

MAHMOUD HANY M. DALLOUL
Faculty of Accountancy, Universiti Teknologi Mara (UiTM)
Shah Alam, Selangor, Malaysia
mabmoood21@gmail.com

ZURAEDA BINTI IBRAHIM
Faculty of Accountancy, Universiti Teknologi Mara (UiTM), Malaysia
zurea229@uitm.edu.my

SHARINA TAJUL URUS
Faculty of Accountancy, Universiti Teknologi Mara (UiTM), Malaysia
sharena675@uitm.edu.my

ACCOUNTING INFORMATION SYSTEMS AND FINANCIAL CRISES: INSIGHTS INTO LOCAL GOVERNMENTS

ABSTRACT

The main purpose of this study is to investigate issues related to accounting information systems and the financial crisis in the Palestinian local authorities. This study follows the qualitative method, as it relied on reports issued by governmental and oversight agencies, scientific articles, previous studies, press statements, and reports published by the Palestinian local authorities and the Palestinian Ministry of Local Government. The most important issues related to the financial crisis and the success of accounting information systems in the Palestinian local authorities were discussed. Thus, the study contributes to enriching the literature related to the Palestinian local authorities' reality. Improving awareness of the reality of accounting information systems and the financial crisis in the Palestinian local authorities. Contribute to establishing an integrated vision of the accounting information systems' role in managing financial crises. The study reached many conclusions, the most prominent of which was that the financial crisis management effectiveness stems mainly from the adoption of successful accounting information systems. The study provided many recommendations and directions for future studies towards a further investiga-

tion of the relationship between the success of accounting information systems and the effectiveness of managing financial crises.

KEYWORDS: Accounting Information Systems, Financial Crises, Financial Crisis Management, Palestinian Local Authorities, Local Government, Local Authorities, Gaza Strip, Palestine.

INDEX: 1. Introduction. - 2. Issues in the Accounting Information Systems of the Palestinian Las. - 3. Issues in the Financial Crisis of the Palestinian Las. - 4. Discussion and Conclusion. - 5. References and bibliography.

1. Introduction

In fact, the term 'crisis' originated from public administration sciences in reference to the role of the state in the face of sudden public disasters and emergency conditions, such as earthquakes, floods, and total wars (Xue, Zhang & Zhong, 2022; Al-Bazzaz, 2001; Kapucu, Özerdem & Sadiq, 2022). A crisis is said to be bad and can only result in negative consequences. Without a proper action plan, the event and its aftermath may significantly damage an organization and its employees, products, services, financial condition, and reputation (Claeys & Coombs, 2020; Pedersen, Ritter & Di Benedetto, 2020; Sutherland, 2013; Suleimany, Mokhtarzadeh & Sharifi, 2022). A crisis requires confronting it with a rational decision capable of containing it, reducing its effects, and restoring the situation to what it was before. It puts pressure on the decision-maker to confront the situation soonest possible, and failure to take immediate action could produce negative results. Time constraints, limited information, and a lack of data could increase internal and external pressures on the organization to fulfil its obligations and meet its needs (Al-Dabbagh, 2020; Al-Hariri, 2010; Çapar & Koca, 2022; Abu Salout, 2015; Al Thani & Obeidat, 2020).

In this context, with regard to the role of the information system related to the financial crisis, information has currently become the most valuable resource. Information obtained in a timely and appropriate form has become the basis for the success of every decision made. Therefore, there is no successful management without the availability of information. Hence, the funds allocated by an organization to undertake a sophisticated information system enable

it to know the obstacles that it may face. The accounting information system (AIS) expresses a set of interrelated elements that collect, sort, classify, operate, analyse, save the data, and transform it into information. The extracted information related to the financial aspects of the institution's activity should be retrievable at the time of need. Generally, AIS should provide the decision-makers with accurate information at the right time, in the proper form, quantity, and type (Dagiliene & Šutiene, 2019; Ali & Ahlam, 2016; Dalloul, binti Ibrahim, & Tajul Urus, 2022b; Elsharif, 2019; Vahedi & Arvand, 2020; Dalloul, 2019).

In light of the risks of crises and disasters faced by an organization, AIS requires adequate management at its various stages. Operational efficiency should be raised to face financial crises. Rapid changes in economic, political, and social life threaten the sustainability of an organization and contribute to the different types of crises faced by contemporary organizations. An organization's reputation is at stake if it cannot deal with crises, including financial crises. Consequently, effective financial crisis management at all stages, whether before, during, or after the occurrence, is critical (Mubarak, 2021; Zwyalif, 2015; Chahed & Zergoune, 2017; Radwan, 2020).

Local authorities (LAs) have a central place in the public lives of citizens in any country. Their main responsibility is to serve the community and citizens in various areas of life, raise the standard of living, and provide a decent life through developing services, the economy, and social and cultural aspects. In addition, the LAs also provide a clean and beautiful environment, arrange public affairs in various areas of organizational life, rehabilitate cultural values, build bright modern cities, and keep pace with scientific development in all fields. During crises, the local authorities play significant roles in assisting the government in managing crises. According to the Disaster Management Guidelines for Local Authorities issued by the Centre for Natural Disaster Management in South Africa, the local government is at the forefront when dealing

with disasters. When the disaster is not so great, it shall be the sole governmental body to manage it as and when required (Bakir, 2016; Christensen & Lægreid, 2020; Mavhura, 2020; Al-Buhaisi, 2013; Stefanova, 2019; Beshi & Kaur, 2020; Awad, 2010; Amyulianthy, Muda, Said & Setyaningrum, 2021).

In Palestine, the LAs are crucial institutions that operate in times of crisis. These LAs have done their best over the years. However, looking from the point of view of the AIS's success, it would be interesting to investigate issues related to accounting information systems in the LAs. Also, highlight and take a closer look at the financial crisis of the LAs in the southern Palestinian governorates (Gaza Strip). This area is interesting for further investigation due to the recent occurrence of various crises, especially the recurring financial crises.

2. Issues in the Accounting Information Systems of the Palestinian LAs

In the context of the Palestinian government's efforts to shift toward electronic government consistent with technological developments, the Ministry of Local Government (MLG) has a strategic guiding and organizing framework for the transition process of municipalities within the vision 2019-2023. The framework includes many projects and analyses of the current situation in the LAs from various aspects. From the strategic framework for the transformation into electronic municipalities (Ministry of Local Government, 2019), it was observed that some of the analyses were on the reality of information and communication technology, information systems, and financial systems. Many weaknesses have been uncovered. Some of them are:

i) Investment in information technology is related to the nature of the project, the infrastructure, or the existing resources. The project's nature and the size of the financing determine the mechanisms of procurement and set the specifications. Often, it was not based on technological planning that defines the needs and working mechanisms of technological construction in the municipalities. There is also no follow up and evaluation strategy after implementing the project.

ii) Weak financial spending and investment from municipalities in information technology. One of the reasons for this weakness is the limited financial resources, especially in small municipalities, and insufficient awareness of the importance of information technology among employees. Many municipalities do not have a specific employee to maintain the permanence of their systems.

iii) The companies have weak capabilities to develop the information systems, update, and develop programs using the latest technology. The companies monopolize the systems, but they are not able to link the systems to other suppliers. These weaknesses contribute to the high maintenance costs of the computerized systems.

iv) Other weaknesses include lack of governance among the local authorities for their information technology, weak technical and physical capabilities (information technology infrastructure), lack of sufficient technical staff capable of dealing with technology, lack of sufficient expertise within the municipality, and the absence of an administrative body or unit responsible for the systems.

v) Another weakness is the presence of many computerized systems that are not inter-connected and integrated, especially the financial and public service centre systems. This weakness reduces the ability of the LAs to identify and update their needs periodically in terms of information technology. Then, there is the low consideration by the municipalities of the requirements and standards for integrating information systems within the municipality and interconnection with other institutions throughout the investment process. There is no clear policy regarding the use of a particular technology. For example, one municipality received several software tools, programs, and applications from several companies, which constitutes an additional burden on maintenance, follow-up, and licensing fees.

The Palestinian State Audit & Administrative Control Bureau (SAACB) is the highest supervisory body in Palestine. It is also known as the Diwan of Financial and Administrative Control. The Bureau aims to ensure work safety and financial and administrative stability in the State of Palestine with its three authority branches, executive, legislative, and judicial authorities. It also aims to uncover all aspects of financial and administrative deviations, including cases of public office abuse, and ensure that the general performance in Palestine is consistent with the provisions of laws, regulations, decisions, and instructions in force. The performance should be within the LAs' limits and exercised economically, efficiently, and effectively. Moreover, the Bureau works to submit periodic reports covering all public sectors in the State of Palestine. The sectors include the local government sector, where the Bureau reports the financial and administrative conditions to the Ministry of Local Government and its affiliated local government authorities. The following sections discuss the points extracted from the 2016 and 2018 reports that highlighted the financial management oversight, control, and auditing of the accounting and financial information systems used in the Palestinian local authorities. According to the SAACB Report on local authorities for 2018, the majority of the local government authorities suffer from weaknesses in the financial and accounting systems and general weakness in the application of accounting standards that regulate their work. Based on the financial reports issued, the results of the work of the local authorities revealed many gaps and problems in the accounting programs used by some local authorities. The weaknesses make them vulnerable to modification, deletion, or loss. The report also showed that some problems existing in the accounting systems in some municipalities include no segregation of duties, multiplicity of tools for transferring financial data between systems, no plan for the programming department to develop and standardize these systems in line with work needs, and not all departments of the municipalities are using accounting programs (State Audit & Administrative Control

Bureau - State of Palestine: Control & Audit for Construction, Development & Good Governance Enhancement: Annual Report 2018, 2018).

Audit findings reported by the same agency in 2016 (Palestinian State Audit & Administrative Control Bureau Report for 2016) revealed many problems and weaknesses related to the financial aspect and AISs of the LAs. In general, many LAs committed many cases of abuse and irregularities in financial management. They also lack the reinforcement necessary for operations spending, the reliability of some of the accounts, and experienced workers in the financial departments. Overlap in the powers and responsibilities, especially in the financial departments, and the absence of specialization in some jobs resulted in exceeding the approved appropriations in the general budget. Additionally, there were non-compliance with laws, rules, and regulations governing the operations of the exchange and purchase, abuse of credit for some financial resources, misuse by the heads and members of the authorities, manipulation of data and records, and forgery. Many LAs had also violated the provisions of laws, regulations, and instructions that regulate the preparation of budgets and estimation of revenues and expenditures. They were also unable to fulfil their obligations due to the weakness of the collection processes. Some of the direct problems related to the AISs, according to the report, are:

i) Weakness of adequate controls in accounting programs in many LAs in terms of the ability to delete and amend receipt documents and invoices after the process of entering the data,

ii) Lack of specification of powers over the programs and their use, leading to the possibility of financial data being lost or deleted and raising doubts on its reliability and fairness, and

iii) Absence of the necessary security and protection of the accounting systems and central storage devices for databases in some LAs (State Audit & Administrative Control Bureau - State of Palestine: Control & Audit for Con-

struction, Development & Good Governance Enhancement: Annual Report 2016, 2016).

According to the Ministry of Local Government and the Palestinian Municipal Development and Lending Fund, there is no integrated and unified computerized accounting system for all Palestinian LAs that are connected to the Ministry of Local Government. This weakness led to the unavailability of the necessary financial information and data to be used in planning, supervision, and direction processes (Ministry of Local Government: A guide to accounting procedures according to the cash basis, 2012; Municipal Development and Lending Fund: Financial policies and procedures related to a medium or small Palestinian municipality, 2011). A study by Al-Buhaisi (2013) confirmed and revealed that there is a failure of AISs to provide the information needed to make decisions at the right time and a limited degree of detail of that information, which affects its validity in the decision-making process. Weak control over proceeds leads to the possibility of wasting municipal resources and not using the resources in the interest of the society. The loss of the financial statements' ability to properly display the municipalities' business results and financial position leads to a low level of reliance on financial data in municipal decision-making. The study also identified other weaknesses, including the lack of qualified accounting human resources in the municipalities, lack of separation between the different powers and the accountants performing work that contradicts the nature of their profession in the municipality (e.g., collection and accounting work), and poor use of computerized accounting information systems to prove financial transactions. Due to these weaknesses, the financial reports lose their ability to reflect the reality of financial events in the municipalities.

Poor control over some financial transactions and the possibility of their manipulation lead to a waste of municipal funds and resources. The municipalities failed to prepare the statement of financial position (balance sheet). In-

stead, they prepared only the accumulated monthly income and expenses report, which is mainly intended for presentation to the Ministry of Local Government. A modest audit of financial data and information carried out by the Ministry of Local Government indicated a low efficiency of the annual system of budgets prepared by those in charge of financial and accounting work in the municipalities without the participation of the rest of the departments and divisions. Abu Rahma (2008) showed some indications of infrastructure for implementing the advanced accounting systems in the municipalities of the Gaza Strip. However, there is a weakness in developing and updating the accounting systems to keep pace with practical and technological developments and the increasing need for information. Moreover, there are weaknesses in their capabilities to provide accurate information and in the availability of an integrated financial and statistical database that supports planning, coordination, control, and decision-making processes. The difficulties of studying and accurately analysing the costs of some activities and services provided by the municipalities are due to the lack of a capable and efficient system that enables the correct treatment of the activities and services and the weakness in utilizing the available expertise and human cadre to work on developing the system. Salim (2007) showed that accounting information does not help decision-makers in different municipalities make decisions. However, there is a weakness in the municipalities' accounting information systems for comparing accounting information with other municipalities. The administration in the municipalities relies on the accounting information provided by the accounting system in making administrative decisions in a weak way that contradicts scientific methods of decision-making. Ghoneim (2004) showed that there is no data bank (databases) that includes all the information related to the activities of the municipalities in Palestine that can be accessed and used by all Palestinian municipalities, other authorities, and interested parties, including researchers. Several studies and reports have also made recommendations in this re-

gard, including Ghoneim (2004) and Sabbah (2013), who recommended for more studies to be carried out, especially in a Palestinian municipality that has a computerized administrative information system. The Ministry of Local Government: The strategic framework for the transformation into electronic municipalities (2019-2023) (2019) included many proposed activities, such as assessing the current reality of information systems in the local authority, determining the needs of information systems, and carrying out periodic evaluations of information systems and their effectiveness.

The discussions above show the extent of the absence and shortage of studies related to information systems, in general, AISs, in particular, and, specifically, AISs in the Palestinian local authorities operating in the Gaza Strip. Therefore, this study contributes greatly to directing the areas of development in AISs in LAs from a practical point of view, as well as to the theoretical and research perspectives. It would be a comprehensive and integrated starting point for research and studies on other information systems in local authorities.

3. Issues in the Financial Crisis of the Palestinian LAs

Abu Al-Taif (Director of the Strategic Development Planning Project at the Municipal Development and Lending Fund) has indicated that there is an imbalance in the handling of the LAs in the Gaza governorates with the crises they face. The imbalance is due to the absence of an approved emergency plan for Palestinian cities and towns. The leadership level in the LAs adopts a policy of reaction and randomness when dealing with the crises facing the municipalities (Al-Khatib, 2015), including financial crises. Al-Khatib (2015) revealed that there is a weakness in evaluating the efficiency and effectiveness of previous crisis management plans that is important for preventing future crises. The municipalities' performance was not at the required level during the crises and emergencies despite the recurrence of those crises and working at full capacity and potential during the crises (Bakir, 2016). This weakness calls for the dire

need to study the municipalities' capacity to manage the crises they face. In addition, Bakir (2016) revealed that the municipalities do not deal with crises and emergencies as required. In other words, the crises are not well managed. The poor management is due to the shortage of equipment and devices needed in emergencies, insufficient emergency budget, municipal administration's lack of interest in good planning, and no proper forecasting in emergencies. Shortage of human cadres and absence of training programs for technical personnel working during emergencies, lack of training programs in emergency management, and insufficient coordination with external actors operating during emergencies worsened the situation. The study showed the existence of a real financial crisis facing the municipalities and attributed the shortages and weaknesses in some axes to the financial distress afflicting the municipalities. Ghorab (2017) recommended having a special unit for planning and budgets and an integrated accounting system for planning where costs and deviations can be calculated accurately so that management can address them quickly.

This section prominent deal with the financial crises in Palestinian LAs and their various causes, as well as other crises that contributed to the emergence of the financial crises and had a role and effect in exacerbating them. It is necessary to clarify and understand the financial crises that the Palestinian LAs were exposed to, and identify the causes that led to their occurrence and their dimensions to provide a better understanding of the issue concerned in this research. The administration should use the best and most effective scientific methods in handling crises following the phases of crisis management to facilitate effective crisis management, i.e., before, during, and after the occurrence of the crisis.

According to the 2016 SAACB Report, which included the most important audit findings of the Palestinian local government sector, most of the local authorities suffer from a lack of financial resources. The local authorities suffer significant weaknesses in collecting fees and taxes and fail to take deci-

ve action in collecting revenue and accumulated debt from the taxpayers. These weaknesses negatively affect the services provided to the citizens in terms of their diversity and quality, leading to the considerable accumulation of receivables from taxpayers. The low revenue weakened the authorities' capacity to meet their obligations in the face of rising prices of electricity and water, thereby increasing their indebtedness and inability to pay (State Audit & Administrative Control Bureau - State of Palestine: Control & Audit for Construction, Development & Good Governance Enhancement, Annual Report 2016, 2016).

Bakir (2016) showed that the weakness of the municipalities' financial resources and dealing with emergency cases are due to many factors, including the suspension of support to the municipalities by many foreign financiers and international institutions for political reasons as a result of the internal division since 2007. The political and economic blockade imposed on the Gaza Strip and the shortage of building materials has led to a deep decline in private and public construction works, where one of the sources of municipal funding is the collection of building license fees. Poor economic conditions and the high unemployment rate caused the failure and reluctance of many citizens to pay the municipalities' dues (collections). Furthermore, the financial hardship faced by the government resulted in the central government providing low subsidies to municipalities. Al-Assar (2015) mentioned that the municipalities depend on external sources of financing for development and improvement projects. This dependence and the absence of diversification programs in financing and financial sustainability are due to weak self-financing based on collections, self-investment and asset rotation, limited and weak government financial allocations to municipalities, and the municipalities' lack of independence in financial decisions. All the weaknesses led to insufficient resources to cover programs and projects planned within the annual estimated budget of the municipalities, especially the development and improvement budgets.

Earlier, Abu Freya (2013) revealed that the weakness of local funding in the municipalities is due to the bad political and economic situations in the Gaza Strip and the negative culture of citizens towards the price of services, which is seen as a grant that must be provided. The municipal administration in the Gaza Strip priced the municipal services below the real cost. Furthermore, aid and governmental support for the municipalities of the Gaza Strip are low, resulting in most of the municipalities not receiving their financial dues from the central government. The poor support from the government made covering the operational expenses the main concern of the chairman and members of the municipal councils. The real obstacle lies in the Israeli occupation's control of most of the sovereign decisions of the Palestinian state, especially control of the crossings, the manner of distributing aid, and the presence of semi-permanent security instability. The correlation of international aid to the Palestinian territories with the progress of the political settlement process with the Israeli occupation government is considered an obstacle to Palestinian development.

The Palestinian local authorities are exposed to recurrent financial crises exacerbated by the ever-changing state of affairs. The Israeli occupation and its repeated military operations are the most prominent crises facing the Gaza Strip that caused a severe financial impact on the Palestinian local government sector. The most recent and most violent operation in the history of the Gaza Strip happened in July 2014. This military operation caused substantial direct and indirect damages to public and private properties estimated at USD4 billion, according to the National Plan for Early Recovery and Reconstruction (2014). The municipal sector suffered USD70 million from the destruction of roads and USD34 million from the damage in the water and sanitation sectors. The Gaza Strip also experienced the Alexa atmospheric depression in 2013, which caused heavy losses of USD64 million. It also suffered from the Huda low atmospheric depression in 2015 and the Niaama atmospheric depression

in 2016, which led to floods that destroyed many homes, neighbourhoods, roads, and agricultural lands in different areas of the Gaza Strip.

The Gaza Strip has also been suffering from an electricity crisis since 2006 due to the continuous and increasing shortage of electricity as a result of the Israeli siege and recurrent wars. The worsening electricity crisis has cast a negative shadow on all aspects of life including health, water, and the environment. The siege and wars aggravated many other crises and increased their severity. The municipal facilities and work related to electricity, sewage pumping and treatment plants, water delivery services to citizens' houses, waste collection and removal services, maintenance works for machinery and equipment, and all other administrative work all fall under the purview of the LAs (Bakir, 2016; Al Mezan Centre for Human Rights, 2016; Hijazi, 2017). However, due to these destructions, the LAs are among the sectors most affected by the crises.

Additionally, the Coronavirus (Covid-19) pandemic greatly impacted all constituencies, especially the LAs. According to the Union of Gaza Strip Municipalities, represented by its president and chairman of Gaza Municipality, Dr. Yahiya Al-Sarraj, the municipalities of the Gaza Strip are experiencing a financial crisis that has gradually reduced the services provided to more than two million citizens living in the Gaza Strip. Rationing of basic services and municipal expenses to the minimum is a plan by the municipalities to avoid a state of collapse and an effort to provide the service for the longest possible period according to the available capabilities. The Covid-19 pandemic has also exacerbated the financial crisis. The percentage of those obliged to pay municipal bills has decreased to a minimum. According to the estimates of the Union of Municipalities of the Gaza Strip, the total decline in revenues during recent months because of the Covid-19 pandemic is more than 50%. The percentage of those obligated to pay municipal services bills decreased to only 10% at a

time when the municipalities need an amount of USD3 million to return to the previous level.

The Covid-19 crisis has also placed additional financial burdens and responsibilities on the municipalities, represented by collecting quarantine waste, launching intensive awareness programs, activating the personal prevention and sterilization system for employees and visitors, enhancing the personal safety of workers, and sterilizing public facilities, parks, streets, and markets on a daily basis. Sterilization and disinfection of quarantine centres and safe disposal of their waste in sanitary landfills in accordance with global health standards that guarantee the safety of citizens outside the quarantine centres placed a huge financial burden on the municipalities. Similarly, the periodic sterilization projects for vital facilities to confront the Coronavirus increases the financial burden of the municipalities. Al-Batta, the Mayor of Khan Yunis, which is the second largest municipality in the Gaza Strip after the Gaza municipality, indicated that the financial distress afflicting the Khan Yunis municipality has greatly affected the services provided in all basic sectors. He also stressed the municipality's work in light of scarce possibilities due to the Covid-19 pandemic (Al-batta, 2020).

In addition, the Palestinian government does not provide the minimum financial need for the municipalities as part of the financial dues for the benefit of the municipalities, which would have allowed them to continue their work. The government also does not provide the necessary fuel to ensure the continuous operation of sewage pumps, water wells, and municipal mechanisms and vehicles, especially those for waste collection and transfer operations. Neither does it contribute to paying the municipal employees' salaries and filling the municipalities' financial deficits. Municipalities in the Gaza Strip are suffering from suffocating financial crises that have contributed to the reduction and suspension of their services several times, irregularity in paying salaries, and low spending rates since the beginning of the Israeli blockade imposed after Ha-

mas won the legislative elections 14 years ago. The stifling financial crisis and the gradual effects of reduced services may lead to accumulation of waste in the main streets and neighbourhoods, delay in transfer operations, confusion in water distribution schedule, delay in pumping operations to citizens' homes, and an increase in the likelihood of sewage water overflowing in the streets. The municipalities may have to start pumping sewage water toward the seashore if the crises continue to prevent health problems inside the cities. Dr. Al-Sarraj, President of the Union of Gaza Strip Municipalities and Mayor of Gaza Municipality, also indicated that the municipalities are trying to manage the current crises according to the available and simple capabilities (Abu Watfa, 2020; Al-Sarraj, 2020; Abu Aisha, 2020). Abu Al-qumbuz (Head of the Emergency Department in the municipalities of the Gaza Strip) said that all municipalities in the Gaza Strip suffer from a stifling financial crisis and are unable to pay their employees' salaries. He pointed out that the donor countries did not provide the municipalities with emergency and relief projects, similar to previous years, and that the services provided by the municipalities are linked to a continuous electricity supply. The citizen's ability to pay the municipality bill has greatly decreased, noting that only 15% of the citizens pay the bill (Abu Al-qumbuz, 2018).

The rule in crisis management is that every crisis is a problem but not every problem is a crisis, meaning that some small problems may exacerbate and extend their effects to countries and people if they are not addressed immediately or slowed down. Each crisis appears to be a complex, multi-dimensional problem, and the outbreak of the Covid-19 pandemic has proven that belief. The pandemic has also shown that many countries in the world are suffering from a crisis of lack of interest in crisis management (Al-Ketbi, 2020).

Previous studies and reports (Abu Watfa, 2020; Abu Aisha, 2020; Al-Batata, 2020; Al-Sarraj, 2020; Al-Ketbi, 2020; Ministry of Local Government: The strategic framework for the transformation into electronic municipalities

(2019-2023), 2019; State Audit & Administrative Control Bureau - State of Palestine: Control & Audit for Construction, Development & Good Governance Enhancement: Annual Report 2018, 2018; Abu Al-qumbuz, 2018; Ghorab, 2017; Hijazi, 2017; Bakir, 2016; Al Mezan Centre for Human Rights, 2016; State Audit & Administrative Control Bureau - State of Palestine: Control & Audit for Construction, Development & Good Governance Enhancement, Annual Report 2016, 2016; Al-Khatib, 2015; Al-Assar, 2015; Abu Freya, 2013 Al-Buhaisi, 2013; Sabbah, 2013; Ministry of Local Government: A guide to accounting procedures according to the cash basis, 2012; Municipal Development and Lending Fund: Financial policies and procedures related to a medium or small Palestinian municipality, 2011; Abu Rahma, 2008; Salim, 2007; Ghoneim, 2004) showed that there is a weakness in the AISs in the local authorities, which will be reflected in their ability to contribute to managing the financial crises they faced. The International Monetary Fund (IMS) report, The IMF-FSB early warning exercise: Design and methodological toolkit (2010), stated that the causes of crises and financial crises are weaknesses in the economy and the organizations' administrative and accounting systems (Dalloul, binti Ibrahim, & Tajul Urus, 2023). The municipalities' practices related to financial management are still weak, not to mention the administrative fragmentation that prevents the achievement of savings in service provision because of the increase in their size (World Bank: The Third Phase of the Gaza Municipal Development Project, 2017). Thus, it can be seen that AISs play an important role in managing financial crises, and any weakness in the systems would have an impact on the effectiveness and ability of the LAs to manage the crises, including financial crises (Dalloul, binti Ibrahim, & Tajul Urus, 2022a).

There is a lack of studies and research on determining the role AISs play in managing crises, particularly financial crises. Chabani and Chabani (2014) indicated in their study's conclusion that AIS works to reduce uncertainties and turn them into certain cases that contribute to the management and treatment

of financial crises. In order to develop an AIS to manage financial crises, it is recommended to increase the interest in studying the systems because the current world depends on information as the main resource for decision-making, and this century has become dependent on information as a fundamental variable in all fields. Efforts to develop an effective AIS should be intensified.

4. Discussion and Conclusion

The study aimed to investigate issues related to accounting information systems in the Palestinian local authorities. Besides, investigate the financial crisis of the Palestinian local authorities. The study contributes to enriching the literature related to the reality of the Palestinian local authorities. As well as standing on the reality of accounting information systems and the financial crisis in the Palestinian local authorities. Contribute to deepening understanding and identifying aspects of the financial crisis, and understanding the problems and challenges related to the ability of the Palestinian local authorities to effectively manage the financial crisis. Contribute to enhancing the Palestinian local authorities' awareness of the problems and weaknesses related to accounting information systems and their relationship to the effective management of the financial crisis. Contribute to enhancing the vision and drawing attention towards the need to manage the financial crisis in light of the adoption of successful accounting information systems.

The study found the most important issues facing the accounting information systems in the Palestinian local authorities, which are discussed as follows:

1. There is a weakness in the IT infrastructure of the Palestinian local authorities. This will be reflected in the weak effectiveness of accounting information systems, being one of the systems based on that technological structure.
2. Weak integration and interconnection between the various information systems within the Palestinian local authorities. This will limit the availabi-

lity and integrity of the financial and accounting information required for the purpose of decision-making and reduce its quality.

3. The lack of periodic evaluation of information systems in line with the renewed needs and requirements periodically. This reduces the use of accounting information systems, which is reflected negatively in the level of user satisfaction with them, as they do not meet the required needs.

4. The lack of specialized human cadres working to monitor the information systems, and to update them constantly, reduce design errors, and update the data periodically. Which creates many technical errors and inaccuracies in the information provided by the accounting systems, and weaknesses in the services provided by the systems.

5. Accounting information systems do not provide the information necessary to make timely decisions.

6. Accounting information systems do not provide detailed information for decision-making purposes.

7. The loss of the financial statements' ability to properly display municipalities' business results and their financial position, and the low level of reliance on them for decision-making in the municipalities.

From the foregoing, it is clear that many of the previously discussed problems are concentrated in dimensions related to (system quality, information quality, service quality, volume of use, intent to use by the user, and the level of user satisfaction). Thus, future studies should be directed towards further study of these dimensions. With the aim of determining the effectiveness and success of accounting information systems, estimating the volume of development and modernization that these systems need, and identifying the aspects that require care and development. Moreover, assessing the need to completely replace these systems and apply other new systems. User satisfaction and usage variables are also the most important indicators that show the effectiveness and success of accounting information systems and user acceptance of them.

The study found the most important issues facing the financial crisis management of the Palestinian local authorities, which are discussed as follows:

1. Municipalities are exposed to successive financial crises that continue to date, which produced many other crises.

2. The financial crisis worsened greatly during the Coronavirus (Covid-19) pandemic.

3. The lack of a specific system and procedures to deal with the financial crisis in the municipalities, made them unable to manage the crisis in a scientific and organized manner. This resulted in many other crises, which made the municipalities face a complete collapse and stopping the performance of their services completely.

4. There is a defect in handling of local authorities with crises.

5. The lack of a contingency plan approved in the municipalities.

6. The municipalities follow a policy of reaction and randomness when dealing with the municipality's crises.

7. Despite the recurrence of these crises, the performance of the municipalities was not at the required level during crises and emergency cases.

8. The weakness of the Municipalities dealing with emergencies.

9. Lack of municipal administration interest in good planning, forecasting emergencies, and developing potential scenarios for them.

10. The lack of training programs in the field of emergency management.

11. Municipalities lack the most important step in preparing contingency plans, which is analyzing the external and internal environment, which enables them to predict future risks.

12. Municipalities do not benefit from re-evaluating the contingency plan placed or developing a well-structured contingency plan based on lessons learned after each emergency case.

13. Municipalities do not rely on advance contingency planning. However, rely on momentary planning at the time an emergency case occurs.

14. In the absence of an urgent contingency plan, the matter becomes random management, which may increase the size of losses and damages.

15. The reliance on personal and improvisational judgment in estimating plans, confirms the weakness in planning and the plans developed.

16. There is a great lack of studies and research that dealt with the subject of the financial crisis and management of financial crises, understanding the method of crisis management through its stages that are followed in the municipalities, and an understanding of the nature of the steps involved in those stages.

From the foregoing, it is clear that many of the previously identified problems are concentrated in the stages related to financial crisis management (detection of early warning signs, preparedness and prevention, containment and damage reduction, recovery of activity, and learning). Thus, future studies should be directed towards further study of these stages. In order to determine the effectiveness and success of the crisis management system throughout its stages. Identifying the obstacles that hinder and limit the effectiveness of each stage of crisis management. Identify aspects and stages that require care and development.

Accordingly, as a comment and conclusion regarding information systems and financial crisis management in the Palestinian local authorities. Previous studies and reports showed that there is a weakness in the accounting information systems in the municipalities, which will be reflected in their ability to contribute to managing the financial crisis to which these municipalities are exposed. There is also a weakness in the planning process, which is considered one of the basic aspects of the preparedness and prevention phase in managing any financial crisis. There is also a weakness in forecasting and detecting early warning signs of a financial crisis.

Each of the previous phases required performing a financial analysis of the financial and accounting information, the main source of which was the accounting information system. Also, both stages have a role in the municipality's ability to contain the crisis and limit its damages if it occurs, which is in the stage of the occurrence of the crisis, as the prediction, detection of early warning signals, and good preparation for crises make the municipalities more efficient and able to confront and contain them. There is also a weakness in learning and benefiting the municipalities from the crises they were previously exposed to. This reflects negatively on the first administrative stages before the occurrence of the crisis of anticipation and the discovery of early warning signals and preparedness. As there is no improvement and feeding back to those stages, which makes municipalities are vulnerable to crisis repeatedly.

Consequently, the important role that accounting information systems play in managing financial crises has been noted, and any weakness in the accounting information system will have an impact on the effectiveness and ability of municipalities to manage crises, including the financial crises they face. It is expected that the major role of accounting information systems will be concentrated in the initial stages of managing the financial crisis, which are the stage of forecasting and detection of warning signals and the stage of preparation and prevention, as it includes planning and analysis processes that are essential in those stages. This does not mean that accounting information systems are not important in the other stages of containment and reducing the damages of the crisis, where the focus is on the continuous analysis of financial and accounting data based on the course of the current financial crisis that occurs at that stage, and the continuous adjustment of plans accordingly. The same applies to the stage of learning from and benefiting from the lessons of the previous financial crisis, as in this stage the focus is on the evaluation of plans and methods of analysis used in the previous crisis, and working to deve-

lop and make them more effective to face any similar financial crisis in the future.

The study shows the extent of the absence and lack of studies related to AISs in the Palestinian local authorities operating in the Gaza Strip. There is also a lack of studies and research dealing with financial crises and their management, crisis management methods and stages followed by local authorities, and the nature of the actions used in those stages. It was also found that there is a significant lack of studies and research that work to determine the role accounting information systems played generally in managing crises and particularly in managing the financial crisis. Therefore, this study contributes greatly to guiding the areas of development in AISs in LAs from a practical point of view, as well as to theoretical and research perspectives. It also contributes to directing areas of improvement in the management of financial crises in the Palestinian local authorities. It would be a comprehensive and integrated starting point for research and studies on accounting information systems and financial crisis management in local authorities.

5. References and bibliography

Abu Aisha, N. (2020). Gaza municipality reduces its services after the exacerbation of its financial crisis due to "Corona". Retrieved from Anadolu Agency: <https://www.aa.com.tr/ar/>

Abu Al-qumbuz, A. (2018). *Municipalities crises in the Gaza Strip and their impact on human rights*. Retrieved from Alwatanvoice: <https://www.alwatanvoice.com/arabic/news/2018/03/06/1127570.html>

Abu Freya, Z. A. (2013). Factors Affecting the Development Projects in Gaza Strip Municipalities (case study Beit Lahiya municipality). *Master Thesis*. The Islamic University of Gaza.

Abu Rahma, M. A. (2008). The availability of the components of applying the activity-based budgeting system (ABB) in the municipalities of the Gaza Strip. *Master Thesis*. The Islamic University of Gaza.

Abu Salout, W. A. (2015). The Role of Intellectual Capital in Health Crisis Management at Ministry of Health in the Gaza Strip. *Master Thesis*. Palestine: Academy of Management and policy for Graduate Studies & Al-Aqsa University, Gaza.

Abu Watfa, Y. (2020). *Gaza municipalities gradually reduce their services due to their financial crises*. Retrieved from Alaraby: <https://www.alaraby.co.uk>

Al Mezan Centre for Human Rights. (2016). *Electricity crisis in the Gaza Strip (possible solutions between commercial generators and smart meters)*. Al Mezan Centre for Human Rights.

Al Thani, F. B., & Obeidat, A. M. (2020). The Impact of Strategic Leadership on Crisis Management. *International Journal of Asian Social Science*, 10(6), 307-326.

Al-Assar, M. S. (2015). The Municipalities and Local Sustainable Development in Gaza Strip, Reality and Impediments. *Master Thesis*. Al-Aqsa University and the Academy of Management and Politics.

Al-batta, A.-a. (2020). *Due to the Corona pandemic, municipalities are reducing their services and calling for support to overcome their crisis*. Retrieved from Municipality of Khan Younis : <http://khanyounis.mun.ps/ar/news/details/30759>

Al-Bazzaz, H. (2001). *Managing the crisis between the boiling and transformation points*. Beirut: University Foundation for Studies, Publishing and Distribution.

Al-Buhaisi, E. M. (2013). Evaluating the Reality of Accounting Information System in the Gaza Strip Municipalities: a Field Study. *Journal of the Islamic University of Economic and Administrative Studies*, 21(1), 79-98.

Al-Dabbagh, Z. S. (2020). The role of decision-maker in crisis management: A qualitative study using grounded theory (COVID-19 pandemic crisis as a model). *Journal of Public Affairs*, 20(4), 1-11.

Al-Hariri, M. S. (2010). *Crisis management: economic, financial and administrative problems*. Amman: Dar Al Bidaya publishers and distributors.

Al-Ketbi, S. (2020). "Corona" and the role of leaders in crisis management. Retrieved from Elaph: <https://elaph.com/Web/opinion/2020/04/1288261.html>

Al-Khatib, M. H. (2015). Skills of Strategic Leadership and its Relation with Crisis Management "A Field Study on the Palestinian Local Institutions in Gaza Governorates". *Master Thesis*. Al-Azhar University-Gaza.

Al-Sarraj, Y. (2020). *The municipalities of the Gaza Strip announce a gradual reduction in services due to the worsening financial crisis*. Retrieved from Gaza municipality: <https://gaza-city.org/public/index.php/news>

Amyulianthy, R., Muda, R., Said, J., & Setyaningrum, D. (2021). Examining The Moderating Role Of Performance Measurement System On Relationship Between Audit Results And Performance Of Indonesian Local Authorities. *Journal of Contemporary Issues in Business and Government*, 27(1), 2040-2058.

Awad, R. R. (2010). Obstacles of Geographic Information System Implementation in Gaza Strip Municipalities-Palestine. *Master Thesis*. Palestine: The Islamic University of Gaza.

Bakir, H. M. (2016). Obstacles in the achievement of the major municipalities of the Gaza Strip for their services during emergency situations. *Master Thesis*. Gaza, Palestine: The Islamic University of Gaza.

Beshi, T. D., & Kaur, R. (2020). Public Trust in Local Government: Explaining the Role of Good Governance Practices. *Public Organization Review*, 20, 337-350.

Çapar, S., & Koca, M. (2022). Provincial administration in crisis and emergency management in Turkey. *Journal of Human Sciences*, 19(2), 150-161.

Chabani, M., & Chabani, W. (2014). Managing financial crises according to accounting information systems. *journal of economics and applied statistics*, 11(1), 196-206.

Christensen, T., & Læg Reid, P. (2020). The coronavirus crisis—crisis communication, meaning-making, and reputation management. *International Public Management Journal*, 23(5), 713-729.

Claeys, A.-S., & Coombs, W. T. (2020). Organizational Crisis Communication: Suboptimal Crisis Response Selection Decisions and Behavioral Economics. *Communication Theory*, 30(3), 290-309.

Dagiliene, L., & Šutiene, K. (2019). Corporate sustainability accounting information systems: a contingency-based approach. *Sustainability Accounting, Management and Policy Journal*, 10(2), 260-289.

Dalloul, M. H. (2019). The Extent of IT Infrastructure Development and Its Relationship to Accounting Information Systems Efficiency in Palestinian Governmental Higher Education Institutions in The Gaza Strip: an Applied Study. *Finance and Business Economics Review (JFBE)*, 3(3), 101-128.

Dalloul, M. H., binti Ibrahim, Z., & Tajul Urus, S. (2022a). The Role of the Accounting Information Quality in Pre-Financial Crisis Management at Palestinian Government Universities. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 12(1), 64-78.

Dalloul, M. H., binti Ibrahim, Z., & Tajul Urus, S. (2023). The Impact of Quality Dimensions of Accounting Information System Success on the Effectiveness of During-Financial Crisis Management: The Mediating Role of System Usage in a Government Sector Context. *Asian Economic and Financial Review*, 13(1), 18-48.

Dalloul, M. H., Ibrahim, Z. b., & Urus, S. T. (2022b). The Association Between the Success of Information Systems and Crises Management (A Theoretical View and Proposed Framework). *International Journal of Asian Social Science*, 12(1), 55-68.

Elsharif, T. A. (2019). The Elements of Accounting Information Systems and the Impact of Their Use on the Relevance of Financial Information

in Wahda Bank—Benghazi, Libya. *Open Journal of Business and Management*, 7(3), 1429-1450.

Ghoneim, M. A. (2004). The role of computerized management information systems in the decision-making process in the municipalities of the Gaza Strip in Palestine. *Master Thesis*. Gaza, Palestine: The Islamic University of Gaza.

Ghorab, I. K.-F. (2017). The role of the budget as a planning tool to exploit the financial resources in the Gaza strip municipalities. *Master Thesis*. The Islamic University of Gaza.

Hijazi, N. (2017). *The Union of Municipalities in Gaza warns of a renewed electricity crisis*. Retrieved from Palestine Today News Agency: <https://cms.paltoday.ps/ar/post/296662>

International Monetary Fund (IMF). (2010). The IMF-FSB Early Warning Exercise - Design and Methodological Toolkit. *Policy Papers*, 2010(78), 1-41.

Kapucu, N., Özerdem, A., & Sadiq, A.-A. (2022). *Managing Emergencies and Crises: Global Perspectives*. US: Jones & Bartlett Learning.

Mavhura, E. (2020). Learning from the tropical cyclones that ravaged Zimbabwe: policy implications for effective disaster preparedness. *Nat Hazards*, 104, 2261-2275.

Ministry of Local Government. (2012). *A guide to accounting procedures according to the cash basis*. State of Palestine, Ministry of Local Government.

Ministry of Local Government. (2019). *The strategic framework for the transformation into electronic municipalities (2019-2023)*. State of Palestine: Ministry of Local Government.

Municipal Development and Lending Fund. (2011). *Financial policies and procedures related to a medium or small Palestinian municipality*. Municipal Development and Lending Fund.

Pedersen, C. L., Ritter, T., & Di Benedetto, C. A. (2020). Managing through a crisis: Managerial implications for business-to-business firms. *Industrial Marketing Management*, 88, 314-322.

Sabbah, R. S. (2013). Obstacles to strategic plans implementation in Gaza strip municipalities: from the perspective of top and executive management. *Master Thesis*. The Islamic University of Gaza.

Salim, F. M. (2007). The effect of applying the cash basis on the significance of accounting information for decision makers in the municipalities of the Gaza Strip in Palestine. *Master Thesis*. The Islamic university of Gaza.

State Audit & Administrative Control Bureau. (2016). *Report of the State Audit & Administrative Control Bureau, Annual Report 2016: Control & Audit for Construction, Development & Good Governance Enhancement*. State Audit & Administrative Control Bureau - State of Palestine.

State Audit & Administrative Control Bureau. (2018). *Report of the State Audit & Administrative Control Bureau, Annual Report 2018. Control & Audit for Construction, Development & Good Governance Enhancement*. State Audit & Administrative Control Bureau - State of Palestine.

Stefanova, M. (2019). Methodology for assessing the activities of local authorities to protect the public interest. *Public policy*.bg, 10(4), 3-19.

Suleimany, M., Mokhtarzadeh, S., & Sharifi, A. (2022). Community resilience to pandemics: An assessment framework. *International Journal of Disaster Risk Reduction*, 80, 1-14.

Sutherland, T. (2013). The Management of the Effects of a Hurricane: A Study of Higher Education Crisis Management Processes as Viewed through a Performance Management System. *Doctoral dissertation*. United States: Texas A & M University.

Vahedi, M., & Arvand, H. (2020). The Role of Information Systems in Decision-making and Public Policy Making. *Journal of Management and Accounting Studies*, 8(2), 11-14.

World Bank. (2017). *World Bank: The Third Phase of the Gaza Municipal Development Project*. Washington, D.C.: World Bank.

Xue, L., Zhang, Q., & Zhong, K. (2022). Basic Concepts: Crisis and Crisis Management "Challenges of the Transition". In L. Xue, Q. Zhang, & K. Zhong, *Crisis Management in China* (pp. 23-43). Singapore: Springer.