## Design Thinking and Its Impact on Decision Making In NGOs

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Abstract: The study aimed to identify the impact of Design Thinking on decision making in local NGOs in Gaza Strip. In order to achieve the objectives of the study and test its hypotheses, the descriptive analytical method was used and the questionnaire was used as a main tool for data collection. The study population consisted of decision makers in the local NGOs in Gaza Strip. The researchers chose a comprehensive inventory method. The researchers used SPSS in processing and analyzing the data obtained through the questionnaire. The Smart-PLS program was used to construct the Structural Equation Model (SEM) to solve the relationship between the variables of the study, and the calculation of the direct and indirect effects of the independent variable on the dependent variable through the intermediate variable. The study found a set of results, the most important of which are: The study revealed that Design Thinking has a direct and total impact on decision-making that is relevance to the decision, based on reference data for decision-making. Among the most important recommendations of the study are: • Adoption of the Design Thinking methodology by senior management in the local NGOs in Gaza Strip; In order to make sound and correct decisions, encourage them to follow scientific methodologies in the decision-making mechanism.

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

### **1. INTRODUCTION**

The world of business and organizations lives in an age of technology, full of opportunities and challenges, where seizing opportunities, meeting challenges and managing quality has become the primary task of executives. The task of researchers to find practical solutions to meet the challenges of accelerating, we see today the invasion of technology and information to our world where he found the term Design Thinking, which relies on the approach of the human axis, and the processes used to discuss ambiguous problems, the acquisition of information, knowledge analysis, and solutions through the designer toolkit In order to integrate people's needs, the possibilities of technology in business planning.

On the other hand, we see the increasing role of NGOs in societies. The more they have an active role in society, the better and faster the society will evolve. Therefore, we see that civilized societies tend to integrate NGOs in political dialogue, governance, and other matters of importance in the state, and often go to the spirit of starting and renewal, and to engage in new experiences and creativity in implementation, and perhaps the most prominent challenges faced in this It is the management of information, and the generation of the idea in order to reach a successful management decision that achieves the objectives pursued by the organization efficiently and effectively.

#### 2. PROBLEM STATEMENT

The research team noted that there are challenges and obstacles facing NGOs by working with them on executive projects. The research team examined the NGO sector and the international reports issued in particular, showing that NGOs provide about 90% of the social services to the local community in Palestine, due to the ability of the organizations to preserve the most experienced and knowledgeable Palestinian human resources (Costanini et al., 2015), (Al Shobaki et al., 2018). The results of the 2015 survey of civil society organizations in Palestine conducted by the European Union, and that civil society organizations in Gaza Strip need (Costanini et al., 2015):

- 1. Stimulating the research, creativity and innovation environment of NGOs.
- 2. Networking with local NGOs, governmental and international organizations and the private sector.
- 3. Develop the organizations environment, develop sustainability plans and enhance their strategic planning.

**Q1-**: What is the impact of Design Thinking in its dimensions combined (sustainability of projects, technical feasibility study, and the desire of the beneficiary) on decision-making in local NGOs?

#### **3. Research Importance**

1. The study draws its importance from the fact that it sheds light on the management of process design and its impact on decision-making through the use of Design Thinking, and this is a new approach for many

organizations; The Danish Design Center study conducted between 1998 and 2003 showed that Danish companies that relied on Design Thinking to design process management increased their overall revenue by 22% and achieved much faster growth than other companies (Melander, 2001).

- 2. The study provides a scientific reference that can guide NGO staff, especially those with higher management levels, to solve their challenges and make strategic decisions.
- 3. The study contributes to the activation of Design Thinking building in making complex decisions in Palestinian NGOs.

#### 4. RESEARCH OBJECTIVES

The main objective of this study is to identify the impact of Design Thinking with its combined dimensions (project sustainability, technical feasibility study, and beneficiary's desire) on decision making in NGOs.

#### **RESEARCH HYPOTHESIS**

**Ho**: There is a statistically significant direct impact at the 0.05 level of Design Thinking with its combined dimensions (project sustainability, technical feasibility study, and beneficiary's desire) on the decision making process in NGOs.

#### 5. THEORETICAL FRAMEWORK

#### **First- Design Thinking**

#### The Concept of Design Thinking

Design thinking is a tool that brings human creativity to the generation of insights and logical solutions to them through the use of different ways of thinking, including empathy for the conditions of the problem, observation, cooperation, rapid learning, and the conceptualization of ideas and rapid conceptual models.

The primary goal of design thinking is to engage the consumer, designer, and employer in an integrated process to reach a quality product or service that satisfies all parties (Jansson, Viklund, & Lidelöw, 2016).

Based on the above, Sarah Gibbons' definition of design thinking is an ideology that follows a practical approach based on problem-solving that leads to creativity. Design thinking is an application of designers' intuition and ways of solving problems, regardless of what the problem is. It cannot be considered as a substitute for professional design or art and craftsmanship in design, but as a methodology for creativity and empowerment. (Lockwood, 2009), (Al Shobaki & Abu-Naser, 2017), Tim Brown described design thinking in an article in the Harvard Business Journal (HBR): as a discipline that uses intuition, designer methods to fit people's needs with technological potential, and also how strategic management can turn them into customer value. Brown also defined it as a human-centered approach to creativity that draws from a designer toolkit to integrate people's needs, technology possibilities, and business success requirements (Brown, 2008).

In the light of the above can be devised procedural definition of the study as: a way of thinking based on the different ideas of the designer in order to design a tool to study the negatives and positives that can face the organization, and contribute to the solution of obstacles in a creative and different ways that satisfy the beneficiary mainly; Humanitarian.

#### The importance of design thinking

Based on an article with Andrea Nowia, CEO of Pepsi, in Harvard Business, titled "How Andra Nouva Turned Design Thinking into Strategy, Interview with Bessie CEO", Nowia said: "Design thinking brings the company to creativity. Porcini as the first head of design at Bessie, now design has become the most important voice in decision making in the company. (Ignatius, 2015) Emphasizing the importance of design orientation, Harvard Business Magazine highlighted Design Management and Design Thinking in a series of articles called The Design Thinking Revolution in its September 2015 edition, with topics as follows: (a) Design as a Strategy Ignatius, 2015), (b) design to work within change management (Brown & Martin, 2015), (c) maturity of design thinking within an organization's culture (Kolko, 2015), (e) how Samsung has become powerful by adopting a design strategy (Yoo & Kim, 2015), (d) Bessi Design Chief Executive Creation of the organization wherever design grows within the leadership of the team (Vries, 2015), Finally, as mentioned earlier, the article How Andra Nouva turned design thinking into strategy: an interview with Bessi CEO within the strategy (Ignatius, 2015). Problems, design thinking can be applied to products, services and processes; anything that needs improvement (Ursrey, 2014), the following are the most important points to consider about how important design thinking is (Shapland, 2017):

- 1. Focuses on end user needs.
- 2. Encourages new perspectives, examines all possible solutions.
- 3. Explains the initial errors, and shows possible solutions.
- 4. The final product is continuously improved.

#### Second- Decision making

### The Concept of Decision Making

Robert Harris defined as: study of determinants, and choosing alternatives based on value and preference from decision makers. He also defined it as a process of reducing uncertainty and suspicion of finding alternatives that would allow for a reasonable choice among them (Harris, 2012), and the administrative decision of Al-Azzawi, 2006: the one that maximizes the organization's objectives. The decisionmaker is the economic individual who can identify the possible consequences of each alternative or the behavior in front of him, and arrange those results according to the importance of each for him and the objectives of the organization, and then choose the alternative The best according to his estimates and knowledge, and Nigro defined it as: that the administrative decision is the choice To be aware and conscious of the alternatives available in a particular position of Al-Muhaidat, 2004)). In view of the above concepts, it can be said that there are common elements in the previous definitions, as follows:

- 1. The first element is a number of alternatives available: here it is assumed uncertainty as a result of having at least two options in a given situation to address a particular problem.
- 2. The second element is the conscious and informed choice of one of the alternatives. This means that the trade-off and selection process result from the study, awareness, and awareness of the choice of one of the alternatives and management decision-making (Kanaan, 2007).

The procedural definition of decision-making is a dynamic process that examines the alternatives and options available to determine the best option through the data and information collected, and the decision-maker is wise and able to analyze issues.

#### **Decision - Making Mechanism**

Here are the classic steps to problem solving, which begin with the definition of the problem to the implementation and evaluation, but as the steps evolve to become more effective, Arnaud Chevallier explained in his book "Strategic Thinking in Solving Complex Problems" and devised a mechanism to acquire techniques to better solve complex problems, especially those We face personal and professional life away from considerations of educational level, age, and desire, but also make it clear that this approach cannot be relied upon in time-dependent situations, and critical Grint problems that require decisions with tight deadlines; This approach aims at a modular system of thinking, which can adapt to the needs of individuals. The book explained the structure of the decision-making process using four methods: framing the problem (what), diagnosing it (why), then finding solutions (how), then implement the solution (done).

- 1. Framing the problem (what): Identifying the problem to be solved, and facing new situations, and unusual; therefore, the decision-maker must understand the real essence of the problem, and this step is the most important and difficult in the decision-making process. It is often thought that we have a good idea of what we need to do, but when we start to look for solutions it is clear that we are on the wrong path; and codify these decisions.
- 2. Diagnose the problem (why): Find out what the problem is, move to identify its causes, and how to diagnose it. This step is the link between all relevant problem data that serve as a diagnostic card for the problem on which subsequent efforts will depend.
- 3. Finding solutions (how): After relying on a database, identifying and diagnosing the problem, we begin to look for solutions and alternatives that can contribute to solving the problem with minimal losses.
- 4. Implementing the solution (doing): This step makes the best decision among the alternatives, followed by

persuading key project stakeholders of the feasibility of the decision based on the data and information given (Drucker, 1967).

#### Third- Local NGOs

Aviles (2012)defined Non - Governmental Organizations as organizations independent of both the government and the business sector, their functions are focused on promoting the public interest and serving the public good rather than making a profit, or serving the interests of a narrow group of individuals. Palestinian law defines the Authority or Association in Law No. (1) of 2000 as "an independent legal entity established by agreement between a number of at least seven persons to achieve legitimate objectives of public interest without targeting profit-making for the purpose of sharing among members, or for personal benefit" (Palestinian National Authority, 2000).

We conclude from the above basic elements related to the concept of NGOs:

- 1. Service, non-profit.
- 2. Built on the volunteer side of individuals.
- 3. An independent entity from the government and private sector.
- 4. Serving all target groups (children, women, youth, marginalized areas... etc).
- 5. Each organization has a vision, values, and goals derived from its statute.

### 6. LITERATURE REVIEW

- $\geq$ The objective of the study of (Abdel Moneim, 2018) is to identify the role of intellectual capital (human capital, creative capital, structural capital), in universities in Gaza Strip from the perspective of senior management, and to identify the impact of intellectual capital in improving the quality of decision-making, the use of descriptive analytical method Using a questionnaire as a study tool, a stratified random sample was selected. The most important results of the study: that intellectual capital contributes to improve the quality of decisionmaking, and that there is a statistically significant relationship between intellectual capital (human capital, creative capital, structural capital) and improve decision-making, in addition to a statistically significant impact Between intellectual capital (human capital, creative capital, structural capital) and the improvement of decision-making according to the results of relative importance, and the existence of differences between universities (Al-Azhar, Islamic, Al-Aqsa) in the quality of decision-making.
- 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  $\geq$ 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 University Social Enterprise Northeastern at impact demonstrated the of teaching design methodology in classroom and practice in the real world to solve social problems.
- $\geq$ 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: reexamination 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 (Yang & Gabrielsson, 2017) aims to expose the marketing decision-making process to entrepreneurs who seek to market their projects in international trade, which are engaged in high-tech. A qualitative study was conducted with entrepreneurs and the creative involvement of the process in marketing technology decisions for business. One of the most important results of the study: It showed that companies dealing with radical innovation marketing data is analytical and highly relevant. The study recommended that entrepreneurs or managers use an effective

approach when developing products, especially when the level of uncertainty is high.

- ⊳ The study of (Wieder & Ossimitz, 2015) aimed at investigating the direct and indirect impact of management intelligence management on the quality of management decision-making, the use of PLS analysis, and data collected by questionnaire targeted the heads of information technology departments in Australia, and relied on descriptive analytical approach. Some of the most important results of the study: It confirmed that there is a comprehensive relationship or a total impact between the variables of the study, and the study also revealed the intermediate effects of data, the quality of information, and the scope of management intelligence solution, the study contributes in both academic and industrial circles by providing the first evidence of Direct and indirect determinants in improving, supporting administrative decisions related to the scope of IT solutions, and active management of management intelligence.
- 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 (Glen, Suciu, Baughn, & Anson, 2015).  $\triangleright$ 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, &  $\geq$ 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.
- The study (Kassem, 2011) aimed at identifying the  $\geq$ impact of strategic intelligence on the decision-making process. . The most important results: A statistically significant relationship between the elements of strategic intelligence (foresight, systems thinking, future vision, motivation, partnership) and decision-making process. A descriptive analytical approach was used, and the questionnaire was used on managers working in the UNRWA Gaza Regional Office. The studv recommended that a strategic intelligence unit be formed to provide UNRWA with the required information, contribute to shaping its future with its beneficiaries and channels, conduct risk assessments, monitor changes affecting its activities, and then assist its managers in taking the appropriate position.

#### 7. METHODOLOGICAL PROCEDURES OF THE STUDY

### Methodology of the study

The research is based on the descriptive analytical method. This method is used as a method of scientific research that relies on the study of research phenomena as they exist in reality. The quantitative expression gives a numerical description of this attribute or its size. The researcher used this approach to study "the impact of the design process management on decision-making through design thinking" applied study on local NGOs in Gaza Strip. **Study population** 

In general, the study aims to shed light on the community of local NGOs working in Gaza Strip, which numbered (667) according to the statistics of the General Department of Public Affairs and NGOs in the Ministry of Interior on October 30, 2017, which represents the theoretical study community. As the study is interested in shedding light on the active local organizations that submit administrative and financial reports annually, while it is clear that there are a large number of these organizations are not active in the community, therefore, the researcher tended to choose the possible community style of theoretical society by obtaining a list of more From 100 active organizations from the Ministry of Interior - Gaza based on the largest annual expenditure amount 1,221,762 \$.

After determining the population of the study the most effective organization percent (22) organizations were excluded because they are offices of international organizations or offices of organizations operating in the West Bank. Thus, the final community available to study consists of (78) local NGOs working in Gaza Strip. 156 questionnaires were distributed, however, the respondent reached (109) questionnaires, and none of the questionnaires were excluded. This is due to the fulfillment of the required conditions. This is due to the researcher's use of modern electronic techniques in distributing and filling the questionnaire form, which makes the recovery rate 70%, and can be relied on to generalize the results of the study

### Statistical description of the study population

# A. Statistical description of the study population according to personal data.

The number of respondents in the study questionnaire was (109) decision makers, and those in charge of local NGOs in Gaza Strip. Table (1) shows the statistical description of the study population according to the personal data of the study participants. Gender to 71 male (65.1%) of the total participants, and the remaining 38 (34.9%) are females. This result is attributed to the fact that the percentage of the labor force in Palestine according to the Palestinian Central Bureau of Statistics for the Palestinian Labor Force Survey for the third quarter of 2017 (July-September, 2017) reached 73.9% for males in the labor force compared to 19.2% for females in the labor force. The gap in male and female labor force participation is significant.

The percentage of participants aged (25-30) years (18.3%), while the proportion of participants aged (30-35) years (27.5%), and the proportion of participants aged (35-40) years (29.4%), While the remaining participants age (40) years and more, they constituted (24.8%), and this indicates that the proportion of participants less than 40 years, which totaled 75.2%, which indicates that the workers in NGOs are young people, This confirms that the Palestinian society is a young society, and that the highest results were directed at

the age group (40-35 years) by 29.4%, due to the fact that the participants in the society are managers and decision makers. As for the educational qualification variable, the majority of participants had a bachelor's degree (69.7%) and a master's degree (24.8%). What remains is a small percentage of diploma holders and doctoral degrees, indicating that most NGO staff are scientifically qualified.

Regarding the job title variable, executives made up 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 represented by the chairmen of the boards of directors (4.6%) and vice-chairmen (9.2%). The highest percentage of participants is **Table 1**. Statistical Description of the

attributed to the executive directors as the representative of the institution and where direct communication is made through them.

Years of experience classified the study participants as (8.3%) years of experience less than five years, and (27.5%) years of experience begins with fifteen years and more, while (33%) of the participants years of experience of (5-less than 10) years, while the remaining (31.2%) years of experience ranges between (10 - less than 15) years, the results indicate that more than 91.7% of decision makers in NGOs have years of experience more than five years, and this shows They have experience and skill in making the right decisions and wise in solving problems.

<b>Table 1</b> : 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	
40 years and over	27	24.8	Ph.D.	2	1.8	
Job Title	The Number	The Ratio %	Years of Experience	The Number	The Ratio %	
Job Title Chairman Of Board Of Directors	The Number 5	<b>The Ratio %</b> 4.6	Years of Experience Less than 5 years	The Number 9	The Ratio %           8.3	
Job Title Chairman Of Board Of Directors Vice President	The Number           5           10	The Ratio %           4.6           9.2	Years of Experience Less than 5 years 5 to less than 10	The Number936	The Ratio %           8.3           33.0	
Job Title Chairman Of Board Of Directors Vice President Executive Director	The Number           5           10           39	The Ratio %           4.6           9.2           35.8	Years of Experience Less than 5 years 5 to less than 10 10 to less than 15	The Number           9           36           34	Statio %           8.3           33.0           31.2	
Job TitleChairman Of Board Of DirectorsVice PresidentExecutive DirectorProject Manager	The Number           5           10           39           23	The Ratio %           4.6           9.2           35.8           21.1	Years of Experience Less than 5 years 5 to less than 10 10 to less than 15 15 years and over	The Number           9           36           34           30	The Ratio %           8.3           33.0           31.2           27.5	

# B. Statistical description of the study population according to job data

As mentioned above, the size of the study population available to researchers (109) participants from local NGOs in Gaza Strip. Social work, social, cultural, trade union, medical, youth, educational, legal, childhood, etc., where social organizations constituted the largest proportion of participants in the study, which amounted to (30.3%), followed by agricultural organizations, and organizations dealing with women's affairs (11%) for each, and followed them on water In terms of participation rate of medical societies and human rights organizations (8.3%) each, and then cultural and educational organizations also (7.3%) each, and the rest of the organizations participated less than that as shown in the table, due to the economic vulnerability that Gaza Strip suffers as a result of the siege, frequent closures, and increased unemployment, which has helped raise the needy and poor population, and the role of the government in providing services to citizens has decreased, leading to an increase in the percentage of organizations working in providing social services in Gaza Strip.

As for the variable scope of work of the organization, the participants in the study were distributed according to the scope of work of the organizations in which they work, and according to the geographical area covered by the organizations, where (51.4%) work in the organizations of the scope of work in Gaza. As for Khan Younis, the scope of work was 13.8% of the participants in the study. In the north of Gaza, 12.8% of the respondents were working, while for Rafah 11.9% of the respondents and 10.1% were working in organizations within the central area. Gaza, where the city is the center of the political and public work of Gaza Strip, as well as a huge population density in the city.

According to the variable number of employees, 52.3% of the respondents were employed by organizations whose number is 20 and more, while 30.3% of the respondents work for organizations whose number is less than ten. 17.4% of the employees work in organizations whose number ranges between (11-19) employees. This is due to the fact that the study community is the most effective local NGOs in the society according to the Ministry of Interior data.

FAO's field of work	The	The Ratio	Scope of the work of the	The	The Ratio
	Number	<b>%</b> 0	Organization	Number	%0
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

**Table 2**: Statistical Description of the Study Society by Functional Data (N = 109)

Agricultural	12	11.0	Number of employees	The	The Ratio
Agricultural	12	11.0	Number of employees	Number	%
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			

8. ANALYZE DATA, INTERPRET AND DISCUSS RESULTS

# A. Analyzing the results related to the dimensions of the design thinking axis:

Questionnaires were analyzed using parameter tests (T-test for a single sample) to see if the averages of response scores. Where the degree (3) was considered to be neutral, which represents \* a statistical function at the level of 0.05 on the study scale, the mean is the average of the respondents' answers, the standard deviation by the deviation of values from their mean, and where the relative weight is measured by (arithmetic mean / 5 \* 100 The relative weights of design thinking were determined from the point of view of decision makers in local NGOs in Gaza Strip:

Table 3: Arithmetic mean, standard deviation, relative weight and T val	lue of design thinking
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No.	Dimension	SMA	Standard Deviation	Relative Weight	T Value Test	Ranking
1.	The first dimension: sustainability of projects	4.06	0.48	81.2%	*4.06	3
2.	The second dimension: the technical feasibility study	4.17	0.52	83.3%	*4.17	1
3.	The third dimension: the desire of the beneficiary	4.09	0.47	81.7%	*4.09	2
	The total score of the axis	4.15	0.42	83.1%	*4.15	

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

- Table (3) shows descriptive statistical metrics for the dimensions of the second axis "design thinking" in the local NGOs in Gaza Strip, and this axis consists of three dimensions, where we find that the second dimension "technical feasibility study" came first with an arithmetic mean (4.17 out of 5), relative weight (83.3%). The researchers attribute this to the awareness of NGOs of the importance of studying the technical feasibility of developing the organizational capacities of the organization. The funders' role comes in supporting organizations through workshops to develop their organizational capacities and build their technical capacities, which increased the organizations awareness of their importance to the organization.
- The third dimension "beneficiary's desire" came in second place with an arithmetic average (4.09 out of 5) and a relative weight (81.7%), due to the experience of NGOs in providing services to beneficiaries and their direct interaction with the local community. Services during the political split in Gaza Strip. Therefore, NGOs have the knowledge base and expertise in meeting the needs and desires of the beneficiaries. The organizations are also interested in holding continuous workshops and seminars with the target groups and the local community in order to stay in constant contact with them and identify their needs.
- The first dimension "sustainability of projects" came in third and last place, with an arithmetic average (4.06 out

of 5) and a relative weight (81.2%). Through their social responsibility programs, organizations strive to provide quality services, develop their organizational capacity and infrastructure, and attract community-based competencies in order to obtain funding for projects. On the other hand, organizations seek to sustain their projects through the implementation of incomegenerating programs through the collection of service fees, leasing the assets of the organization, in addition to the fees of members of the General Assembly.

The mean of the responses of the community members in general on the whole axis was (4.15 out of 5) with a relative weight (83.1%). The results of the T test to verify that the average of the answers exceeds the value (3) that reflects the neutral position of the members of the community, there are statistically significant differences at the level of 0.05 between the averages of responses for each dimension, and the neutral average expressed by value ( The positive values of the T test indicate that the mean of the answers exceeds the value of (3) a significant increase and statistically significant, at the level of 0.05, and researchers attribute this because the attitude of members of the study population towards the dimensions of the second axis "design thinking" is moving towards a positive attitude This is explained by the awareness of senior management of decision makers and employees of NGOs In Gaza Strip, the importance of attention to sustainability, technical feasibility study, and meeting the beneficiary's desire to reach to maintain the status of their organization in the civil society.

- The results of this axis are consistent with the results of the study (Glen, Suciu, Baughn, & Anson, 2015), that the use of design thinking methodology in the management of projects and the use of prototypes and applications lead to problem solving in a creative way, and this result is consistent with the study (Johansson-Sköldberg Woodilla, & Çetinkaya, 2013), which suggests that design thinking leads to sustainability and to the needs of FAO's beneficiaries. Questionnaires were analyzed using parameter tests (T-test for a single sample) to see if the averages of response scores. Where the degree (3) was considered to be neutral, which represents \* a statistical function at the level of 0.05 on the scale of the study, the mean is the average of the responses of the respondents, the standard deviation by deviation of values from the mean, and where the relative weight is measured by (arithmetic mean / 5 \* 100 The relative weights of the decision-making axis were determined from the point of view of the decision makers in the local NGOs in Gaza Strip, as shown in the following table:

	Table 4. A humene mean, standard deviation, relative weight and 1 varie for decision maxing						
No.	Paragraphs	SMA	Standard Deviation	Relative Weight	T Value Test	Ranking	
1.	The organization identifies real problems before the decision-making process begins.	4.26	0.57	85.1%	*23.11	1	
2.	The organization analyzes and diagnoses the problem and its causes through the relevant data of the decision.	4.17	0.66	83.3%	*18.43	3	
3.	The organization uses a differentiation between different alternatives when making a decision.	4.10	0.72	82.0%	*15.98	6	
4.	The organization is based on a process of baseline data for project decision-making.	4.17	0.62	83.3%	*19.74	3	
5.	The organization assesses the risks associated with alternatives before making a decision.	4.09	0.60	81.8%	*18.95	7	
6.	The Organization makes the final decision with high confidence in the decision-making process followed.	4.13	0.56	82.6%	*20.94	5	
7.	The organization relies on the personal experience of decision-makers in solving problems.	3.74	0.85	74.9%	*9.08	13	
8.	FAO uses a systematic decision-making process.	4.00	0.64	80.0%	*16.36	9	
9.	FAO shares decision-making with stakeholders.	3.84	0.86	76.9%	*10.22	12	
10.	The organization re-examines alternatives in case of mistrust of the decision taken.	3.94	0.69	78.9%	*14.26	11	
11.	FAO takes care of the time required to select the best alternatives in the decisions taken.	3.97	0.73	79.4%	*13.99	10	
12.	FAO develops a range of alternatives for decision- making.	4.00	0.58	80.0%	*18.08	9	
13.	The Organization shall develop a plan for the implementation of the decisions taken.	4.16	0.53	83.1%	*22.77	4	
14.	The organization relies on one personality in decision- making and disseminates it.	4.20	0.73	84.0%	*17.19	2	
15.	The organization sets certain criteria for the decision- making process followed.	4.04	0.69	80.7%	*15.62	8	
	The total score of the axis	4.05	0.48	81.1%	*23.05		

#### B. Analysis of the results related to the decision-making axis: Table 4: Arithmetic mean standard deviation relative weight and T value for decision making

Table (4) shows the following:

The descriptive statistical measurements of the third axis paragraphs "Decision-making" in the local NGOs in Gaza Strip, which number (15) paragraphs, where we find that the first paragraph "identify the real problems before the start of the decision-making process" came first, with an average Arithmetic (4.26 out of 5) and relative weight (85.1%), the researchers attribute this to the fact that the basis of decision-making depends on the identification of problems, and therefore managers and staff are aware of the importance of identifying the problem before starting to develop solutions. The seventh paragraph, "The organization relies on the personal experience of decision-makers in solving problems" in the last place, with an arithmetic average (3.74 out of 5) and a relative weight (74.9%). The researchers attribute this to the monitoring and evaluation that NGOs have on their decisions from several different bodies, including funders, government agencies, and community control, as well as the board of directors, which reduces the bias to individual and personal decisions.

The overall responses to the paragraphs as a whole (4.05)out of 5) were averaged at a relative weight (81.1%). This value reflects high approval by decision makers in local NGOs, and the results of the T test to verify that the average answers exceed the value (3) which reflect the neutral position of members of the community, because there are statistically significant differences at the level of 0.05 between the averages of responses for each paragraph, and the neutral average expressed by the value (3), and positive values for the test (T) indicate that the average of answers, the value of (3) increased substantially, and statistically significant, at the level of 0.05, and this indicates that the position of members of the study community Towards the paragraphs axis "decision-making" is moving towards the positive attitude of the local NGOs working in Gaza Strip. This is due to the interest of the new generation of managers and employees in making sound and systematic decisions, in addition to the accumulated experience of employees and the continuous development received by workers in NGOs from workshops, training courses and conferences that contributed to raising the level of awareness in making sound and systematic decisions.

- The result of this axis is consistent with the results of the study (García-Peñalvo & Conde, 2017), (Yang & Gabrielsson, 2017) and (Wieder & Ossimitz, 2015) in the role of technology in raising the quality of decisionmaking, and agreed with the result of the study (Maioa (Fenzab, Loiab, Orciuolib, & Viedmac, 2016) which pointed to the importance of supporting collective decision-making, focusing on the human axis in decision-making, analyzing the implementation process given all possible alternatives, and using the simulation model, for high resolution quality, measuring all Alternatives before applying them to the field, as agreed with the result of a study (Muratovski, 2015) that showed the impact of risk assessment on project management, Allergic decision-making in the early detection of threats and opportunities facing the organization.
- C. Analysis of the results of the structural model to study the direct and indirect effects between the study variables.

Table 5: Direct and	indirect imp	act of the general	l structural model of the study	variables
				-

The Influence	Direct	Impact	Indire	ct Effect	<b>Overall Effect</b>	
The influence	The Value	Significance	The Value	Significance	The Value	Significance
Design Thinking→ Decision-making	0.819	0.000			0.819	0.000
It shows the results of estimating the	general stru	ictural o	lecision-makir	ng, and this e	xplains that	decision-making
model to study the direct and indirect effects between the depends on the extent of achieving the sustainability of					sustainability of	
main study variables (Design Thinking, decision making).			projects, and the efficiency of the technical feasibility study,			
The design will result in a change of (0.819) in the decision- And respond to the desire of the beneficiary, and answers					y, and answers to	
making level. The researcher attributes this to the fact that the third question: What is the impact of Design Thinking					esign Thinking in	
Design Thinking with its specific dimensions (sustainability			its dimensions combined (sustainability of projects, technical			
in projects, technical feasibility study, and the desire of the			feasibility study, and the desire of the beneficiary) on			
beneficiary) is one of the factors involv	red in the dec	cision- c	lecision-makir	ng in NGOs?		
making process, and therefore directly aff	ects it.	-				

#### 9. ANSWER STUDY AND OUESTIONS TEST THEIR HYPOTHESES

### The main hypothesis states that:

Ho: There is a statistically significant direct impact at the 0.05 level of Design Thinking with its combined dimensions (project sustainability, technical feasibility study, and beneficiary's desire) on the decision making process in NGOs.

We can see from the results that the direct effect of the intermediate variable - the Design Thinking on the dependent variable making decisions is statistically significant effect at the level of 0.05 in both cases, both in the general model as the main components, or in the detailed model as partial components. This in turn confirms acceptance of the main hypothesis. Thus, we accept the alternative hypothesis, and impose the nihilistic hypothesis, and this result indicates that the Design Thinking of the sustainability of projects, and the technical feasibility study, and the desire of the beneficiary plays an important role in

### **10. RESULTS**

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

- 1. Regarding the impact of design thinking as an independent variable:
- The results of the study showed that the Design Thinking with its dimensions (sustainability in projects, technical feasibility study and beneficiary desire) among decision makers and managers in local NGOs in Gaza Strip is moving towards a positive attitude with a relative weight of 83.1%.
- The focus of the technical feasibility study came in the first place with a relative weight of 83.3%, which indicates the knowledge and knowledge of decision makers and managers in civil organizations the importance of the technical feasibility study, and the extent of its impact on the decisions of the organization.
- The second rank came in the focus of the beneficiary's desire with a relative weight of 81.7%, which indicates the interest of local NGOs to identify the needs of

beneficiaries, and provide services that help meet their needs.

- In the last rank, the sustainability of projects with a weight of 81.2% came in. This indicates that local NGOs in Gaza Strip are seeking to develop the sustainability axis in the projects and achieve their longterm goals.
- 2. Concerning decision-making as a dependent variable: The results showed that decision-making in local NGOs in Gaza Strip is moving towards a positive position with a relative weight of 81.1%.

#### Practical results of the study:

- Adopting the activities of local NGOs to meet the needs and desires of the beneficiaries.
- Local NGOs identify real problems before starting the decision-making process.
- The reliance of local NGOs on one personality in decision-making.
- Analyze local NGOs and their causes and diagnose them through the relevant data.
- Local NGOs are based on a process of baseline data for project decisions.

#### **11. RECOMMENDATIONS**

- The senior management of local NGOs in Gaza Strip should adopt the Design Thinking methodology because of its impact on the sustainability of projects, designing the technical feasibility study, and meeting the wishes of the beneficiaries.
- Promote systematic decision-making in NGOs in Gaza Strip: Local NGOs in Gaza Strip should continue to develop their competencies to make sound and sound decisions, and encourage them to follow scientific methodologies in the decision-making mechanism.

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