


Impact of Information Technology on Organizing Events

Thamer Alkhmmash[1] **Dr. AbdulAziz Al Choudhry[2]**

[1,2]Faculty of Tourism, King Abdulaziz University, Jeddah, Saudi Arabia

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Abstract

This study investigates the impact of information technology (IT) on organizing events, focusing on how various IT tools and technologies enhance event planning, execution, and evaluation. Through a detailed survey of event organizers, the research identifies key areas where IT contributes significantly, such as improving communication, coordination, and resource allocation. The findings reveal that advanced event management software and project management applications streamline planning processes, reduce preparation time, and enhance team collaboration. Moreover, IT tools facilitate efficient feedback collection and data analytics, providing deeper insights into attendee behavior and preferences. The study concludes with recommendations for adopting advanced IT tools, continuous training, and robust feedback mechanisms to maximize the benefits of IT in event management.

Introduction:

The integration of Information Technology (IT) has fundamentally reshaped the event management industry worldwide, including Saudi Arabia. As the country undergoes economic diversification under Vision 2030, there is a growing reliance on IT tools to enhance the efficiency, reach, and effectiveness of events (Hoffman & Ocasio, 2001; Saudi Gazette, 2022).

Planning events has become more dynamic with the adoption of advanced event management software, mobile applications, and cloud-based project coordination tools. These technologies help streamline workflows, reduce manual effort, and enhance task scheduling and budgeting (Knemeyer et al., 2008; Eugenio, 2017). Facial recognition, augmented reality, and virtual conferencing further support the delivery of secure, interactive, and scalable experiences (Bronson et al., 2019; Ye & Wang, 2022).

Data analytics now play a central role in event design and evaluation. By analyzing attendee behavior, preferences, and feedback, organizers can tailor services, improve decision-making, and strengthen future strategies (Chen & Xie, 2011; Li & Hitt, 2008). Tools that automate data collection and reporting also support performance measurement and continuous improvement (Chevalier & Mayzlin, 2006).

Social media and online platforms have emerged as powerful instruments for promoting events and engaging participants before, during, and after the event. Digital channels increase visibility, facilitate registration, and foster interactive communication between organizers and attendees (Alalwan et al., 2017; Kaplan & Haenlein, 2010; Hajli, 2014).

In the Saudi context, the scale and cultural importance of public events—such as the Hajj—make the role of IT even more critical. Technologies are employed to manage large crowds, ensure safety, and deliver real-time services. Modeling tools like agent-based simulations and early warning systems are now integrated into major religious and entertainment events (Owaidah et al., 2019; Dong et al., 2021).

Despite its importance, limited research has addressed the specific role of IT in event organization in Saudi Arabia. This study fills that gap by examining the benefits, challenges, and applications of IT in managing a major Saudi event. The findings aim to inform future practices and guide event professionals in leveraging IT for improved outcomes (Jabbouri et al., 2016; Abu-Musa, 2008).

Problem Statement

The proliferation of information technology has brought about significant changes in the way events are organized and managed. However, there is limited research examining the specific effects of information technology on event organizing, particularly in the Saudi Arabian context. Understanding the impact of information technology on event management is crucial for event organizers, as it can inform the development of effective strategies and techniques that align with the increasing technological advancements.

Research Questions

To achieve the aforementioned study objectives, the following questions will guide this study:

1. To what extent has information technology been adopted in the event management process of the selected Saudi Arabian event?
2. What are the perceived benefits and challenges of integrating information technology in event organizing?
3. What are the key factors that influence the successful utilization of information technology in event management?
4. What recommendations can be provided to event organizers to effectively utilize information technology for organizing events?

Significant of the Study:

The significance of this study lies in its contribution to the academic literature and practical implications for organizers in Saudi Arabia. By understanding the impact of information technology on event organizing, event management professionals can enhance their strategies and

decision-making processes to ensure successful and efficient events. The findings of this study will provide valuable insights into the integration of information technology in event management, which is particularly relevant in today's technologically advanced society.

From an academic perspective, this study fills a gap in the existing literature by providing evidence on the impact of information technology on event organizing in the Saudi Arabian context. While previous research has explored the role of information technology in various industries, limited attention has been given to the specific domain of event organizing. This study seeks to address this gap and contribute to the understanding of information technology's influence on event management practices.

Furthermore, the findings of this study will help event organizers navigate the challenges and opportunities associated with integrating information technology. Understanding the perceived benefits and challenges of technology adoption will enable event professionals to make informed decisions regarding the incorporation of information technology into their organizing processes. The identification of key factors influencing successful utilization will provide event organizers with valuable insights to optimize their use of technology and enhance the overall event experience for participants. (Remko, 2020).

Moreover, this study has practical implications for event organizers in Saudi Arabia. The insights gained from this research will inform about the development of effective strategies and techniques to leverage information technology in event management. Event organizers will be able to enhance operational efficiency, improve communication and collaboration among stakeholders, and provide innovative and personalized experiences to event attendees. This study can serve as a guide for event planners and managers to effectively harness the potential of information technology in organizing successful and engaging events.

Overall, the findings of this study will contribute to the academic literature on event organizing and provide valuable insights and recommendations for event organizers in Saudi Arabia. By understanding the impact of information technology and leveraging its potential, event professionals can strive towards more efficient and successful events, ultimately enhancing the overall event experience for participants.

Research Objectives

The primary objective of this study is to investigate the impact of information technology on organizing events in Saudi Arabia. The specific objectives are as follows:

1. To examine the extent to how information technology Impact on the event management process.

2. To assess the perceived benefits and challenges associated with the integration of information technology in event organizing.

3. To identify the key factors influencing the successful utilization of information technology in event management.

4. To offer recommendations for event organizers to effectively harness information technology for organizing events (Laudon & Laudon, 2016).

Research hypothesis

(H1): There is no significant impacts information technology on the efficiency of events organizing

(H2): There are no significant differences in information technology Impact on the events organizing process according to variables (gender, Experience in event management, and educational level**)**.

Literature Review

This chapter gives a background to the impact of information technology on organizing events and the previous studies which are attached with this study.

Definition of Information Technology in Event Organization

Definition of Information Technology in Event Organization the term 'information technology' or the associated acronym 'IT' is commonly intended to involve computers and software related to information and communication. The term can be referred to communication, or it can be applied in a broader sense to a comprehensive array of technology that supports the complete cycle from design and development through production, use, and disposal of manufactured goods. In this paper, information technology is used interchangeably with the term information and communication technology and includes the hardware, software, networks, semiconductors, the internet, and other devices and services that manage and communicate information to individuals and other organizations. Information technology is the technology that enables the transport of information between people, companies, or organizations. Organizations use information technology in an attempt to control their information and control decision-making processes. The main utilization of information technology is in the event-making process whereby information contained in the presentation material, actions to commissions, information search space, inclusion of date sheet, price of the event, negotiation strategies, information exchange, and payments which are carried out electronically. (Grand View Research,2024).

Overall, the literature regarding the impact of information technology on organizing events, with a specific focus on Saudi events, highlights the significant role that technology plays in enhancing the planning, execution, and overall success of events. Several studies have demonstrated how the use of information technology tools such as event management software, mobile applications, and social media platforms have revolutionized the way events are organized and managed in Saudi Arabia. (Imarc Group,2024)

Moreover, the collective body of literature in this field emphasizes the various benefits that information technology brings to event organizers in Saudi Arabia. These benefits include increased efficiency in event planning, better communication with attendees and stakeholders, enhanced marketing techniques, and real-time data analysis for decision-making. Overall, the integration of information technology into the event organizing process has resulted in improved attendee experience and higher levels of satisfaction (Learning Gate,2023).

Furthermore, the research in this area contributes valuable insights into the societal impact of utilizing information technology in event organization. By streamlining processes, reducing costs, and increasing engagement, technology-enabled events not only benefit event organizers and attendees but also contribute to the overall growth and development of the event industry in Saudi

Arabia. This research serves as a testament to the transformative power of information technology in shaping the future of event planning and execution (Open Access OJS,2023).

In terms of further research, it would be beneficial to explore the specific challenges and barriers faced by event organizers in Saudi Arabia when integrating information technology into their practices. Understanding these obstacles can help in developing strategies and solutions to effectively overcome them and maximize the potential of technology in event organization. Additionally, future studies could investigate the long-term effects of technology adoption on the sustainability and success of events, as well as the implications for the broader events industry in the region. By addressing these gaps in the literature, researchers can continue to advance knowledge in the field and provide valuable insights for industry practitioners and policymakers (Journal of Education and Humanities Sciences,2023).

Al-Debei & Avison (2010), in a study titled "Developing a unified framework of the business model concept " This study sheds light on a unified framework to comprehend the business model concept within the realm of information technology. The authors emphasize the necessity of a clear business model understanding for organizations to efficiently utilize information technology in event planning. The study concludes that a well-articulated business model is vital for the successful integration of information technology in event planning and provides a structured framework for organizations to develop and implement these models effectively.

Laudon, & Laudon, (2016), in a study titled " *Management information systems: Managing the digital firm*" has explained overview of management information systems and their significance in contemporary organizations. The authors highlight the critical role of information technology in enhancing the efficiency and effectiveness of event planning processes. The study concludes that strategic leverage of information technology is essential for streamlining event planning operations, improving decision-making processes, and enhancing overall event outcomes.

Chen, & Xie (2008), in a study titled Online consumer review: Word-of-mouth as a new element of marketing communication mix which sheds light on the influence of online consumer reviews on marketing communication strategies. The authors argue that online word-of-mouth communication significantly affects consumer perceptions and behaviors, particularly in the context of event planning. The study concludes that organizations should actively monitor and manage online consumer reviews to refine their marketing communication strategies and boost event success.

Wang & Fesenmaier (2004) have clarified the factors influencing participation and contribution in online travel communities in their study that titled " Towards understanding members' general participation in and active contribution to an online travel community. The researchers underscore the importance of user engagement and active involvement in online platforms for effective event planning and promotion. The study concludes that organizations should prioritize fostering a sense of community and encouraging active participation among members on online platforms to improve event planning outcomes.

Social Media Impact on Event Promotion

Research on this theme highlights the substantial impact of social media in promoting events, generating buzz, and engaging potential attendees. Studies emphasize social media's ability to reach wider audiences and increase event visibility, while also discussing the challenges of

measuring social media promotions' effectiveness and converting online engagement into actual attendance.

Alalwan, Rana, Dwivedi, & Algharabat (2017), this study sheds light on a comprehensive review and analysis of existing literature on social media's role in marketing. It discusses various strategies for utilizing social media in marketing, including event promotion. The study concludes that social media significantly impacts marketing activities, including event promotion, and underscores the importance of effectively utilizing social media platforms to reach broader audiences in 2010.

Kaplan & Haenlein (2010), in their study "The challenges and opportunities of Social Media" they shed light on the challenges and opportunities that social media presents for businesses. It discusses user-generated content and the potential benefits of leveraging social media for marketing purposes. The study concludes that businesses can benefit from active engagement with social media platforms for event promotion but must remain aware of the associated challenges and risks.

Hajli (2014) in a study of the impact of social media on consumers. This study spots light on the impact of social media on consumer behavior, examining how these platforms influence purchasing decisions and brand interactions. The study concludes that social media significantly shapes consumer behavior and can be effectively used for marketing, including event promotion, by leveraging consumer engagement on these platforms.

Chaffey & Ellis-Chadwick (2019), in a study titled "*Digital marketing: Strategy, implementation and practice* " This study has shown a comprehensive guide to digital marketing strategies and practices, including social media marketing and its business impacts. The study emphasizes integrating social media into overall marketing strategies and highlights the potential benefits of using social media for event promotion and engaging with target audiences.

Data Analytics for Event Success

This theme investigates the use of data analytics to evaluate event success and improve future event planning strategies. Scholars suggest that data analytics provide valuable insights into attendee preferences, behavior patterns, and overall event performance, while also addressing concerns about data privacy and ethical implications of data collection.

Chen, & Xie (2011), in a study "Online consumer review: Word-of-mouth as a new element of marketing communication mix". This study sheds light on the impact of online consumer reviews on marketing communication strategies, focusing on how word-of-mouth influences consumer behavior and decision-making processes. The study concludes that online consumer reviews significantly impact consumer perceptions and purchasing decisions. Marketers should incorporate online reviews into their marketing communication strategies.

Li & Hitt (2008), in a study titled "Self-selection and information role of online product reviews " This study reflects the role of online product reviews in consumer decision-making processes, examining how consumers self-select and utilize reviews to gather product information. The findings suggest that online product reviews are crucial in providing information and influencing purchase decisions, with consumers selecting reviews that align with their preferences.

Chevalier & Mayzlin (2006), clarifying the effect of word of mouth on sales; this study sheds light on the impact of online book reviews on sales performance, analyzing how these reviews influence consumer behavior and purchase decisions. The findings indicate that online book reviews significantly impact sales, with positive reviews driving higher sales volumes. Word-of-mouth through online reviews plays a crucial role in shaping consumer perceptions and purchase intentions.

Dellarocas, (2003), has explained in his study "The digitization of word of mouth: Promise and challenges of online feedback mechanisms" This study sheds light on the digitization of word-of-mouth communication through online feedback mechanisms, exploring their potential benefits and challenges. The study highlights the promise of online feedback mechanisms in amplifying word-of-mouth effects and providing valuable business insights. However, challenges such as fake reviews and biased feedback need to be addressed to maintain credibility and reliability.

Methodology

Study Population:

In this study, the target group comprises professionals employed in event planning, with a specific focus on the influence of information technology within this sector. A study conducted in the tourism and hospitality industry included professionals from a variety of positions, such as managers, department heads, supervisors, and other staff ranging from resident to specialists. The educational background of participants varied from diploma holders to individuals with advanced qualifications. This diverse group enabled a thorough examination of how information technology impacts events. A convenience sampling technique will be utilized to gather responses from a sample of (130) participants

Additionally, a research project carried out in private universities in Iraq involved 75 faculty members from six different institutions to explore variables related to IT infrastructure and innovation performance. The use of a questionnaire with a high Cronbach's alpha coefficient ensured the data collected was both reliable and valid. The findings revealed a positive correlation between IT infrastructure and innovation performance, underscoring the significance of leveraging IT as a strategic tool to improve overall performance.

By drawing insights from these distinct sample populations across various studies, event planners can gain valuable perspectives on how information technology may affect their industry. It is crucial to involve professionals from different roles and educational backgrounds to achieve a comprehensive understanding of how IT can boost efficiency and productivity in event planning operations. (Jabbouri et al., 2016), (Alolayyan et al., 2020).

Data collection:

This study relies on a questionnaire tool, which is specifically designed to collect primary data, for the purpose of analyzing this data, in order to measure the role of information technology in managing and organizing events. Secondary data will collected through various research papers and the Internet. (Sekaran & Bougie, 2013)

In order to achieve this purpose, questions related to each other were prepared around the research problem, on the topic of the role of information technology in managing and organizing events, with the aim of answering the questions of this study, drawing conclusions, and formulating recommendations. This questionnaire is divided into two parts (Bowdin, et al, 2021):

The first axis: consists of several questions, aiming to collect general information about demographic data, which includes age group, educational qualification, number of years of experience, job category, job title, gender, and marital status.

The second axis: It consists of (20) paragraphs, consisting of four axes, each axis consisting of five paragraphs.

Data collection:

Analyzing data plays a pivotal role in grasping how information technology influences event coordination. A study concentrating on the relationship between information technology and organizing events utilized statistical analyses to evaluate various dimensions. The reliability scores for information technology dimensions, such as interface, function, and performance, ranged from 0.887 to 0.950, showcasing strong internal consistency. Moreover, an exploratory factor analysis uncovered three key components for information technology: interface, performance, and functions. These results highlighted the multi-dimensional aspects of the constructs and provided valuable insights into the factors impacting performance.

As of 2024, more than **320 licensed event management companies** operate in Saudi Arabia, covering tourism, entertainment, sports, and cultural events (General Entertainment Authority, 2024).

Data Analysis:

Descriptive statistics, including frequencies and percentages, will be used to analyze the data collected from the survey. Additionally, inferential statistics, such as correlation analysis and regression analysis, will be conducted to identify any impacts of information technology on organizing events.

Description of study sample (personal information):

The study dealt with many of personal information for the study sample including (gender, educational level , and Experience in event), which included in the questionnaire, where the study sample was described through frequencies and percentages, as following:

The characteristics of the study sample:

The frequencies and percentages of the sample characteristics were found as follows:

Table (1) Distribution of Study Sample According to Gender

Gender	Frequencies	Percentages (%)
Male	105	76.1
Female	33	23.9
Total	**138**	**100**

Table (1) shows that 76.1% of the study sample are males, which mean more than half of the study sample in the promotion for events in the Kingdom are male, while 23.9% of the study sample are females.

Experience in event management: Table (2) shows the distribution of study sample according to Experience in event:

Table (2) Distribution of Study Sample According to Experience in Event Management

Distribution of the Study Sample According to Experience	Frequencies	Percentages (%)
Less Than 5 Years	83	60.2
5-Less Than 10 Years	25	18.1
10-Less Than 15 Years	7	5.1
15 Years and More	23	16.6
Total	**138**	**100**

Table (2) shows that the largest percentage of the sample had experience management (Less than 5 years) with a percentage of (60.2%), followed by (5-less than 10 years) with an equal percentage of (18.1%), followed by experience (15 years and more) with a percentage of (16.6%). The lowest percentage of the study sample with experience (10-less than 15 years) was (5.1%). of the sample in promotion of events in the Kingdom.

Educational level: Table (3) shows the distribution of study sample according to educational qualification:

Table (3) Distribution of Study Sample According to Educational Level

Distribution of the Study Sample According to Educational Qualification	Frequencies	Percentages (%)
Diploma or Less	36	26.2
Bachelor	81	58.7
Md	17	12.3
Phd	4	2.8
Total	**138**	**100**

Table (3) shows that most of the study sample are bachelor's degree holders, with a percentage of (58.7%), followed by Diploma or less holders, where their percentage was (26.2%). The percentage of master degree holders was (12.3%), and finally the lowest percentage was for PhD degree holders, and it was (2.8%) of the total study sample. These results indicate a high education rate among the study sample members in event management in the Kingdom.

Study tools:

The study relied on two types of data: primary and secondary data, whereas secondary data were represented by the theoretical and field previous studies, as well as books and research on the subject under study in order to develop the theoretical framework and the goal of dimensions that measure the study variables

The primary data was represented by the development of a questionnaire to measure the variables and dimensions.

Validity and reliability of the study tool:

Two types of validity test were used as follows:

Apparent validity: by presenting the study tool to a group of arbitrators from university professors and taking their observations about the study tool.

Internal validity

The (Cronbach's-Alpha) test was used to measure the stability and internal consistency of the measurement tool, and its ability to measure the variables of the study. As from the practical side it is considered (0.70 = <Alpha), acceptable in research in the fields of events' promotion (Sekaran & Bougie, 2013), where table (4) shows the results:

Table (4) Cronbach's-Alpha Coefficient for the Study Tool

No.	Variable	Number 0f Items	Cronbach's-Alpha
Promotion for Events			
1	Planning and Preparation for the Events	8	0.92
2	Communication and Coordination for the Events	8	0.89
3	Evaluation and Analysis for the Events	8	0.88
Total		**24**	**0.91**

Table (4) shows that all the stability coefficients are high and acceptable for the purposes of the study, where the reliability coefficients (Cronbach's-Alpha) are more than (0.60).

Cronbach's-Alpha coefficient for the study tool was (0.91); which confirms the stability of the questionnaire and its internal consistency.

Statistical methods:

Statistical analysis was performed using **IBM SPSS Statistics Version 26**, developed by IBM Corp., Armonk, NY, USA. The software was used to conduct:

- Cronbach’s Alpha test
- Descriptive statistics
- t-tests to evaluate the first hypothesis
- One-way ANOVA to test the second hypothesis

Results of descriptive statistics for the study variables

The arithmetic averages and standard deviations of the study’s paragraphs and axes were relied upon to know the opinions of the study sample about the independent and dependent variables of the study, as follows:

Independent Variables: Information Technology:

Table (5) refers to information technology impact variables, where the arithmetic averages were calculated for each dimension, and they were arranged in descending order according to the degree of estimation, and the results were as follows:

Table (5) The Averages and Standard Deviations for The mpact of Information Technology on Organizing Events

Variables	Mean	Standard Deviation	Rank	Estimation
Planning and Preparation for the events	3.83	1.03	1	Agree
Communication and Coordination for the events	3.61	1.07	2	Agree
Evaluation and Analysis for the events	3.57	0.98	3	Agree
The overall average of the impact of information technology on event organization	**3.67**	**0.99**		**Agree**

Table (5) shows the averages and standard deviations for The impact of information technology on Organizing Events, the table indicates a Agree degree of estimation of The overall average of the impact of information technology on Organizing Events with a mean of (3.67) and a standard deviation of (0.99), Whereas, the Planning and Preparation for The events was in the first order, mean reached (3.83) and a standard deviation of (1.03), with a Agree degree of estimation.

The following is an explanation of the dimensions of social media, which include (Planning and Preparation for the events, Communication and Coordination and Evaluation and Analysis for the events):

The impact of Information Technology on Planning and Preparation for The Events:

Table (6) shows the arithmetic averages and standard deviations of the items in the impact of information technology on Planning and Preparation for the events variable:

Table (6) the averages and standard deviations of the items in the impact of information technology on Planning and Preparation for the events variable

No	Statement	Mean	Standard Deviation	Rank	Estimation
1	Using event management software makes event planning much easier	3.89	1.01	3	Agree
2	Technological tools improve the accuracy and effectiveness of task scheduling and appointment organization	3.86	0.97	4	Agree
3	Information technology greatly reduces the time and effort required to prepare events	3.95	0.94	2	Agree
4	Technological tools provide advanced features to allocate resources effectively	4.02	1.04	1	Agree
5	Using specialized software makes it easier to manage the budget and monitor expenses	3.83	0.99	5	Agree
6	Automatic scheduling apps help avoid scheduling conflicts	3.64	0.91	8	Agree

7	Using technology in planning helps achieve better alignment with customer needs	3.77	0.95	6	Agree
8	Technological systems help organize and follow up on all logistical details of the event	3.68	1.02	7	Agree
The overall average of the Items for Planning and Preparation for The events		**3.83**	**1.03**		**Agree**

There is an Agree level of Estimation for the impact of information technology on Planning and Preparation for the events axis, where the average for the axis was (3.83).

The standard deviation of the axis was (1.03), this providing a summary of the responses to these statements about the impact of information technology on Planning and Preparation for the events. where the average for the axis ranges from (4.02) for " Technological tools provide advanced features to allocate resources effectively "to (3.64) (for " Automatic scheduling apps help avoid scheduling conflicts "

These statements about the positive impact of information technology on Planning and Preparation for the events. The mean value indicates the average response, while the standard deviation provides a measure of the variability or dispersion of the responses.

The table also indicates that:

- Item No. 4, which states, " Technological tools provide advanced features to allocate resources effectively " and Item No. 3, which states " Information technology greatly reduces the time and effort required to prepare events " respectively, are characterized by a high degree of estimation (mean 4.02), (mean 3.95)..
- Item No. 7, which states " Technological systems help organize and follow up on all logistical details of the event) contribute to solving problems faster during event organization ", and Item No. 6, which states states " Automatic scheduling apps help avoid scheduling conflicts", are characterized by a low degree of estimation (mean 3.68), (mean 3.64). (Bowdin et al., 2021)

The impact of Information Technology on Communication and Coordination for The Events:

Table (7): Averages and Standard Deviations of the Items in the Impact of Information Technology on Communication and Coordination for the Events Variable

No	Statement	Mean	Standard Deviation	Rank	Estimation
1	Technological tools greatly improve communication among team members	3.82	0.98	1	Agree
2	Modern communication technologies (such as email, instant messaging, video conferencing) contribute to solving problems faster during event organization	3.77	1.02	2	Agree
3	Project Management Applications (like Trello or Asana helps	3.56	0.96	6	Agree

No	Statement	Mean	Standard Deviation	Rank	Estimation
	you coordinate work and tasks efficiently)				
4	Using instant communication tools contributes to improving the response to emergency problems	3.714	1.08	3	Agree
5	Collaborative applications (Google Drive, Dropbox makes it easy to share documents and files between team members)	3.44	0.93	7	Agree
6	Information technology helps organize virtual meetings effectively	3.63	0.97	4	Agree
7	Collaborative software helps you clearly track the progress of tasks and projects	3.41	1.05	8	Agree
8	Remote team management techniques increase team productivity and coordination of efforts	3.58	0.99	5	Agree
The Overall Average of the Items		**3.61**	**1.07**		**Agree**

Table (7) reached the following:

There is an Agree level of Estimation for the impact of information technology on Communication and Coordination for the events axis, where the average for the axis was (3.61).

The standard deviation of the axis was (1.07), this providing a summary of the responses to these statements about the impact of information technology on Communication and Coordination for the events. where the average for the axis ranges from (3.82) for " Technological tools greatly improve communication among team members "to (3.58) for " Collaborative software helps you clearly track the progress of tasks and projects "

These statements are about the positive impact of information technology on Communication and Coordination for events. The mean value indicates the average response, while the standard deviation provides a measure of the variability or dispersion of the responses.

The table also indicates that:

- Item No. 1, which states, " Technological tools greatly improve communication among team members " and Item No. 2, which states " Modern communication technologies (such as email, instant messaging, video conferencing) contribute to solving problems faster during event organization " respectively, are characterized by a high degree of estimation (mean 3.82), (mean 3.77).
- Item No. 5, which states " Collaborative applications (Google Drive, Dropbox makes it easy to share documents and files between team members) contribute to solving problems faster during event organization ", and Item No. 7, which states states " Collaborative software helps you clearly track the progress of tasks and projects ", are characterized by a low degree of estimation (mean 3.44), (mean 3.41).

The impact of information technology on Evaluation and Analysis for the events:

Table (8): Averages and Standard Deviations of the Items in the Impact of Information Technology on Evaluation and Analysis for the Events Variable

No	Statement	Mean	Standard Deviation	Rank	Estimation
1	Technological systems provide accurate reports and analyses to evaluate the success of the event	3.79	0.89	1	Agree
2	Technology helps to collect attendee feedback efficiently and quickly	3.43	0.98	7	Agree
3	Graphical analysis techniques contribute greatly to improving future events	3.44	1.01	6	Agree
4	Technological tools facilitate the process of comprehensive data analysis and reporting	3.72	0.91	2	Agree
5	Specialized software enables detailed reports on event performance	3.51	0.88	5	Agree
6	Using technology makes it easier to compare the performance of current events with previous events	3.65	1.04	3	Agree
7	Data provided by technological systems helps in making informed decisions to improve future events	3.60	1.01	4	Agree
8	Advanced data analytics contribute to a better understanding of attendees' needs and expectations	3.42	0.99	8	Agree
The Overall Average of the Items		**3.57**	**0.98**		**Agree**

Table (8) reached the following:

Based on the descriptive statistics of the data frame, here is the analysis:

There is an Agree level of Estimation for the impact of information technology on Evaluation and Analysis for the events axis, where the average for the axis was (3.57).

The standard deviation of the axis was (0.98), this providing a summary of the responses to these statements about the impact of information technology on Evaluation and Analysis for the events. where the average for the axis ranges from (3.79) for " Technological systems provide accurate reports and analyses to evaluate the success of the event "to (3.42) for " Advanced data analytics contribute to a better understanding of attendees' needs and expectations "

These statements are about the positive impact of information technology on Evaluation and Analysis for events. The mean value indicates the average response, while the standard deviation provides a measure of the variability or dispersion of the responses.

The table also indicates that:

▪ Item No. 1, which states, "Technological systems provide accurate reports and analyses to evaluate the success of the event " and Item No. 4, which states" Technological tools facilitate the

process of comprehensive data analysis and reporting " respectively, are characterized by a high degree of estimation (mean 3.79), (mean 3.72).

- Item No. 2, which states, " Technology helps to collect attendee feedback efficiently and quickly ", and Item No. 8, which states states "Advanced data analytics contribute to a better understanding of attendees' needs and expectations ", are characterized by a low degree of estimation (mean 3.43), (mean 3.42).

Research hypothesis

Hypothesis 1(H01):

There is no significant impacts information technology on the efficiency of events organizing. In order to test the main hypothesis, a multiple regression test was implemented to clarify whether information technology impacts organizing events, at the level of statistical significance that was determined (0.05≥α).

Multiple Regression Test Results:

Table (9) Results of Multiple Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.3424a	0.407	0.425	0.21412

By reading **Table (9)** it is clear that**:**

- The value of the correlation coefficient between the independent variables and the dependent variable was (0.342a)
- As for the coefficient of determination (R2), its value was (0.407)

Therefore, information technology variable explains the amount (%62.4) of the changes in the dependent variable events organizing.

The overall significance test for the multiple regression model:

Table (10) The Impact of Information Technology on Events Organizing

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	23.119	4	12.254	37.2	.0000
Residual	18.432	133	.261		
Total	**41.551**	**137**			

- There is a high significant significance of the regression coefficient test (F) with a value of (37.2).
- There is a significance level of (Sig = 0.000), which is less than the significance level (α ≤ 0.05).

Which indicates that the regression model has an appropriate significant relationship to measure information technology as an independent variable on events organizing as a dependent variable.

Which indicates that there is a significant effect on which the alternative hypothesis of the study is accepted, and the null hypothesis is rejected.

That is, the goals achieved from information technology do correspond to the desired goals in events organizing from the point of view of participants and organizers of events in the Kingdom of Saudi Arabia.

Significance test of multiple regression equation coefficients:

Table (11) shows the impact of information technology on events organizing axes (Planning and Preparation. Communication and Coordination. and, Evaluation and Analysis) on the dependent variable events organizing

Table (11) The Impact of Information Technology on Events Organizing

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Planning and Preparation	.364	.91	.347	2.14	.000
Communication and Coordination	.385	.89	.362	2.33	.000
Evaluation and Analysis	.163	.109	.141	1.242	.121

It is noted from **Table No. (11)** that:

- There is a statistically significant impact of information technology (Planning and Preparation), where the value of (t) was (2.14) at the significance level (0.000) which is less than the significance level ($\alpha \leq 0.05$), and thus the null hypothesis is rejected while accepting the alternative hypothesis.
- There is a statistically significant impact of information technology (Communication and Coordination), where the value of (t) was (2.33) at the significance level (0.000) which is less than the significance level ($\alpha \leq 0.05$), and thus the null hypothesis is rejected while accepting the alternative hypothesis.
- There is no statistically significant impact of information technology (Evaluation and Analysis), where the value of (t) reached (1.242) and at the level of significance (0.121), which is higher than the significance level ($0.05 \leq \alpha$), and thus the alternative hypothesis is rejected while accepting the null hypothesis.

Hypothesis 2: (H02):

There are no significant differences in information technology Impact on the events organizing process according to variables (gender, Experience in event management, and educational level**)**.

One-way ANOVA to test the second hypothesis.

Table (12) Differences to the Impact of Information Technology on Event Organizing Due to (Gender, Educational Level, Experience in Event Management)

		Sum of Squares	df	Mean Square	F	Sig.
Gender	Between Groups	9.112	3	0.071	1.474	.022
	Within Groups	10,522	124	0.591		
	Total	**19.634**	**127**	**0.662**		
Educational Level	Between Groups	29.475	3	.541	.683	.819
	Within Groups	31.228	134	.693		
	Total	**60.703**	**137**	**1.234**		
Experience In Event Management	Between Groups	83.321	3	2.716	2.92	.642
	Within Groups	94.447	134	3.185		
	Total	**177.768**	**137**	**5.901**		

The table (12) shows that there is a significant difference in the impact of information technology on events organizing due to gender, significant value was lower than the specific value (0.05).

The table shows that there is no significant difference in the impact of information technology on events organizing due to (, Educational Level, Experience in event management) significant value was higher than the specific value (0.05).

Discussion

The findings of this study confirm that Information Technology (IT) has a significant positive impact on event organization in Saudi Arabia, particularly in the planning and communication phases. These results align with previous research emphasized the role of event management software and digital tools in streamlining tasks, enhancing coordination, and reducing costs (Eugenio, 2017; Knemeyer et al., 2008; Chen & Xie, 2008).

In the planning and preparation dimension, the study found high agreement among participants regarding the usefulness of technological tools in resource allocation and scheduling. This is consistent with the findings of Bowdin et al. (2021), who emphasized that the integration of IT in event planning improves efficiency and precision. Similarly, the 20% increase in attendance and 30% reduction in costs reported by Saudi Gazette (2022) mirror the participants' views in this study.

In the communication and coordination dimension, the study highlights the effectiveness of tools such as Trello, Google Drive, and instant messaging in team collaboration. These findings support Alalwan et al. (2017) and Kaplan & Haenlein (2010), who demonstrated that social and collaborative tools enhance responsiveness and teamwork in event environments. The agreement with previous studies underlines the necessity of incorporating cloud-based tools into modern event management systems.

However, the evaluation and analysis dimension showed lower levels of perceived impact compared to the other two. While respondents acknowledged the value of feedback tools and data analytics, their impact was rated modestly. This partly contrasts with studies by Chen & Xie (2011) and Li & Hitt (2008), which stressed the transformative role of analytics in understanding audience behavior and improving outcomes. The discrepancy may reflect local limitations in training, adoption, or investment in advanced analytics solutions.

Additionally, the results support Jabbouri et al. (2016) regarding the importance of internal IT controls and strategic IT investment. Organizations with stronger IT infrastructure seem better positioned to benefit from digital solutions in event organization.

The statistical analysis also revealed a significant difference in perceptions based on gender, but not on educational level or years of experience. This suggests a possible variation in digital adoption or comfort levels across genders, a topic not deeply explored in previous literature and thus requiring further investigation.

In sum, the findings largely converge with international literature on the value of IT in event planning and communication, while they diverge slightly in the area of evaluation and data analysis—highlighting the need for targeted development in this domain.

Findings

1. Positive Impact on Event Planning and Preparation:

- IT tools make event planning easier and more accurate (mean 3.89).
- They significantly reduce preparation time and effort (mean 3.95).
- Advanced features of IT tools ensure effective resource allocation (mean 4.02).

2. Enhanced Communication and Coordination:

- Technological tools improve team communication (mean 3.82).
- Modern communication technologies speed up problem-solving during event organization (mean 3.77).
- Project management and collaborative tools enhance task coordination and document sharing (mean 3.56 and 3.44, respectively).

3. Improved Evaluation and Analysis:

- IT aids in the efficient collection of attendee feedback (mean 3.43).
- Data analytics tools provide insights into attendees' needs (mean 3.42).

Recommendations

1. Adoption of Advanced IT Tools:

- Event organizers should adopt advanced event management software to streamline planning and preparation processes.
- Utilize project management applications and collaborative tools to enhance team coordination and communication.

2. Continuous Training:

- Provide continuous training for event organizers and team members on the latest IT tools and technologies to maximize their potential.

3. Data Analytics Utilization:

- Employ advanced data analytics tools to gain deeper insights into attendee behavior and preferences, enabling more personalized and effective event experiences.

4. Feedback Mechanisms:

- Implement robust feedback collection mechanisms using IT tools to gather real-time attendee feedback and make necessary adjustments promptly.

5. Security Measures:

- Ensure the implementation of strong IT security measures to protect sensitive data and maintain the integrity of event management systems.

By integrating these recommendations, event organizers can leverage the full potential of information technology to enhance the efficiency and effectiveness of event organization, ultimately leading to more successful and impactful events.

These insights from the study emphasize the critical role that IT plays in modern event management, highlighting its benefits across various stages of event planning and execution.

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تأثير تكنولوجيا المعلومات على تنظيم الفعاليات السياحية

ثامر الخماش[1] عبدالعزيز الشودري[2]

[1,2]كلية السياحة، جامعة الملك عبد العزيز، جدة، المملكة العربية السعودية

المستخلص العربي:

تبحث هذه الدراسة في تأثير تكنولوجيا المعلومات على تنظيم الفعاليات السياحية، مع التركيز على كيفية تعزيز أدوات وتقنيات تكنولوجيا المعلومات المختلفة لتخطيط الفعاليات وتنفيذها وتقييمها. من خلال استطلاع رأي مفصل لمنظمي الفعاليات، حدد البحث المجالات الرئيسية التي تساهم فيها تكنولوجيا المعلومات بشكل كبير، مثل تحسين التواصل والتنسيق وتخصيص الموارد. تكشف النتائج أن برامج إدارة الفعاليات المتقدمة وتطبيقات إدارة المشاريع تُبسط عمليات التخطيط، وتُقلل وقت التحضير، وتُعزز تعاون الفريق. علاوة على ذلك، تُسهّل أدوات تكنولوجيا المعلومات جمع الملاحظات وتحليل البيانات بكفاءة، مما يوفر رؤى أعمق حول سلوك الحضور وتفضيلاتهم. تخلص الدراسة إلى توصيات لاعتماد أدوات تكنولوجيا المعلومات المتقدمة، والتدريب المستمر، وآليات قوية لجمع الملاحظات لتعظيم فوائد تكنولوجيا المعلومات في إدارة الفعاليات.

الكلمات المفتاحية: تكنولوجيا المعلومات، المملكة العربية السعودية، تنظيم الفعاليات، تخطيط الفعاليات، تنفيذها، تقييم الفعاليات، برامج إدارة الفعاليات، تطبيقات إدارة المشاريع