



# Ranking of Risk Management Factors Influencing SMEs Organizational Performance

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DOI: <https://doi.org/10.30880/ijscet.2021.12.05.018>

Received 6 June 2021; Accepted 31 December 2021; Available online 31 December 2021

**Abstract:** UAE Small and Medium-Sized Enterprises (SMEs) play a central role in socio-economic transformation, poverty reduction, job creation, and wealth creation. However, most SMEs faced unsustainable growth due to a lack of managing risk. Hence, this paper presents a study on the ranking of risk management practices that influence SMEs' organizational performance in the UAE. The study has identified 11 factors, and these factors were classified into four groups: risk management process; operational risk management; risk assessment, risk control. These factors were used in the questionnaire development used in the survey to measure the respondents' perceptions of these factors. The data collected from the questionnaire survey were analysed to rank these factors using mean and standard deviation values scored by the individual factor. In the risk management process group, it was found that the highest rank is the treat risk. The second group is operational risk management. The highest-ranked factor is the system, followed by the third group, which is Risk assessment with risk prioritization as the critical factor. The highest-ranking factor for the final group, risk control, is the risk management plan. These findings will help the SMEs community to handle risk either at the planning or the implementation stage of their activities to ensure the sustainability of the SMEs industry in UAE.

**Keywords:** Small and Medium-Sized Enterprises (SMEs), risk management practices factors

## 1. Introduction

UAE has experienced an unprecedented socio-economic transformation over the last 25 years. Schilirò (2013) reiterated that the Emirates has evolved to become the Arab world's second-biggest economy and has joined the group of high-income economies. The UAE's economy has displayed consistent and steady growth between 2000 to 2018, in which the economy grew by an average of close to 5% per annum (Schilirò, 2013). Essentially, the UAE is the most rewarding commercial market in the Gulf Cooperating Council (GCC) countries and the most innovative amid its Arab peers (Schilirò, 2015; Sitharam and Hoque, 2016; MOE, 2017). In addition, the International Monetary Fund (IMF) explains that the UAE has benefited from the country's safe-haven position within a geopolitical region that has been beset by socio-political challenges (IMF, 2013; Mansour-Khoury 2018).

Globally, and in the UAE in particular, small and medium-sized enterprises (SMEs) play a central role in socio-economic transformation, poverty reduction, job creation, and wealth creation. The UAE Ministry of Economic (Alkhoraif et al., 2018) reported that a significant percentage of the total registered companies in the UAE represent small and medium-sized enterprises that account for approximately 92% of the registered enterprises. Small and medium-sized enterprises contribute to around half of GDP or economic activity in the UAE. In terms of job creation, 85 % of the expatriate and indigenous private sector jobs are created from over 200,000 SMEs domiciled in the UAE (Ministry of Economy, 2013). It is expected that SMEs located in the UAE now account for over 90 % of legally registered entities,

and as a contribution to the gross domestic product would have risen to approximately 70% by 2020 as cited by Mansour-Khoury (2018). At the Emirate level, Khan (2019) isolated Dubai and mentioned in Dubai, only approximately 1% of registered companies can be regarded as large businesses, which essentially means most enterprises in Dubai are SMEs and micro-enterprises. SMEs in Dubai account for over 50% of the emirate's labor force employed and are represent some 47% of Dubai's gross domestic product (Khan, 2019). SMEs constitute nearly 90 percent of all companies compared to the broader UAE region and employ about 30% of the labor market (Nasr and Pearce, 2012). A World Bank (2014) publication highlighted how SMEs in the emerging economies of the global constitute 40 percent of the economy and employ around 60 percent of the total labour market (World Bank, 2014).

When benchmarked against its peers, it showed favourable and positive results. Mansour-Khoury (2018) and Khan (2019) reported SMEs in the UAE as the spine of the national economy. Shihadeh, Gamage & Hannon (2019) pointed out that small and medium-sized companies need to ensure that their role in avoiding risks is fulfilled and continue to play a significant role in the economy. This is a basic phenomenon that every business experience several risks. Risk is an uncertain event or condition that, if occurs, has a positive or negative effect on a project's objectives (Altaf et al. 2020). It is essential to have adequate and effective risk management processes and practices for success in any business. Risk management process should be considered as basic part of overall management (Abd Karim et al. 2012). However, risk management processes in the UAE's SMEs have a casual approach to adopting risk management practices and the potential positive impact on organizational performance. This paper presents a study on evaluating the risk management practices factors which influence SMEs Organizational Performance in UAE. The findings from this paper will help the SMEs community in identifying the process of handling risk either at the planning or the implementation stage of their activities to ensure the sustainability of the SMEs industry in UAE.

## 2. Small and Medium-Sized Enterprises (SMEs)

SMEs establish a significant realism for an economic system driver in several countries through innovation, social integration, and employment. SMEs also play a crucial role in promoting economic growth at the international level, which helps in reducing the unemployment rate (World Trade Organisation WTO, 2016). There are several challenges faced by SMEs where several studies show that 50% of SMEs shut down after the fifth year of the operation. The key reasons for closing the business are lack of business sophistication and less organized structure, leading to difficulties in the relationship between competitive strategy and performance (Parnell, Long, & Lester, 2015). It is quite common in SMEs where the ownership and management of the company is usually the same people. This leads to a high potential of insolvency due to management errors (Henschel, 2010). Other challenges SMEs face are limited resources, which exposes and is vulnerable to external shocks compared to large companies having more extensive resources. Besides that, most SMEs cannot manage inherent risks such as company performance and competitive advantage when it needs the decision-making process (O'Regan, Sims, & Ghobadian, 2005).

Amongst the challenges faced by SMEs, common challenges include increased competition, the ability to adapt to rapidly changing market demand, technological change, and capacity constraints relating to knowledge, innovation, and creativity. For many SMEs, however, their potential is often not fully realized due to the factors associated to their small scale:

- i. lack of resources (finance, technology, skilled labour, market access, and market information).
- ii. lack of economies of scale and scope.
- iii. higher transaction costs relative to large enterprises.
- iv. lack of networks that can contribute to a lack of information, know-how, and experience of domestic and international markets.
- v. increased market competition and concentration from large multinational enterprises caused by globalization and economic integration.
- vi. inability to compete against larger firms in terms of R&D expenditure and innovation (product, process, and organization);
- vii. subject to "churning" and instability; and
- viii. lack of entrepreneurial zeal, capacity, and know-how. In addition, many small businesses find that their geographical isolation puts them at a competitive disadvantage.

Despite these substantial obstacles, many economies remain heavily dependent on SMEs, particularly employment generation. Moreover, despite their perceived weaknesses, SMEs have not been swept away by globalization and regional integration; instead, their role and contribution have changed and evolved, which have enabled many to remain internationally competitive and collectively be an essential source of employment generation (Harvie and Charoenrat 2015).

### 2.1 SMEs in the UAE

The UAE government acknowledges the importance of SMEs as a driver to economic growth, which contributes significantly to the GDP and provides jobs to the majority of private-sector workforces. Accordingly, the government intended to increase SMEs contribution up to 70% of its GDP by 2021. The record shows that SMEs have contributed to the UAE's productivity growth over the past decade. It needs to retain and improve to face a competitive edge in the

dynamic global economies. Syed Zamberi Ahmad, (2018). SME is defined as any enterprise which meets the thresholds of employee headcount and turnover, as applicable to the sector it belongs to (Trading / Manufacturing / Services). Further, the classification of enterprise size (Micro, Small, and Medium), is based on unique thresholds for each sector, as table 1.

**Table 1 - Classification of business sizes**

Types of business	Trading sector	Manufacturing sector	Services sector
Micro business	≤ 9 employees AND ≤ AED9 million turnover.	≤ 20 employees AND ≤ AED10 million turnover.	≤ 20 employees AND ≤ AED3 million turnover.
Small business	≤ 35 employees AND ≤ AED50 million turnover.	≤ 100 employees AND ≤ AED100 million turnover.	≤ 100 employees AND ≤ AED25 million turnover.
Medium business	≤ 75 employees AND ≤ AED250million turnover.	≤ 250 employees AND ≤ AED250 million turnover.	≤ 250 employees AND ≤ AED150 million turnover.
Large business	≥75 employees AND ≥ AED250million turnover.	≥250 employees AND ≥ AED250million turnover.	≥250 employees AND ≥ AED1250million turnover.

### 3. Methodology

This study adopted a quantitative approach where the data was collected through a structured questionnaire survey. The targeted respondents were employees of the UAE public sector. The study implemented a non-probability sampling method where the sample to be taken is not known in advance. This sampling method uses various sampling mechanisms, including decision sampling, snowball sampling, quota sampling, and convenience sampling (Collis et al., 2013). Convenience sampling refers to collecting the most readily available sample to contribute to the analysis and provide the necessary data (Kothari, 2004). Thus, this study adopted non-probability with a convenience sampling approach.

#### 3.1 Sample size

Since the population is unlimited or unknown, then the sample size can be determined with the following equation (Enshassi and Al Swaity, 2015):

$$SS = \frac{Z^2 \times P (1 - P)}{C^2}$$

Where,

SS = Sample Size

Z = Z value (1.96 for 95% confidence level)

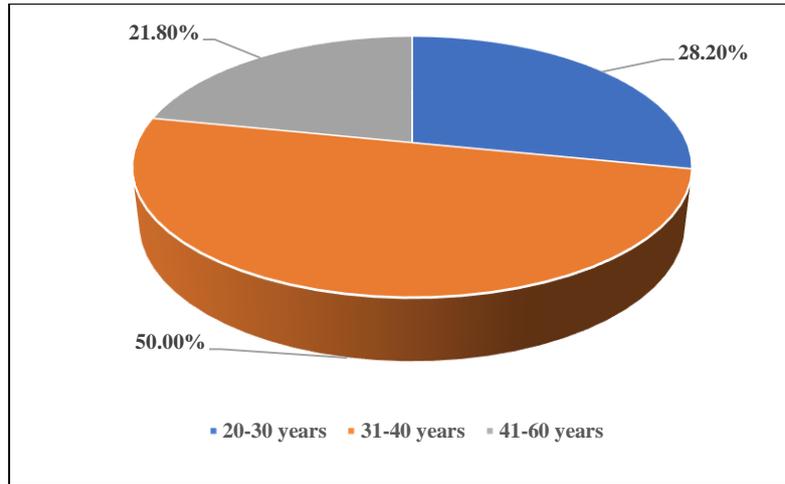
P = percentage picking a choice expressed as a decimal (0.5 used for sample size needed)

C = margin of error (9 %), the maximum error of estimation which can be 9 or 8%.

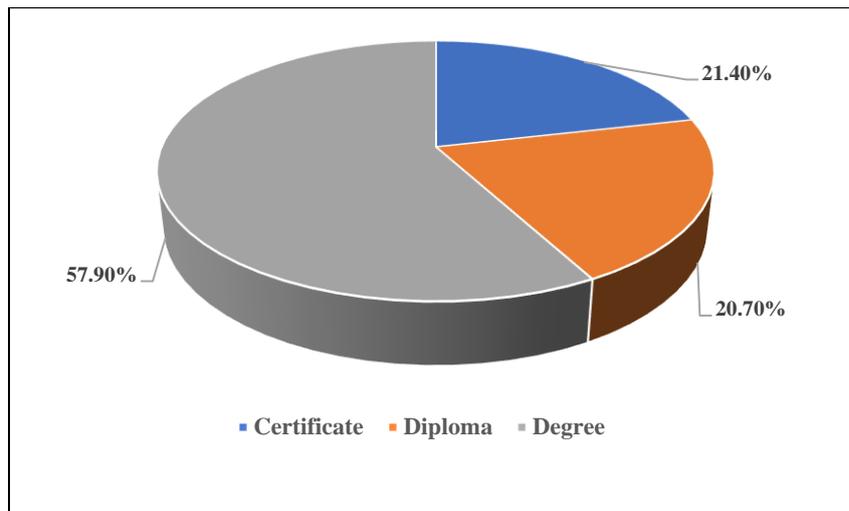
$$SS = \frac{1.96^2 \times 0.5 (1 - 0.5)}{0.09^2} = 118.57 \cong \approx 119$$

#### 3.2 Demography of respondents

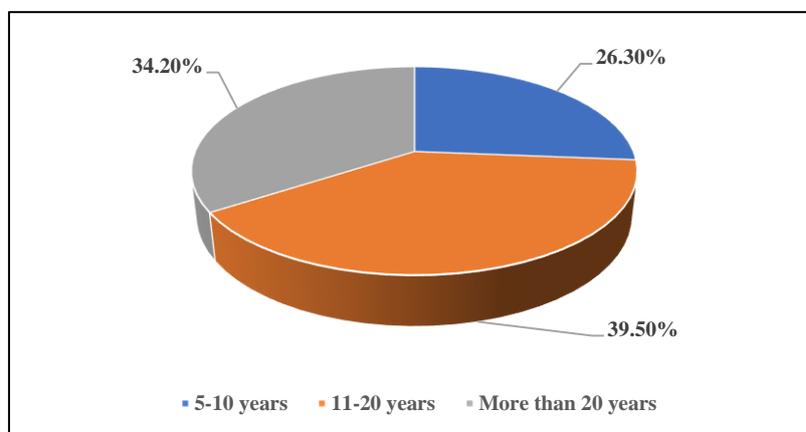
A total of 500 questionnaire forms were distributed to personnel involved in the UAE's SMEs sector. However, this study received 266 completed questionnaires, representing an 88.67 percent response rate exceeding 123.5 percent of the required sample size. The demographics of the respondents are shown in the figures 1, 2 and 3 below.



**Fig. 1 - Respondents' age group**



**Fig. 2 - Respondents education level**



**Fig. 3 - Respondents working experience**

Figures 1, 2, and 3 show the respondents' age group, education level, and working experience. The demography of the respondents shows that more than 50% of the respondents are over 30 years old, which indicates that most of the respondents are mature enough to answer the questionnaire. In addition, the majority of the respondents have a diploma and bachelor's degree. The majority of the respondents have working experience for more than 10 years in SMEs industries in UAE.

#### 4. Measurement Models

Data collected from this study was tested for its consistency using a reliability test (Almarashda et al 2021, Memon et al. 2016). It confirms a research instrument's quality (Souza et al., 2017) and stability of the data (Memon 2013). The indicator for this test is Cronbach's alpha coefficient/value, and the data is considered satisfactory if the Alpha value is more than 0.7 (Munir et al. 2019, Almansoori et al. 2021). In this study, Cronbach Alpha values for all the groups of the factors are shown in table 2.

**Table 2 - Reliability test**

No.	Risk Management Practices group	Numbers of factors	Cronbach Alpha value
1	Risk Management process	3	0.810
2	Operational Risk Management	2	0.885
3	Risk Assessment	3	0.803
4	Risk Control	3	0.794

Table 2 indicates that the Alpha values for all the four characteristics are above 0.7. Hence, the collected data from the questionnaire survey is considered reliable and valid for further analysis. The data was also tested for normality. Normality tests are used to determine whether a data set is well-modelled by a normal distribution and to compute how likely it is for a random variable underlying the data set to be normally distributed. There are several types of normality tests: Kolmogorov-Smirnov (K-S) test, Lilliefors corrected K-S test, Shapiro-Wilk test, Anderson-Darling test, Cramer-von Mises test, D'Agostino skewness test, Anscombe-Glynn kurtosis test, D'Agostino-Pearson omnibus test, and the Jarque-Bera test. However, this study used skewness and kurtosis test to check the normality of the data. The generated values from this test for all items/factors are as shown in table 3.

**Table 3 - Skewness and kurtosis values**

Risk Management Practices group	Factors	Skewness	Kurtosis
Risk Management process	Risk analysis	-0.482	-0.197
	Treat risk	-0.717	0.158
	Evaluate risk	-0.455	-0.213
Operational Risk Management	People	-0.526	-0.082
	System	-0.237	-0.127
Risk Assessment	Risk Identification	-0.352	-0.265
	Risk Analysis	-0.559	0.017
	Risk Prioritization	-0.465	-0.078
Risk Control	Risk Management Plan	-0.409	-0.631
	Risk Mitigation	-0.342	-0.295
	Risk Monitoring	-0.687	-0.631

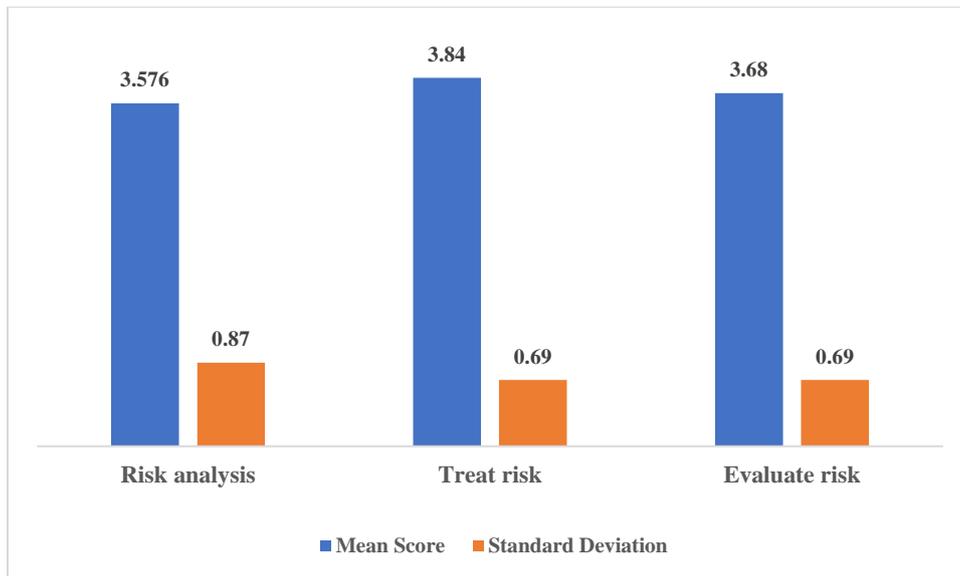
According to Pallant (2011) and Kline (2011), the skew and kurtosis value scores for measurement items should be between -1 and + 1, and the findings for all items should be within the permissible range of -1 to + 1. The overall perception scale of these research items/constructs was within the allowable range, indicating that the data is reliable with decent normal data distribution.

#### 5. Ranking of Risk Factors

This section presents the ranking of factors related to risk management practices. These factors are classified into four groups: risk management process; operational risk management; risk assessment, risk control. In the first group, the risk management process contains three factors: risk analysis, treat risk, and evaluate risk. The factors are ranked based on each factor's mean and standard deviation values. Factors with the highest mean score are ranked first and consecutively with the other factors. But if two factors have the same mean score, then a factor with smaller standard deviation values is chosen to have a higher rank.

##### 5.1 Risk Management Process group

The results for the risk management process group are as Figure 4.

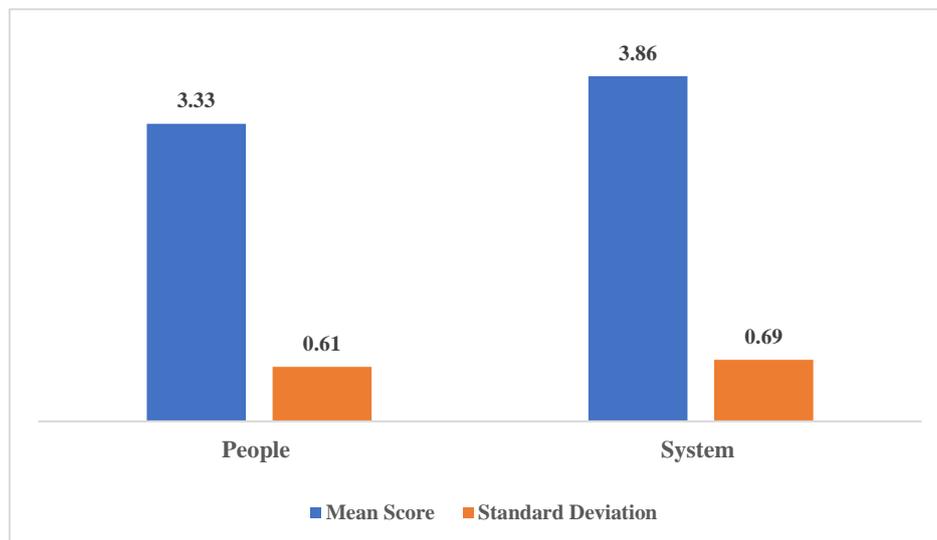


**Fig. 4 - Risk management process group**

Figure 4 shows that treat risk is most critical risk with highest mean score of 3.84. Treat risk is the process of selecting and implementing measures to modify risk. Risk treatment measures can include avoiding, optimizing, transferring, or retaining risk. This is followed by evaluating risk factors, deciding their severity, and managing it. Finally, risk analysis is the process of identifying and analysing potential issues that could negatively impact key business initiatives or projects. This process is done to help organizations avoid or mitigate those risks.

### 5.2 Operational Risk Management Group

The factors of Operational risk management were also ranked based on the mean value and standard deviation as presented in Figure 5.

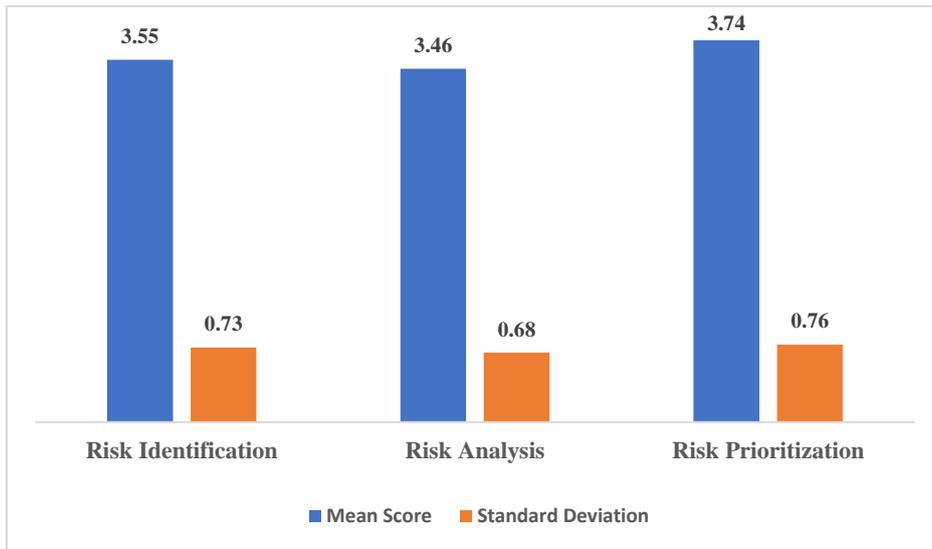


**Fig. 5 - Operational risk management group**

Figure 5 shows that the Operational Risk Management group contained only two factors: the people and the system. The respondents ranked the system with the higher rank with a mean score of 3.86, and the second rank is the people with a 3.33 score. Systemic risk refers to the risk of a breakdown of an entire system rather than simply the failure of individual parts. While people risk, also known as human risk, is the risk of people doing things which they shouldn't, or not doing something where they should', this is the most significant risk facing organizations.

### 5.3 Risk Assessment Group

Risk assessment factors were also ranked as presented in Figure 6.

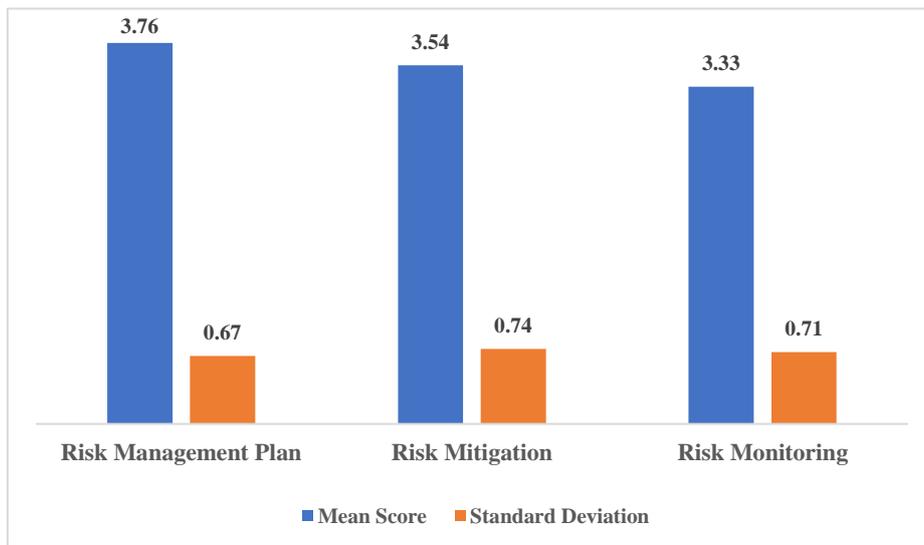


**Fig. 6 - Risk assessment group**

Figure 6 depicts that among the factors of the risk assessment group, risk prioritization is most critical with a mean score of 3.74, followed by risk identification and analysis. Risk prioritization is the process of determining which risk should be acted upon in the first place. At the same time, risk identification is the process of determining risks that could potentially prevent the program, enterprise, or investment from achieving its objectives. It includes documenting and communicating the concern. Finally, risk analysis is the process of identifying and analysing potential issues that could negatively impact key business initiatives or projects. This process is to help organizations avoid or mitigate the risks.

### 5.4 Risk Control Group

The ranking of the factors of risk control is presented in Figure 7.



**Fig. 7 - Risk control group**

Figure 7 demonstrates the rank of three factors in the risk control group. The highest-ranked factor is a risk management plan, with a mean score of 3.76 as reported by the respondents. It is a document that a project manager prepares to forecast risks, estimate impacts, and define responses to risks. It also contains a risk assessment matrix. The second rank is risk mitigation, a strategy to prepare for and lessen the effects of threats faced by an organization. It takes

steps to reduce the adverse effects of threats and disasters. At the same time, the last rank is risk monitoring process which tracks and evaluates the levels of risk in an organization.

## 6. Conclusion

This paper has presented a study on the ranking of risk management practices factors that influence SMEs' organizational performance in UAE. The study has identified 11 factors, and these factors were classified into four groups. The data collected from the questionnaire survey was analysed to rank these factors using mean and standard deviation values scored by the individual factor. In the risk management process group, it was found that the highest rank is the treat risk. The second group is operational risk management in which the highest-ranking factor is the system. In the third group, Risk assessment, the risk prioritization factor is the most critical factor. The highest-ranking factor for the final group, risk control, is the risk management plan. These findings will help the SMEs community to handle risk either at the planning or the implementation stage of their activities to ensure the sustainability of the SMEs industry in UAE.

## Acknowledgement

The authors would like to thank the Institute of Technology Management and Entrepreneurship, Universiti Teknikal Malaysia Melaka, for supporting this research works.

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