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### Relationships Between Total Quality Management Components and Employee Performance in Higher Education

Institutions<sup>1</sup>

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#### Abstract

Higher education institutions are the foundation of society. They are also the key to progressing toward a perfect culture that connects the past with the future. The provision of good service by institutions is the cornerstone of all talents and individual or collective achievements. Therefore, prioritizing and implementing all quality management systems are crucial for positioning a business among large organizations worldwide. Learning new practices from international institutions and adapting to these innovations is vital for the success and long-term stability of the organization.

<sup>&</sup>lt;sup>1</sup> Produced from the Master's Thesis completed by Omar Abdulsattar Kamel Sandel ARAB

This study sought to promote knowledge about how comprehensive quality management concepts might be more effectively utilized to improve the performance of academic and administrative staff at universities. At this moment, the purpose of this research is to investigate the impact of overall quality management on employee performance in higher education institutions. For this objective, data were collected from 400 Samarra University employees using an online survey. The dependent variable in the study is employee performance, whereas the independent variables are TQM and its sub-variables, Leadership, Continuous Improvement, and Employee Involvement. The study included descriptive, reliability, and validity analyses, as well as factor analysis, correlation analysis, and regression analysis.

The results show a statistically significant direct association between leadership, continuous improvement, employee engagement, and employee performance. Total quality management in higher education, including the sub-dimensions of leadership, continuous improvement, and employee involvement, has a significant and positive impact on employee performance. Consequently, all hypotheses were accepted.

**Keywords:** Total Quality Management, Employee Performance, Higher Education

### Yükseköğretim Kurumlarında Toplam Kalite Yönetimi Bileşenleri ile Çalışan Performansı Arasındaki İlişkiler

#### Öz

Yüksek öğretim kurumları, toplumun temelidir. Ayrıca, geçmişle gelecek arasında bağ kuran kusursuz bir kültüre doğru ilerlemesinin anahtarıdır. Kurumların sunacağı iyi bir hizmet, tüm yeteneklerin ve bireysel veya kolektif başarıların temel taşıdır. Bu nedenle, tüm kalite yönetim sistemlerini önceliklendirmek ve uygulamak, bir işletmeyi dünya çapında büyük organizasyonlar arasına yönlendirecektir. Orgütün başarısı ve uzun vadeli istikrarı için uluslararası kurumlardan yeni uygulamalar öğrenmek ve bu yeniliklere uyum sağlamak hayati önem taşımaktadır.

Bu çalışma, kapsamlı kalite yönetimi kavramlarının üniversitedeki akademik ve idari personelin performansını artırmak için nasıl daha etkili bir şekilde kullanılabileceği konusunda bilgi yaymayı amaçlamaktadır. Bu aşamada, araştırmanın amacı yükseköğretim kurumlarında toplam kalite yönetiminin çalışan performansı üzerindeki etkisini incelemektir. Bu amaçla, 400 Samarra Üniversitesi çalışanından çevrimiçi anket aracılığıyla veri toplanmıştır. Çalışmada bağımlı değişken çalışan performansı, bağımsız değişkenler ise toplam kalite yönetimi ve onun alt değişkenleri olan liderlik, sürekli iyileştirme ve çalışan katılımıdır. Çalışma, tanımlayıcı istatistik, güvenilirlik ve geçerlilik analizlerinin yanı sıra faktör analizi, korelasyon analizi ve regresyon analizini de içermektedir.

Sonuçlar, liderlik, sürekli iyileştirme, çalışan katılımı ve çalışan performansı arasında istatistiksel olarak anlamlı bir doğrudan ilişki olduğunu göstermektedir. Yükseköğretimde toplam kalite yönetimi, liderlik, sürekli iyileştirme ve çalışan katılımı alt boyutları da dahil olmak üzere, çalışan performansı üzerinde önemli ve olumlu bir etkiye sahiptir. Sonuç olarak, tüm hipotezler kabul edilmiştir.

Anahtar Kelimeler: Toplam Kalite Yönetimi, Çalışan Performansı, Yüksek Öğretim.

#### Giriş

Performance is defined as successfully completing the correct task as determined by practicality (Cascio, 1991). The term "efficiency" is derived from the phrases "labor effectiveness" and "real achievement," which characterize how far an individual achieves their professional objectives. The quality and quantity of results that a clerk achieves while completing his job duties are indicators of his success (Mulyani et al., 2019: 71). Employees are essential to the business. The labor of employees determines whether the entity succeeds or fails. As a result, firms invest a considerable amount of their revenues in staff development (Hameed & Abdul, 2011: 224). Productivity is a broad, diverse concept that is inextricably linked to a system's critical principles (Abbas & Yaqoob, 2009: 269). The personnel, as one of the organization's assets, is critical to achieving those goals effectively. In employee development, a staff member's efficiency is critical to achieving staff efficiency and the firm's continued profitability. Improving the productivity of these employees benefits both the company and the individuals themselves. As a result, exceptional performance may lead to improved staff career advancement (Mulyani et al., 2019: 69). Learning enhances worker performance by delivering instantaneous gains in the expertise, talents, and skills required to complete job-related tasks, resulting in greater staff dedication to corporate goals (S. Sharma & Taneja, 2018: 140). What a person does and does not do in the workplace determines its efficiency. Worker ability includes achievement advantage and quantity, attendance at work, accommodating and cooperative behavior, and outcome perseverance (Marewo et al., 2020: 161).

A worker's action is defined as the "outstanding performance of duties by selected members and examined by an authority figure or workmate, predetermined appropriate guidelines, while to systematically and successfully maximizing available assets within a dynamic situation" (Tinofirei, 2011: 28). Poor academic performance can be ascribed to a variety of circumstances, including high anxiety levels (Awotinde, 2021: 13). Desire affects staff efficiency because motivated employees might work longer hours and perform better (Marewo et al., 2020: 161). Competence has numerous properties, such as quantity, excellence, and interpersonal influence. Excellence is described as the closeness of measuring findings to genuine worth, quantity as how much is produced from an item, and social effect as an opportunity for individuals to form a belief in equal respect and collaboration with colleagues (Bernardin & Russell, 2006). Practical

responsibility and spontaneous action have been linked to contextual success. Employees that do their jobs at an average to great level differentiate themselves as creative workers in businesses. Agencies could acknowledge equal performance on the job and in the workplace, as well as offer possibilities for advancement (Ullah, 2015: 307).

Quality is defined as everything that influences the character of objects, and it is frequently used as a synonym for "good" or "wonderful". In absolute terms, quality as a function denotes the excellence of a product or service. The daily definition of quality is typically tied to the intrinsic attributes of the product or service, whereas excellence is described as possessing all of the traits that comprise it (Flores-molina, 2011: 20). Quality, in general, refers to a standard of excellence or how well something meets its intended purpose. At its most basic, product or service quality is defined as meeting particular requirements, being free of faults or contaminants, or simply matching consumer expectations (Jones et al., 2007: 138).

According to Kumar et al. (2016: 142), quality entails adherence to the purpose. Quality can be defined as the level of customer satisfaction or as adherence to specifications or principles. Meeting the standards or rules is what quality entails. Quality is defined as a standard of excellence.

Employee performance is a significant factor in determining a company's competitive advantage. As a result, corporations and, of course, higher education institutions seeking success should prioritize improving employee performance. With this knowledge, TQM was examined and investigated as a factor influencing employee performance in the study. As a result, TQM was identified as a variable that influences performance in all dimensions. It is recommended that higher education institutions that seek to improve employee performance concentrate on TQM.

#### 1. Definitions of Quality and Total Quality Management

The phrase has a variety of connotations depending on the industry in which it is used, such as health, education, or other professions. The concept of quality is ambiguous, causing people to hold differing views on the quality of a product, its software, or whether a service is excellent or terrible. In fact, an individual's opinions, perspectives, market forces, and consumer demands all influence how this phrase is used (Aldaweesh, 2018: 12). Quality is defined as everything that influences the nature of items and is frequently associated with phrases such as "good" or "excellent." Quality, in its most fundamental meaning, indicates a product's or service's superiority. Quality is typically defined as the intrinsic characteristics of a product or service, with excellence reflecting the full embodiment of those distinguishing characteristics (Flores-Molina, 2011: 20). A measure of excellence or how effectively something fulfills its intended purpose is broadly how quality is defined. The quality of a product or service can be most simply described as adhering to standards, being free of defects or impurities, or merely satisfying consumer expectations (Jones et al., 2007: 138).

Some of the definitions are the following (Kumar et al., 2016: 142).

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Quality refers to suitability for a specific aim.

- Quality can be described as client satisfaction.
- Quality can be defined as adhering to specifications or concepts.
- Quality means meeting standards or rules.
- Quality is a state of perfection.

Total Quality Management is described as the managerial logic and organizational tactics that maximize an organization's human and physical resources in order to achieve its goals (Gözaçan Borahan and Ziarati 2002:914). Pioneers of Total Quality Management such as Deming, Crosby, Juran, Feigenbaum, Ishikawa, and others have produced compelling ideas in the field of business quality management that have resulted in a significant change in raising the standard of customer service (Neyestani, 2018: 1). TQM is defined as a systematic strategy for continuously optimizing all system workflows with full employee participation, resulting in outstanding outputs that meet people's needs (Baig et al., 2015:1). TQM is a contemporary, broad concept that utilizes a holistic management approach or system, focusing on implementing essential changes across all aspects of the organization, including mindsets, viewpoints, managerial development, and leadership strategies (Mahmoud & Aloqlah, 2021: 188).

TQM is a related activity or process in an organization's internal environment that helps to achieve high-quality improvement. It's a cutting-edge method for expanding the firm. The approach is widely utilized around the world. It states that desired goals can be achieved with minimal changes to an organization's culture, practices, and behaviors (Aldaweesh, 2018: 11). Excellence is a structure and set of elements that serve as the foundation of a continuously developing workplace. The four cornerstones of all explanations of excellence are continuous process improvement, human perspective, statistical methodology, and market emphasis (Flores-molina, 2011: 29).

#### 2. Dimensions of Total Quality Management

It is necessary to characterize the quality aspects briefly, and to a lesser extent, identifying the quality component for educational institutions (Owlia & Aspinwall, 1996). These components are as follows:

According to Hasham and Hasham (2018: 362), leadership is defined as a creative process that aims to uncover the essential competencies and beliefs of an organization, communicate and demonstrate them, and inspire others to trust and behave accordingly within the institution.

When full employee involvement and assistance are combined, a realistic style of executive action in universities becomes conceivable. This includes defining job specifications for staff in charge of education and research standards, as well as specifying leadership duties for organizational factors such as policy, strategy, processes, and procedures relating to quality empowerment initiatives. Furthermore, using data, information, intelligence, and knowledge from the institution's internal environment is critical for making informed decisions in this setting (Osseo-Asare et al. 2005: 163). According to Zairi and Leonard (1996: 19), the leader's responsibilities under Total Quality Management will include unquestionable leadership, blatant customercenteredness, employee education, acknowledging and rewarding employee involvement, quality-related internal and external communication, and the accessibility of superior processes and instruments.

The degree to which workers participate in choices pertaining to their jobs and workplace is known as employee involvement. If firms base their remuneration methods on these distinctions, workers' job satisfaction can improve. When employees' efforts, ideas, experiences, and knowledge are valued, organizations develop a positive mindset (Bayraktar et al., 2017: 1). However, some employees, despite agreeing with TQM concepts, may avoid from making personal contributions due to a lack of awareness and motivation. This challenge is particularly severe in higher education, as faculty members must evaluate the data seriously. To effectively adopt TQM, everyone must be completely engaged and dedicated to the process (Sherr & Gregory Lozier, 1991: 55). Employee participation is defined as each employee contributing to the company's success while also being treated as a unique human being rather than a piece of machinery. According to both management and staff, everyone who works for the company helps to keep it running. Finding the best employee involvement strategies to achieve particular business goals is the aim. In a company, there are four key components to employee empowerment and involvement: delegating tasks, giving training, keeping lines of communication open and soliciting feedback, and awarding rewards (Apostolou, 2000: 2).

According to Bessant et al. (1994: 18), continuous improvement is a progressive, ongoing process of innovation that involves the entire organization. Continuous improvement at academic institutions requires recognizing and addressing the demands of stakeholders such as teachers, students, employees, the board of regents, accreditation authorities, and community members. This includes reassessing program success and overall quality initiatives. Implementing and sustaining continuous improvement projects in educational environments is difficult but necessary. It is critical to underline that continuous improvement is a mindset based on the concept that there is always a better approach, making it a continual journey rather than a single method (Evans & Lindsay, 2002: 60). Providing resources, improving facilities and lab equipment, improving teaching techniques, and emphasizing the practical aspects of education are all crucial components of ongoing academic advancement. A lot of academic staff members view conferences, working with other universities, reading literature, subscribing to international journals, having outside speakers, attending conferences, and so on as essential components of the process of continuous improvement (Aldaweesh, 2018: 132-133).

#### 3. Employee Performance

Performance is defined as successfully completing the correct task, as judged by practicality (Cascio, 1991). Performance is a multifaceted concept, and one can distinguish a process element of effectiveness, i.e., acts responsibilities, from a desired outcome on a fundamental level (Pradhan & Jena, 2017: 3). The term "efficiency" is derived from the phrases "labor effectiveness" and "real achievement," which describe the extent to which an individual achieves their professional goals. The quality and quantity of results a clerk achieves while performing his job duties is an example of his success (Mulyani et al., 2019: 71).

Employees are essential to the business. The labor of employees determines whether the entity succeeds or fails. As a result, firms invest a considerable amount of their revenues in staff development (Hameed & Abdul, 2011: 224). Productivity is a big, diverse entity that is closely related to a system's critical principles (Abbas & Yaqoob, 2009: 269). The staff, a component of the organization's assets, plays an important role in the effective achievement of those objectives. In the improvement of employees, the efficiency of a staff member in a firm is essential to achieve staff efficiency and the firm's continuous prosperity. Improving the productivity of these employees benefits not just the company, but also the employees themselves. As a result, outstanding work may lead to increased staff career development (Mulyani et al., 2019: 69). Learning improves workers' performance by providing instantaneous increases in expertise, talents, and skills required to do job-related tasks, resulting in more staff dedication to corporate demands (S. Sharma & Taneja, 2018: 140).

Workplace productivity is influenced by both the actions and inactions of an individual. Employee capability includes factors such as performance effectiveness and volume, attendance, a supportive and collaborative attitude, and persistence in achieving results (Marewo et al., 2020: 161). "The exceptional execution of responsibilities by designated individuals, assessed by a supervisor or colleague, according to established guidelines, while effectively and efficiently utilizing available resources in a changing environment" is how employees are defined (Tinofirei, 2011: 28).

Poor performance among academic professionals can be attributed to a range of factors, including extensive anxiety scales (Awotinde, 2021:13). Desire has an impact on staff efficiency because when people are motivated, they can work longer hours and perform better (Marewo et al., 2020: 161). Several characteristics define competence, including quality, quantity, and social impact. Quality refers to how closely measurement results align with the true value, quantity pertains to the amount produced from a resource, and social impact provides individuals with the chance to build mutual respect and collaboration among peers (Bernardin & Russell, 2006). Practical responsibilities and spontaneous behavior have both been connected to contextual success. It is a distinguishing feature of creative workers in organizations when employees accomplish their duties at an average to excellent level. Agencies could recognize equitable performance in both the job and the surroundings of workforce members, as well as provide opportunities for promotion (Ullah, 2015: 307).

# 4. The Impact of Total Quality Management on Employee Performance

TQM is founded on the belief that workers, groups, and entities may always improve their performance (Kanji, 2012: 2). Reliable data on the functioning of the TQM approach is necessary for executive leadership to manage it effectively, and this information should be accessible continuously rather than relying on an extensive evaluation of the Quality Management System before determining when to intervene and take action (Hoyle, 2017). The primary goals of TQM implementation are to measure, identify performance concerns, and set guidelines for improved performance; without evaluation, there can be no assessment, and hence no true difference in efficiency can be detected (Zairi, 1992: 178). The Qatari Ministry of Interior examined how overall quality management approaches affect employee productivity. Key priorities identified include customer service, employee engagement, continuous improvement, leadership, and operational management. The results indicate that overall quality management systems enhance employee performance through the exchange of information, which supports the strategic plan aimed at boosting worker efficiency (Saffar & Obeidat, 2020: 77).

A study revealed that TQM methods significantly affect employee performance in Turkish public hospitals. Factors such as commitment from top management, a focus on customer needs, individual leadership, continuous improvement, and workflow management contribute to this impact. Additionally, training plays a crucial role in the connection between TQM elements and employee performance (Abukhader & Onbaşıoğlu, 2021: 521). TQM procedures were found to have a substantial correlation with employees' workrelated attitudes, such as involvement, job satisfaction, professional fulfillment, and organizational loyalty. TQM actions also improve employee engagement, promote performance, recognize workers' vital role in attaining organizational goals, and regard them as valuable assets (Dedy et al., 2016: 2).

According to Pulakos (2014:12) the benefits of performance standards include sharing key performance indicators and targets. The following advice can be given to managers in this regard:

 Help managers understand why an individual was assessed in a specific way by displaying varying efficiency levels.

Ensure fairness by establishing a job-relevant framework
 for personnel evaluations.

#### 5. Methodology

#### 5.1. Method of The Research

In this study, the questionnaire technique was used for data collection. The study collected 400 questionnaire responses that were examined. Google forms were used to collect information for online surveys. Data on Total Quality Management and its impact on higher education achievement were acquired from current university employees. The questionnaire contains questions for each dimension of overall quality management, as well as four questions related to the employee performance axis, for a total of 24 complete questions. Respondents' responses were scored using a five-point Likert scale: 1 = Strongly Disagree; 2 = Disagree; 3 = Neutral; 4 = Agree; and 5 = Strongly Agree. The data from the questionnaire was then evaluated with the SPSS program, and analytical exams were performed to validate the study hypothesis.

The necessary authority to conduct the surveys was granted by a decision issued by Karabuk University's Ethics Committee of Social and Human Sciences Researches on September 29, 2022, and numbered 2022/07-01.

The survey form was prepared by scanning and examining relevant literature and applicable scale studies. Berrish (2016) scale was used as the total quality management scale in higher education. According to Berrish (2016), there are three parts to TQM in higher education. As a result, these factors were utilized to name the total quality management sub-dimensions. So, 7 items were chosen for leadership, 5 for continuous improvement, and 8 for employee involvement on the TQM scale. Most previous scientists and academics have widely used the selected survey and set of questions, including Berrish (2016), Khoja (2016), Al-Ghanboosi (2002), Ahmed & Ali (2012), Bon & Mustafa (2013), Pradesh (2017), A. Zwain (2012), Sherr & Gregory Lozier (1991), Bayraktar et al. (2008), and Al-omoush, Alrahahleh and Alabaddi (2015).

The Employee Performance scale was first developed by Kirkman and Rosen (1999). Later, the scale was adapted by Sigler and Pearson (2000) and Çöl (2008). In this study, the form adapted by Çöl (2008) as 4 questions was used.

#### 5.2. Hypothesis of the Research and Research Problem

Numerous articles, books, and theses highlight the origin of this hypothesis, as referenced by authors such as Ali & Shastri (2010), Nadali Najafabadi et al. (2008), Al-Najjar & Jawad (2019), Al-Qayoudhi et al. (2017), Tribus (2010), and Aly & Akpovi (2001).

Some concerns were raised in this study, however the major topic is "Does total quality management have an effect on employee performance?" Other queries are as follows:

- What function does total quality management play in higher education?
- Can the characteristics of overall quality management create a paradigm shift in higher education?

Many studies have been undertaken on the mechanism of adopting comprehensive quality management, as well as its obstacles and implementation strategies, which served as an important source for the hypothesis.

(H1) Total quality management in higher education has a significant and positive effect on employee performance.

(H1a) Leadership in higher education has a significant and positive effect on employee performance.

(H1b) Continuous improvement in higher education has a significant and positive effect on employee performance.

(H1c) Employee involvement in higher education has a significant and positive effect on employee performance.

#### 5.3. Population and Sample

Samarra University is a public university in Iraq that was founded at the beginning of 2012 and presently has nine faculties. The College of Applied Sciences was established in 2011, the College of Education in 2000, the Colleges of Archeology and Islamic Sciences in 2010, and the College of Engineering in 2012. In 2020, the College of Administration and Economics, the College of Agriculture, the College of Arts, and the College of Physical Education and Sports Sciences were also founded. In less than a year, the university has made remarkable progress by working tirelessly to improve the educational process while focusing on scientific and knowledge aspects within quality standards, attracting competencies, and maintaining open communication with the Ministry of Higher Education and all stakeholders. The researcher readily selected a sample of documentation and pedagogical people from the entire Academic Facility at Samarra University in Iraq. The total The Academic Facility employs 500 lecturers (teaching staff) and 600 administrative staff members. So, the current research study has a population of 1100 employees. The institution's website provided access to 500 people's corporate e-mail addresses, and the surveys were distributed electronically. 400 hired hands and teachers completed surveys. According to Sekaran (2003), 384 data points obtained for a research with a universe number of 1,000,000 or above have the potential to represent the universe at an advanced level. Based on this information, the survey data gathered for this study has a high potential to reflect the universe.

#### 6. Statistical Analysis

#### 6.1. Findings on Demographic Factors

Starting with gender, it is clear that at Samarra University, the majority of respondents (70.5%) were male, while the remaining (29.5%) were female. According to the age distribution of the participants, the highest rate (33%) is between the ages of 26-33 and the lowest rate (1.3%) is 51 years old and abov. In terms of academic qualifications, the majority of Samarra University respondents (55.8%) held a bachelor's degree, while the least (5.0%) held another degree. According to their status, the majority of respondents (65.5%) were managerial staff, while the minority (34.5%) were academics.

#### 6.2. Reliability Analysis

According to Sekaran (2019), Cronbach's alpha analysis is used to determine the consistency and dependability of a variable. A Cronbach's alpha score close to 1.00 suggests exceptional input solidity; one less than 0.70 is deemed undesirable, while one greater than 0.80 is considered acceptable (Sekaran, 2019).

Employee performance, the dependent variable, has a Cronbach's alpha coefficient of 0.812. The independent variables' Cronbach's alpha coefficients are 0.805 for effective leadership, 0.887 for staff involvement, and 0.835 for continual development. The Cronbach's alpha coefficients for each independent variable indicates positive outcomes. For Samarra University, all measurements showed strong reliabilities of Cronbach's alpha, ranging from 0.805 to 0.887. All elements were kept after taking into account the previously indicated acceptable values, especially since Samarra University employees' performance levels were regularly 0.812.

#### 6.3. Factor Analysis

Due to Principal Components Analysis, only 24 items will be used in the Effect research (PCA). According to, factor analysis results KMO measure is 0.947, which is regarded as outstanding (sig.0.000). It suggests that gaining identification during this inspection is sufficient for the case investigation to resume. In Bartlett's test, the current inquiry must reject the null hypothesis of uncorrelated variables or a non-identity grid. In the event that the correlation matrix is deemed non-identity, the significance level is set at 0.000. Consequently, the factors considered in this study reveal definite connections. This result is not significant enough to refute the hypothesis, indicating that a factor analysis should be carried out.

		Component			
Variables		2	3	4	
Leadership	1	2	0	1	
The university's top leadership implements a strategy plan to					
attain quality in every sector.	0.647				
The institution has adopted the quality standard as the duty of					
all sectors and individuals participating in the institution.	0.643				
The management of the university proposes goals for continual					
development and encourages staff to get involved.	0.751				
At the university, ways to connect to the markets need to be					
provided to explore concerns, comments, and ideas about the	0.647				
value quality of learners.					
The University offers competent scientific and technological					
groups that can assess and surpass the demands and wants of	0.686				
the marketplace.					
Decisions taken by upper management rely on data and trends					
or on the feedback of employees and learners.	0.704				
Do a fundamental shift in upper leadership to incorporate					
quality into the organization's processes and activities.	0.671				
Continuous improvement					
Educational institution staff are furnished with essential					
resources and tasked with improving quality.		0.754			
For preventing errors, there is a precise and well-defined					
strategy.		0.789			
The institution has statistical methodologies and instruments for					
testing and measuring the proficiency of graduates.		0.792			
Develop methods and tools to consistently enhance the quality					
of the institution's academic achievements and the ability of its		0.784			
graduates.					
Employees are trained to be mindful of possibilities and					
improvement aims.		0.763			
Employee involvement					
Participate in effective quality choices with teaching staff.			0.763		
Employees and instructors have the authority to handle			011 00		
important graduate-related issues.			0.743		
Participate in the resolution of major issues at the institution					
with Lecturers and other employees.			0.757		
The institution has an effective mechanism in place to encourage					
Staff to engage (both financially and morally).			0.731		
Individuals who demonstrate innovation are rewarded by the					
university mechanism.			0.752		
While performing their duties, the administration attempts to					
alleviate professors' and workforce members' anxieties.			0.749		
Promote contact channels and improve connections between					
professors and employees, as well as top management.			0.734		
There are effective initiatives that assist employees in becoming					
acquainted with the goals and mechanics of how the institution			0.751		
operates.			0.701		
Employee performance					
I finish my responsibilities on schedule.				0.818	
My objectives are met or exceeded.				0.811	
I ensure that the items meet or surpass the quality requirements.				0.781	

#### Table 1: Factor Analysis Results

When an issue arises, I am fast to reply.	0.791		
Variance Explained (%)	42.901 6.280 5.305 4.408		
Total Variance Explained (%) (Cumulative)	58.895		
KMO and Bartlett's Test	0.047		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.947		
Bartlett's Test of Sphericity	4824.014, p <.000		
Extraction Method: Principal Component Analysis.	Rotation Method: Varimax with Kaiser		
Normalization			

Considering the Kaiser criterion, investigators should use a few factors equal to the amount of Eigenvalues in the correlation matrix that are greater than one. Table 1 reveals that four components were larger than one, indicating that all measured variables can be divided into four categories. The four factors combined can explain 58.895% of the total variance.

The Eigenvalues assigned to each factor represent the variance explained by that linear component and are expressed as a percentage of the overall differences stated. Four composite factors explain 10% of the variation. Table 1's rotating part matrix demonstrates that all 24 elements will be divided into four components.

Factor analysis requires common variance values and factor loads of at least 40% (Field, 2000: 434). Factor analysis was used in accordance with this information.

#### 6.4. Pearson Correlation Analysis

The findings revealed the following correlations between the independent factors and the dependent variable: Leadership (r=0.607), Continuous Improvement (r=0.696), and Employee Involvement (r=0.761).

	Leadership	Continuous Improvement	Employee Involvement	Employee Performance
Leadership	1			
Continuous	.660**	1		
Improvement Employee				
Involvement	.639**	.757**	1	
Employee Performance	.607**	.696**	.761**	1

Table 2: Pearson's Correlation Analysis of Independent Variables

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 3: Pearson's Correlation Analysis of Dependent Variables

	TQM	Employee Performance
TQM	1	
Employee Performance	.776**	1
** 0 1	(1 0 0 1 1 1 (0 ( 1 1))	

\*\*. Correlation is significant at the 0.01 level (2-tailed).

Table 3 clarifies the results of correlation. The research was primarily conducted to test the dependability of the relationship between total quality management and employee performance (r=0.776). Overall, all the criteria in the Samarra University case showed a substantial positive association.

### 6.5. Findings from the Relationship of Variables Hypothesis Testing

According to the data in Table 4, in the Samarra University case, there is a statistically significant association between Leadership, Continuous Improvement, Employee Involvement, and Employee Performance at the significance level of (p = 0.05). The results show that the correlation coefficient (R) is 0.789, the R2 is 0.623, and the value test (F) is 217.923. Therefore, the hypothesis is accepted.

Variables	В	Т	Sig.	R	R2	F	Sig.
TQM	.511	3.803	.000				
Leadership	.155	3.223	.001				
Continuous	.215	4.427	.000	- .789 -	.623	217.923	.000
Improvement	.215						
Employee	.511	10.224	.000				
Involvement	.511	10.224	.000				
a. Dependent Variable: Employee Performance							

Table 4: Multiple Regression Analysis

Table 4 below highlights the study findings based on the results of the multiple regression analysis. TQM has a favorable and significant effect on employee performance ( $\beta$ =0.511, p<0.01).

Leadership has a favorable and significant effect on employee performance ( $\beta$ =0.155, p < 0.01). Continuous improvement has a favorable and significant impact on employee performance ( $\beta$ =0.215, p < 0.01). Employee involvement has a favorable and significant impact on employee performance ( $\beta$ =0.511, p < 0.01).

As a result, a one-unit increase in the university's TQM enhances employee performance by 0.511 units. A one-unit boost in leadership at the institution increases employee performance by 0.155 units. A one-unit increase in the university's Continuous Improvement enhances employee performance by 0.215 units. A one-unit increase in employee involvement at the university boosts employee performance by 0.511 units. Therefore, hypotheses H1, H1a, H1b, and H1c were accepted.

#### **Conclusions and Recommendations**

Important institutions in any country, universities play a significant role in economic growth, reflecting the government's appreciation for education and knowledge as tools against ignorance for future generations. Thus, when considering Total Quality Management within the academic context, it indicates that students either have a poor or excellent reputation in the university academic sector.

Recently, the concept of comprehensive quality management has emerged in the academic sector as a foundation and prerequisite for enhancing the environment of academia and showcasing it in the best possible way, improving the ranking of institutions, and delivering high-quality outcomes. The implementation of comprehensive quality management in academic processes, through leadership, continuous improvement, and employee involvement, contributes to increasing morale among faculty members and higher education staff.

The subject research's findings indicated that the certificate from Samarra University illustrates that total quality management is an approach that aligns with the university's strategic direction, including aspects of leadership. A high level of employee involvement among university members was revealed by the data. An effective system implemented by the institution to promote participation and reward individuals displaying creativity was one of the most notable signs of staff engagement. Various statistical methods were used to analyze the data, and the study's hypotheses were evaluated. The research yielded several findings, with the most significant being the use of correlation analysis to assess the strength of the relationship between each independent variable and the dependent variable.

According to the findings obtained in this research, leadership, continuous improvement and employee involvement, which are dimensions of total quality management, positively affect employee performance. These results are parallel to previous studies (Saffar & Obeidat, 2020; Dedy vd., 2016) in the literature.

In conclusion, all factors at Samarra University showed a positive correlation. The research question was explored, leading to the discovery that employee performance in higher education is positively impacted by leadership, continuous improvement, and employee involvement. Therefore, to enhance employee performance in higher education, it is essential to strengthen the study variables (effective leadership, continuous improvement, and employee involvement). University administrators should be mindful of this.

The implications of this study's findings are both logical and practical. The following recommendations can be given to managers in this regard. Education should be improved by emphasizing scientific and economic factors for growth. Training programs, workshops and seminars should be implemented to train staff on global quality management. An environment should be created within educational institutions that encourages employee participation and provides incentives and motivation to share ideas, suggestions and initiatives. In addition, a financing strategy is essential for senior management to secure the necessary knowledge and skills training, as financial constraints may arise. It is important to find a balance between quantitative growth and quality to ensure that the increase in enrollment does not negatively affect educational standards. In addition, universities should take into account the needs of society and the labor market when developing their admission processes. However, it is vital to stay up to date with developments in university management and scientific research, and to focus on improvements, administrative procedures and top rankings in global rankings while investing heavily in infrastructure.

The following suggestions can be made for future studies that will contribute to the literature. A second model for comprehensive quality management could be developed to compare results and implement necessary adjustments. Additionally, the focus of this study was the University of Samarra. It is recommended that this approach be implemented in other institutions to facilitate deeper understanding and allow for comparisons. Additionally, more empirical research with larger sample sizes and geographical diversity could help validate the findings. Future studies could investigate how TQM principles such as improvement, teamwork, and employee participation can increase employee motivation and thus performance. Furthermore, new research could focus on leadership and employee training related to TQM.

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#### A Model That Helps Stakeholders Strategize Entrepreneurial

#### Development Among the Students in Oman

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#### Abstract

Entrepreneurship plays a significant role in a country's economic growth, innovation, and transformation. Despite its significance, many graduates are unable to fulfil their desire to start a new business because of a number of internal and external challenges. Therefore, the main aim of this study is to develop a model that helps stakeholders strategize entrepreneurial development among students in Oman. In this study, different literature sources and previous research were used. This study uses a deductive research approach and primary data was collected through a non-probability sampling technique, with a sample size of 478 responses
The study model covers everything from ideation to planning, business growth to resource allocation, market analysis, and structural support, with the aim of fostering student entrepreneurial growth. Thus, this study adds new information to the related literature and the industry. The research model can influence entrepreneurship growth in Oman by providing practical tools and knowledge to navigate the complexities of starting and maintaining new business. Also, it has potential to improve Oman's entrepreneurial ecosystem, reduce obstacles, improve entrepreneurial intentions, and pave the way for students' entrepreneurial endeavours.

**Keywords:** Entrepreneurship Development, Entrepreneurial Challenges, Business Growth, Structural Support, Omani Students

# Umman'daki Öğrenciler Arasında Paydaşların Girişimcilik Gelişimi Stratejisini Oluşturmasına Yardımcı Olan Bir Model

# Öz

Girişimcilik, bir ülkenin ekonomik büyümesinde, inovasyonunda ve dönüşümünde önemli bir rol oynar. Önemine rağmen, birçok mezun bir dizi iç ve dış zorluk nedeniyle yeni bir iş kurma isteğini yerine getirememektedir. Bu nedenle, bu çalışmanın temel amacı, paydaşların Umman'daki öğrenciler arasında girişimcilik gelişimini stratejize etmelerine yardımcı olan bir model geliştirmektir. Bu çalışmada, farklı literatür kaynakları ve önceki araştırmalar kullanılmıştır. Bu çalışmada tümdengelimli bir araştırma yaklaşımı kullanılmış ve birincil veriler, 478 yanıttan oluşan bir örneklem büyüklüğü ile olasılık dışı örnekleme tekniği aracılığıyla toplanmıştır.

Çalışma modeli, öğrenci girişimcilik büyümesini teşvik etmek amacıyla fikir aşamasından planlamaya, işletme büyümesinden kaynak tahsisine, pazar analizine ve yapısal desteğe kadar her şeyi kapsamaktadır. Bu nedenle, bu çalışma ilgili literatüre ve sektöre yeni bilgiler eklemektedir. Araştırma modeli, yeni bir iş kurma ve sürdürmenin karmaşıklıklarında gezinmek için pratik araçlar ve bilgi sağlayarak Umman'daki girişimcilik büyümesini etkileyebilir. Ayrıca, Umman'ın girişimcilik ekosistemini iyileştirme, engelleri azaltma, girişimcilik niyetlerini iyileştirme ve öğrencilerin girişimcilik çabalarının önünü açma potansiyeline sahiptir.

**Anahtar Kelimeler:** Girişimcilik Geliştirme, Girişimcilik Zorlukları, İşletme Büyümesi, Yapısal Destek, Ummanlı Öğrenciler

# Introduction

It is known that entrepreneurship plays a significant role in the economic growth of a country (Singh & Pravesh, 2017); similarly, Reynolds et al. (2005) stated that if economic prosperity is to be attained, young people's entrepreneurial growth must be encouraged. Besides, Seikkula-Leino et al. (2015) stated that the importance of youth participation in the country's economic development cannot be overstated. It would be necessary to prepare them for success as well as to make society entrepreneurial and to develop in them the spirit and drive of entrepreneurship (Mohammed et al., 2016). Earning a living does not entail transforming society into an entrepreneurial one, contrary to the conventional strategy of focusing development on adults, particularly the unemployed. Therefore, if economic prosperity is to be attained, young people's growth is key. Ustyuzhina et al. (2019) stated that entrepreneurship development programs such as formalized teachings inform, train, and educate anyone interested in participating in socio-economic development through a project. Besides, Belwal et al. (2020) stated that promoting entrepreneurship awareness, business creation, and small business training, or train the trainers, are essential for entrepreneurial growth. Similarly, Samuel & Sarprasatha (2016) stated that spreading knowledge about entrepreneurship among students at all levels of education, primary, secondary, and higher, can be accomplished by using media campaigns, seminars, workshops, and lectures.

Besides confronting the long-held belief that entrepreneurs are born, not made, part of the attraction to entrepreneurship has been the increased interest in entrepreneurship-related educational programs and training (Kirby & Ibrahim, 2011). Due to this, there are now more higher education institutions providing entrepreneurship programs, and students who wish to study about entrepreneurship are in greater demand (Ibrahim et al. (2017). Even though entrepreneurship training offers students exciting opportunities to work for themselves, a significant number of students were unable to take advantage of the course's benefits and eventually chose not to pursue careers in entrepreneurship (Tumati & Kumar, 2023). Consequently, the challenges that students encounter both during and after entrepreneurship training programs are discussed below.

## 1. Literature Review

## 1.1. Challenges for Entrepreneurial Development

Student entrepreneurs encountered numerous challenges, such as insufficient funding, administrative hurdles, and the taxing work of learning while running a business (Kabonga & Zvokuomba, 2021). Some students are affected by environmental and social barriers (Veleva, 2021). Additional challenges include a lack of knowledge and expertise, which was a problem for student entrepreneurs (Kurdyś-Kujawska & Wojtkowska, 2023), lack of working capital and an understanding of company operations (Che Nawi et al., 2022), lack of experience and funding (Arranz et al., 2018); lack of ties with the entrepreneurial community (Soetanto & Qihai Huang, 2018); and deficiency of financial knowledge and general business running (Che Nawi et al., 2022).

The family's reluctance towards helping their children in pursuing their entrepreneurial goals (Morales et al., 2022), their lack of confidence in their ability to understand how to react to changes and deviations from the outside world (Alawamleh et al., 2023), and their lack of confidence in their ability to manage staff management, bookkeeping, obtain permits, and navigate company laws (Lougui & Nyström, 2014). Some students face difficulties in coming up with business ideas, establishing their vision, and obtaining start-up capital (Fong et al., 2020). Encouragement from families for their entrepreneurial activities is another major problem that students face. Besides, a few parents have a skeptical view towards entrepreneurial endeavours, which affects their children's attitude and passion towards them (Rengiah & Sentosa, 2016). Meanwhile, Seikkula-Leino et al. (2019) asserted that the expansion of entrepreneurial activity can be hampered by a lack of favourable views towards entrepreneurship programs. Moreover, if society does not encourage kids to adopt an entrepreneurial mindset, they will not acquire the skills needed to be successful business owners.

Additional obstacles that students encounter when it comes to entrepreneurship include their incapacity to overcome psychological and self-imposed barriers, which makes it difficult for them to turn their aspirations into reality (Sandhu et al., 2011); their shortage of skills to become an entrepreneur, even after completing entrepreneurship programs (Ustyuzhina et al., 2019); their capacity to manage stress, which enables them to avoid the risks associated with entrepreneurship activities (Sandhu et al., 2011); their lack of knowledge and expertise in matters—they require financial literacy financial and other entrepreneurial abilities to cultivate an entrepreneurial mindset (Lope Pihie & Bagheri, 2012); and their the absence of a favorable mindset and weak intent in an entrepreneurship program.

For the entrepreneurial program to be successful and effective, a strong mindset and intention are both significant determinants (Rengiah & Sentosa, 2016). Despite the numerous efforts to foster entrepreneurial abilities, students show little enthusiasm for participating in

entrepreneurial activity, possibly as a result of their modest needs for achievement (Chiekezie et al., 2016). According to Lope Pihie & Bagheri (2012), they are hesitant to devote their time and efforts to starting their own businesses, perhaps because of a lack of prior knowledge and experience in entrepreneurship, which dampens wants or intents towards business. Alawamleh et al. (2023) state that Jordanian new entrepreneurs face challenges related to finances, business operations, technology, and forming business alliances and relationships. Some of the challenges in the Philippines are inadequate schooling, limited money, and a lack of skills (Gozun & Rivera, 2021). Government limitations and intricate rules (Veleva, 2021), teamwork at work, and managing stress (Bignotia et al., 2022). Entrepreneurs face many challenges outside of funds, especially with regard to their lack of experience in financial management (Alegario et al., 2021). Other difficulties consist of the absence of youth entrepreneurial activities in the Western Cape and the dearth of entrepreneurial programs (Gwija & Iwu, 2014).

One of the main obstacles to Oman's entrepreneurial development, according to Khan & Almoharby (2007), is the lack of business supervisory skills, insufficient market understanding, and poor executive experience. Furthermore, Belwal et al. (2015) reported that university students' main barriers to selecting a business career path were their fear of company failure and their aversion to taking risks. Furthermore, Magd & McCoy (2014) found that one of the issues is that Oman's prospective entrepreneurs are not receiving enough entrepreneurship training, which could lead to a high rate of new company failures. Similarly, Ibrahim et al. (2017) recommended that government agencies and educational institutions create intervention programs, cultivate a positive attitude in students towards entrepreneurship, and educate on risk management. Additionally, it is important to remember that support for aspiring entrepreneurs should go beyond the start-up phase and should be extended till business development (Fatoki & Chindoga, 2011). Furthermore, marketing their businesses is a major challenge that Omani students must overcome, and their aversion and fear of failing were the biggest obstacles to starting their own business (Bakheet, 2018). Studies show that Omani students need more efficient instruction through entrepreneurial education at the program and course levels (Magd & McCoy, 2014). Although Belwal et al. (2015) noted that Omani students were enthusiastic about launching their own businesses, they lacked understanding of business operations and a fear of failing and do not like taking necessary risks. The following challenges faced by Omani students were brought to light by a study by Tumati & Kumar (2023): inadequate technical and practical skills, fear of failure, difficulty in obtaining funding, can't handle high risks associated with starting a business, ignorance of the legal and commercial facets of business, aversion to figures and financial statements, and last but not least, a lack of specific entrepreneurial training that could cause my business to fail.

## **1.2. Entrepreneurial Development Model**

The objective of providing practical skills for entrepreneurs is fulfilled by providing information through education and training interventions (Kirby & Ibrahim, 2011). The entrepreneurial program is viewed as a concept broader than a straightforward course, so long as it contains a portfolio of complementary activities (Souitaris et al., 2006). According to the authors, effective programs should have four parts: a "taught" component, a "business planning" component, an "interaction with practice" component, and a "university support" component. Similarly, Bandura (2012), stated that two significant forms of selfefficacy are enactive mastery (learning by doing) and vicarious learning (learning occurring through observing the behaviour of others). By offering programs that involve students in various activities known to promote self-efficacy and by inviting guest entrepreneurs as speakers who can serve as successful role models for students, contextual factors, especially the university environment, may offer opportunities for vicarious experience or active mastery (Rengiah & Sentosa, 2016). In summary, it is anticipated that students will feel more assured and upbeat about their ability to launch and run a new business when they see their environment as supportive and as providing resources and support systems for doing so.

Starting up a business is difficult, and the entrepreneur must overcome challenges in envisioning the business. However, confronting these challenges early in life, particularly during college or university, will assist entrepreneurs, particularly young ones, in shaping their attitudes and thoughts in order to make an informed decision to pursue a career in entrepreneurship (Fong et al., 2020). As a result, a model was developed to assist stakeholders in planning the growth of entrepreneurship among Omani students. This model can influence students' opinions in favor of entrepreneurship, help them develop positive perceptions about themselves and favorable attitudes towards entrepreneurship, and encourage them to choose an entrepreneurial career. The model consists of twelve steps, each of which is covered in depth below. By following these processes, one might influence students' perceptions and attitudes towards entrepreneurship:

# 2. Methodology

The following methodology was employed in this study. This study is part of a larger study conducted to investigate students' attitudes and intentions towards entrepreneurship in Oman. The study also examined perceived support, social cultural factors, and barriers related to students' ambitions to become entrepreneurs. The findings of the preceding study demonstrated a significant disparity between stakeholders' initiatives for entrepreneurship development and students' genuine intentions to start enterprises. To bridge this gap, the stated model was established, as it can effectively address the gap and assist stakeholders in strategising entrepreneurial development among Oman's students. The study adopted a deductive research approach, beginning with a theory, deriving hypotheses from it, testing theses hypotheses, and revising the theory (Babbie, 2010). Furthermore, a quantitative research methodology was applied, which, according to Kothari (2019), employs analytical or numerical methods to quantify data and uncover cause-and-effect relationships between variables. The descriptive research approach was utilised in this study because it demonstrates the features of the population or phenomenon under investigation (Creswell, 2014). This study used purposive sampling, which is a non-probability sampling technique. Purposeful sampling is a technique that selects a sample based on a researcher's background and expertise. Primary data was collected using a survey questionnaire. Venesaar et al. (2006) developed the questionnaire used in this study. Nonetheless, the questionnaire was modified to meet the study criteria. The study had a sample size of 478 responses.

# 3. Entrepreneurial Strategies

Scholars have proposed numerous models of entrepreneurial growth, including the model developed by McClelland highlighting the importance of entrepreneurial accomplishment motives (McClelland, 1976). In addition, Hagen's approach to status withdrawal serves as a predictor of the relationship between entrepreneurial conduct and creative personality (Hagen, 1963). Moreover, according to Kunkel's behaviourist model, social structure has an impact on entrepreneurial behaviour (Kunkel, 1997). In addition, Young's model of

entrepreneurship is fuelled by society's adoption of relative subgroups (Young, 1970). However, Rao's model of entrepreneurial disposition the prospect of accomplishing objectives with particular actions such as resources, inspires aspiring business owners (Rao, 1975). The Gartner entrepreneurship model places strong emphasis on motivation, abilities, and quality (Gartner, 1988). Drucker's innovation model describes methodological strategies for innovation, emphasising sources of entrepreneurial opportunity such as industry shifts, demographics, and market gaps (Drucker, 1985). Thomas Cochran's idea of cultural values model highlights that entrepreneur are societal role models, and the model's importance is based on cultural values, role expectations, and social sanctions (Cochran, 1965). On the other hand, the Davidsson and Wiklund entrepreneurship model argues that collective action, masculinity, and long-term orientation encourage entrepreneurship, whereas power distance and avoidance of uncertainty discourage it. Males, rural areas, and low-education populations have a greater influence on traditional family values (Davidsson, & Wiklund, 1997). Finally, Saras Sarasvathy's effectuation model emphasises the use of the resources at hand to generate possibilities ((Sarasvathy, & Venkataraman, 2011)

However, the models mentioned are constrained and only address a portion of entrepreneurs' growth. As a result, there is a substantial need for a model that can address early entrepreneurial exposure to the launch of a business. The model proposed in this study is a thorough approach that will assist stakeholders in transforming students into business owners. The model comprises twelve steps that give students exposure, knowledge, skills, and experience, encouraging them to develop entrepreneurial mindsets and eventually become entrepreneurs. Two key characteristics that lead students to choose entrepreneurial careers are their ability to take risks and confidence in their skills. The proposed model will assist students in developing these qualities, which will help them pursue entrepreneurial endeavours. **Ekonomi, İşletme ve Yönetim Dergisi Journal of Economy Business and Management** Cilt/Vol: 8, Sayı/Issue: 2, Sayfa/Pages:33-77 DOI: 10.7596/jebm.1583806



**Figure 1:** A proposed Model that helps stakeholders in strategizing entrepreneurial development among students in Oman. Source: Entrepreneurial development model by the Authors.

## 3.1 Proposed Strategy 1: My Hometown and Me

Young children should be taught about their local market, the different types of businesses that operate, the raw materials that are available, the customs and practices of different businesses, its main consumers and their demographics, and details on foreign versus local businesses. In addition, the economic situation of a country, its main imports and exports, the country's business laws and regulations, and finally, the difficulties and opportunities faced by new businesses. Additionally, it is wise for educational institutions to schedule outings and spend time at nearby souks, malls, or business centres so that the students can learn about various businesses. Young individuals will be discouraged from beginning their own businesses if they are not exposed to the aforementioned factors since they will be unsure of what to do, and it can take months or years to come up with new business ideas.

Understanding local business is crucial for young people because it helps them become informed customers, informed citizens, and better prepared to engage in the local economy. This information may also help young people prepare to become entrepreneurs or employees in the future, as well as comprehend how companies and local governments interact, which can have an influence on their everyday lives. Young people can make better judgements about how to spend their money, how to get active in their community, and how to prepare for their own futures if they grasp the dynamics of their local business community. It's possible that this knowledge will help young people form good opinions about different business opportunities and will transform their intention to launch a new company into a genuine desire rather than just a sentiment, an aspiration, or a fascination (Fayolle & Gailly, 2008).

# 3.2 Proposed Strategy 2: Internships for All

To begin with, all students, regardless of their programs, must do an internship. Currently, students from practical courses like hospitality, engineering, and medicine are engaged in internships, but this study proposes that it should be for all students. Students who participate in internships gain the necessary work experience, develop their skills, and have access to a variety of jobs and departments. Consequently, internships are beneficial for all students, not just those enrolled in practical courses, because they provide hands-on, real-world experience in a chosen field of interest (Omar et al., 2017). This can help students gain valuable skills and knowledge, such as teamwork, communication, problem-solving, and time management, which are all highly sought after by employers.

It can inspire innovative thinking and ground-breaking solutions and finally give them the self-assurance they need to seek a long-term career or start their own business. Besides, internships also provide students with the opportunity to network with professionals in their field, which can lead to future job opportunities or valuable connections for their future careers. Additionally, internships give students a chance to try out different careers and industries, helping them determine what they like and do not like and make more informed decisions about their future paths. All academic institutions, including schools, should focus on internships, as they provide students with hands-on experience that will enhance their classroom experience, expose them to real-world business scenarios, and ultimately prepare them to set up their own business (Joshi & Pandey, 2015). Overall, internships are a valuable investment in a student's personal and professional growth, and regardless of their major or career aspirations, internships should be offered to all students.

## 3.3 Proposed Strategy 3: Part-Time Work Opportunities

Oman currently has no part-time job culture. People either work full-time or don't. There are few exceptions for citizens who can select a part-time job; nevertheless, this practice is not commonly recognized. The Ministry of Labour should provide part-time employment opportunities for both citizens and the expatriate community, as well as encourage young individuals to choose them, not just students. Unlike in European countries, in Oman, the tuition fees for schools and universities are largely paid by the government and, in some situations, by the parents. As a result, students rarely take on part-time jobs. However, this study advocates for the introduction of a part-time employment culture in Oman since it may give young people muchneeded job experiences and exposure, enhance their confidence, and develop their independence, which is required to be entrepreneurs.

Part-time job experience is vital for students because it allows them to learn valuable skills and gain experience that will help them in their future employment. Besides, part-time employment can assist students in developing time management skills, responsibility, and a strong work ethic, all of which are attractive attributes for future employers, and it can also help students become entrepreneurs. Further, it also provides students with the opportunity to improve their resumes and obtain practical experience in their subject of interest, which may help them stand out when applying for internships or full-time jobs. Working part-time can also provide students with vital networking opportunities as well as the opportunity to earn money and achieve financial independence (Chiekezie et al., 2016).

The Ministry of Labour should actively gather information about available jobs from various public and private organisations and post the information online. Following their announcement, academic institutions let students know about those openings and encouraged them to apply. Furthermore, educational institutions must identify and offer a few parttime jobs on campus to students, such as in the library, canteen, reception, and other areas. One of the reasons young people are afraid to start their own businesses is a lack of business experience. Part-time work will give you valuable experience. Furthermore, educational institutions must be welcoming to students who work. Overall, part-time job experience may help students better prepare for their future professions by providing them with useful life experiences that can improve their personal and professional growth and help them become future entrepreneurs (Teng & Chan, 2022).

## 3.4 Proposed Strategy 4: Enterprise Week & Pitch Festival

All academic institutions need to organise an Enterprise Week. This week, regular classes must not be held, and a number of businessrelated events should be scheduled. Students' knowledge of the business environment, financial sources, and support mechanisms should increase as a result of these activities. Local business owners and alumni who have achieved success in business should be invited during this week so that students can immediately connect with them and gain invaluable knowledge and confidence. Workshops and seminars that provide students with a comprehensive understanding of the opportunities and challenges of entrepreneurship should be conducted (Al-Ani, 2016).

*Present successful young entrepreneurs:* Seeing other youngsters who have created their own enterprises successfully may be quite encouraging and inspiring. Young entrepreneurs can have a big influence on undergraduates because they have similar perspectives and come from the same society. *Encourage risk-taking and experimentation:* In order to thrive as entrepreneurs, young people must be comfortable taking chances and trying new things. Encourage them to try new things and not be afraid of failing. This can be accomplished through events, social media, or guest speaker appearances. *Omani pitch festival:* Prospective business owners, primarily students, are expected to pitch their ideas to a panel of judges and possibly possible investors as part of the Oman Pitch Festival. The event is expected to provide awards, publicity, and feedback. For the top three pitches, a monetary incentive of at least OMR 2,000–4,000 should be offered. This kind of exercise

pushes students to think creatively and come up with business concepts to close the gap in the local market.

Competitions for young entrepreneurs at the local, national, Gulf Cooperative Council (GCC) and international levels should be fostered. A blueprint for inspiring and nominating students for these competitions should be developed and distributed to all schools, colleges, universities, and other training institutions. The initiative should be funded, and tutors involved should undergo training on how to prepare students to compete and succeed. The following activities are recommended to help students succeed in starting new businesses.

Students may learn about the process of launching a business, from idea creation to marketing and product development, by participating in Enterprise Week events. They can also network with established entrepreneurs, investors, and mentors who can offer vital advice and direction. Furthermore, these events generally provide students with the opportunity to present their own business ideas, receive feedback, and receive assistance in turning their ideas into reality. This can assist students in developing critical thinking, creativity, and leadership abilities, all of which are necessary for success in any career. Overall, Enterprise Week events may provide students with significant hands-on experience as well as the skills and information required to flourish as entrepreneurs and innovators (Joshi & Pandey, 2015).

Another fantastic option is to have a 'Meet Your Industry Forum' session where students can showcase their business ideas to

professionals in the field and obtain feedback, as well as resources for some of their business ideas. This session is beneficial to industry and students alike, giving the former a chance to interact with the next generation of leaders and potentially collaborate on commercial projects or projects that fall under their corporate social responsibility, and the latter gets the chance to network and exchange ideas with industry professionals.

#### 3.5 Proposed Strategy 5: Storytelling Moments

Currently, there are very few business case studies pertaining to the Sultanate of Oman. As a result, this study advises that educational institutions, in collaboration with industry practitioners and other stakeholders, create business case studies that are widely available to students. When these case studies are developed, they are meant to be presented to the students orally, much like a storytelling exercise, and students are expected to provide solutions to the challenges that the companies face. When creating case studies, it's critical to share the narratives of both successful and unsuccessful businesses because the latter will teach students more than the former. All educational institutions in Oman should assess students using Omani business case studies, i.e., problems and challenges faced by businesses in Oman. For instance, in a marketing strategy module, students might work on a marketing plan for a small business in collaboration with the business owner rather than on an assignment based on a hypothetical company. In this scenario, the owner of the business stands to gain from a new

marketing plan, and the student gets to learn practically how to create marketing plans for new businesses (Omar et al., 2017).

Local business case studies are essential for prospective young entrepreneurs because they give them a greater grasp of the local business scene, cultural practices, industry trends, and competitive analysis. This expertise can assist them in identifying new possibilities and avoiding common mistakes that may emerge while launching a firm. Insights into best practices, business models, and tactics that have proven beneficial in their local market may be gained through analysing successful local enterprises. This data may be utilised to help them develop their own company plans and give them a road map to success. Furthermore, researching local businesses may help aspiring entrepreneurs grasp the local regulatory structure, relevant laws, and competitive landscape, all of which are key aspects that can affect the success of their own initiatives. Overall, local business case studies are an important phase in the entrepreneurial path because they equip young entrepreneurs with the information and understanding they need to flourish in their local market (Al-Ani, 2016).

# 3.6 Proposed Strategy 6: Innovative Treks

According to the study's findings, undergraduate students know very little about how the government and other supporting organisations assist young people in starting their own businesses. However, the government is doing a lot to help them, yet the youths are unaware of it. As a result, this study recommends "*on-site visits to financial and support*  *institutions*" as the most effective strategy for reducing the gap. Based on the findings of various studies, young entrepreneurs frequently struggle to get the finance and other resources needed to launch a firm. Furthermore, understanding where to seek finance and help for their firm is one of their toughest obstacles.

As a result, it is vital to plan site visits for both public and private organisations that support new businesses. Simply providing information about financing providers may not be sufficient for potential young entrepreneurs because this method is not producing any results. However, when students meet and interact with funding providers, such as the *SMEs Development Authority*, they gain confidence that if they require assistance, they can contact them directly and receive it. Workshops and interactive meetings with funding providers can have a positive impact as students face their realities and gain confidence. Access to capital, office space, and other resources can help young people interested in entrepreneurship overcome barriers to entry.

Site visits are beneficial to aspiring entrepreneurs because they give them hands-on, experiential learning opportunities that may help them gain a better grasp of various support systems, models, and entrepreneurial ecosystems. Site visits allow aspiring entrepreneurs to study and learn from successful businesses in a number of industries, both large and small, which may give significant insights into best practices, trends, and consumer behaviour. These visits also provide networking opportunities with investors, business lenders, partners, banks, and trainers, which can lead to invaluable contacts and mentorship possibilities. Site visits may also assist potential entrepreneurs in developing critical skills like communication, cooperation, and problem-solving, as well as providing a greater knowledge of the challenges and benefits of business (Shenkoya et al., 2023).

Overall, site visits are a good opportunity to widen a potential entrepreneur's horizons, get practical experience, make useful relationships in the entrepreneurial community, and, most significantly, secure feasible financial backing and, in some cases, guarantees for marketing one's products and services (Mohammed et al., 2016).

# 3.7 Proposed Strategy 7: Mini Projects

Academic success is dependent on entrepreneurial skills such as teamwork and creative problem solving. This does not imply that all students must launch their own businesses. Self-efficacy, achievement orientation, an inclination to take risks, and problem-solving abilities all rise as a result of exposure to entrepreneurial skills. Working on a real, interesting, and challenging problem or issue allows students to develop knowledge and abilities through project-based learning. When a start-up is established, it is typically required to begin tackling a challenge or issue. Project-based learning's main objective is to provide students with the skills to identify problems in the real world and come up with sensible solutions for them while they are still in high school or college (Teng & Chan, 2022). Some of the creative ideas for mini projects include: *social media consultancy, product/service campaigns, digital marketing, handmade goods, food truck business, breakfast and lunch delivery services, jewellery design, app development, artistry, young tour guides, and art* & *craft stalls near forts* & *castles.* 

Mini projects can help students become future entrepreneurs in a variety of ways. Students can receive hands-on experience in creating and implementing business ideas, overcoming challenges, and making decisions through working on mini projects. Besides, they can gain vital entrepreneurial skills such as critical thinking, creativity, project management, teamwork, and communication (Belwal et al., 2020). Mini projects can help students network with classmates, mentors, and industry professionals, which can be useful for future entrepreneurial attempts. Further, they might gain confidence in their skills to establish and maintain a business by successfully completing mini projects. Furthermore, mini projects can expose students to real-world issues faced by entrepreneurs, helping them to acquire problem-solving abilities and a greater grasp of the business world. Finally, students can experiment with several business models by working on different miniprojects and determining which ones correspond with their interests and abilities.

#### 3.8 Proposed Strategy 8: You Follow Me & I Will Follow You

There is growing interest in finding out how social networks affect young people's lives. Studies show that social media is the preferred information delivery tool for the younger generation. Additionally, studies confirmed that youth spend a lot of their time on social media and believe much of the information they get there. Using this information as a guide, it is advised that Oman's stakeholders use social media platforms to disseminate crucial information, including access to resources, knowledge, and guidance on how to start businesses. *Trend jacking* is the act of participating in popular memes, hashtags, events, or concerns. This study suggests that the government, educational institutions, and other stakeholders involved in the development of entrepreneurship in Oman use trend-jacking to engage students and potential young entrepreneurs in novel ways, stimulate their interest, and sustain their entrepreneurial intentions.

Using social media sites like Instagram, YouTube, Snapchat, and Twitter to highlight successful entrepreneurs and their businesses may be a great source of motivation for prospective company owners. Furthermore, governments and educational institutions may use social media to promote and offer online entrepreneurship and business workshops and webinars. Similarly, governments and educational institutions may create a space for budding entrepreneurs to interact, network, and learn from one another by forming groups and communities on social media platforms. Additionally, governments and educational institutions may utilise social media to provide aspiring company owners with vital tools and information, such as financing options, business plan templates, and market research data. Because social media is a two-way communication medium, governments and educational institutions may proactively answer aspiring entrepreneurs' queries, provide feedback, and offer support in their entrepreneurial journeys by connecting with them through social media (Samuel & Sarprasatha, 2016).

## 3.9 Proposed Strategy 9: Students as Consultants

One of the major reasons for business failure is a lack of a viable business plan. This is more common in small firms, particularly those in rural regions. Entrepreneurs might reduce risks by outsourcing their business plans to students who have turned into consultants. It is vital to hire someone to draft a business plan since they may contribute experience as well as perspective. Students who have learnt how to develop business plans and their various components in their schools, colleges, and universities may now function as consultants and produce business plans for future business owners. Students can become professional writers and assist businesses in communicating their company ideas, financial estimates, and success methods in a clear and effective manner. Furthermore, students can assist in identifying possible difficulties and developing solutions. A lack of a workable business plan is one of the primary reasons why banks refuse to support new firms. This may now be avoided in Oman since potential entrepreneurs can establish a solid business plan in order to receive finance from investors or lenders. Overall, students can help raise the likelihood of a business's success. This is a win-win situation for both students and entrepreneurs (Al Kharusi, 2016).

Students who successfully market small enterprises might potentially get consulting work. One of the most crucial factors in any company's success is promotion, and small businesses will gain even more from it. Similar to this, advertising on social media is popular, and the majority of recent graduates are familiar with the social media platforms and how to use them to their advantage. Students should, therefore, pitch their services to companies and advertise their firms online. Writing the accounts for small businesses is another type of consulting job that students might undertake. The majority of businesses in Oman do not maintain any kind of accounting record since it is not required by law. The business owners will greatly benefit if they maintain books and are aware of how much money is coming in and going out if they actually keep the books. Students can provide their services to small enterprises in this way and manage their finances.

# 3.10 Proposed Strategy 10: 100 Rials Company

Academic institutions must look into the possibility of establishing business hubs on campus that will encourage students to launch their own enterprises, i.e., student companies, and enable those businesses to operate while students are still enrolled. Potential student entrepreneurs should be given a place to launch their businesses on campus. A business pitch event is meant to be held annually, and the top two pitches with innovative business ideas should receive an initial capital of OMR 100 from institutions in order to launch their operations on campus. A teacher or small committee is required to coach the student company, monitor its growth, and guide it through the operation. Furthermore, colleges should allow students to take their company out of the institution and into the market after graduation under particular conditions. One of the conditions might be a collaboration between the institution and the student who wants to launch the student company into the market. Academic institutions can retain a minimal number of shares in the student company, and profits from the student company can be reinvested in the college's business centre. This will encourage other students at the institution, and their confidence in their entrepreneurial intentions will grow (Shenkoya et al., 2023).

Making an activity visible is the most effective motivator for encouraging youth to engage in entrepreneurial pursuits. Positive tales about entrepreneurs can help alleviate the fear that keeps young people from starting their own firms. The campus media should publicise student success stories, their engagement in various commercial ventures, and the accolades they receive.

## 3.11 Proposed Strategy 11: Crowd funding for Omani SMEs

Crowdfunding is a platform that allows projects and businesses to raise money from a large number of individuals. It is often utilized by startups and developing enterprises to get access to alternative funding sources. However, in the proposed strategy, crowdfunding has a somewhat different meaning. SMEs Development Authority, banks, the ministry of commerce, development agencies, people who support the success of SMEs, and businesses engaged in corporate social responsibility (CSR) in Oman should all come together under the banner of 'Crowdfund for SMEs' as one group and act as a crowdfunding agency for entrepreneurs. Whenever a prospective entrepreneur or an established business owner requests a fund either to start a new business or to expand his existing business, the group should evaluate the pitch or business expansion plan and provide funds (Chaudhry et al., 2017). Financing administration is streamlined and improved in this way, and even for nascent enterprises, contacting Fund the SME rather than a number of different organizations is a hassle-free experience.

This step is one of many crucial ones that, if taken, can greatly benefit Oman. Numerous studies on entrepreneurship conducted both domestically and abroad have consistently demonstrated that one of the main obstacles faced by business owners is a lack of funding or the inability to obtain capital because borrowing money is costly. That being said, creating 'Crowdfund for SMEs' and providing financial support to entrepreneurs would have a significant positive impact on both individuals and society. Communication is key again here: how to approach 'the group' for funding, the annual funding amount, and the sectors (including area-wise) that should be made clearly known to the public through a variety of channels, including social media platforms like Instagram, Snapchat, and Twitter as well as more conventional channels like radio, TV, and newspapers. Youth who are unsure about pursuing an entrepreneurial career can benefit from this information, which can also serve as a motivator and boost confidence in them.

#### 3.12 Proposed Strategy 12: SMEs in Tourist Attractions

Tourists enjoy visiting Oman for a variety of reasons, such as experiencing the country's natural beauty, which includes deserts, mountains, and coastline. Additionally, Oman has a rich culture and history, and visitors can explore historic forts and castles as well as traditional souks (markets). Besides, Oman also offers a variety of outdoor activities, such as hiking, camping, and snorkelling. Many tourists also appreciate Oman's commitment to sustainable tourism and the efforts to preserve the country's natural and cultural heritage. However, many tourist destinations lack basic necessities such as food, drinks, conveyance stores, and tour guide services, among others.

To address this, the study suggests launching 'SMEs for Tourists.' The government should encourage students to launch tourist-orientated enterprises once they obtain experience operating student businesses at various educational institutions. The destination management authorities should work with these businesses and give substantial help so that these students may survive and mature into full-fledged entrepreneurs capable of serving tourists. Tourist contentment with the location is crucial for a variety of reasons, and this strategy hopes to improve student satisfaction and encourage tourists to return. The 'SME for Tourists' initiative should act as a launching pad for young graduates to become entrepreneurs. This strategy will help them put into practice whatever they have learnt over the years. However, as they gain experience, they should move on from this initiative to launch their businesses somewhere else in the country, leaving the space for other graduates (Mohamed & Hammami, 2015).

# 3.13 Other Proposed Strategies

In the other proposed strategies, the first and most important strategy is *Teaching entrepreneurship in schools:* offering entrepreneurship education to students in the lower grades will improve their character traits, enhance their awareness of business opportunities, and help them acquire the abilities to launch their own businesses. Seikkula-Leino et al. (2015) believe that the preschool years are a crucial time for children to begin an entrepreneurship program since this is when their cognitive and personality development, both of which are crucial for entrepreneurial development. Alternatively, Seikkula-Leino et al. (2019) insist that school dropouts and unschooled youngsters must receive entrepreneurial training from either government or non-government organizations that are dedicated to the growth of entrepreneurship. Economic progress can only be achieved, especially in emerging nations, through timely involvements and an emphasis on entrepreneurship programs for young people (Singh & Pravesh, 2017).

Additional strategies include *Entrepreneurial Mentorship*: This initiative should connect students with seasoned entrepreneurs and business executives who can guide them as they develop their entrepreneurial skills and ideas (Fayolle & Gailly, 2008). *Incubation and Acceleration centres in every wilayat (province)*: This initiative provides students with resources such as office space, money, and networking

opportunities to assist them in developing their ideas into viable enterprises. *Building a Community and Network:* This initiative aims to create a community of like-minded individuals, including students, alumni, teachers, and industry experts, who can give support and resources to students. *Recognition & Rewards:* This initiative recognises and rewards students for their entrepreneurial successes, such as through contests, awards, and other initiatives that recognise their growth.

Finally, a crucial element in Oman's student entrepreneurial development process is engaging the community and making them aware of the value of entrepreneurship. According to earlier research, one of the biggest obstacles students experience when deciding on an entrepreneurial profession is the lack of social appreciation. Young people who want to start their own business encounter obstacles from societal and cultural opinions, lack of family support, fear of failing, and family obligations that require them to work in order to provide a steady income. Besides, studies conducted in Oman revealed that a large number of young people were seeking employment in the public sector since their families respected it. To tackle this issue, the Omani government and other parties involved in the nation's entrepreneurial growth need to collaborate to encourage entrepreneurship within the community (Khan & Almoharby, 2007). It should be made a national priority, and public awareness should be raised about its advantages, particularly the benefits that small enterprises provide to families, the community, and the country at large. The value of self-employment and its benefits must be brought to the attention of societies.

The above model has the potential to give undergraduate students in Oman a complete and supportive environment in which to develop their entrepreneurial abilities, knowledge, and experience, as well as improve their interest in business growth.

# 4. Conclusion

There is no denying that starting and developing your own business is difficult. Nevertheless, nothing is impossible to overcome, and they can be accomplished if you have a strong will to do so. Moreover, the entrepreneurial journey for young people in Oman will be easier if stakeholders follow the above-mentioned model. Similarly, for entrepreneurs to thrive in Oman, youth require some support, and the support from the academic community can take the form of technical assistance; financial and material support from institutions; accelerated licenses and other incentives from the government; moral and personal support from families; and lastly, the public can demonstrate support by purchasing their goods and services or through positive word of mouth.

Entrepreneurship is a practical and attainable skill that everyone possesses, and it is not a unique chromosome. Everyone has an entrepreneur within them, and identifying and embracing this inner entrepreneur will awaken your best traits. Self-belief is crucial for success in any endeavor, especially in entrepreneurship (Bandura, 2012). Starting a business allows individuals to discover their inner selves, interests, and life goals. Market research is essential for success, and hard work and perseverance are key. Organization, raising money, and finding inspiration are essential steps in starting a business. Entrepreneurship can be summarized into four key elements: attitude, creativity, relationships, and organization. Maintaining an optimistic attitude, having strong relationships with customers, employees, suppliers, partners, and other businesses, and being organized are essential for managing day-to-day operations (Fayolle & Gailly, 2008). Seeking advice from friends, family, coworkers, and specialists can help overcome challenges and achieve great success.

Although the concept can be applied to a wide range of markets, it was designed in the context of Oman; thus, other countries that choose to adopt it may or may not find it practicable. In general, models are unable to meet the various objectives, goals, and resource restrictions of various entrepreneurs or industries. Several models, including this one, are not intended to respond dynamically to quickly changing contexts such as economic shifts, technology improvements, or changes in consumer behaviour. Furthermore, the model's efficacy strongly dependents on the entrepreneur's ability to evaluate and apply its results. Although the model has been developed effectively, factors such as emotional intelligence, creativity, and intuition are challenging to quantify and frequently overlooked. Future research can focus on analysing the effectiveness of the proposed model and, if necessary, suggest improvements. Future studies could also focus on incorporating psychological profile capabilities into programs to provide tailored suggestions based on individual traits. Future research can investigate how cultural variations impact how entrepreneurs act and include these findings in the model. Perhaps future research should concentrate on models that can address both possibilities and limitations in certain areas such as technology, healthcare, and hospitality.

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## **Internationalization Processes of Local Enterprises:**

The Case of Kalyon PV<sup>1</sup>

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### Abstract

This study investigates how locally established businesses expand into international markets and transform into international enterprises. The internationalization process of Kalyon PV has been analyzed in depth. In this process, a qualitative interview was conducted with the company's sales supervisor, and the data were analyzed. The findings indicate that Kalyon PV initially focused solely on domestic sales in its early years, expanded into the United States through exports in its third year, and plans to progress using an innovative internationalization model. Among the limitations of the study is the analysis based on a single company example. Future

<sup>&</sup>lt;sup>1</sup> This study is derived from the master's thesis titled 'The internationalization of National Enterprises: The Case of Kalyon PV

research is recommended to compare the internationalization processes of businesses in different sectors. This study offers valuable insights into the transformation processes of local enterprises at the international level.

**Keywords:** Internationalization, Internationalization Theories, Export, Renewable Energy, Solar Energy Panels, Kalyon PV.

## Yerel İşletmelerin Uluslararasılaşma Süreçleri: Kalyon PV ..

## Örneği

## Özet

Bu çalışma, yerel düzeyde kurulmuş işletmelerin uluslararası pazarlara nasıl açıldığını ve uluslararası işletmelere dönüştüğünü PV'nin araştırmaktadır. Kalyon uluslararasılaşma süreci derinlemesine analiz edilmiştir. Bu süreçte, şirketin satış yöneticisi ile nitel bir mülakat yapılmış ve veriler analiz edilmiştir. Elde edilen bulgular, Kalyon PV'nin ilk yıllarda yalnızca yurtiçi satışlar gerçekleştirdiğini, üçüncü yılında ihracat yaparak Amerika Birleşik Devletleri'ne açıldığını ve yenilikçi uluslararasılaşma modeli kullanarak ilerlemeyi planladığını göstermiştir. Çalışmanın kısıtları arasında yalnızca bir şirket örneği üzerinden yapılan analiz yer almaktadır. Gelecek araştırmalarda, farklı sektörlerdeki işletmelerin uluslararasılaşma süreçlerinin karşılaştırılması önerilmektedir. Bu çalışma, yerel işletmelerin uluslararası düzeydeki dönüşüm süreçlerine dair önemli iç görüler sunmaktadır.

**Anahtar Kelimeler:** Uluslararasılaşma, Uluslararasılaşma Teorileri, İhracat, Yenilenebilir Enerji, Güneş Enerji Panelleri, Kalyon PV

## Introduction

Businesses not only make our lives easier through the products and services they offer but also contribute significantly to innovation, economic growth, and the development of global trade. With the acceleration of globalization, the process of local businesses expanding into international markets has become crucial for sustainable growth and gaining competitive advantage (Johanson & Wiedersheim-Paul, 1975). Internationalization is defined as the process by which local businesses extend beyond their domestic boundaries to operate in global markets, becoming a strategic necessity as competition in the global economy intensifies. Various theories and models have been developed to understand this process. One of the earliest models is the Uppsala Model, which posits that firms enter international markets gradually, increasing their presence as they gain knowledge and experience (Johanson & Wiedersheim-Paul, 1975). The Uppsala Model suggests that businesses first build experience in their domestic markets, then expand to nearby, lowerrisk markets. Kalyon PV's strategy of growing domestically before exporting to the U.S. can be viewed as aligning with the principles of this model.

Following the Uppsala Model, the Innovative Approaches Model has gained significant recognition in the literature. Developed by Bilkey and Tesar (1977), this model suggests that businesses follow a step-by-step learning and development process during internationalization. According to this model, firms are initially uninterested in exports but gradually become more involved in export activities as they gain market experience. Kalyon PV, after meeting domestic demand, embarked on its first export journey to the U.S. in 2022, making this model a fitting framework for understanding its internationalization path.

The Network Model emphasizes the importance of global relationships in the internationalization process. Developed by Johanson and Mattson (1988), this model argues that a business's success in international markets is closely tied to its partnerships and networks. Kalyon PV's technology transfer with China can be considered an example of this model. However, since innovative internationalization models have played a more dominant role in Kalyon PV's global expansion, the Network Model offers limited explanatory power in this case.

Additionally, the Born Global Firms Model focuses on innovative and technology-driven small-scale firms that enter international markets shortly after their inception (Knight & Cavusgil, 1996). This model highlights businesses that rapidly expand into global markets, with a significant portion of their sales coming from these markets. While Kalyon PV has quickly ventured into international markets, the company's internationalization strategy is more closely aligned with innovation-driven models.

The methods by which businesses enter international markets vary depending on their strategic goals and the characteristics of the target market. Exporting is one of the most common methods used for entering international markets, offering lower costs and lower risks. Exporting can be classified into two types: direct and indirect exports. Direct exporting refers to a firm selling its products directly to international markets without intermediaries, while indirect exporting involves using intermediaries to export goods (Kotabe & Helsen, 2011). Kalyon PV's direct export to the U.S. demonstrates the prominence of this method in the company's internationalization strategy.

In addition, businesses may use other strategies such as contractual entry methods and foreign direct investment. Contractual entry methods include licensing agreements, franchising, and contract manufacturing, offering firms flexibility in entering foreign markets with lower costs (Karafakioğlu, 2000). Foreign direct investment (FDI) involves a company establishing a production facility or acquiring a business in a foreign market, providing deeper international influence but also carrying higher risks (Cullen & Parboteeah, 2009, as cited in Onur, 2019). Kalyon PV's future plans to establish production facilities abroad demonstrate its potential engagement in foreign direct investment.

In conclusion, the case of Kalyon PV highlights the importance of innovative internationalization models in the internationalization process. Through strategies such as technology transfer, supply chain management, and exporting, the company has gained a competitive advantage in global markets and successfully navigated its international expansion. This study will analyze Kalyon PV's internationalization journey, providing key insights into the global expansion strategies of local businesses.

## 1. Conceptual Framework

In this section of the study, the concept of internationalization

and the key theories related to the internationalization processes of businesses are examined. Additionally, the methods businesses use to enter international markets are detailed, and information specific to Kalyon PV is presented as an example. This information forms the theoretical framework of the study, helping us understand how internationalization processes are carried out at the business level.

### 1.1 The Concept of Internationalization

The concept of internationalization gained importance, especially after the rapid developments in industrial and economic fields following World War II. As businesses began to expand their operations beyond the borders of their home countries, the term internationalization became widely used. A review of both local and international literature reveals several definitions of internationalization, many of which share similar characteristics but emphasize different aspects. This study aims to understand this diversity and examine the impacts of internationalization on businesses.

Internationalization refers to the process by which businesses expand their operations beyond their domestic borders and establish a presence in international markets. According to Bolel (2017), this process begins when a firm, after establishing itself in its home country, decides to expand into foreign markets. Hollensen (2011) defines internationalization as the extension of commercial activities such as research and development, production, and sales into international markets. This process presents local businesses with both new opportunities and risks (Öztürk, 2014). The internationalization literature has been enriched by various definitions. Welch and Luostarinen (1988) describe the process as increasing participation in international operations. Bell and Young (1998, as cited in Bilgütay, 2018), on the other hand, define internationalization as the effort to establish a presence in international markets through various means such as foreign trade, licensing agreements, and franchising.

Both local and foreign literature make it clear that internationalization is a fundamental necessity for businesses. The literature emphasizes that internationalization involves not only adapting a firm's resources to international contexts but also conducting business relationships and economic activities in international markets. In this context, businesses can demonstrate their presence internationally by engaging in activities such as countries, producing in foreign establishing commercial relationships, or forming international partnerships. These activities not only increase access to global markets but also strengthen businesses' growth and sustainability strategies.

In conclusion, internationalization has become increasingly important for businesses, providing a competitive advantage in the global economy and enhancing their growth potential. It can be seen as a critical strategic step that allows businesses to operate beyond national borders and achieve success on a global scale.

Having established that internationalization is a fundamental requirement for businesses, it is important to focus on the theoretical foundations of this process. In addition to the analyses in the literature, several theories have been developed to explain the internationalization process. These theories help us understand the strategies businesses use to enter international markets and how these strategies evolve. Notably, approaches such as the Uppsala model, innovative approaches, network theory, and the concept of born globals offer insights into different aspects of the internationalization process, allowing us to examine it from a broader perspective.

## **1.2.** Internationalization Models

Internationalization models play a critical role in understanding the processes through which businesses expand into global markets. These models aim to explain how firms enter international markets and what strategies they employ, as well as the stages they go through. Different approaches, such as the Uppsala Model, the Innovative Approach, Network Theory, and Born Global Firms, address various dimensions of the internationalization process and guide businesses in their strategic decisions. A detailed analysis of these models is provided below.

#### 1.2.1. The Uppsala Model

The Uppsala model was developed by Scandinavian scholars Johanson and Wiedersheim-Paul in 1975, based on their studies of Swedish companies operating in multiple foreign countries. It explains how small and medium-sized enterprises (SMEs) gradually increase their level of internationalization as they gain experience and knowledge in international markets. The model emphasizes that businesses first develop in domestic markets and then expand internationally.

According to the Uppsala model, internationalization occurs in four stages. Developed by Scandinavian academics Johanson and Wiedersheim-Paul in 1975, the model was based on studies of Swedish firms that had at least one production facility in a foreign country and conducted a significant portion of their sales in foreign markets. The model suggests that small and medium-sized enterprises (SMEs) begin their activities in international markets gradually and that their level of internationalization increases as they gain knowledge and experience throughout the process. It emphasizes that firms typically start by operating in domestic markets and, after gaining experience, they expand into international markets. The Uppsala model defines internationalization as a fourstage process (Johanson & Wiedersheim-Paul, 1975).

Irregular export activities: Initial steps into international markets without consistent activities.

Export through independent agents: As demand increases, businesses begin exporting via independent agents.

Establishing foreign sales subsidiaries: Companies set up their own sales subsidiaries to expand their market share.

Setting up foreign production facilities: Firms establish production plants abroad to reduce costs and increase profits.

The model assumes that businesses face obstacles due to lack of information and resources, which are gradually overcome through decision-making and learning about foreign markets. Typically, firms begin exporting to nearby countries or those with similar business practices. In conclusion, the Uppsala internationalization model highlights the gradual, experience-based process of entering foreign markets.

## **1.2.2.** The Innovative Approache Model

Since 1962, many studies have focused on innovation-based internationalization models. Early work in this field was done by American sociologists Rogers (1962) and Simmons and Smith (1968). The most significant contribution to these theories came in 1977 from Bilkey and Tesar. While these models perceive internationalization as a multi-stage learning process, similar to the Uppsala model, the innovative approaches feature more stages, setting them apart from other models (Ecer & Canitez, 2003, as cited in Cengiz, 2010).

These models share many characteristics but differ in the number of stages and how each stage is defined. Below is a table outlining the stages described by Bilkey and Tesar (1977), Cavusgil (1980), Czinkota (1982), and Reid (1981).

Stages	Bilkey ve Tesar (1977)	Cavusgil (1980)	Czinkota (1982)	Reid (1981)
Stage 1	Firms are not concerned with export activities	Completely indifferent to exporting	Completely indifferent to exporting	No knowledge about exporting
Stage 2	Firms are willing to receive export orders but not actively engaged in exporting	Show partial interest in exporting	Seek specific export orders	Show partial interest in exporting
Stage 3	Firms begin feasibility studies for export activities	Irregular export entries	Seek export opportunities, but engage in irregular exporting	Engage in regular exporting
Stage 4	Firms export to psychologically close countries with limited exports	Engage in regular exporting	Increase export activities	Psychologically export to close countries
Stage 5	Firms become experienced exporters through sales in foreign markets	Become active exporters	Become experienced exporters	Become experienced exporters
Stage 6	Firms conduct feasibility studies for exporting to psychologically distant countries	Psychologically prepare for exports to distant countries	Psychologically prepare for exports to distant countries	Psychologically prepare for exports to distant countries

## **Table 1:** Innovative Internationalization Models

Source: (Andersen, 1992)

Table 1 demonstrates that firms initially uninterested in export activities gradually show more interest and become more active in these endeavors over time. In the early stages, companies are not involved in exporting, but they eventually develop partial interest and engage in irregular export activities. As firms progress, they become more active, conduct feasibility studies, and seek export opportunities in neighboring countries. Over time, they gain experience, expand their markets, and target more distant regions. In conclusion, innovative internationalization models provide valuable insights into the stages and processes firms encounter on their journey to internationalization, emphasizing a systematic learning and adaptation approach from initial disinterest to active market participation and expansion.

## 1.2.3. The Network Model

The network model provides an important conceptual framework for understanding the internationalization processes of businesses. This model was first introduced by Johanson and Mattson in 1988, and it argues that the success of companies in international markets depends on their global networks and relationships. These connections include the company's customers, competitors, supplier firms, export trade associations, distributor companies, private and public institutions, and the relationships with these entities (Ulaş, 2009).

The network model explains businesses' entry into and growth in international markets through the networks they have and the relationships within those networks. It suggests that the internationalization of a company is closely linked to its interactions within local and global business networks and the relationships developed within those networks. These relationships are critical in acquiring information, accessing resources, and determining market entry strategies in international markets.

While the network model emphasizes the importance of network relationships in explaining how companies succeed in international markets, it also has certain limitations. Chetty and Holm (2000) noted that the model does not sufficiently discuss the importance of decision-makers and firm-specific characteristics that affect internationalization, nor does it address the challenges encountered in internationalization through network relationships. Additionally, the model has been criticized for not considering external factors such as intense competition in domestic markets, unexpected orders, and government economic policies, and for failing to explain how firms shift their positions within the matrix. Moreover, the model focuses solely on organically developed relationships, overlooking networks formed through formal institutions (Chetty and Holm, 2000).

### 1.2.4. The Born Global Firms Model

Born global firms are innovative, technology-focused, and typically small-scale businesses that begin operating in international markets immediately after their founding or within a short period. Knight and Cavusgil (1996) define these firms as small, innovative, and technology-oriented organizations that quickly establish a presence in foreign markets. Similarly, Chetty and Campbell-Hunt (2004) describe born global firms as companies that internationalize within the first two years of their founding and derive a significant portion of their sales from international markets.

These definitions highlight the rapid internationalization processes of born global firms and their active roles in global markets. Their focus on innovation and technology enables them to offer cutting-edge products and high value-added services. Although small in scale, these firms operate with a global vision, providing high-value products that allow them to compete on a global stage.

However, their small size can make them more vulnerable to cultural, economic, or political risks. Limited financial resources and operational capabilities can also pose challenges when competing against larger-scale rivals. Born global firms may also face a lack of local knowledge and experience necessary to establish a foothold in international markets, making the adaptation process difficult in the early stages.

In conclusion, born global firms stand out due to their rapid internationalization and innovative structure, but their small size and exposure to various risks must also be considered.

## 1.3. Methods of Business Entry into International Markets

Methods of business entry into international markets may vary depending on the size of the business, characteristics of the target market and strategic goals. These methods can be generally classified as export, contractual entry methods and investment-based entry methods. In this section of this study, the methods used by businesses to enter international markets are discussed.

## **1.3.1. Export-Based Market Entry Methods**

It is known that the most common method preferred by businesses in the process of opening up to international markets is export. The main reasons for choosing this method are that it involves less risk and is easier than other entry methods. According to a simple definition made by Bradley (2002), export is the sale of a business's goods within the framework of valid export and customs rules. This method, which is frequently preferred by businesses because it requires lower costs compared to other methods in both administrative and economic terms, involves businesses selling the goods they produce to foreign markets.

Most businesses first use the export method to enter international markets. This method is frequently preferred by small businesses operating in the local market. There are two basic export methods for businesses that want to sell their products in international markets. These are; indirect export and direct export methods. In indirect export, the business uses an intermediary in its own country, while in direct export, the business needs to establish its own export organization or coordinate its export activities with an intermediary established in a foreign country (Kotabe and Helsen, 2011).

In the indirect export method, businesses allow small national businesses established at the local level to sell in international markets. In this method, the business sells the goods it produces to a local buyer just as it sells to a customer in the country. This buyer then transfers the same goods out of the country and carries out the sale (Ulaş, 2009).

In the direct export method, the exporting business carries out export transactions directly without using any intermediaries. Businesses that enter the foreign market by choosing this method can eliminate intermediaries and make direct sales in international markets themselves. In this way, they can increase their business profit, control all export stages and carry out sales activities by dealing directly with relevant individuals and institutions without any intermediaries. For these reasons, direct export is considered to be better than indirect export (Akat, 2009). For example, Hewlett Packard, a computer manufacturer in the USA, purchases the microchips required for computer production from another American company, Intel, and then exports these computers it produces to foreign markets. In this case, Intel's chips are exported abroad by an intermediary company through the indirect export method (Ulaş, 2009).

### **1.3.2.** Contractual Entry Methods

Contractual entry methods are one of the strategies that provide flexibility and efficiency in entering international markets. These methods can be applied in various ways such as license agreements, franchising, contractual production, turnkey projects, management contract and assembly (Karafakioğlu, 2000).

License agreements are methods that allow businesses to use their rights for a certain period by transferring them to another business. This method, which can be applied in areas such as production, sales authority or use of technology, provides businesses with the opportunity to enter new markets at low cost (Engin, 2005).

Franchising is carried out by transferring their brands and business models to other businesses. With this method, the franchisee benefits from the prestige and recognition of the brand by offering products or services within certain standards (Yalçın, 2016).

Contractual production allows businesses to enter international markets by having a business abroad produce. This method is suitable for businesses that want to gain cost advantage and increase production capacity (Koçak, 2019).

Turnkey projects are based on the principle of providing all project services to a country abroad within the scope of a specific project and transferring the project to the business after completion. This method is usually used in large construction and engineering projects (Keskin, 2011).

Management contracts allow businesses to enter international markets by providing management services to businesses abroad. With this method, businesses share their management experience and expertise, provide mutual benefits and increase the capacity of local businesses (Yalçın, 2016).

The assembly method is a method of entering international markets by having certain parts assembled in a country abroad. While the main components are produced in the home country, the assembly process is carried out in countries where labor is cheaper, thus optimizing logistics and production costs (Engin, 2005).

The advantages of this method are that it provides the opportunity to enter the market at low cost, helps to overcome cultural and legal barriers by cooperating with local partners, and ensures efficient use of resources by sharing risks. Disadvantages include the transfer of some of the control to local partners, reducing the flexibility of the company in its strategic decisions, the negative impact of possible disagreements on the duration and terms of the contract on cooperation, and the risk of decreasing quality standards in the absence of adequate control mechanisms.

#### **1.3.3. Foreign direct investment**

Foreign direct investment is a business's direct investment in an asset or business in foreign markets through methods such as capital and technology. The most advanced level of internationalization is when businesses invest partially or completely in a business in another country and own it (Cullen & Parboteeah, 2009, as cited in Onur, 2019).

International businesses generally prefer to operate in foreign markets by making direct investments or by establishing their own production facilities in foreign countries or by purchasing another business. Foreign direct investment means creating the deepest impact on the host country. In other words, such investments involve business ownership in a completely foreign country (Keskin, 2011). These investments offer many advantages to businesses such as making foreign investments in foreign markets, entering new markets in the international arena, benefiting from local resources and labor in that country at lower costs, providing knowledge and technology transfer, tax exemption or low tax payment and government incentives (Cateora, Gilly & Graham, 2013).

Foreign direct investments are categorized as vertical and horizontal investments. The purpose of vertical investments is supply and provides the business with raw materials and production inputs to be used in secondary businesses in the country where it is located or abroad. The purpose of horizontal investments is to produce the same product that the business produces in its own country abroad (Bradley, 2002). In this way, businesses try to strengthen their positions in the market with international vertical and horizontal investments.

The benefits of foreign direct investments to businesses can be listed as follows (Mucuk, 2001, as cited in Çubukcu, 2015):

Cheap labor and raw material savings: Investment incentives and transportation advantages that come with the use of cheap labor and raw materials in foreign countries provide savings in expenses. This allows businesses to reduce their costs and gain a competitive advantage.

Brand image: Establishing a business in a new country is expected to create a positive impression by contributing to the local community. This can help businesses create a positive image in terms of social impact and employment.

Local adaptation and relationships: A strategy that will help businesses adapt their products more easily in the local market includes establishing stronger relationships with the government, local manufacturers, customers and distributors. These relationships play an important role in entering the local market and in the acceptance of products.

Full control and flexibility: Investors can develop their production and marketing strategies more freely by shaping them in line with their long-term goals. This allows the company to act more flexibly in line with its own goals.

On the other hand, there are some disadvantages of making direct foreign investments in foreign markets. The most important of these disadvantages is that businesses face a number of risks in foreign markets. These risks include limited or devalued local currencies and political changes in foreign countries. These large investments usually take place in countries with political and economic stability. Many countries try to reduce bureaucratic barriers to attract foreign investments and reduce local risks (Çubukcu, 2015). In addition to all these risks, problems arising from cultural differences in the countries where direct foreign investment will be made may also occur. In order to avoid such problems, businesses that will make direct investments in foreign markets should conduct studies such as feasibility studies and market research before investing in the market.

## 2. Methodology

In this study, the case study method, one of the qualitative research methods, was preferred. Qualitative research refers to a process where qualitative data is collected from a specific person or group using techniques such as observation, interview, and document analysis, examining perceptions and events in a realistic and holistic manner in a natural environment (Yıldırım & Şimşek, 2008). In this context, the internationalization process, opportunities, challenges, and changes in the organizational structure of Kalyon PV, a company in the renewable energy sector, were analyzed in-depth.

The main focus of the research is on the international strategies of Kalyon PV, the opportunities and challenges faced in the internationalization process, and the organizational changes after entering the international market. The research is limited to Kalyon PV, which is the first company in Turkey to have a vertically integrated production system in the solar panel manufacturing sector. Kalyon PV operates with four factories and one R&D center, making it the first integrated facility of its kind outside of China. Due to these unique characteristics and its internationalization experience, Kalyon PV was chosen as the subject of this study.

As a data collection method, semi-structured interviews were conducted. These interviews were based on key questions developed through a literature review and an examination of Kalyon PV's operations. Open-ended questions were also included to explore various dimensions of the topic in depth, thereby enabling the collection of more detailed information. Company officials at Kalyon PV were contacted for interviews, and as a result, the Sales Supervisor at Kalyon PV's Sales and Marketing Department provided key insights. His contributions and opinions served as one of the main data sources for the study. The interview process enhanced the integrity and depth of the research, contributing significantly to its reliability and quality.

In the data analysis process, the collected data were analyzed using the content analysis method. Content analysis involves systematically reducing the explicit or implicit meanings within texts to categories and concepts, enabling objective analysis (Güçlü, 2019). This method allowed for a better understanding of Kalyon PV's internationalization experience and the transformations it underwent during this process.

The case study method, according to Lune and Berg (2017), is a systematic process of collecting sufficient information about a specific person, group, event, or social environment to understand how a particular phenomenon functions or operates. This method was chosen as it allowed for an in-depth examination of Kalyon PV's international market entry strategies and the changes experienced during the internationalization process.

## 3. Findings

The internationalization process of businesses typically emerges as a result of efforts to achieve growth and gain a competitive advantage. this examining the In context, internationalization journey of one of Turkey's leading companies, Kalyon PV, is crucial for understanding how this process affects the company's structure and performance. This section presents the findings related to the phases that Kalyon PV Solar Technologies Factory has undergone since its establishment, its strategies for entering international markets, and the challenges encountered during this process.

To gain deeper insights into Kalyon PV's internationalization process, a face-to-face interview was conducted with the Sales Supervisor. Based on the information obtained, the following key findings have been identified.

#### **3.1. Kalyon PV solar technologies factory**

Kalyon PV Solar Technologies Factory was established on August 19, 2020 in the Başkent Organized Industrial Zone in Ankara province, with a closed area of 100,000 square meters, in a total area of 250,000 square meters, and started producing solar energy panels. Kalyon PV has an integrated facility structure consisting of four separate factories and an R&D center, and produces continuously with a capacity of 2 GW. The production process consists of four stages: ingot, wafer, cell and module, and the facility brings these stages together under one roof.

# 3.2. Kalyon PV Partnership Structure and Financial Independence

Kalyon PV's corporate structure and financial strategy play an important role in the company's success in the international market. In the interview, it was learned that the company was established entirely with its own capital and has no partners. This situation emphasizes Kalyon PV's financial and operational independence. Being established with equity capital allows the company to be autonomous in decision-making processes and to be less affected by external factors. In addition, not having to borrow from external sources or share with partners has positively affected the company's risk management and financial stability. These features have contributed to Kalyon PV gaining a competitive advantage and being more resilient in the global market.

## 3.3. Kalyon PV's Internationalization Decision and Influencing Factors

Kalyon PV's internationalization process has been shaped by the influence of various strategic and operational factors. These factors, which are effective in the company's decision to open up to the global market, include both the principles in the establishment phase and elements such as strategic partnerships. The main factors determining Kalyon PV's internationalization decision are discussed in detail below. Principles Determined During the Establishment Phase: The main reason for Kalyon PV's internationalization decision was built on the principles determined during the establishment phase of the factory. The company adopted the mission of protecting nature and providing sustainable energy, and this mission stood out as one of the main factors behind the internationalization decision.

Cooperation with China and Knowledge Transfer: Cooperation with China and knowledge transfer have played a critical role in Kalyon PV's internationalization strategy. China's know-how and technology in panel production have been transferred to Kalyon PV's local and national staff, and a supply chain has been established in this process. This cooperation has made a significant contribution to the company's competitive advantage in the international market and technology transfer.

Supply Chain Management: Another important factor affecting the internationalization decision is supply chain management. Kalyon PV has focused on the process of creating its own supply chain in order to be successful in the international market. This process has formed the basis of the company's internationalization strategy and has contributed to achieving a competitive position in the global market. Strategic thinking and planning have been decisive in the success of this process.

Ramp-Up Process and Local Demands: The company's rampup process has been an important element in the internationalization process. Kalyon PV, which first completed its own production process, then focused on the demands of its local customers. Meeting local customer demands helped the company gain a solid place in the international market and use it as the basis of its internationalization strategy.

Product Quality and Brand Value: Product quality and brand value play an important role in Kalyon PV's internationalization strategy. The company has provided customer satisfaction by offering high-quality and reliable products and has turned the country's brand value into an advantage in the global market in this process. The company made its name known in the international market with its first export on March 7, 2022 and continued its efforts to develop products and create a brand.

## 3.4. Kalyon PV's International Market Entry

## **Strategies and Achieved Advantages**

Kalyon PV's successful positioning in international markets is supported by effective strategies and various advantages. The company's international market entry strategies are shaped by its achievements in energy production, geographic location advantages, and competitive production capacities.

Energy Production and Success: Kalyon PV's international success is underpinned by its impressive local energy production capacity. The company produces approximately 2 GWh of energy in Turkey, meeting 2% of the country's energy needs. This success highlights Kalyon PV's significant role in energy production and its presence in the international arena.

International Demand: The company's appeal in international markets is largely based on product quality. The Sales Supervisor notes, "The foundation of the company's success is its product quality" This statement demonstrates that Kalyon PV offers highquality products recognized globally and generates demand in international markets.

Geographic Location and Advantages: The company's geographic location also plays a crucial role in its international market success. The Sales Supervisor explains the geographic advantages as follows: "We are right in the middle of Asia and Europe; this position offers us various advantages" This location provides logistical and strategic advantages, helping the company establish a strong presence in international markets.

Competitive Advantage: Kalyon PV's international competitive advantage is particularly evident in its production capacity. The Sales Supervisor describes this advantage: "Globally, we are among about 3 or 4 companies in Europe that produce cells. Similarly, we are second in ingot and wafer production. This situation provides us the opportunity to sell products directly to the American market" The company's strong position offers the opportunity to sell products directly in the American market.

In conclusion, Kalyon PV's success in the international market is attributed to its product quality, strategic location, and competitive advantages. The company's successful projects in Turkey, coupled with an effective entry into the American market through export methods, represent some of the greatest advantages achieved by the company.

## 3.5. Challenges Faced by Kalyon PV in the Internationalization Process

Kalyon PV has encountered various challenges and required adaptation during its international market expansion. The difficulties faced by the company in its internationalization process have involved overcoming strategic and operational barriers. Below is a detailed examination of the main challenges encountered by Kalyon PV and the strategies developed to address them.

Technology Transfer and Integration Challenges: One of the significant challenges for Kalyon PV in its internationalization process was the transfer and integration of technology from Asia to Europe. This process required adapting the technology to local conditions and ensuring its effective integration. Difficulties encountered during the technology transfer have directly impacted the company's ability to compete effectively in international markets.

Geographic Distance and Cultural Differences: Geographic distance and cultural differences have led to significant communication and coordination challenges for Kalyon PV during its international expansion. These factors complicated collaboration and project management processes and made it difficult for the company to achieve alignment in its global business operations.

Supply Chain and Logistical Complexities: Integrating raw materials from Asia and Europe and complying with different standards has complicated supply chain management. Logistics complexities and challenges in supply chain management have affected the company's operational efficiency and increased costs.

## 3.6. Kalyon PV's Activities and Practices During Internationalization

Kalyon PV has chosen the United States when determining its first target market in the international arena. It has been found that there are several reasons for choosing the American market. The reasons for this preference include gaining an advantage in competition with China and the demand for solar energy panels produced with a high local content rate in this market. The company aims to meet the expectations of American consumers with its highquality products and provides a competitive advantage by documenting its compliance with international standards with the UL certificate. The interview results show that Kalyon PV constantly reviews its strategies to achieve its sustainability goals and focuses on innovative solutions. However, it has been determined that the company currently only exports to America and has not yet fully achieved its global expansion goals.

## 3.7. Kalyon PV's Considerations in International Market Selection and Market Structure

In the Kalyon PV interview, questions were asked about the criteria for international market selection, the factors considered and the sources of information. In this context, it was determined that the company gives equal priority to domestic and foreign customers when determining its international market entry strategies, adopts a people-oriented service approach and prioritizes customer satisfaction and service quality. In addition, it was found that before entering international markets, foreign trade and sales marketing
department employees analyze the economic and cultural structure of the market in detail, evaluate customer profiles, demand dynamics and the competitive environment in foreign markets. It was learned that they also examine factors such as local regulations, tax policies and trade barriers by considering the legal and political risks of the market. These studies help Kalyon PV understand its target audience, market dynamics and the competitive environment in international markets and contribute to the company's determination of its suitability in the international market by correctly adjusting its product portfolio and marketing strategies.

# 3.8. Kalyon PV's Internationalization Process and Changes in the Business Structure

According to the interview with the Sales Supervisor, it is understood that Kalyon PV's entry into international markets has caused significant changes in the business structure. In particular, entering the American and Chinese markets has led to radical changes in product processing and strategy development processes. The necessity to process and export certain products locally in the American market and the necessity to comply with local acceptance criteria in the Chinese market have made it necessary for the business's strategies to be versatile and flexible.

These changes have caused Kalyon PV to switch to a more flexible production process, increase its production capacity for orders from abroad, and increase the number of employees. The internationalization process has also required the selection of qualified personnel for a healthy progress of communication and coordination, and the foreign trade department to take an active role in international sales activities. Currently, the company is focused on domestic and American markets, and the foreign trade department plays an important role in planning, budgeting and providing physical support. In the future, Kalyon PV aims to gain more experience and gain competitive advantage by expanding into different markets such as Europe, Asia and the Middle East. With the experiences gained in this process, the company is developing strategies to expand its presence in international markets and become a more effective player on a global level.

#### 3.9. Kalyon PV's Future Plans and Mission

Kalyon PV's internationalization strategies and future plans have been clearly outlined in the interview. According to the Sales global Supervisor's response, the company's vision and environmental sustainability mission are prominently emphasized. The company has adopted a zero-carbon footprint goal by 2032 and has made significant progress in the domestic market toward this target. To extend this sustainability demand to a broader audience through international trade, Kalyon PV plans to establish similar facilities in different countries. The company is adopting a strategic positioning and wait-and-see policy in this process.

Accordingly, the core of Kalyon PV's future goals on the international stage is environmental sustainability. The company aims to play an active role in the global market and strengthen its reputation internationally with its zero-carbon footprint target by 2032. These strategies are seen as a significant step toward fulfilling environmental responsibilities and gaining a competitive advantage on a global scale.

# 3.10. Kalyon PV's Customer Relations and Preference Shaping Strategies

After the interview, it is seen that elements such as quality, transparency, customer satisfaction and warm relations play a key role in Kalyon PV's customer relations in international markets. The company allows customers to directly experience product performance by prioritizing quality production approach and transparent production processes. This strategy increases customer satisfaction and supports long-term business relationships. In addition, customer visits and direct communication are an important part of this process, showing that both a technology and humanoriented approach is successfully implemented.

#### 3.11. Growth and Challenges: Key Moments in

#### Kalyon PV's Journey

In the interview with KALYON PV's sales supervisor, important milestones in the company's growth process and the challenges faced were discussed. It was emphasized that the company's first export experience was a critical stage, playing a significant role in reaching its leadership position in the European and Turkish energy sectors. This initial export supported Kalyon PV's goal of becoming not only a gateway for Turkey but also for Europe to the world. However, the challenges brought by the COVID-19 pandemic required a reassessment of strategic planning. The pandemic provided KALYON PV with an opportunity to develop a more resilient business model.

The findings indicate that the initial export increased the company's growth potential and removed barriers in international markets. The challenges created by COVID-19 reshaped strategic planning and established a solid foundation for future growth objectives. KALYON PV plans to strengthen its competitiveness in international markets and achieve its growth targets with these experiences.

#### Discussion

Today, rapid advancements in science, industry, and technology enable businesses to deliver their products globally quickly and reliably. These developments have led to increased demand for products and the emergence of new opportunities for businesses. Particularly in the energy sector, rising competition and the need for renewable energy sources have led leading companies to place greater emphasis on their internationalization processes. Being present in the global market not only provides economic growth but also contributes to the adoption of innovative technologies and achieving sustainability goals. Therefore, understanding internationalization strategies and examining successful examples are crucial for future business plans.

In this context, the internationalization strategies and growth journey of a pioneering company like Kalyon PV provide significant lessons and examples for other players in the sector. A detailed examination of Kalyon PV's internationalization process contributes to understanding sector trends and future directions. Thus, the thorough exploration of Kalyon PV's internationalization strategies and growth process in this study serves as an important guide for businesses seeking to gain a competitive advantage in international markets and achieve sustainable growth.

Kalyon PV has chosen the Innovative Approaches Model, which emphasizes a step-by-step learning process during internationalization. According to this model, businesses are often reluctant to export in their early years. Kalyon PV focused on the domestic market in its initial years, aiming to produce high-quality products and meet local customer demands. However, in its third year of establishment, on March 7, 2022, it conducted its first export to BP's solar energy plant in Texas. This strategic move not only contributed to the company's competitive advantage in the international market but also demonstrated alignment with innovative internationalization models.

Challenges faced during Kalyon PV's internationalization process include technology transfer, supply chain management, and the COVID-19 pandemic. The company has taken strategic steps to overcome these challenges, improved supply chain management, and continued production activities during the pandemic by actively using digital platforms. By leveraging technology and enhancing operational efficiency, Kalyon PV has shown resilience in navigating crises and better preparing for similar challenges in the future.

Kalyon PV's internationalization strategies and future plans clearly reflect the company's sustainability-focused global vision and environmental responsibilities. The company plans to achieve a zerocarbon footprint by 2032, demonstrating its commitment to environmental sustainability. This commitment is an important step in increasing the company's impact on the international stage and contributing to a sustainable future globally.

The limitations of this study should also be acknowledged. The research was conducted with a single company operating in the renewable energy sector based in Ankara. This situation makes it difficult to generalize the findings. Future studies involving interviews with more companies operating in different geographical regions and sectors may help obtain more objective and comprehensive results.

In examining Kalyon PV's internationalization process in depth, it is evident that the company's strategic steps and solutions to challenges serve as a valuable guide for other businesses. By adopting innovative internationalization models, Kalyon PV has made significant progress in the international market and is moving towards its goal of contributing to a sustainable future. This study is considered an important resource for businesses seeking to understand ways to overcome challenges in the internationalization process and strategies for gaining a competitive advantage in the market.

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#### Volunteer Management and Its Impact on Overall Operations

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#### Abstract

Management has long been a key factor in organizational success. Today, non-profit organizations are increasingly significant, expanding their influence both in Turkiye and globally. Like businesses, they rely on effective management to achieve sustainable operations. Volunteerism, historically essential to non-profits, is also crucial to their success, making volunteer management a strategic focus. This dissertation will examine the management style of nonprofits, assess the impact of volunteer management on overall performance, and address key challenges in managing volunteers.

In this project, it shall be tried to find out managerial issues on volunteerism in a non-profit organisation scope of Turkiye as well as define the influences of the management style of non-profit organisation. Thus, it might be occasion for better management structure which is more profitable, sustainable and convenient management style to manage volunteers in Turkiye.

It shall be needed to undertake primary research which involves quantitative research. This research will include questionnaire separately to volunteers in non-profit organisations and managers of non-profit organisations. Further, this project aims to examine the managerial issues and its influences on volunteers and voluntary operations of the non-profit organisation.

**Keywords:** Volunteer, Management, NPO, Voluntary Operations

#### Gönüllü Yönetimi ve Bunun Genel İşleyişe Etkisi

## Öz

Yönetim uzun zamandır kurumsal başarıda önemli bir faktör olmuştur. Günümüzde, kâr amacı gütmeyen kuruluşlar giderek daha önemli hale gelmekte ve Türkiye'de olduğu kadar küresel olarak etkilerini artırmaktadır. Kâr amacı gütmeyen kuruluşlar, firmalar gibi, sürdürülebilir operasyonlar elde etmek için etkili yönetim anlayışına güvenmektedirler. Tarihsel olarak kâr amacı gütmeyen kuruluşlar için önemli olan gönüllülük, başarıları için de hayati önem taşımakta ve gönüllü yönetimini stratejik bir odak noktası haline getirmektedir. Bu çalışmada, kâr amacı gütmeyen kuruluşların yönetim tarzı incelenecek, gönüllü yönetiminin genel performans üzerindeki etkisi değerlendirilecek ve gönüllüleri yönetmedeki temel zorluklar ele alınacaktır.

Bu çalışmada, Türkiye'deki kâr amacı gütmeyen bir kuruluş kapsamında gönüllülükle ilgili yönetim sorunlarını bulmaya ve kâr amacı gütmeyen kuruluşun yönetim tarzının etkilerini tanımlamaya çalışılacaktır. Bu nedenle, Türkiye'de gönüllüleri yönetmek için daha kârlı, sürdürülebilir ve uygun bir yönetim tarzı olan daha iyi bir yönetim yapısı için örnek teşkil edebilir. Nicel araştırma yöntemi ile gerçekleştirilen bu araştırma, kâr amacı gütmeyen kuruluşlardaki gönüllülere ve kar amacı gütmeyen kuruluşların yöneticilerine ayrı ayrı gerçekleştirilen anket sonuçlarını içermektedir. Çalışma, kâr amacı gütmeyen kuruluşların yönetimsel sorunlarını ve bunların gönüllüler ve gönüllü faaliyetleri üzerindeki etkilerini incelemeyi amaçlamaktadır.

Anahtar Kelimeler: Gönüllü, Yönetim, STK, KAGK, Kar Amacı Gütmeyen Kuruluşlar, Gönüllü Çalışmaları

#### Introduction

Nowadays, non-governmental organisations that develop social capital via their volunteer operations have become an indispensable feature of social life. Moreover, in today's modern societies, non-profit organisations continue to proliferate, day-by-day, whereby these organisations are constituted of volunteers and are seen as a sign of advanced civilisation. Non-profit organisations play an active role in spreading human rights, freedom, equality, solidarity and global peace – aspects that have become new values in the world for increasing the social balance and welfare on the global level.

The most important factor for such voluntary operations, as constitute the main activities of non-profit organisations, may be human resources. Volunteers, as a human resource, fulfil a social responsibility by contributing to voluntary activities in non-profit organisations. However, to ensure volunteers perform effectively and thoroughly, professional volunteer management is needed. For these reasons, the management style of a non-profit organisation (as includes volunteer management) will be investigated in regards to how it impacts on the overall activities undertaken.

#### The Current Scenario of Non-Profit Organisations and Volunteers in

#### Turkiye

Non-profit organisations assume a significant position in many societies. For exturkytample, some studies have pertained to nonprofit organisations in Turkiye – such as Gungor & Colgecen (2013) and Kurt & Tas (2015). It has also been found that the number of nonprofit organisations increases year-by-year, as seen in Figure 1 In the case of Turkiye, more than 100.000 active associations and foundations operated as non-profit since 2014 (Sivil Toplumla İlişkiler Genel Müdürlüğü, nd.).



Figure 1: Active Associations and Foundations in Turkiye

Source: Sivil Toplumla İlişkiler Genel Müdürlüğü

It is important to highlight here that the revenue of the nonprofit organisations has been going up year by year as seen from the Figure 2. When this graph showing the income of associations in Turkiye from 2015 to 2021 is examined, it is understood that the total income of associations is effective in the country's economy. In 2021 it was almost 40 billion Turkish liras which is a huge amount as much as the budget of some of the ministries of Turkiye.



Figure 2: Annual Revenue of the Non-Profit Organisations

Source: Sivil Toplumla İlişkiler Genel Müdürlüğü

#### Literature Review

Volunteer management has been extensively studied across various contexts, with researchers highlighting its role in enhancing organisational outcomes. Shin and Kleiner (2003) emphasize the importance of structured management tools, including planning, recruitment, training, and recognition, to create effective volunteer programs. Their study underscores the need for clear job descriptions, proper screening mechanisms, and ongoing support to foster volunteer satisfaction and productivity.

Carvalho and Sampaio (2017) investigated volunteer management practices in Portuguese NPOs, identifying key dimensions such as strategic planning, recruitment, performance appraisal, and volunteer retention. They found that organisations with formalised management practices, such as volunteer orientation and regular feedback, achieved higher levels of volunteer engagement and loyalty. These findings align with Hager and Brudney (2004), who reported that ineffective management practices are a leading cause of volunteer turnover, with 40% of volunteers citing poor organisational practices as their reason for leaving.

Gungor and Colgecen (2013) examined the role of volunteer management in Turkish NPOs, highlighting challenges such as resource constraints and low institutionalisation levels. They advocate for professionalised management approaches, including tailored training programs and motivation strategies, to address these issues. Similarly, Al Mutawa (2015) explored the impact of management practices on volunteer motivation and satisfaction, demonstrating a strong correlation between recognition efforts and volunteer retention. Al Mutawa's study further suggests that regular appreciation and acknowledgment significantly enhance volunteers' commitment to organisational goals.

Volunteer motivation is another critical area of study. Taysir et al. (2013) categorize volunteer motivations into altruistic and egoistic dimensions, noting that volunteers often seek personal growth and social connections alongside contributing to societal well-being. This dual perspective is supported by Inglis and Cleave (2006), who identify six motivational dimensions, including self-worth enhancement, community contribution, and individual relationship building.

According to Cuskelly et al. (2006), this planning process includes several steps – such as the provision of job descriptions, succession planning, encouragement and the identification and targeting of potential volunteers. Nevertheless, without additional motivating factors, planning cannot motivate volunteers. Moreover, planning is expected to invoke some factors that are directly concerned with volunteer satisfaction – for example organisation policies and procedures and the job descriptions of volunteers.

Moreover, according to Cuskelly et al. (2006), Holtom et al. (2008) and Mudor & Tooksoon (2011), volunteer motivation, meaningful work, satisfaction, management practices, globalisation, the rate of technological advancement, supervision, job training and pay practice are the main factors to contribute to volunteer retention

Despite these insights, gaps remain in understanding the specific impacts of volunteer management practices on overall organisational performance, particularly in the Turkish context. This study aims to address these gaps by building on existing research and providing actionable recommendations for improving volunteer management in NPOs.

#### Methodology

A positivist philosophy and deductive research approach were employed. Quantitative data were collected via an online survey distributed to Turkish NPOs. The survey consisted of 25 questions covering demographic information and managerial practices, including planning, recruitment, support, and recognition. Data analysis was performed using SPSS version 24.

The research targeted volunteers and managers within Turkish NPOs. The survey was designed to ensure accessibility, with questions

tailored to gather insights into the effectiveness of current management practices. Participants were selected to represent a diverse range of NPOs to provide a comprehensive understanding of the challenges and opportunities in volunteer management.

#### Results

#### **Demographic Variables**

The data includes six demographic variables: gender, age, educational status, job status, years of volunteer service, and voluntary position in a non-profit organization. Gender distribution was nearly equal, with females making up 55% and males 45%, indicating gender does not significantly impact volunteerism.

Age data (Figure 3) shows participants were aged between 19 and 50 years, with 86.4% falling in this range. The largest group was 19-30 years old (72.8%), and no respondents were under 18 or over 50.



Figure 3: Age of Participants

Educational status (Figure 4) reveals most participants held an undergraduate degree (86.4%), while 4.5% had a Master's degree, and none had only primary or secondary education or a doctorate.





Regarding job status (Figure 5), 45.5% were students, followed by teachers (27.3%). Engineers and unemployed individuals each comprised 9.1%, while social workers and accountants made up 4.5% each.



Figure 5: Job Status of Participants

Years of volunteer service (Figure 6) were evenly distributed, indicating a mix of experience levels among participants.



Figure 6: Number of Years the Participants Have Volunteered For

#### **Descriptive Statistics**

Descriptive statistics were used as the first step of analysing the data in the research model. The mean of the data collected ranged from 3.71 ('Recruiting') to 4.21 ('Supporting'). The mean of the 'Planning' and 'Recognising' factors was 3.77 and 3.74, respectively.

The standard deviation is related to all topics in Table 1. It can be seen that the deviation has a maximum of 1.06 (Recognising').

	Mean	Std. Deviation	Significance
Planning	3.77	0.84	83 %
Recruiting	3.71	0.95	74 %
Supporting	4.21	0.90	86 %
Recognising	3.74	1.06	80 %

Table 1: Descriptive Analysis

#### **Exploration Factors**

This section will include survey results on managerial issues such as planning, recruitment, support and recognition. These sections of the survey will be evaluated.

The mean scores for the planning section ranged from 3.27 to 4.05, with the highest standard deviation of 0.94 observed for the first issue. This indicates that identifying potential volunteers before events is uncommon in non-profits and had the most varied responses, being deemed the least significant issue. Conversely, the third issue, with a relatively high mean, was considered the most significant, reflecting the importance of detailed communication for general operations.

<u>PLANNING</u>	Never (1)	Rarely (2)	Someti mes (3)	Often (4)	Always (5)	Mean	Standar d Deviati on	Signific ance
1-Identified potential volunteers before events begin.	4.55%	13.64%	36.36%	40.91%	4.55%	3.27	0.94	76%
2-Which task the volunteers will perform is certain.	-	4.55%	22.73%	63.64%	9.09%	3.77	0.69	82%
3-Detailed information is provided about the task to be performed.	-	4.55%	18.18%	50%	27.27%	4.00	0.82	88%
4-Tasks are given according to the experience, skill and qualificatio n of the volunteer.	-	4.55%	22.73%	36.36%	36.36%	4.05	0.90	86%

**Table 2:** Descriptive Analysis of Planning Questions

The survey addressed recruiting in three questions. The second issue had the highest mean (4.32), with half of the participants stating their organizations were always open to volunteer admissions, making it the most significant. The third issue had the largest standard deviation (1.40) and the lowest mean (2.59), indicating varied responses and the minimal use and importance of advertising for volunteer recruitment.

<u>RECRUITING</u>	Never (1)	Rarely (2)	Someti mes (3)	Often (4)	Always (5)	Mean	Standar d Deviati on	Signific ance
1-Recruit volunteers from diverse backgrounds.	-	-	13.64%	50.00%	36.36%	4.23	0.69	79%
2-Constantly open to volunteer admissions.	-	-	18.18%	31.82%	50.00%	4.32	0.78	82%
3-Advertising is used for volunteer searches (i.e., printed, online.)	22.73%	36.36%	18.18%	4.55%	18.18%	2.59	1.40	61%

**Table 3:** Descriptive Analysis of Recruiting Questions

The survey addressed resource support in five questions, with mean scores ranging from 4.00 to 4.36. The second issue had the highest mean (4.36) and significance (89%), indicating that most participants believe non-profits introduce new volunteers to others, making it the most important issue in this section. Additionally, all significant percentages exceeded the 80% threshold, reflecting strong agreement.

<u>SUPPORTIN</u> <u>G</u>	Never (1)	Rarely (2)	Someti mes (3)	Often (4)	Always (5)	Mean	Standa rd Deviati on	Signific ance
1-Ensure that volunteers operate within a code of acceptable behaviour.	-	4.55%	4.55%	45.45%	45.45%	4.32	0.78	86%
2-Introduce new volunteers to others.	-	4.55%	13.64%	22.73%	59.09%	4.36	0.90	89%
3-Provide support to volunteers in their roles.	-	4.55%	9.09%	36.36%	50.00%	4.32	0.84	89%
4-The volunteer's workload is determined.	-	9.09%	13.64%	40.91%	36.36%	4.05	0.95	83%
5-Provide opportunities or support for volunteer skill development.	4.55%	4.55%	9.09%	50.00%	31.82%	4.00	1.02	82%

 Table 4: Descriptive Analysis of Supporting Questions

The survey on 'recognising' showed mean scores between 3.41 and 4.18, with the second issue having the highest mean, indicating that non-profits often thank volunteers for their efforts and that this is considered the most significant. Conversely, providing special awards to active volunteers was seen as the least important. Standard deviations were above 1 for all issues except one, showing varied opinions among participants regarding recognition practices.

<u>RECOGNISIN</u> <u>G</u>	Never (1)	Rarely (2)	Someti mes (3)	Often (4)	Always (5)	Mean	Standa rd Deviati on	Signific ance
1-The skills of volunteers are determined.	4.55%	18.18%	9.09%	31.82%	36.36%	3.77	1.27	82%
2-Thank volunteers for their efforts.	-	9.09%	13.64%	27.27%	50.00%	4.18	1.01	89%
3-Volunteer job is clearly appreciated.	4.55%	9.09%	36.36%	18.18%	31.82%	3.64	1.18	79%
4-Provide special awards for active volunteers.	4.55%	9.09%	45.45%	18.18%	22.73%	3.45	1.10	74%
5- Performance of the volunteer is monitored.	-	-	31.82%	36.36%	31.82%	4.00	0.82	82%
6-Feedback to the volunteer is made about the performance.	-	18.18%	40.91%	22.73%	18.18%	3.41	1.01	76%

**Table 5:** Descriptive Analysis of Recognising Questions

The survey on 'recognising' showed mean scores between 3.41 and 4.18, with the second issue having the highest mean, indicating that non-profits often thank volunteers for their efforts and that this is considered the most significant. Conversely, providing special awards to active volunteers was seen as the least important. Standard deviations were above 1 for all issues except one, showing varied opinions among participants regarding recognition practices.

#### Discussion

The findings indicate that professional volunteer management practices significantly impact the efficiency of NPOs. For instance, providing training and recognition fosters volunteer commitment, while strategic recruitment ensures a steady influx of motivated individuals. Planning practices that align with organisational objectives can enhance the effectiveness of volunteer programs, ensuring that resources are utilised efficiently.

Challenges such as limited resources and inadequate planning were identified as significant barriers to effective volunteer management. Many NPOs in Turkiye operate with constrained budgets, which limits their ability to invest in comprehensive management systems. Addressing these challenges requires innovative solutions, such as leveraging digital platforms for recruitment and engagement or collaborating with corporate sponsors to secure funding for volunteer programs.

This study highlights the necessity of adopting a formalised approach to volunteer management. Insights from existing literature (Al Mutawa, 2015; Gungor and Colgecen, 2013) support these findings, showing that effective management practices not only improve volunteer satisfaction but also enhance organisational outcomes. For example, recognition strategies, as suggested by previous studies, have a profound impact on volunteer retention, demonstrating the universal applicability of these practices across different contexts.

#### Conclusion

Volunteer management is a cornerstone for the success of NPOs. By focusing on structured planning, effective recruitment, and ongoing support, organisations can improve both volunteer satisfaction and operational efficiency. The study underscores the importance of recognising volunteers' contributions and providing them with the necessary resources to perform their roles effectively. Furthermore, fostering a culture of appreciation and inclusivity can strengthen the bond between volunteers and organisations.

Future research could explore the integration of digital tools in volunteer management and comparative studies across different regions. Additionally, examining the long-term impact of effective management practices on volunteer retention and organisational sustainability could provide valuable insights for practitioners and policymakers.

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# Generative Artificial Intelligence in Marketing: The Invisible Danger of AI Hallucinations

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#### Abstract

This study explores the transformative impact of Generative Artificial Intelligence (GAI) on the marketing highlighting both its significant opportunities and inherent challenges. GAI enhances marketing strategies through automated content creation, personalized customer experiences, and advanced data analytics, thereby increasing efficiency and engagement. However, the phenomenon of AI hallucinations-where AI models produce realistic yet incorrect or misleading information-poses substantial risks, including damage to brand reputation, erosion of consumer trust, and potential legal ramifications. To mitigate the risks associated with AI hallucinations, the study proposes comprehensive risk management strategies that include technical solutions to detect and correct erroneous outputs, human oversight to ensure accuracy, and adherence to ethical and regulatory frameworks. By balancing the advantages of GAI with robust measures to address AI-generated inaccuracies, organizations can harness its full potential while safeguarding their brand integrity and maintaining trust with customers.

**Keywords:** Generative Artificial Intelligence, GAI, Marketing, Marketing Strategies, AI Hallucinations, ChatGPT

# Pazarlamada Üretken Yapay Zekâ: Yapay Zekâ Halüsinasyonlarının Gizli Tehlikesi

### Öz

Bu çalışma, pazarlama alanında Üretken Yapay Zekânın (ÜYZ) dönüştürücü etkisini hem önemli fırsatlarını hem de barındırdığı zorlukları vurgulayarak incelemektedir. ÜYZ, otomatik içerik üretimi, kişiselleştirilmiş müşteri deneyimleri ve ileri düzey veri analitiği yoluyla pazarlama stratejilerini geliştirerek verimliliği ve etkileşimi artırmaktadır. Ancak, Yapay Zekâ modellerinin gerçekçi ancak yanlış veya yanıltıcı bilgi üretmesi olarak tanımlanan Yapay Zekâ halüsinasyonları, marka itibarına zarar verme, tüketici güveninin sarsılması ve olası yasal sonuçlar gibi önemli riskler taşımaktadır. Çalışma, literatür incelemesi ve vaka analizleri kullanarak Üretken Yapay Zekânın pazarlamadaki çift yönlü etkilerini, yani potansiyel avantajları ve ilişkili riskleri ele almaktadır. Çalışma, Yapay Zekâ halüsinasyonları ile ilişkili riskleri azaltmak için, yanlış çıktıları tespit etmek ve düzeltmek için teknik çözümler, doğruluğu sağlamak için insan denetimi ve etik ile yasal düzenlemelere uyum gibi kapsamlı risk yönetimi stratejileri önermektedir. Bu sayede, ÜYZ'nin avantajlarını dengeli bir şekilde kullanarak marka bütünlüğünü korumak ve müşteri güvenini sürdürmek hedeflenmektedir.

Anahtar Kelimeler: Üretken Yapay Zekâ, ÜYZ, Pazarlama, Pazarlama Stratejileri, Yapay Zekâ Halüsinasyonları, ChatGPT

#### Introduction

In recent years, the rapid development of artificial intelligence (AI) has significantly transformed various industries, particularly reshaping marketing strategies by enabling more personalized and effective engagement with target audiences (Chaffey & Ellis-Chadwick, 2019). Generative Artificial Intelligence (GAI), a subset of AI, has emerged as a transformative technology, offering innovative solutions such as automated content creation, personalized customer experiences, and advanced data analytics. By leveraging tools such as OpenAI's ChatGPT, Google's Bard, Anthropic's Claude, and Meta's Llama 2, businesses can generate human-like text, visuals, and videos, thereby enhancing the efficiency and creativity of marketing strategies. Each of these models presents unique strengths: ChatGPT is renowned for its general linguistic capabilities and widespread application support, Bard excels in real-time data integration and knowledge retrieval, Claude focuses on ethical and safety-driven responses, and Llama 2 stands out for its open-source accessibility, making it ideal for research and customization.

GAI applications enable businesses to craft tailored marketing campaigns, ranging from personalized email content to dynamic social media strategies, that resonate with specific audience preferences. For instance, Sherly Steffi et al. (2024) highlight how AI technologies can analyze consumer behaviors and provide personalized content, positively influencing customer satisfaction and brand loyalty. Additionally, Bhattacharya (2024) emphasizes strategies to address hallucinations in large language models, an issue central to the reliability of AI-generated content. Furthermore, GAI's predictive data analytics capabilities allow businesses to better forecast market trends and make data-driven decisions (Bernard, 2023). These advancements underscore the transformative role of GAI in fostering more impactful and engaging marketing strategies.

However, alongside these advantages, there exists an inescapable risk: AI hallucinations. These occur when AI models generate plausible but incorrect or misleading outputs, posing significant challenges in marketing where accuracy and reliability are critical. For example, Wen and Laporte (2024) note that while AI can evoke positive emotional responses in audiences, its lack of diversity and emotional depth can undermine the authenticity of marketing communications. Misleading or inaccurate content, such as false product information or inappropriate campaign messaging, can damage brand reputation, erode consumer trust, and result in legal challenges (Bender et al., 2021). Moreover, as Christensen et al. (2024) explain, consumers' awareness of AI hallucinations can influence their decision-making processes, particularly in trust-sensitive industries like tourism.

The purpose of this study is to provide a comprehensive examination of the phenomenon of AI hallucinations encountered in GAI applications. By investigating the causes and implications of these inaccuracies, the study seeks to balance the opportunities offered by GAI with the associated risks, offering practical strategies for marketers to utilize this technology responsibly. The structure of the study begins with an exploration of GAI's specific applications in marketing, including content generation, personalization, and data analytics, followed by an in-depth analysis of AI hallucinations, their causes, and their manifestations in marketing. It then discusses strategies for risk mitigation, including technical, ethical, and humancentered approaches. By addressing these critical issues, this research aims to guide marketing professionals in leveraging GAI effectively while safeguarding brand integrity and customer trust.

#### 1. Generative Artificial Intelligence and Marketing

GAI is a subfield of artificial intelligence aimed at creating new data samples resembling existing data. Unlike discriminative models, GAI models focus on learning the underlying distribution of inputs to generate similar new outputs rather than classifying or predicting data. One of the fundamental architectures of GAI is Generative Adversarial Networks (GANs), which consist of two neural networks: a generator that produces data and a discriminator that evaluates whether the data is real or fake. These two networks compete against each other, enabling the generator to enhance its ability to produce increasingly realistic data with each iteration (Goodfellow et al., 2014). Another significant advancement in GAI is the development of the Transformer architecture, which has accelerated progress in the field of Natural Language Processing (NLP). Models such as GPT-3, leveraging deep learning and large datasets, can generate human-like texts and demonstrate advanced proficiency in understanding the context and nuances of language (Brown et al., 2020). These developments have enabled the establishment of more natural and personalized interactions with target audiences in the marketing field.

GAI models are trained on large datasets to learn the probability distributions of inputs. This training process involves adjusting the model's parameters to minimize the difference between the generated data and real data. For instance, in GANs, while the generator creates data, the discriminator determines whether the data is real or artificial. Through iterative training phases, the generator enhances its capacity to produce outputs that can deceive the discriminator, leading to the generation of increasingly realistic data (Goodfellow et al., 2014). This process facilitates the creation of more realistic and impactful content in the marketing domain. GAI has various applications that transform how businesses engage with consumers and design strategies.

#### 1.1. Content Generation

GAI models can produce high-quality content such as articles, social media posts, visuals, and videos. For example, AI-powered tools can prepare personalized e-mail campaigns tailored to specific target audiences or generate product descriptions that resonate with user groups (Kietzmann et al., 2018). In the visual content domain, GAI can be used to design logos, advertising materials, or pre-production product simulations (Radford et al., 2019). These capabilities enhance marketing practitioners' ability to produce content quickly and diversely (Elgammal et al., 2017).

GAI has enabled innovative marketing campaigns across various industries. For instance, Heinz used AI to create unique, visually appealing images of ketchup bottles for their advertisements, which highlighted the brand's innovative approach (Speedy Brand, 2024). Similarly, Mango adopted AI-generated imagery to streamline its content production for marketing campaigns, reducing costs while maintaining creativity (FT, 2024). Coca-Cola also showcased the creative potential of GAI by integrating AI-generated music and art into its advertising campaigns. In 2023, Coca-Cola launched the "Create Real Magic" platform in collaboration with OpenAI and Bain & Company, allowing digital artists to generate original artwork using the brand's iconic assets (Coca-Cola Company, 2023). Additionally, in 2024, the company released an AI-generated Christmas commercial that reimagined its classic "Holidays Are Coming" ad, further blending tradition with modern AI technologies (NYP, 2024). These examples demonstrate how GAI can transform content creation processes while reinforcing brand identity and engaging consumers.

#### **1.2.** Personalized Customer Experiences

Personalization has become a critical element in modern marketing, and GAI enables scaling these experiences to be highly individualized. By analyzing consumer data, AI can provide personalized recommendations, adapt website content to individual users, and create marketing messages tailored to each consumer. This level of personalization has been shown to enhance customer engagement and loyalty (Lambrecht & Tucker, 2019). Personalization through GAI fosters deeper connections between consumers and the brand, significantly boosting the success of marketing activities (Butler, 2023). For example, Nike's "By You" campaign utilized AIdriven tools to allow customers to design their own shoes, creating a highly engaging and personalized customer experience (Digital Agency Network, 2024). This demonstrates how GAI can directly influence consumer satisfaction and long-term loyalty.

#### 1.3. Data Analytics and Predictive Models

GAI has also found its place in marketing by enhancing data analytics and modeling complex patterns within large datasets. It can generate synthetic data to augment existing datasets, thereby improving the performance of predictive models (Frid-Adar et al., 2018). In the marketing context, this capability enables more accurate predictions of consumer behavior, market trends, and campaign outcomes, ultimately enhancing data-driven decision-making processes (Chaffey & Ellis-Chadwick, 2019). Particularly when integrated into systems like Customer Relationship Management (CRM), GAI solutions facilitate the rapid and accurate acquisition of insights into consumer behaviors (Sullivan, 2023).

GAI has been successfully integrated into various marketing strategies, as evidenced by numerous case studies. Nike has effectively integrated AI into its marketing strategy by using data analytics and AI-powered tools to create personalized advertisements, leading to higher customer engagement rates (Chaffey, 2020). Furthermore, Ben & Jerry's applied AI-driven data analysis to develop new ice cream flavors tailored to customer preferences, illustrating the power of databacked personalization in product innovation (DataDance, 2024). These applications underscore how GAI technologies allow marketers to make informed decisions, strengthening customer relationships and increasing brand competitiveness.

However, despite its significant advantages, GAI presents several challenges. Ethical concerns regarding the use of AI-generated content, the authenticity of the content, and the prevention of misinformation dissemination are critical issues in marketing (Floridi & Cowls, 2019). Marketers should address these challenges while effectively utilizing GAI, particularly with the risk of AI hallucinations—where AI models produce outputs that may appear accurate but are, in fact, erroneous or irrelevant—posing a threat to brand reliability. Addressing these risks by recognizing the limitations of AI models and implementing mitigation strategies allows businesses to benefit from GAI while safeguarding their brand reputation and customer relationships.

#### 2. AI Hallucinations

AI hallucinations refer to instances where language models generate outputs that appear meaningful and accurate on the surface but are, in fact, nonsensical or incorrect (Marcus & Davis, 2019). Additionally, Sun et al. (2024) provide a comprehensive classification of distorted information within AI-generated content, a framework that can help contextualize the various hallucinations discussed here. This phenomenon typically manifests in the context of language models, where the models produce statements that are not aligned with reality but seem convincing. Hallucinations are a byproduct of the probabilistic nature of AI models, which focus on predicting linguistic sequences based on input patterns without fully grasping the essence of reality (Bender et al., 2021). Such misconceptions pose significant risks in fields like marketing, where reliability and accuracy are paramount. Large-scale deep learning models, such as language models, are predominantly trained on extensive internet datasets, enabling them to generate fluent and coherent texts. However, this training approach can lead to the production of incomplete or incorrect
information due to errors or misinformation present in the training data (Brown et al., 2020). Since these models lack a genuine understanding mechanism, they can produce content referred to as "hallucinations"—reliable-looking but factually ungrounded information (Dwivedi et al., 2023).

### 2.1. Causes of AI Hallucinations

### 2.1.1. Deficiencies or Biases in Training Data

One of the primary causes of AI hallucinations is the quality of the training data. Errors, biases, or unverified information in the dataset can lead models to reproduce or even amplify inaccuracies. These issues are particularly prevalent when the data is insufficient, outdated, or lacks diversity, compromising the model's ability to produce reliable outputs (Bender et al., 2021). Outdated training data or inaccuracies within datasets can lead AI models to produce unrealistic or misleading outputs. The absence of self-verification or logical reasoning capabilities in these models further exacerbates the spread of such misleading results. Large language models (LLMs), for instance, are prone to generating "hallucinations"—outputs that seem plausible but are factually incorrect—due to limitations in their training data and design. These issues highlight the need for highquality, diverse training data and mechanisms that allow AI systems to verify the accuracy of their outputs (Ji et al., 2023).

### 2.1.2. Architectural Limitations of Models

The architecture of AI models also contributes to hallucinations. Models like Transformers, which rely on identifying statistical patterns in data, often lack a deep understanding of semantics or real-world context, resulting in outputs that may appear plausible but are factually incorrect (Vaswani et al., 2017). When predicting word sequences, these models do not inherently verify the accuracy of their content, which can lead to the confident generation of incorrect information (Ji et al., 2023). This characteristic can result in the dissemination of misleading content in marketing campaigns, thereby damaging brand reputation (Dwivedi et al., 2023).

### 3. AI Hallucinations in Marketing: An Invisible Danger

As digital marketing evolves rapidly, the integration of AI has become inevitable. However, AI hallucinations pose significant and often invisible threats to marketing practices. These hallucinations manifest in various forms, from misleading content generation to behavioral issues in chatbots and incorrect outputs in critical fields such as healthcare. Such occurrences undermine trust, damage reputations, and create ethical and legal challenges, making their management a critical issue for marketers.

AI hallucinations appear in various scenarios, presenting significant risks across different sectors. In content generation, AI models like GPT-3 occasionally create fictitious events or misinformation about real individuals, which can damage brand credibility and spread false information, as identified by Brown et al. (2020). Additionally, chatbots like Microsoft's Tay demonstrate behavioral issues by producing inappropriate responses when interacting with biased inputs, which could undermine brand integrity (Neff, 2016). In the healthcare industry, the impact of AI hallucinations can be especially critical; AI-powered diagnostic tools sometimes provide incorrect diagnoses, posing serious health risks (Nori et al., 2021). AI hallucinations in marketing lead to key consequences, as shown in Figure 1.

Figure 1: Key Consequences of AI Hallucinations in Marketing



Source: Conceptualized by the author.

• Damage to Brand Reputation: False information can result in public relations crises, loss of consumer trust, and long-term reputational harm (Mills & Robson, 2020). For example, in 2023, an AIdriven social media scheduler erroneously paired a luxury watch campaign with images of counterfeit products, causing public backlash and forcing the company to issue a formal apology to restore its brand image (De Bruyn et. al., 2020).

• Undermining Customer Trust: Erroneous AI outputs can diminish consumers' confidence in a brand, leading to reduced loyalty and sales. For instance, a study by Guerra-Tamez et al. (2024) found that AI accuracy perception significantly enhances brand trust among Generation Z consumers, which in turn positively impacts purchasing decisions. Similarly, research by Malhan and Agnihotri (2023) indicated that perceived ease of use and trust in AI positively affect brand loyalty in online shopping contexts. These findings underscore the importance of reliable AI systems in maintaining consumer trust and loyalty. A real-world illustration of this occurred when an AIpowered recommendation engine on a popular e-commerce platform repeatedly suggested unrelated or non-existent product lines—such as a purported "EcoSmart" smartphone—leading customers to question the platform's reliability (Zhou et al., 2023).

• Financial and Legal Risks: Misleading information can result in financial losses, legal liabilities, and increased marketing costs to rebuild trust (Aaron Hall, 2024). For example, Air Canada's chatbot failure revealed that the company did not respect consumer rights and had to face legal consequences (Deloitte, 2024a).

### 4. Risk Mitigation Strategies

### 4.1. Technical Solutions

*Improving Training Data Quality:* High-quality, diverse datasets reduce biases and inaccuracies (Bender et al., 2021). Rigorous data curation and the inclusion of domain-specific data are essential for minimizing hallucinations. For instance, integrating real-time inventory data into AI chatbots can enhance customer experience and operational efficiency. By providing up-to-date product availability, these chatbots prevent the dissemination of incorrect information during customer interactions (Ochatbot, n.d.).

Strengthening Model Validation: Stress testing and continuous monitoring are crucial for ensuring the reliability of AI systems. Continuous monitoring allows for real-time validation of systems in new scenarios, while stress testing evaluates their resilience under extreme conditions. These techniques help in managing the evolving nature of AI post-deployment and ensuring robust system performance (Breck et al., 2021). For instance, Fujitsu has implemented advanced hallucination detection technologies in its conversational AI systems to enhance accuracy and reliability. These systems are designed to identify and mitigate instances where AI produces fabricated or incorrect information, thereby improving user trust and engagement (Fujitsu, 2023).

### 4.2. Human Oversight

*Integrating Human Review:* Human intervention ensures content accuracy and contextual relevance before publication (Müller, 2020). A practical application of this is observed in a publishing house where editors now manually verify AI-generated book synopses to prevent the AI from inventing plot elements that do not exist in the actual manuscripts.

*Enhancing AI Literacy:* Training marketing teams on AI capabilities and limitations empowers them to identify potential issues early on (West, 2019). By organizing regular workshops and interactive sessions, one technology firm significantly reduced hallucination-related incidents, as marketers became more adept at catching errors in AI-generated promotional materials (Kaur & Nagina, 2024).

## 4.3. Ethical and Regulatory Approaches

*Establishing Ethical Guidelines:* Transparency, accountability, and fairness are key principles to prevent consumer harm and maintain trust (Jobin et al., 2019). For example, Orange, a global telecommunications leader, has established a "Data and AI Ethics Council" to promote responsible AI practices. This independent advisory body ensures transparency, fairness, and good governance in AI and data processing, reflecting the company's commitment to ethical digital practices (Orange, n.d.).

*Compliance with Regulations:* Compliance with regulations such as GDPR is essential for ensuring responsible AI use and contributing

to the development of industry standards (Mantelero, 2018). For instance, Clearview AI faced significant fines for violating GDPR by unlawfully collecting and processing personal data without individuals' consent, highlighting the importance of adhering to data protection laws in AI applications (Lomas, 2023).

#### 4.4. Integrated Risk Management Framework

*Continuous Monitoring and Evaluation:* Real-time monitoring tools detect anomalies promptly, enabling swift corrective actions to ensure system reliability and performance (Luo et al., 2020). Continuous monitoring and evaluation are crucial for maintaining AI system reliability and performance. Real-time monitoring tools can promptly detect anomalies, enabling swift corrective actions. For instance, Air Canada's AI-powered chatbot provided inaccurate guidance on bereavement fares, leading to misinformation and customer dissatisfaction. This incident underscores the importance of real-time monitoring and prompt corrective measures to maintain system reliability and customer trust (Aporia, 2023).

*Incident Response Planning*: Predefined protocols for handling misinformation are crucial in minimizing fallout and facilitating recovery during security incidents (Cichonski et al., 2012). For example, Samsung experienced a data leak when employees inadvertently shared confidential information via ChatGPT. In response, Samsung implemented measures to prevent future breaches, including banning the use of generative AI tools across the company (prompt.security, 2023).

*Cross-Functional Collaboration:* Effective risk management in marketing can be achieved through collaborative efforts between

marketing teams, data scientists, and legal experts (Chaffey & Ellis-Chadwick, 2019). For instance, Advanced Micro Devices (AMD) has established a Responsible AI Council to oversee the ethical use of AI in their marketing strategies. This council ensures that AI applications, such as automated copywriting and partner marketing claims processing, adhere to ethical standards and maintain accuracy, thereby enhancing efficiency while safeguarding against potential risks (Deloitte, 2024b).

## Conclusion

This study has thoroughly examined the impacts and risks associated with GAI in marketing. The integration of GAI into marketing strategies offers numerous advantages, including increased efficiency in content creation, personalized customer experiences, and the development of creative campaigns. However, it also presents serious disadvantages, such as AI hallucinations, damage to brand reputation, and erosion of customer trust. The analysis demonstrates the critical importance of using high-quality training data and robust model validation processes to mitigate the negative effects of AI. Furthermore, the study highlights the essential role of human oversight and the enhancement of AI literacy among team members in ensuring the responsible and effective use of this technology.

GAI offers innovative solutions in marketing but necessitates awareness of its accompanying risks. Among its advantages are automated content generation, increased customer engagement, and accelerated data analysis. Conversely, its disadvantages include the generation of incorrect information, ethical concerns, and legal liabilities (Bender et al., 2021). Balancing these advantages and disadvantages is crucial for organizations to utilize GAI strategically and responsibly. The integration of technological solutions, human factors, and ethical regulations emerges as an effective method to achieve this balance.

#### Recommendations for Marketing Professionals

Several key recommendations are provided for companies and marketing professionals seeking to maximize the benefits of GAI while minimizing its risks:

⇒ **Prioritizing Data Quality:** Utilizing high-quality, diverse, and representative datasets is essential for enhancing the accuracy and reliability of AI models. Investing in rigorous data cleaning and preparation processes significantly reduces the risk of model errors, including hallucinations (Gebru et al., 2018).

⇒ Model Validation and Continuous
Monitoring: Regularly validating and monitoring AI models ensures
the early detection of potential errors. These processes should include
continuous updates and improvements to the models (Chander et al.,
2024).

 $\Rightarrow$  Integrating Human Oversight: Having humans review AI-generated content prevents the spread of false information and ensures quality control. Human-enhanced AI collaboration aids in developing more reliable and effective marketing strategies (Müller, 2020).

⇒ Enhancing AI Literacy Among Team Members: Ensuring that marketing teams are knowledgeable about AI technologies enables more effective and responsible use of these tools. Training programs and continuous learning opportunities allow teams to fully exploit AI's potential.

 $\Rightarrow$  Ensuring Ethical and Legal Compliance: Establishing ethical guidelines and adhering to legal regulations support the responsible use of AI. This is critical for protecting brand reputation and avoiding legal issues (Jobin et al., 2019).

## Recommendations for Researchers

Current studies on the role and impacts of GAI in marketing indicate a need for further research in this area. Some recommendations for future research include:

 $\rightarrow Causes and Prevention of AI$ Hallucinations: Developing a better understanding of the root causes
of hallucinations in AI models and devising new techniques to prevent
them can enhance the reliability of the technology.

 $\rightarrow$  Ethical and Social Impacts: Comprehensive studies on the ethical and social implications of GAI can help assess the long-term effects of this technology on society.

 $\rightarrow$  Industry-specific Applications: Research on the deployment of General AI across different industries reveals distinct challenges that each sector faces, suggesting the need for tailored AI solutions to address these specific issues.

Future Directions of the Technology

The future of GAI technology would be shaped by both technical advancements and the evolution of ethical and regulatory frameworks. It is anticipated that AI models will become more transparent, explainable, and user-friendly. Moreover, regulatory bodies are expected to develop clearer and more comprehensive regulations for AI technologies, promoting responsible usage. The progress of AI in marketing will continue to offer new opportunities for personalizing customer experiences and enhancing marketing strategies, while also requiring ongoing attention to ethical and security concerns.

GAI offers significant opportunities in the marketing sector, providing enhancements in creativity, personalization, and data analytics. However, these advantages are accompanied by inherent risks, notably AI hallucinations, which can adversely affect brand reputation and customer trust. Technical solutions such as improving data quality and strengthening model validation processes are effective in mitigating these risks. Additionally, increasing AI literacy among team members and establishing robust ethical guidelines are crucial for the responsible and effective deployment of GAI technologies. Future research and the development of regulatory frameworks will further support the safe and effective use of AI in marketing. In conclusion, adopting a comprehensive and integrated approach to managing and mitigating the risks of GAI is essential for organizations to fully capitalize on its potential while safeguarding their brand and customer relationships.

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## Sosyo-Ekonomik Eşitsizlik Araştırmalarında Din ve Tematik Dinamikler: Bibliyometrik Bir Değerlendirme

## Öz

Son yıllarda sosyo-ekonomik eşitsizlikler üzerine yapılan araştırmalar, disiplinler arası yaklaşımların artması ve sosyal kategorilerin eşitsizliklerle nasıl kesiştiğine dair yeni anlayışlar geliştirilmesiyle önemli bir dönüşüm geçirmiştir. Ancak bu literatürde, dinin eşitsizlikler üzerindeki rolünü ele alan çalışmalar sınırlı kalmıştır. Bu çalışma, sosyo-ekonomik eşitsizliklere odaklanan akademik araştırmaların din ve dindarlık temasıyla nasıl kesiştiğini analiz etmeyi amaçlamaktadır. Web of Science (WoS) veri tabanından elde edilen 2922 akademik çalışma, belirlenen kriterlere uygun olarak seçilmiş ve Bibliometrix yazılımı kullanılarak analiz edilmiştir. Araştırma, din ve eşitsizlikler üzerine yapılan çalışmaların tematik eğilimlerini, bölgesel dağılımlarını ve bilimsel iş birliklerini incelemektedir. Elde edilen bulgular, bu alanın literatürde yeterince ele alınmadığını ve dinin eşitsizlik dinamikleri üzerindeki etkisine dair daha fazla araştırmaya ihtiyaç duyulduğunu göstermektedir. Bu yönüyle çalışma, literatürdeki önemli bir boşluğu doldurmayı hedeflemektedir.

Anahtar Kelimeler: Sosyo-ekonomik eşitsizlik, Bibliyometrik analiz, Tematik eğilimler, Eşitsizlik araştırmaları, Din

# Religion and Thematic Dynamics in Socio-Economic Inequality Research: A Bibliometric Assessment Abstract

In recent years, research on socio-economic inequalities has significant transformation with undergone а the rise of approaches and the interdisciplinary development of new perspectives on how social categories intersect with inequalities. However, studies examining the role of religion in socio-economic inequalities remain limited. This study aims to analyze academic research focusing on socio-economic inequalities in connection with religion and religiosity. A total of 2,922 academic works were identified from the Web of Science (WoS) database based on predefined criteria and analyzed using the Bibliometrix software. The study investigates thematic trends, regional distributions, and scientific collaborations in research on religion and inequalities. The findings reveal that this area remains underexplored in the literature, highlighting the need for further investigation into the impact of religion on inequality dynamics. This study aims to fill a critical gap in the existing literature.

**Keywords:** Socio-economic inequality, Bibliometric analysis, Thematic trends, Inequality research, Religion

### 1. Giriş

Sosyo-ekonomik eşitsizlik, tarih boyunca toplumsal yapıların ve ekonomik ilişkilerin en temel dinamiklerinden biri olmuştur. Kaynakların, fırsatların ve refahın farklı topluluklar arasında adaletsiz bir şekilde dağılımı, bireylerin sosyal konumlarını ve yaşam standartlarını belirleyerek gelir ve servet eşitsizliğini derinleştirmiştir. Gelir dağılımındaki eşitsizlikler kadar, eğitim, sağlık, sosyal hareketlilik ve siyasal katılım gibi alanlardaki adaletsizlikler de toplumsal yapılar üzerinde derin etkiler yaratmaktadır (Milanovic, 2016). Bu bağlamda, sosyo-ekonomik eşitsizlik araştırmaları, sadece ekonomik faktörleri değil, toplumsal normlar, din, cinsiyet, etnisite ve ırk gibi sosyal kategorilerin de bu eşitsizliklere nasıl katkıda bulunduğunu inceleyen disiplinler arası bir alan haline gelmiştir.

Eşitsizlik çalışmaları, 1970'lerden itibaren küreselleşme, sanayileşme ve teknolojik dönüşümlerle birlikte çeşitlenmiş ve derinleşmiştir. Özellikle Bretton-Woods sisteminin çöküşü, petrol krizleri ve neoliberal politikaların yaygınlaşması, gelir ve servet eşitsizliklerinde belirgin bir artışa yol açmıştır (Galbraith, 2016). Gelişmiş ülkelerde gelir eşitsizliği sürekli artarken, gelişmekte olan ülkelerde bu süreç daha karmaşık bir seyir izlemiştir. Özellikle Latin Amerika ve Afrika'da, 1980'lerden itibaren gelir eşitsizliği dramatik bir şekilde artmış ve bu artış, borç krizleri ile yüksek faiz oranlarıyla ilişkilendirilmiştir. Doğu Avrupa ve eski Sovyetler Birliği ülkelerinde ise Soğuk Savaş'ın sona ermesi ve Sovyetler Birliği'nin dağılmasıyla birlikte eşitsizlikte önemli artışlar gözlemlenmiştir (Milanovic, 2015).

Branko Milanovic (2015), küresel gelir eşitsizliğinin üçte ikisinden fazlasının ülkeler arasındaki gelir farklılıklarından kaynaklandığını belirtmektedir. Bir kişinin gelir düzeyinin değişkenliğinin yarısından fazlası, yaşadığı ülkenin ekonomik gelişmişlik seviyesi ve ülke içindeki gelir dağılımındaki eşitsizlikle belirlenmektedir. Bu bulgu, bireyin doğduğu ve yaşadığı ülkenin gelir düzeyi üzerinde büyük bir etkiye sahip olduğunu göstermektedir.

Artan eşitsizliğin etkileri geniş kapsamlı ve derindir. Eşitsizlik yalnızca bireyler arasındaki gelir farklarını genişletmekle kalmaz, aynı sosyal dokusunu zamanda toplumların ve hükümetlerin vatandaşlarına karşı sorumluluklarını da aşındırır. Artan eşitsizlik, yoksulluğu azaltma çabalarını zayıflatmış ve hükümetlerin odak noktalarını vatandaşlardan ziyade büyük şirketlere yöneltmesine neden olmuştur (Stiglitz, 2012). Eşitsizlik, ekonomik büyümeyi engellediği gibi fırsat eşitliğini de baltalar; sosyal hareketlilik imkânlarını zayıflatır ve toplumsal merdiveni kırılgan hale getirir. Ayrıca, daha eşitsiz toplumlarda şiddet suçları, cinayet oranları ve siyasi şiddet riski daha yüksektir.

Son yıllarda yapılan araştırmalar, geleneksel eşitsizlik ölçümlerinin ötesine geçerek en üst gelir gruplarındaki yoğunlaşmayı vurgulamaktadır. Branko Milanovic, milyoner ile milyarder arasındaki farkı şu şekilde açıklar: Bir milyoner, günde 1.000 dolar harcayarak servetini üç yılda tüketebilirken, bir milyarder aynı hızla harcayarak servetini tüketmek için 2.700 yıla ihtiyaç duyar (Lakner & Milanovic, 2016). Credit Suisse'in verilerine göre, Dünya genelinde yaklaşık 42 milyon kişi, yani dünya nüfusunun %0,8'i, 1 milyon doların üzerinde net servete sahiptir. Bu grup, kabaca küresel nüfusun en zengin %1'ini oluşturarak dünya servetinin %44,8'ini kontrol etmektedir. Bu veriler, oldukça az sayıda bireyin küresel servetin neredeyse yarısını elinde bulundurduğunu göstermektedir (Shorrocks et al., 2018).

Eşitsizliklerin analizinde yalnızca gelir ya da servet gibi ekonomik göstergeler değil, toplumsal ve kültürel normlar da önemli bir rol oynamaktadır. Max Weber'in klasik eseri *Protestan Ahlakı ve Kapitalizmin Ruhu* (1905), dini değerlerin ekonomik davranışlar üzerindeki etkisini inceleyen ilk sistematik çalışmalardan biri olarak öne çıkmaktadır. Weber'in çalışması, din ve ekonomi arasındaki ilişkinin çok boyutlu yapısını tartışmaya açmış ve bu bağlamda önemli bir literatür oluşmuştur.

Literatüre baktığımızda, eşitsizlik araştırmalarının tarihsel olarak yalnızca ekonomik göstergelere odaklanmadığını, aynı zamanda din, cinsiyet, etnisite gibi sosyal kategorilerle de kesiştiğini görüyoruz. 1970'lerden itibaren bu araştırmalar disiplinler arası bir yapıya kavuşmuş ve farklı coğrafi bölgelerde farklı dinamiklere odaklanmıştır. Ancak eşitsizlik literatürü ne kadar gelişmiş olursa olsun, din gibi eşitsizliği etkileyen alt alanlar veterince incelenmemiştir. Bu çalışmanın özgün katkısı, din ve eşitsizlik arasındaki ilişkilere odaklanarak bu eksikliği gidermeye yönelik bir değerlendirme sunmasıdır.

Bu çalışmada, sosyo-ekonomik eşitsizlikler üzerine yapılan akademik araştırmalar bibliyometrik bir yöntemle analiz edilmiştir. Araştırmanın temel amacı, literatürdeki tematik ve mekânsal eğilimleri inceleyerek, eşitsizlik çalışmalarının tarihsel gelişimini ve disiplinler arası çeşitliliğini ortaya koymaktır. Bu kapsamda, 1970'lerden günümüze kadar eşitsizlik araştırmalarının hangi başlıklar altında yoğunlaştığı, coğrafi olarak nasıl farklılık gösterdiği ve hangi sosyal kategorilerle kesiştiği analiz edilmiştir.

Makalenin devamında, bibliyometrik veriler ışığında eşitsizlik çalışmalarındaki ana temalar, disiplinler arası eğilimler ve bölgesel farklılıklar detaylı bir şekilde ele alınacaktır. Bu analizler, literatürdeki mevcut boşlukları belirlemeye ve eşitsizlik çalışmalarının küresel bağlamdaki önemini daha iyi anlamaya katkı sağlayacaktır.

## 2. Materyaller ve Yöntemler

## 2.1. Bibliyometrik Analiz

Bibliyometrik analiz, bilimsel literatürdeki üretim kalıplarını ve tematik eğilimleri nicel yöntemlerle incelemeyi sağlayan güçlü bir araçtır. Bu analiz yöntemi, bilimsel makaleler ve atıf verileri gibi bibliyografik veriler üzerinde çeşitli nicel tekniklerin uygulanmasını içerir. Örneğin, atıf analizleri ve coğrafi dağılım çalışmaları gibi teknikler, araştırma alanının epistemolojik yapısını ve evrimini ortaya çıkarmada kritik rol oynar (Glänzel, 2012). Bibliyometrik yöntemler, bilimsel üretimin genel kalıplarını yazar, kaynak, bağlı kurum ve ülkeler arasında görselleştirmenin yanı sıra, bu birimler arasındaki ilişkileri de analiz eder (Niu et al., 2016).

Bu analizler zaman sınırlamalarıyla veya belirli dönemler için yapılabilir, böylece literatürün zaman içerisindeki evrimini ve belirli dönemlerdeki eğilimleri anlamak mümkün hale gelir. Belirli zaman dilimlerinde ortaya çıkan ana temaları ve literatürdeki temel yapısal değişiklikleri tanımlamak, alanın hangi köşe taşlarının önemli olduğunu belirlemeye yardımcı olur (Agbo et al., 2021; Garrigós-Simón et al., 2021; Guo et al., 2019).

Ek olarak, bu teknikler sadece bibliyografik verilere değil, anahtar kelimeler, başlıklar ve özetler gibi metinsel verilere de uygulanabilir. Böylece araştırmacılar, belirli bir disiplin içinde merkezi tematik alanları belirleyebilir ve bilgi yapısının zaman içindeki değişimlerini izleyebilirler (Sharifi et al., 2023). Bu yöntem, literatürdeki araştırma boşluklarını ve gelişmemiş alanları tespit etmede de oldukça etkilidir (Jakobsen et al., 2023).

Çalışmada kullanılan WoS Clarivate analiz araçları ve Bibliometrix yazılımı, bu tür bibliyometrik ve tematik analizler için özelleştirilmiş güçlü araçlardır. R programlama dili için geliştirilmiş olan Bibliometrix, bibliyometrik analizlerin kolayca yapılmasını sağlayan bir yazılımdır ve Biblioshiny adlı web tabanlı ara yüzü ile kullanıcı dostu bir deneyim sunar (Aria & Cuccurullo, 2017). Çalışmada, WoS Core Collection'dan elde edilen veriler, plain text formatında Biblioshiny'ye yüklenmiş ve bu platformda sınıflandırılmış, filtrelenmiş ve analiz edilmiştir.

### 2.2. Verilerin Seçimi ve Toplanması

Bu araştırma için veriler, en eski ve en güvenilir akademik indeksleme platformlarından biri olan WoS veri tabanından alınmıştır. WoS Çekirdek Koleksiyonu yalnızca üst düzey bilimsel yayınları içerdiğinden, yüksek düzeyde akademik güvenilirlik vaat etmektedir. Bu nedenle, bibliyometrik literatür analizleri yapan çalışmalarda çoğunlukla WoS veri tabanı kullanılmaktadır. Bu araştırmanın amaçlarına hizmet edecek en uygun verileri elde etmek için önceden belirli filtreleme kriterleri belirlenmiş ve uygulanmıştır. Bilimsel güvenilirliği artırmak ve mükerrerlik riskini en aza indirmek için belge türü olarak yalnızca 'makaleler' ve 'konferans bildirileri' dikkate alınmış; kitaplar, bölümler ve tezler gibi diğer türler kapsam dışında bırakılmıştır. Arama dizesi, "veya" ve "ve" operatörleri ile birleştirilen bileşik anahtar kelimelerin bir kombinasyonundan oluşmaktadır. Arama konumu başlık olarak seçilmiş ve arama istemi TI= (religion OR religious OR religiosity) AND TI= ("inequality" OR "inequalities") olarak belirlenmiştir. İlgili araştırmanın en geniş zaman aralığını gözlemlemek için herhangi bir zaman filtresi uygulanmamıştır. Veriler 16 Nisan 2024 tarihinde güncellenmiştir.

Tablo 1, 1976'dan 2024'e kadar yayınlanan 2922 akademik belgeden oluşan veri setinin bir dökümünü sunmaktadır. Bu belgeler arasında 2645 makale ve 53 konferans bildirisi bulunmaktadır. Ayrıca veri setinde 148 kitap bölümü, 75 erken erişim makalesi ve 1 geri çekilmiş yayın yer almaktadır. Belgelerin ortalama yaşı 7,31 yıl olup, yıllık büyüme oranı %8,49'dur. Toplamda 1555 farklı kaynaktan (dergiler, kitaplar vb.) elde edilen belgelerin ortalama atıf sayısı 16,1'dir ve referans sayısı ortalama 1'dir. Bu çalışmalar, 5978 farklı yazar tarafından üretilmiş olup, tek yazarlı makale sayısı 1340'tır. Her makaleye ortalama 2,32 yazar katkıda bulunmuş ve bu makalelerin %20,36'sı uluslararası iş birlikleri ile gerçekleştirilmiştir.

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	1976:2024
Sources (Journals, Books, etc)	1555
Documents	2922
Annual Growth Rate %	8.49
Document Average Age	7.31
Average citations per doc	16.1
References	1
DOCUMENT CONTENTS	
Keywords Plus (ID)	3368
Author's Keywords (DE)	6609
AUTHORS	
Authors	5978
Authors of single-authored docs	1219
AUTHORS COLLABORATION	
Single-authored docs	1340
Co-Authors per Doc	2.32
International co-authorships %	20.36
DOCUMENT TYPES	
Article	2645
article; book chapter	148
article; early Access	75
article; proceedings paper	53
article; withdrawn publication	1

### Tablo 1. Verilerin Dağılımı

Bu veriler, sosyo-ekonomik eşitsizlik üzerine yapılan araştırmaların zaman içerisindeki evrimini ve bu alandaki araştırma üretim dinamiklerini analiz etmek için kullanılacaktır.

### 3. Sonuçlar

### 3.1. Yayın Çıktısı ve Büyüme Trendi

Araştırma verileri, 1976 ile 2024 yılları arasındaki sosyoekonomik eşitsizlik çalışmalarına dair akademik üretimi kapsamaktadır. Bu süre zarfında yayınlanan makalelerin sayısında önemli bir artış gözlenmiştir. Tablo 1, yıllık bazda yayınlanan makalelerin sayısını göstermektedir. Özellikle 1990'lardan itibaren artış eğilimi belirginleşmiş, 2000'li yılların başında ise bu artış ivme kazanmıştır. Örneğin, 1992'de iki makale yayımlanırken 2023'te bu sayı 315'e ulaşmıştır. Bu artış, sosyo-ekonomik eşitsizlik konusunun daha fazla dikkat çekmesi ve bu alandaki akademik üretimin hızlanması ile açıklanabilir.

Yıllık büyüme oranı incelendiğinde, ortalama %8,49'luk bir büyüme oranı gözlemlenmektedir. Bu büyüme, 2000'lerden itibaren giderek hız kazanmış, sosyo-ekonomik eşitsizlik çalışmalarına artan ilgiyle paralel olarak daha fazla makale yayımlanmıştır. 2003 ve 2004 yılları arasındaki hızlı artış ise dikkat çekicidir; 2003'te 13 makale yayımlanırken, 2004'te bu sayı 25'e çıkmıştır. Bu durum, eşitsizlik konusunun küresel çapta daha fazla önem kazanması ve bu alanda daha fazla araştırmanın yapılması ile ilişkilendirilebilir.

Toplam atıf sayıları da yayın üretiminin artışıyla birlikte paralel bir gelişim göstermiştir. Tablo 2, yıllık atıf sayılarını ve her yıl yayımlanan makalelere yapılan ortalama atıf sayısını göstermektedir. Örneğin, 1994 yılında sadece 3 makale yayımlanmış olmasına rağmen, bu makaleler 5,56 ortalama atıf almıştır. 2000'li yılların başlarından itibaren atıf sayılarında da belirgin bir artış yaşanmıştır. Özellikle 2003 yılına ait makaleler, ortalama 18,28 atıf almış, bu da o dönemde yayımlanan makalelerin bilimsel alanda ne kadar etkili olduğunu göstermektedir. 2024 yılına gelindiğinde ise, makale başına düşen ortalama atıf sayısının 0,56'ya düştüğü gözlemlenmiştir. Bu durum, 2024'te yayımlanan makalelerin henüz atıf alacak kadar uzun bir süre bulunmadığını düşündürmektedir.

Atıf verileri incelendiğinde, yıllar içinde eşitsizlik konusundaki çalışmaların akademik alanda daha fazla referans gösterildiği ve bu alandaki çalışmaların etkisinin arttığı görülmektedir. 1992 yılından itibaren, makale başına düşen ortalama atıf sayısında dalgalanmalar yaşanmıştır; ancak genel trend, 2000'li yılların başında önemli bir artış göstermiştir. 2003 yılında yayımlanan makaleler, özellikle 402,23 ortalama atıf sayısı ile en çok atıf alan yıl olmuştur. Bu durum, o dönemde sosyo-ekonomik eşitsizlik üzerine yapılan çalışmaların akademik camiada büyük yankı uyandırdığını göstermektedir.

Yayınların bölgesel dağılımı ve disiplinler arası iş birlikleri de büyüme trendinin önemli bir göstergesi olarak karşımıza çıkmaktadır. Araştırmaya konu olan makalelerin %20,36'sı uluslararası iş birliği ile hazırlanmış olup, bu da sosyo-ekonomik eşitsizlik araştırmalarının küresel çapta ne kadar önemli hale geldiğini göstermektedir. Ayrıca, tek yazarlı makalelerin oranı %45,87 olup, disiplinler arası iş birliklerinin bu alanda giderek yaygınlaştığı gözlemlenmektedir.

Tablo 2 ve Tablo 3'te yer alan verileri değerlendirdiğimizde, sosyo-ekonomik eşitsizlik üzerine yapılan çalışmaların yıllar içinde hem sayıca arttığı hem de bu çalışmaların bilimsel etkisinin giderek büyüdüğü anlaşılmaktadır. Yayımlanan makale sayısındaki artışla birlikte, bu makalelerin aldığı atıf sayıları da paralel bir artış göstermiştir. Özellikle 2000'li yılların başında, bu alandaki araştırmaların yoğunlaştığı ve akademik üretimde önemli bir büyüme kaydedildiği açıktır.



Tablo 2. Yıllık Makale Sayısı

Year	MeanTCperArt	Ν	MeanTCperYear	CitableYears
1976	11	1,00	0,22	49
1977	1	1,00	0,02	48
1980	8	1,00	0,18	45
1986	0	1,00	0,00	39
1991	4	1,00	0,12	34
1992	19,5	2,00	0,59	33
1993	12,5	2,00	0,39	32
1994	172,33	3,00	5,56	31
1995	14,67	6,00	0,49	30
1996	36,17	6,00	1,25	29
1997	12,25	8,00	0,44	28
1998	91,17	6,00	3,38	27
1999	69,33	12,00	2,67	26
2000	76,25	8,00	3,05	25
2001	20,71	21,00	0,86	24
2002	36,91	23,00	1,60	23
2003	402,23	13,00	18,28	22
2004	150,4	25,00	7,16	21
2005	23,29	17,00	1,16	20
2006	69,56	27,00	3,66	19
2007	26,9	51,00	1,49	18
2008	38,45	51,00	2,26	17
2009	21,6	57,00	1,35	16
2010	25,59	74,00	1,71	15
2011	17,8	82,00	1,27	14
2012	23,79	107,00	1,83	13
2013	14,74	90,00	1,23	12
2014	23,77	125,00	2,16	11
2015	15,86	137,00	1,59	10
2016	20,09	172,00	2,23	9
2017	10,59	194,00	1,32	8
2018	11,26	201,00	1,61	7
2019	10,31	230,00	1,72	6
2020	7,86	243,00	1,57	5
2021	5,42	257,00	1,35	4
2022	2,83	302,00	0,94	3
2023	0,7	315,00	0,35	2
2024	0,56	50,00	0,56	1

Tablo 3. Toplam Atıf Sayısı Yıllara Göre

## 3.2. Bölgelere, Ülkelere ve Bağlı Kuruluşlara Göre Bilimsel Çıktı

Sosyo-ekonomik eşitsizlik üzerine yapılan bilimsel araştırmaların bölgesel ve ulusal dağılımı, akademik üretim ve iş birliklerinin küresel boyutunu gözler önüne sermektedir. 1976-2024 yılları arasında 97 ülke bu alandaki çalışmalara katkıda bulunmuştur. Ancak, bilimsel üretim küresel çapta dengesiz bir dağılım göstermektedir. En fazla bilimsel üretim yapan ilk 20 ülke, toplam literatürün %80'ini oluşturmakta ve bu ülkelerin çoğu gelişmiş ekonomilere sahip olan ABD, Birleşik Krallık, Almanya ve Çin gibi ülkelerdir.

Grafiklerde gösterildiği üzere, ABD, bilimsel üretimde ön plana çıkarken, onu Birleşik Krallık ve Hindistan takip etmektedir. ABD, bu alandaki çalışmaların büyük bir kısmını tek başına gerçekleştirirken, uluslararası iş birlikleri de dikkat çekmektedir. Özellikle ABD'nin Birleşik Krallık ve Çin ile olan iş birlikleri, bilimsel literatürde önemli bir yer tutmaktadır. Birleşik Krallık'ın da ABD ve Avrupa ülkeleri ile yoğun iş birliği yaptığı görülmektedir. Çin ise son yıllarda bu alanda üretkenliğini artırmış, özellikle ABD ve Asya ülkeleri ile güçlü akademik bağlar kurmuştur.

Grafik 1, ülkeler arasındaki akademik işbirliğini görselleştirmektedir. ABD, küresel akademik işbirliklerinin merkezinde yer almakta ve birçok ülke ile yoğun işbirlikleri yürütmektedir. ABD'nin ardından Birleşik Krallık ve Çin, önemli işbirlikleri kurmuş ve bilimsel üretimde lider konuma gelmiştir. Batı Avrupa ülkeleri, özellikle Almanya, Fransa ve Hollanda, daha çok kendi aralarında işbirliği yaparken, Birleşik Krallık daha geniş bir ağ ile çalışmaktadır. Asya'da ise Çin ve Hindistan gibi ülkeler, bölgesel işbirliklerinde önemli bir rol oynamaktadır.



Grafik 1. Ülkeler Arası Akademik İş birliği Ağı

Grafik 2'de, ülkelerin bilimsel üretim miktarını detaylandırmaktadır. ABD, hem tek ülke çalışmaları (SCP) hem de çok uluslu iş birlikleri (MCP) açısından lider konumdadır. ABD'nin ardından Birleşik Krallık, Hindistan ve Almanya gelmektedir. Bu ülkeler hem ulusal hem de uluslararası düzeyde önemli iş birlikleri gerçekleştirmiştir. Avrupa ülkeleri daha dengeli bir iş birliği modeli sergilerken, Hindistan gibi ülkeler daha çok ulusal düzeyde bilimsel üretim gerçekleştirmiştir.



Grafik 3'te ise sosyo-ekonomik eşitsizlik literatürüne en fazla sağlayan yazarların bilimsel üretim ve iş birliklerini katkı karşılaştırmaktadır. Yazarların toplam makale sayıları ile fractionalized (oranlanmış) makale sayıları incelendiğinde, işbirlikçi çalışmaların baskın olduğu ve bireysel katkıların bu orana göre değişiklik gösterdiği anlaşılmaktadır. Özellikle, en yüksek makale üretimine sahip yazarlar arasında fractionalized oranlarının düşüklüğü, bu yazarların çok sayıda işbirlikçi çalışmada yer aldığını ve diğer araştırmacılarla birlikte bilimsel üretim gerçekleştirdiklerini göstermektedir.

Muhammet AYDOĞAN



Grafik 3. Yazarlar Üzerinden Bilimsel Üretim ve İş birliği

İlk 10 yazara baktığımızda, SIBLEY CG en yüksek üretimle (20 makale) öne çıkarken, fractionalized oranı 6,38'dir. Bu, yazarın birçok işbirlikçi projeye katıldığını göstermektedir. Benzer şekilde, OSBORNE D (13 makale, fractionalized 4,15) ve KHATTAB N (10 makale, fractionalized 6,08) da yoğun işbirlikçi çalışmalarda yer almıştır. Bu yazarlar, bilimsel üretimin önemli bir kısmını diğer araştırmacılarla birlikte gerçekleştirmiştir.

Diğer yandan, SUMERAU JE (14 makale, fractionalized 7,03) ve POWER M (8 makale, fractionalized 8,00) gibi yazarlar, daha yüksek fractionalized oranlarına sahip olup, bu yazarların daha bireysel veya küçük ekiplerle çalıştığını göstermektedir. Bu, yazarların bilimsel katkılarının daha büyük bir kısmını tek başlarına ya da daha sınırlı iş birlikleriyle üstlendiğini ifade eder.

Genel olarak Grafik 3, sosyo-ekonomik eşitsizlik araştırmalarında güçlü bir iş birliği ağı olduğunu ortaya koymakta ve bu ağın literatüre yön veren başlıca yazarlar tarafından şekillendirildiğini göstermektedir. Bu iş birlikleri, disiplinler arası ve uluslararası düzeyde geniş bir literatürün oluşmasına katkı sağlamıştır.

Bu veriler, sosyo-ekonomik eşitsizlikler üzerine yapılan araştırmaların küresel dağılımını ve iş birliklerini detaylı bir şekilde ortaya koymaktadır. Araştırmaların büyük kısmı, gelişmiş ülkelerde yoğunlaşmışken, Asya-Pasifik bölgesi, özellikle Çin ve Hindistan gibi ülkelerin etkisiyle, bu alanda yükselen bir araştırma merkezi haline gelmiştir. Gelişmekte olan ülkelerde bilimsel üretim artarken, uluslararası iş birliklerinin de bu artışa paralel olarak arttığı gözlemlenmektedir.

## 3.3. Disiplinler ve Araştırma Konuları

Sosyo-ekonomik eşitsizlik, küresel ölçekte toplumsal yapılar üzerinde derin etkiler yaratan karmaşık bir olgu olarak karşımıza çıkmaktadır. Fırsatların, kaynakların ve refahın eşitsiz dağılımı, ekonomik, sosyal ve politik süreçleri şekillendirerek, bireyler ve gruplar arasındaki ayrışmayı artırmaktadır. Bu durum, yalnızca gelir ve servet düzeyindeki farklarla sınırlı kalmamakta; eğitim, sağlık, konut ve istihdam gibi birçok alanda toplumsal adaletsizliğe yol açmaktadır. Sosyo-ekonomik eşitsizliklerin küresel çapta giderek daha belirgin hale gelmesi, bu konunun akademik araştırmaların merkezinde yer almasına neden olmuş ve çok sayıda disiplinin katkılarıyla geniş bir literatür oluşmuştur. Eşitsizlik üzerine yapılan çalışmalar, bu sorunun yalnızca ekonomik boyutunu değil, aynı zamanda sosyolojik, politik ve kültürel yönlerini de irdeleyerek, çok disiplinli bir bakış açısı sunmaktadır.
Tablo 4. Disiplinlere ve Araştırma Konularına Göre Yayınların

Words	Occurrences
Religion	466
Sociology	463
public environmental & occupational health	289
Economics	251
social sciences interdisciplinary	170
political science	168
education & educational research	134
area studies	100
ethnic studies	90
Anthropology	89
social issues	88
women's studies	86
Demography	78
History	78
Geography	67
Law	67
psychology multidisciplinary	66
multidisciplinary sciences	64
social sciences biomedical	62
development studies	61
psychology social	60
international relations	54
family studies	49
Management	46
environmental studies	45
health policy & services	41
social work	40
Business	37
humanities multidisciplinary	37

#### Dağılımı (İlk 20)

Sosyo-ekonomik eşitsizlik üzerine yapılan araştırmalar, çok disiplinli bir yapıya sahip olup, bu alandaki çalışmaların geniş bir yelpazede ele alındığını göstermektedir. Tablo 4, bu konunun çeşitli bilim dallarında yoğun bir şekilde incelendiğini ve farklı alanlarla kesiştiğini ortaya koymaktadır. Literatürde en çok kullanılan kavramlar arasında "din" ve "sosyoloji" öne çıkmaktadır. Din ile ilgili çalışmaların 466 kez, sosyoloji ile ilgili çalışmaların ise 463 kez geçtiği tespit edilmiştir. Bu durum, sosyo-ekonomik eşitsizlik araştırmalarında bu iki disiplinin ne kadar önemli olduğunu göstermektedir.

Tablo 4'te öne çıkan diğer önemli disiplinler arasında "kamu sağlığı" ve "ekonomi" yer almaktadır. Kamu sağlığı 289 kez, ekonomi ise 251 kez araştırmalarda yer bulmuş olup, bu iki alanın eşitsizlik üzerindeki etkilerini incelemek açısından kritik rol oynadığı anlaşılmaktadır. Bunun yanı sıra, "sosyal bilimler" ve "politik bilimler" de önemli bir yer tutmaktadır. Sosyal bilimler alanında yapılan araştırmalar 170 kez, politik bilimler ise 168 kez incelenmiş, bu da sosyo-ekonomik eşitsizliklerin sadece ekonomik değil, aynı zamanda sosyal ve politik bağlamda da ele alındığını göstermektedir.

Tablo 4'teki veriler ayrıca, disiplinlerin geniş bir çeşitliliğe sahip olduğunu ve sosyo-ekonomik eşitsizlik araştırmalarının çok sayıda alanla kesiştiğini göstermektedir. Eğitim, etnik çalışmalar, antropoloji ve kadın çalışmaları gibi disiplinler, eşitsizlik olgusunu farklı perspektiflerden ele alarak toplumsal yapı üzerindeki etkilerini incelemektedir. Bu alanlar, eşitsizliğin toplumsal cinsiyet, etnik kimlik ve kültürel farklılıklar gibi farklı boyutlarını derinlemesine analiz etmektedir.

Daha teknik ve uygulamalı disiplinler de bu araştırmaların bir parçasını oluşturmaktadır. Coğrafya, hukuk ve psikoloji gibi alanlar, sosyo-ekonomik eşitsizliklerin farklı yönlerini anlamak için katkı sunmakta, bu olgunun toplumsal yapılar üzerindeki etkilerini çok boyutlu bir şekilde ele almaktadır. Ayrıca, sağlık politikaları, demografi, ve bölgesel-kentsel planlama gibi alanlar, eşitsizliklerin mekânsal ve bölgesel dağılımlarını inceleyerek, bu konuda yeni perspektifler sunmaktadır.

Bu veriler, sosyo-ekonomik eşitsizlik araştırmalarının oldukça geniş bir disiplinler arası çerçevede ele alındığını ve farklı bilim dallarının bu araştırmalara katkı sunduğunu göstermektedir. Disiplinlerin çeşitliliği, eşitsizliklerin yalnızca bir alana hapsedilemeyecek kadar karmaşık ve çok boyutlu bir konu olduğunu ortaya koymaktadır. Bu da, literatürdeki disiplinler arası yaklaşımın, eşitsizlik olgusunu daha derinlemesine ve kapsamlı bir şekilde ele almaya olanak sağladığını göstermektedir.

### 3.4. Temel, Gelişmekte Olan ve Keşfedilmemiş Temalar

Sosyo-ekonomik eşitsizlikler ve din üzerine yapılan araştırmalar, belirli temalar etrafında toplanmış olup, bu temalar literatürdeki merkeziyet ve gelişim derecelerine göre farklı sınıflara ayrılmaktadır. Verilen grafikler, bu temaların nasıl sınıflandırıldığını ve hangi konuların daha fazla dikkat çektiğini göstermektedir.



#### Grafik 4. Temaların Gelişim ve Merkeziyetine Göre Dağılımı

Relevance degree (Centrality)

Grafik 4'e göre, temaların merkeziyet (relevance) ve gelişim (density) derecelerine göre dört ana kategoriye ayrıldığı görülmektedir. Temel temalar arasında gender (cinsiyet), ethnicity (etnisite) ve race (ırk) yer almaktadır. Bu temalar, literatürde merkezi bir rol oynamakta ve sosyo-ekonomik eşitsizliklerle ilgili en çok çalışılan konular arasında bulunmaktadır. Din ve sosyo-ekonomik eşitsizliklerin bu temalarla nasıl kesiştiği, literatürde önemli bir inceleme alanı olarak karşımıza çıkmaktadır. Cinsiyet, etnik kimlik ve ırk, dinin toplumsal yapılar üzerindeki etkilerini anlamak için sıkça ele alınan başlıklardır ve bu temalar, sosyo-ekonomik adaletsizliklerin derinlemesine incelendiği çalışmaların merkezindedir.



Grafik 5. Temalar Arasındaki İlişkilerin Ağ Analizi

Grafik 5 ise eratürde yer alan temalar arasındaki ilişkileri ve hangi temaların birbiriyle daha sık çalışıldığını gösteren ağ yapısını ortaya koymaktadır. Gender inequality (cinsiyet eşitsizliği), culture (kültür) ve social capital (sosyal sermaye) gibi temalar, gelişmiş ve yaygın olarak çalışılan başlıklar arasında yer almaktadır. Bu konular, sosyo-ekonomik eşitsizliklerin toplumsal bağlamdaki etkilerini ve dinin bu bağlamda nasıl bir rol oynadığını inceleyen araştırmalarda ön plana çıkmaktadır. Kültürel ve toplumsal yapıların din ile kesiştiği noktalar, özellikle sosyal sermaye kavramıyla açıklanmaktadır; bu da toplulukların ve bireylerin sosyal ağlar aracılığıyla dinî ve ekonomik kaynaklara erişimini anlamaya yardımcı olmaktadır. Gelişmekte olan temalar arasında Covid-19, social justice (sosyal adalet) ve mental health (akıl sağlığı) yer almaktadır. Pandeminin etkisiyle sosyo-ekonomik eşitsizliklerin derinleşmesi, bu konuların literatürde daha fazla önem kazanmasına yol açmıştır. Covid-19, özellikle dinî yapıların sosyo-ekonomik eşitsizlikler üzerindeki etkisini vurgulayan araştırmalarda sıkça işlenen bir tema haline gelmiştir. Pandemi, sosyal adalet ve akıl sağlığı gibi konuların, sosyo-ekonomik eşitsizliklerle olan ilişkisini daha görünür hale getirmiş ve bu ilişkilerin dinle olan bağlantısı araştırmalarda yeni bir boyut kazanmıştır.

Niş temalar arasında ise happiness (mutluluk), subjective wellbeing (öznel iyi oluş) ve life satisfaction (yaşam memnuniyeti) gibi konular yer almakta olup, bu temalar daha bireysel ve psikolojik düzeyde incelenmektedir. Din, bireylerin yaşam kalitesi üzerindeki etkisini bu bağlamda şekillendirirken, mutluluk ve yaşam memnuniyeti gibi konular daha dar kapsamlı çalışmaların odak noktasını oluşturmaktadır. Aynı şekilde, secularization (sekülerleşme) ve capitalism (kapitalizm) gibi teorik temalar da sosyo-ekonomik eşitsizlikler ile din arasındaki ilişkiyi daha geniş bir perspektiften ele alan çalışmalarda ele alınmaktadır.

Keşfedilmemiş ya da gelişmekte olan temalar arasında India (Hindistan), caste (kast sistemi) ve Israel (İsrail) gibi daha bölgesel ve kültürel bağlamlara odaklanan konular bulunmaktadır. Bu temalar, sosyo-ekonomik eşitsizliklerin yerel dinî ve toplumsal yapılar üzerindeki etkilerini anlamak için önemli alanlar sunmaktadır. Özellikle Hindistan'daki kast sistemi, dinin sınıfsal yapı ile nasıl kesiştiğini ve bu kesişimin sosyo-ekonomik eşitsizlikleri nasıl derinleştirdiğini incelemekte olup, literatürde henüz tam anlamıyla gelişmemiş bir araştırma alanı olarak dikkat çekmektedir.

Bu iki grafiğe göre şunu söylebiliriz ki; literatürde yer alan temel temalar cinsiyet, etnisite ve ırk gibi geniş çapta ele alınan konuları içerirken, gelişmekte olan temalar Covid-19, sosyal adalet ve akıl sağlığı gibi daha güncel meseleler üzerine yoğunlaşmaktadır. Niş temalar ise bireylerin mutluluk ve yaşam memnuniyeti gibi daha öznel konulara odaklanmakta, keşfedilmemiş temalar ise bölgesel ve kültürel farklılıklar üzerinden incelenmektedir. Bu temalar arasındaki güçlü ilişkiler, sosyo-ekonomik eşitsizliklerin din ile olan karmaşık etkileşimini daha derinlemesine anlamamızı sağlamaktadır.

## 4. Tartışma ve Sonuç

Bu çalışma, sosyo-ekonomik eşitsizlikler üzerine yapılan akademik çalışmaların son yıllarda disiplinler arası iş birlikleri ve tematik çeşitlilik açısından önemli bir artış gösterdiğini ortaya koymaktadır. Bibliyometrik analizler, bu alandaki akademik üretimin niceliksel olarak büyük bir artış yaşadığını ve bu araştırmaların birçok farklı disiplinin katkılarıyla genişlediğini doğrulamaktadır. Din, sosyoloji, ekonomi gibi farklı disiplinlerin katkılarıyla sosyo-ekonomik eşitsizliklerin hem sosyal hem de ekonomik boyutlarının derinlemesine ele alındığı görülmektedir.

Çalışmanın bulguları, literatürde özellikle cinsiyet, etnisite ve ırk gibi sosyal kategorilerin merkezi bir rol oynadığını ve bu kategorilerin eşitsizliklerle olan ilişkilerinin akademik alanda geniş bir şekilde tartışıldığını göstermektedir. Bu sosyal kategorilerin, din gibi kültürel unsurlarla nasıl kesiştiği ve bu kesişimin sosyo-ekonomik eşitsizlikleri nasıl etkilediği, araştırmaların önemli bir parçasını oluşturmaktadır (Crenshaw, 1989; Collins, 2015). Ancak disiplinler arası katkılar arasında bazı dengesizlikler gözlemlenmiştir; örneğin, bazı disiplinler (sosyoloji ve politika gibi) daha az yer bulurken, din ve ekonomi gibi alanların daha fazla öne çıktığı tespit edilmiştir.

Ayrıca, Covid-19 ve sosyal adalet gibi güncel temaların literatürde hızla yükselen başlıklar olduğu ve sosyo-ekonomik eşitsizliklerin bireyler ve topluluklar üzerindeki etkilerini daha belirgin hale getirdiği görülmektedir. Bu temalar, pandemi sürecinde sosyo-ekonomik eşitsizliklerin nasıl derinleştiğine dair yeni araştırma alanları açmış ve bu bağlamda daha fazla çalışmanın yapılması gerektiğini göstermiştir (Blundell et al., 2020; Ahmed et al., 2020; Glover et al., 2020).

Bölgesel dağılım açısından, eşitsizlik araştırmalarının büyük bir kısmının ABD, Birleşik Krallık ve Çin gibi ülkelerden geldiği tespit edilmiştir. Ancak küresel düzeyde henüz kapsayıcı bir coğrafi temsiliyet sağlanamamıştır. Özellikle Asya-Pasifik bölgesindeki (Hindistan gibi) ülkelerin bu alandaki yükselişi, Batı merkezli akademik teorilerin dışına çıkmaya başlamışsa da bu değişim henüz küresel ölçekte daha kapsayıcı bir perspektife dönüşmemiştir (van Meeteren et al., 2016). Eşitsizliklerin bölgesel olarak daha fazla çalışılması ve az temsil edilen coğrafi bölgeler hakkında daha fazla araştırma yapılması, literatürdeki boşlukların doldurulmasına katkı sağlayacaktır.

Bu çalışmanın bulguları, sosyo-ekonomik eşitsizliklerin sadece niceliksel olarak artmadığını, aynı zamanda araştırma yöntemlerinde ve tematik odaklarda önemli bir değişim yaşandığını göstermektedir. Özellikle dinin eşitsizliklerle kesişim noktaları literatürde az çalışılmış ve bu alanda önemli bir boşluk olduğu ortaya konulmuştur. Dinin, bireylerin sosyal hareketliliği, toplumsal fırsat eşitliği ve ekonomik yapılar üzerindeki etkisine dair daha kapsamlı araştırmalara ihtiyaç duyulmaktadır. Literatürdeki bu boşluk, özellikle dinin cinsiyet, etnisite ve ırk gibi diğer sosyal kategorilerle etkileşimini inceleyerek doldurulabilir.

Eşitsizliklerin toplumsal ve bireysel etkilerini daha geniş bir perspektifte incelemek için disiplinler arası iş birliklerinin artırılması gerekmektedir. Ayrıca, sosyo-ekonomik eşitsizliklerin yerel ve küresel bağlamda daha derinlemesine incelenmesi, politika yapıcıların bu sorunlara çözüm üretmesine katkı sunacaktır. Gelecekte yapılacak çalışmaların, özellikle gelişmekte olan ülkelerdeki eşitsizlik dinamiklerini daha kapsamlı bir şekilde ele alarak, bu alandaki literatüre önemli katkılar sağlayabileceği düşünülmektedir.

Sonuç olarak, sosyo-ekonomik eşitsizliklerin çok disiplinli ve çok boyutlu bir mesele olduğu göz önünde bulundurulduğunda hem akademik çalışmaların hem de politika yapıcıların daha kapsamlı, adil ve kapsayıcı çözümler geliştirmeleri gerekmektedir. Eşitsizlik dinamiklerini ele alan gelecekteki araştırmalar, din faktörünü toplumsal ve ekonomik süreçlerin merkezine yerleştirerek, bu alandaki mevcut bilgi birikimini zenginleştirmelidir. Eşitsizliklerin sosyal, ekonomik ve kültürel boyutları hem makro düzeyde toplumsal yapılar hem de bireylerin yaşam kalitesi üzerindeki etkileri açısından daha derinlemesine ele alınmalıdır. Bu çalışma, sosyo-ekonomik eşitsizlik araştırmalarının hangi alanlarda yoğunlaştığını, hangi konularda boşluklar olduğunu ve gelecekte hangi alanlarda daha fazla araştırma yapılması gerektiğini inceleyerek bu alandaki literatüre katkı sağlamaktadır.

# 5. Öneriler

Din faktörünün sosyo-ekonomik eşitsizlikler üzerindeki etkisinin daha kapsamlı bir şekilde incelenmesi gerekmektedir. Gelecekteki araştırmalar, dinin yalnızca bireysel bir inanç sistemi olarak değil, aynı zamanda toplumsal adalet, fırsat eşitliği ve kaynak dağılımını şekillendiren bir yapı olarak ele alınmasını sağlamalıdır. Bu bağlamda, disiplinler arası iş birliklerinin artırılması büyük önem taşımaktadır. Sosyoloji, ekonomi, antropoloji ve siyaset bilimi gibi disiplinlerin katkılarıyla yapılacak çalışmalar, dinin eşitsizliklerle kesişimini daha derinlemesine anlamamıza olanak sağlayacaktır. Ayrıca bölgesel bağlamlara yönelik çalışmaların artırılması, din ve eşitsizlik ilişkisine dair özgün perspektifler sunacaktır.

Sonuç olarak, dinin eşitsizliklerle olan karmaşık ilişkisi, toplumsal ve ekonomik süreçlerin anlaşılmasında önemli bir faktördür. Bu doğrultuda yapılacak araştırmalar hem teorik hem de pratik katkılar sağlayarak literatürdeki önemli boşlukları dolduracaktır.

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