \$.

After identifying the study population as the most effective organization, 22 organizations were excluded because they were offices of international organizations or offices of organizations operating in the West Bank. Thus, the final community available for study is composed of (78) local NGOs operating in Gaza Strip. The researchers used a comprehensive inventory method. The study members are decision makers in the local organizations operating in Gaza Strip. Two questionnaires were allocated to each organization. (156), but retrieved (109) questionnaire, and did not exclude any of the questionnaires, because they meet the required conditions, and the reason for this is due to the use of modern electronic technology in the distribution and mobilization of the questionnaire, making the recovery rate 70%, and reliable In circulating results studying.

Statistical description of the study population

The number of respondents in the study questionnaire was 109 participants from the decision makers and those in charge of local NGOs in Gaza Strip. Table (2) shows the statistical description of the study population according to the personal data of (71) participants in the study. (65.1%) of the total participants, and the remaining (38) participants formed the percentage of females (34.9%). This result is attributed to the fact that the percentage of labor force in Palestine according to the Palestinian Central Bureau of Statistics for the third quarter 2017 (July-September 2017) was 73.9% for males in the labor force compared to 19.2% for females within the labor force, The gap in labor force participation between males and females is large.

As for the age variable, the percentage of participants aged (25-30) years (18.3%), while the proportion of participants aged (35-30) years (27.5%), and the proportion of participants aged (35-35) years (29.4%), (24.8%). This indicates that the percentage of participants is less than 40 years, with a total of 75.2%. This indicates that the employees of NGOs are young, this confirms that the Palestinian society is a young society. The highest results for the age group (40-35 years) were 29.4% due to the fact that the participants in the society are managers and decision-makers.

As for the variable of academic qualification, most of the participants held bachelor's degree (69.7%) and master's degree (24.8%), and the remaining percentage of diploma holders and doctoral degree, indicating that most of the employees of NGOs are scientifically qualified.

With regard to the job title variable, CEOs accounted for the largest percentage (%35.8) of the study population, followed by project coordinators (29.4%) and project managers (21.1%). The rest of the participants were the chairpersons of the board of directors (4.6%) and vice presidents (9.2%). Executives as the institution's representative, and where direct communication is provided through them.

In the years of experience, the participants were classified as 8.3% with less than 5 years of experience and 27.5% of their experience started with 15 years and increased while 33% of participants had years of experience of less than 5 years. 10%), while the remaining 31.2% have years of experience

ranging from 10 to 15 years. The results indicate that more than 91.7% of decision makers in NGOs have more than five years of experience, With experience and skill in making the right decisions and wise in solving problems.

Table 2: Statistical Description of the Study Population by Personal Data (N = 109)

Age	The Number	The Ratio %	Qualification	The Number	The Ratio %
30-25years	20	18.3	Diploma	4	3.7
35-30years	30	27.5	BA	76	69.7
40-35years	32	29.4	M.A.	27	24.8
40years and over	27	24.8	Ph.D.	2	1.8
Job Title	The Number	The Ratio %	Years of Experience	The Number	The Ratio %
Chairman Of Board Of Directors	5	4.6	Less than 5 years	9	8.3
Vice President	10	9.2	From 5 to less than 10	36	33.0
Executive Director	39	35.8	From 10 to less than 15	34	31.2
Project Manager	23	21.1	15 years and over	30	27.5
Project Coordinator	32	29.4			

Statistical description of the study population by functional data

It is noted that the size of the study population available to the researchers is 109 participants from local NGOs in the Gaza Strip. Table (3) shows the statistical description of the study population according to the functional data. For the variable field of work, the study included more than twelve (30.3%), followed by agricultural organizations and organizations that deal with women's affairs in terms of the percentage of women working in the field of social work, including social, cultural, trade union, medical, youth, educational, (11%) each, and followed them on the path (8.3%), cultural organizations and education (7.3%) each, while the rest of the organizations participated in lower percentages as shown in the table due to the economic weakness The Gaza Strip is suffering from a comprehensive siege, repeated closures and increased unemployment. This has helped to lift the needy and the poor. The role of the government in providing services to citizens has been reduced. This has led to an increase in the number of organizations providing social services in the Gaza Strip.

As for the variable of the scope of work of the organization, the participants in the study were divided according to the

scope of work of the organizations in which they work and according to the geographical area covered by the organizations, (51.4%) they work in organizations whose scope of work is Gaza. Khan Younis was a working area (13.8%) of the study participants, and northern Gaza was a working area (12.8%) of the participants in the study, and for Refah was a scope of work (11.9%) of the study participants, and the rest of the participants (10.1%) they were employed by organizations within the central region. This is due to the concentration of organizations operating in Gaza Governorate, which is the central city that has formed the focus of the political and public work of the sector, as well as the existence of a huge population density in the city.

According to the variable number of employees, 52.3% of the participants in the study were employed by the organizations of the number of employees, 20% and more. 30.3% of the respondents worked in organizations with less than 10 employees, (17.4%) are employed by organizations of the number of employees (11-19). This is due to the fact that the study community is the most effective local community organizations based on the data of the Ministry of the Interior. Employment.

Table 3: Statistical Description of the Study Society by Functional Data (N = 109)

FAO's field of work	The Number	The Ratio %	Scope of the work of the Organization	The Number	The Ratio %
Social	33	30.3	North of Gaza	14	12.8
Cultural	8	7.3	Gaza	56	51.4
Woman	12	11.0	Central	11	10.1
Medical Association	9	8.3	Khan Younes	15	13.8
People With Disabilities	7	6.4	Rafah	13	11.9
Agricultural	12	11.0	Number of employees	The Number	The Ratio %
Youth And Athlete	2	1.8	Less than 10 employees	33	30.3
Union	1	0.9	11-19 employees	19	17.4

Educational	8	7.3	20employees and more	57	52.3
Childhood	2	1.8			
Human Rights	9	8.3			
Other	6	5.5			

9. RESULTS OF ANALYSIS OF AXES AND DIMENSIONS OF THE STUDY

The questionnaires were analyzed using the cognitive tests (one sample T test) to determine whether the response averages were. The mean is the deviation of the values from

the arithmetic mean, where the relative weight is measured by the mean (5/100) arithmetic mean (%), The relative weights of design thinking were determined from the point of view of decision makers in local NGOs in the Gaza Strip:

Table 4: arithmetic mean, standard deviation, and relative weight and T value for design thinking

No.	Dimension	SMA	Standard Deviation	Relative Weight	T Value Test	Ranking
1	First dimension: sustainability of projects	4.06	0.48	81.2%	*4.06	3
2	Second dimension: Technical feasibility study	4.17	0.52	83.3%	*4.17	1
3	Third dimension: the desire of the beneficiary	4.09	0.47	81.7%	*4.09	2
	Total degree of axis	4.15	0.42	83.1%	*4.15	

The value of the T-table at the level of significance (0.05) and the degree of freedom of 108 is equal to 1.660

- Table 4 presents descriptive statistical measures for the dimensions of the second axis of "design thinking" in the local NGOs in Gaza Strip. This axis consists of three dimensions. The second dimension is the "Technical Feasibility Study" (4.17 of 5) and relative weight (%83.3) the researchers attribute this to the awareness of NGOs about the importance of technical feasibility study for the development of organizational capacity. The role of financiers in supporting organizations is through workshops to develop their organizational capacities and build their technical capacities.

The third dimension, "the desire of the beneficiary" came in second place with an arithmetic average (4.09.of 5) and relative weight ,(%81.7) this is due to the experience of NGOs in providing services to the beneficiaries, and their direct interaction with the local community. NGOs have become the role of government organizations to provide services during the political divide in the Gaza Strip. Therefore, NGOs have the knowledge base and experience in meeting the needs and desires of the beneficiaries. The organizations also wish to hold ongoing workshops and seminars with the target groups and the local community in order to maintain continuous contact with them and to identify their needs.

- The first dimension was "sustainability of projects" ranked third and final, with an average of (4.06 of 5) and a relative weight of (81.2%). The researchers attributed this to the dependence of NGOs on their sustainability on external financing such as the major Palestinian companies that contribute to this. Through its social responsibility programs, organizations seek to provide quality services, develop their organizational capacities

and infrastructure, and attract community competencies to obtain project finance. On the other hand, organizations seek to sustain their projects through the implementation of income-generating programs through the collection of service fees, the leasing of the assets of the Organization, in addition to the fees of members of the General Assembly.

- The arithmetical average of the responses of community members in general on the whole axis (4.15 of 5) was relatively high (83.1%). This value reflects high approval by managers and employees of local NGOs. The results of the T-test also show that the mean responses are greater than (3), which expresses the neutral position of the members of the community. There are statistically significant differences at the 0.05 level between the mean responses for each dimension and the neutral mean expressed in value 3). The positive values for the T test indicate that the mean of the responses is greater than (3) significant and statistically significant at 0.05. The researchers attribute this to the attitude of the study community towards the dimensions of the second axis, "design thinking", And this explains the awareness of senior management of decision-makers and employees of NGOs In the Gaza Strip the importance of interest in sustainability, technical feasibility study, and meet the desire of the beneficiary; to help maintain the status of their organization in civil society.

- The results of this theme are consistent with the result of the study (Glen, Suci, Baughn, & Anson, 2015), that the use of the methodology of design thinking in project management and the use of prototypes and applications leads to creative problem solving, and this result is consistent with (Johansson-Sköldberg, Woodilla, & Çetinkaya, 2013) that design thinking leads to

sustainability and meeting the needs of FAO beneficiaries.

10. ANSWER THE STUDY QUESTIONS AND TEST THEIR HYPOTHESES

The hypothesis of the study

The hypothesis of the study is that there are statistically significant differences in the mean of the responses of the

Table 5: Examining the differences in the mean responses of the subjects of the design thinking axis according to the demographic variables.

Demographic Variables	SMA	Relative Weight	Standard Deviation	Test Value	Calculated Significance	The Result
Gender						
Male	4.12	82.4%	0.44	T= 0.708	0.481	No differences
Female	4.06	81.2%	0.45			
Age						
30-25years	4.16	83.2%	0.45	F= 2.743	0.047	There are differences
35-30years	3.97	79.4%	0.51			
40-35years	4.05	81.0%	0.37			
40years and over	4.28	85.6%	0.39			
Qualification						
¹ Diploma& (BSc)	4.11	82.2%	0.44	T= 0.622	0.535	No differences
² (MSc & PhD)	4.06	81.2%	0.45			
Job Title						
Chairman Of Board Of Directors	4.18	83.7%	0.39	F= 4.575	0.005	There are differences
Vice President	4.14	82.8%	0.36			
Executive Director	4.29	85.9%	0.44			
Project Manager	3.89	77.8%	0.49			
Years of Experience						
Less than 5 years	3.93	78.7%	0.44	F= 3.117	0.029	There are differences
From 5 to less than 10	4.30	86.1%	0.47			
From 10 to less than 15	4.19	83.9%	0.33			
15 years and over	4.15	82.9%	0.50			

¹Diploma (BSc), ²(MSc, PhD), ³was merged into the job title (Chairman of the Board, Vice President), because of the small number.

Table (5) shows the results of the tests of differences in the average responses of the members of the community on the axis of design thinking according to the different demographic variables. The result of the test is judged by the value of the statistical significance level. If it is greater than the level of 0.05 we conclude that there are no statistically significant differences In the mean of the responses, while if the statistical significance level is less than 0.05 we conclude that there are statistically significant differences in the mean of the responses between the different categories of the demographic variable that showed significant statistical differences. Specifically, the results of the sixth hypothesis test are based on the demographic variables as follows:

- As for the gender variable, the results indicate that there are no statistically significant differences in the average responses of the members of the society on the design thinking according to the gender variable. The level of

members of the community about the design thinking that are attributed to the demographic variables (gender, age, academic qualification, job title, years of desire) in the local NGOs operating in the Gaza Strip.

The following is the sixth hypothesis test according to the demographic variables and Table (5).

significance of the test (t) was (0.481), which is greater than the level of 0.05. Males and females can practice the process of design thinking without the need for certain abilities.

- As for the age variable, the results indicate that there are statistically significant differences in the mean responses of the design thinking according to the age variable, where the significance level is less than 0.05, and using the multiple comparisons tests we notice differences between the age group (30-35 years and 40 years and above) For the age group (40 years and over). The average differences were (0.31) and there were differences between the age group (35-40 and 40 years and above). The differences were for the age group (40 years and over) On the life and practical experiences they have gained, which have contributed to raising their knowledge of the importance of sustainability Technical

feasibility, and meet the desire of the beneficiary through the design of effective management processes.

- The results indicate that there are no statistically significant differences in the mean of the responses on design thinking according to the scientific qualification variable. The level of test significance is (0.535) which is greater than the level of 0.05. This indicates that the process of implementation and application of design thinking is flexible and can share all the educational qualifications.
- The results indicate that there are statistically significant differences in the mean responses of the design thinking due to the job title variable. Using the LSD test for multiple comparisons, we notice differences in the average responses of the chairman and his deputy and the average responses of the project coordinator. (0.29). the differences between the average of the answers of the Executive Director and the average responses of the project coordinator. The differences were in favor of the Executive Director and the average difference was 0.24. This indicates that the Executive Director He is more knowledgeable and knowledgeable the requirements of administrative projects, especially as it is the link between senior management and executive management of the organization.
- The results indicate that there are statistically significant differences in the average of the responses on design thinking according to the variable years of experience. There are differences between the category (less than 5 years and 5-10 years) for the category (5-10 years) by 0.37 (5-10 years and 10-15 years) for the category (10-15 years) and the average differences (0.25) degrees, and there are differences between the category (5-10 years and 15 years and more) (15 years and above) and the average differences (0.21). This indicates that the years of experience contribute to the formation of knowledge and experience in project management, Technical feasibility, and meeting the wishes of beneficiaries.

11. RESULTS

After examining the analysis of the results and testing hypotheses, the results of the study are as follows:

- The results of the study showed that the design thinking in its dimensions (sustainability in projects, technical feasibility study, and the desire of the beneficiary) among the decision makers and managers in the local NGOs in the Gaza Strip is moving towards the positive position with a relative weight of 83.1%.
- The focus of the technical feasibility study came first with a relative weight of 83.3%. This indicates the knowledge and knowledge of decision makers and managers in NGOs about the importance of technical feasibility study and its impact on the decisions of the organization.

- The second rank was the focus of the beneficiary's desire with a relative weight of 81.7%. This indicates the interest of the local NGOs in identifying the needs of the beneficiaries and providing services to help meet their needs.
- At the last level, 81.2% of projects are sustainable, indicating that local NGOs in Gaza Strip are seeking to develop sustainability in projects and achieve their long-term goals.

With regard to the differences between the average responses of members of the community on the axis of design thinking that is attributed to the demographic variables in the local NGOs operating in the Gaza Strip, the results are as follows:

- There were no statistically significant differences in the responses of the members of the society about the design thinking according to the gender variable.
- There were statistically significant differences in mean responses on design thinking according to age variable.
- There were no statistically significant differences in the mean responses on design thinking according to the variable of scientific qualification.
- There were statistically significant differences in the mean responses of design thinking attributed to the variable of job title.
- There were statistically significant differences in the average responses on design thinking according to the variable years of experience.

Practical results of the study:

- Local NGOs have a clear strategic vision and mission.
- The interest of local NGOs in creating a good mental image in the community.
- FAO's activities are consistent with the objectives it seeks to achieve.
- Local NGOs have the expertise and technical skills required to implement the projects.
- Adopting the activities of local NGOs to meet the needs and desires of beneficiaries.
- Local NGOs identify the real problems before starting the decision-making process.
- Accreditation of local NGOs to one person in decision-making.
- Analysis of local NGOs and their causes and their diagnosis through data relevant to the decision.
- Local NGOs rely on a process of reference data for project decision making.

12. RECOMMENDATIONS

In light of the theoretical framework and previous studies, the researchers draw from a previous presentation to discuss the main findings of the study, in light of the theoretical framework and the previous studies, in a bid to clarify the application of the impact of PDM and design thinking to

increase the effectiveness of decision making among decision makers and managers in NGOs in the Gaza Strip, as follows:

1. Using the methodology of design thinking (project sustainability, technical feasibility study, and beneficiary's desire) in local NGOs in Gaza Strip:

The senior management of local NGOs in Gaza Strip should adopt the methodology of design thinking because of its impact on the sustainability of projects, the design of the feasibility study and the satisfaction of the beneficiaries' wishes.

The development of its efficiency should be further developed through the development of the impact of PDM on project management and important decision-making in the organization that directly affects the design thinking mechanism and indirectly affects decision-making, commensurate with the organization's position in the community and its Trust the community and donors by using design thinking by:

- Ensure the sustainability of development projects and develop a follow-up methodology for project outputs, based on the needs of the community, usually designed to positively affect the lives of beneficiaries for a long period of time.
- Develop the technical feasibility study, which aims to understand and analyze the environment and potential of the project and identify obstacles and requirements to achieve the objectives of the project.
- To meet the desires of the beneficiaries, and to ensure the possibility of achieving their realities, which contribute to the development of quality services, and the development and design of new concepts in the projects.

REFERENCES

- [1] Abdalmenem, S. A. M., Owda, R. O., Al hila, A. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Performance Efficiency of University Education between Reality and Expectations. *International Journal of Academic Management Science Research (IJAMSR)*, 2(10), 66-76.
- [2] Abu Naser, S. S., & Al Shobaki, M. J. (2016). Computerized Management Information Systems Resources and their Relationship to the Development of Performance in the Electricity Distribution Company in Gaza. *EUROPEAN ACADEMIC RESEARCH*, 6(8), 6969-7002.
- [3] Ahmad, H. R., Abu-Naser, S. S., El Talla, S. A., & Al Shobaki, M. J. (2018). Information Technology Role in Determining Communication Style Prevalent Among Al-Azhar University Administrative Staff. *International Journal of Information Technology and Electrical Engineering`*, 7(4), 21-43.
- [4] Ahmed, A. A., Abu-Naser, S. S., El Talla, S. A., & Al Shobaki, M. J. (2018). The Impact of Information Technology Used on the Nature of Administrators Work at Al-Azhar University in Gaza. *International Journal of Academic Information Systems Research (IJAISR)*, 2(6), 1-20.
- [5] Al Shobaki, M. J., & Abu Naser, S. S. (2016). Decision support systems and its role in developing the universities strategic management: Islamic university in Gaza as a case study. *International Journal of Advanced Research and Development*, 1(10), 33-47.
- [6] AL-Askary, Aboud Abdullah. (2006). *Methodology of practical research in the psychological and educational sciences*. Damascus: Dar Al-Nimeer.
- [7] Almasri, A., El Talla, S. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Organizational Structure and its Role in Applying the Information Technology Used In the Palestinian Universities-Comparative Study between Al-Azhar and the Islamic Universities. *International Journal of Academic and Applied Research (IJAAR)*, 2(6), 1-22.
- [8] Al Shobaki, M. J., & Abu Naser, S. S. (2016). Performance development and its relationship to demographic variables among users of computerized management information systems in Gaza electricity Distribution Company. *International Journal of Humanities and Social Science Research*, 2(10), 21-30.
- [9] Athamna, Jamal and Ayyash, Khaled and Al Hussein. Fida (2011). *an Analytical Survey of Civil Society Organizations in the Occupied Palestinian Territories*. Palestine: European Union.
- [10] Brown, T. (2008). Definitions of design thinking. Retrieved from *Design Thinking - IDEO*: <https://designthinking.ideo.com/?p=49>
- [11] Abdalmenem, S. A., Owda, R. O., Al Hila, A. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). Performance Efficiency of University Education from Students Perspective. *International Journal of Engineering and Information Systems (IJEAIS)*, 2(11), 10-24.
- [12] Abdulla, A., Aziz, A., Al Shobaki, M., & Abu Naser, S. S. (2017). The Reality of Integrating the Dimensions of Computerized Health Information Systems in Dar Al-Shifa Medical Complex. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(9), 80-104.
- [13] Brown, T. Martin, R. (2015, September). Design for Action. *Harvard Business Review*, pp. 56-64.
- [14] Al Shobaki, M. J., & Abu Naser, S. S. (2017). Usage Degree of the Capabilities of Decision Support System in Al-Aqsa University of Gaza. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(2), 33-48.
- [15] Chou, D. C. (2017). Applying design thinking method to social entrepreneurship project. *Computer Standards & Interfaces*. doi:10.1016/j.csi.2017.05.001
- [16] Abu Naser, S. S., & Al Shobaki, M. J. (2016). Enhancing the use of Decision Support Systems for Re-engineering of Operations and Business-Applied Study

- on the Palestinian Universities. *Journal of Multidisciplinary Engineering Science Studies (JMESS)*, 2(5), 505-512.
- [17] Al Shobaki, M. J., & Abu Naser, S. S. (2016). The Dimensions of Organizational Excellence in the Palestinian Higher Education Institutions from the Perspective of the Students. *GLOBAL JOURNAL OF MULTIDISCIPLINARY STUDIES*, 5(11), 66-100.
- [18] Costanini, Gian Francisco, Stefan Salama and Maher Issa. (2015). *an Analytical Survey of Civil Society Organizations in Palestine - Update 2015*. Palestine: European Union.
- [19] Ewin, N., Luck, J., Chugh, R., & Jarvis, J. (2017). *Rethinking Project Management Education: A Humanistic Approach based on Design Thinking*. Elsevier B.V., pp. 503–510.
- [20] GIBBONS, S. (2016). *Design Thinking 101*. Retrieved Feb. 23, 2017, from Nielsen Norman Group: <https://www.nngroup.com/articles/design-thinking/>
- [21] Al Shobaki, M. J., & Abu Naser, S. S. (2016). The reality of modern methods applied in process of performance assessments of employees in the municipalities in Gaza Strip. *International Journal of Advanced Scientific Research*, 1(7), 14-23.
- [22] Abu Naser, S. S., Al Shobaki, M., & Ammar, T. M. (2017). Impact of Communication and Information on the Internal Control Environment in Palestinian Universities. *International Journal of Hybrid Information Technology*, 10(11), 41-60.
- [23] Glen, R., Suci, C., Baughn, C., & Anson, R. (2015). Teaching design thinking in business schools. *The International Journal of Management Education*, pp. 182-192.
- [24] Ignatius, A. (2015). *How Indra Nooyi Turned Design Thinking Into Strategy: An Interview with PepsiCo's CEO*. *Harvard Business Review*.
- [25] Al Shobaki, M. J., & Abu-Naser, S. S. (2017). The Requirements of Computerized Management Information Systems and Their Role in Improving the Quality of Administrative Decisions in the Palestinian Ministry of Education and Higher Education. *International Journal of Academic Pedagogical Research (IJAPR)*, 6(6), 7-35.
- [26] Johansson-Sköldberg, U., Woodilla, J., & Çetinkaya, M. (2013). *Design Thinking: Past, Present and Possible Futures*. *CREATIVITY AND INNOVATION MANAGEMENT*, pp. 121- 149.
- [27] Kolko, J. (2015). *Design Thinking Comes of Age*. *Harvard Business Review*.
- [28] Madi, S. A., El Talla, S. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The dominant pattern of leadership and Its Relation to the Extent of Participation of Administrative Staff in Decision-Making in Palestinian Universities. *International Journal of Academic Management Science Research (IJAMSR)*, 2(7), 20-43.
- [29] Madi, S. A., El Talla, S. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Organizational Structure and its Impact on the Pattern of Leadership in Palestinian Universities. *International Journal of Academic Management Science Research (IJAMSR)*, 2(6), 1-26.
- [30] Matthews, J., & Wrigley, C. (2017). *Design and Design Thinking in Business and Management*. *Journal of Learning Design*, p. 14.
- [31] Al Shobaki, M. J., & Abu Naser, S. S. (2017). Requirements for Applying Decision Support Systems in Palestinian Higher Education Institutions-Applied Study on Al-Aqsa University in Gaza. *International Journal of Information Technology and Electrical Engineering*, 6(4), 42-55.
- [32] Abu Naser, S. S., & Shobaki, M. (2016). Requirements of using Decision Support Systems as an Entry Point for Operations of Re-engineering in the Universities (Applied study on the Palestinian universities in Gaza Strip). *World Wide Journal of Multidisciplinary Research and Development*, 2(4), 32-40.
- [33] Melander, C. (2001). *Developing the design skills of Danish businesses*. Denmark: Danish Design Centre. Retrieved 2 28, 2017, from Design for Europe: <http://designforeurope.eu/case-study/danish-design-support-programmes>
- [34] Mosley, G., Wright, N., & Wrigley, C. (2018). *Facilitating design thinking: A comparison of design expertise*. *Thinking Skills and Creativity*.
- [35] Msallam, A. A., Salim, S. S. A., Al Hila, A. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Level of Creativity of Jawwal from Its Employees Point of View. *International Journal of Academic Information Systems Research (IJAIRS)*, 2(10), 22-35.
- [36] Muratovski, G. (2015). *Paradigm Shift: Report on the New Role of Design in Business and Society*. *she ji The Journal of Design, Economics, and Innovation*, pp. 118-139.
- [37] P. Roberts, J., Fisher, T., Trowbridge, M., & Bent, C. (2015). *A design thinking framework for health care management and innovation*. *Healthcare*.
- [38] Salim, S. S. A., Msallam, A. A., Al Hila, A. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Dimensions of the Lean Management of Jawwal between Theory and Practice. *International Journal of Academic Management Science Research (IJAMSR)*, 2(10), 52-65.
- [39] Al Shobaki, M. J., & Abu Naser, S. S. (2017). Studying the Reality of Applying Re-Engineering of Operations and Business in the Palestinian Universities in Gaza Strip, Al-Azhar University in Gaza a Model. *International Journal of Information Technology and Electrical Engineering*, 6(2), 10-21.
- [40] Abu Naser, S. S., & Al Shobaki, M. J. (2017). The Impact of Senior Management Support in the Success

- of the e-DMS. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(4), 47-63.
- [41]Salim, S. S. A., Msallam, A. A., Al Hila, A. A., Abu-Naser, S. S., & Al Shobaki, M. J. (2018). The Role of the Lean Management in Promoting the Creativity of Jawwal from the Point of View of Its Employees. *International Journal of Academic Information Systems Research (IJAISR)*, 2(11), 15-33.
- [42]Shapira, H., Ketchie, A., & Nehe, M. (2015). Integration of Design Thinking and Strategic Sustainable Development. *Journal of Cleaner Production*.
- [43]Sultan, Y. S. A., Al Shobaki, M. J., Abu-Naser, S. S., & El Talla, S. A. (2018). Effect of the Dominant Pattern of Leadership on the Nature of the Work of Administrative Staff at Al-Aqsa University. *International Journal of Academic Information Systems Research (IJAISR)*, 2(7), 8-29.
- [44]Sultan, Y. S. A., Al Shobaki, M. J., Abu-Naser, S. S., & El Talla, S. A. (2018). The Style of Leadership and Its Role in Determining the Pattern of Administrative Communication in Universities-Islamic University of Gaza as a Model. *International Journal of Academic Management Science Research (IJAMSR)*, 2(6), 26-42.
- [45]Al Shobaki, M. J., & Abu Naser, S. S. (2017). The Reality of Computerized MIS in the Palestinian Ministry of Education and Higher Education in Gaza Strip. *International Journal of Engineering and Information Systems (IJEAIS)*, 1(6), 89-104.
- [46]Abu Naser, S. S., & Al Shobaki, M. J. (2017). Organizational Excellence and the Extent of Its Clarity in the Palestinian Universities from the Perspective of Academic Staff. *International Journal of Information Technology and Electrical Engineering*, 6(2), 47-59.
- [47]Ursrey, L. (2014). Why Design Thinking Should Be At The Core Of Your Business Strategy Development. Retrieved from Forbes: <https://www.forbes.com/sites/lawtonursrey/2014/06/04/14-design-thinking-esque-tips-some-approaches-to-problem-solving-work-better-than-others/#5a3c0f571627>
- [48]Yoo, Y., & Kim, K. (2015, September). How Samsung Became a Design Powerhouse. *Harvard Business Review*.
- [49]Zaqout, I., Abu-Naser, S. S., El Talla, S. A., & Al Shobaki, M. J. (2018). Information Technology used and it's Impact on the Participation of Administrative Staff in Decision-Making in Palestinian Universities. *International Journal of Academic Multidisciplinary Research (IJAMR)*, 2(8), 7-26.
- [50]Al Shobaki, M. J., & Abu Naser, S. S. (2017). The Role of the Practice of Excellence Strategies in Education to Achieve Sustainable Competitive Advantage to Institutions of Higher Education-Faculty of Engineering and Information Technology at Al-Azhar University in Gaza a Model. *International Journal of Digital Publication Technology*, 1(2), 135-157.
- [51]Abu Naser, S. S., & Al Shobaki, M. J. (2016). The Impact of Management Requirements and Operations of Computerized Management Information Systems to Improve Performance (Practical Study on the employees of the company of Gaza Electricity Distribution). Paper presented at the First Scientific Conference for Community Development.
-