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An Investigation into the Role of Supply-Side Factors in the Implementation of Management Accounting Innovations within the Industrial Companies in UAE: A Questionnaire Survey

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Abstract

This paper focuses on the diffusion of management accounting innovations (MAIs) in UAE with the objectives (i) to determine the role of supply-side factors on decisions implementing MAIs within the UAE industrial sector, and (ii) ascertain the level of satisfaction among the allied UAE companies, concerning the role of these factors in driving the diffusion process. By applying a multi-method approach, (a combination of questionnaire survey and semi-structured interviews), conducted in two sequential stages, the study used the mixed methods of data collection and analysis. About rating the importance of various factors driving the diffusion of MAIs, 33 companies, who implemented MAIs, reported that consultant companies and accounting education were the most important factors influencing them to implement MAIs.

Keywords: Management Accounting Innovation (MAI), Supply-side factors, UAE industrial sector, Diffusion Theory.

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Una investigación sobre el papel de los factores Del lado de la oferta en la implementación de las innovaciones de contabilidad de gestión dentro de las empresas industriales en los EAU: una encuesta por cuestionario

Resumen

Este documento se centra en la difusión de las innovaciones de contabilidad de gestión (AMI) en los EAU con los objetivos (i) para determinar el papel de los factores del lado de la oferta en las decisiones que implementan los AMI dentro del sector industrial de los EAU, y (ii) determinar el nivel de satisfacción entre las empresas aliadas de los EAU, en relación con el papel de estos factores en la conducción del proceso de difusión. Al aplicar un enfoque multimétodo (una combinación de encuesta por cuestionario y entrevistas semiestructuradas), realizado en dos etapas secuenciales, el estudio utilizó los métodos mixtos de recopilación y análisis de datos. Sobre la calificación de la importancia de varios factores que impulsan la difusión de los AMI, 33 empresas que implementaron los AMI informaron que las empresas consultoras y la educación contable fueron los factores más importantes que influyeron en su implementación.

Palabras clave: Gestión de la innovación contable (MAI), factores Del lado de la oferta, sector industrial de los EAU, teoría de la difusión.

1. INTRODUCTION

United Arab Emirates has experienced an economic boom over the last 3 years, moving from one of the least developed countries in

the world to one of the strongest countries attracting capital from abroad. It has wisely utilized and capitalised its oil and gas, the two important natural resources, which strongly aided the rapid and radical development of the entire nation. The development in UAE has been phenomenal and mercurial in nature that she did not witness the prototypical transition through the expert-agreed upon development stages experienced by most industrialised countries. Despite limited opportunities for foreign businesses in UAE, the existence of a fair and transparent government with legal system and stable political environment, the country has been able to attract necessary foreign finances, to make it the financial hub for investors.

In this study, we will concentrate on the social and economic development trends, and identify how the local government supports the industrial sector encouraging and assisting them to enter into the international markets. Specifically, the study will also focus on changes in cost structure of production in industries and finds out how leading firms implement innovations in management accounting innovation systems (MAIs). The study explores the role of supply-side factors implementing MAI within all-industrial companies, listed at Securites Exchange and Commodities Authority (SCA) and Dubai Financial Market (DFM) in UAE. It will also explore information to find out the degree of satisfaction the UAE industrial companies possess regarding the role of supply-side factors in implementing MAIs. Eventually, the paper will investigate the following issues on, (i) the status of implementation of MAIs within all listed industrial companies, (ii) main supply-side factors encouraging implementation

of MAIs; (iii), to what extent, UAE industrial companies are satisfied concerning the role of supply-side factors encouraging them to implement MAIs; and finally, (iv) main reasons for those companies not implementing MAIs.

It is no wonder to witness a number of innovative ideas and ventures in the field of management accounting over the last 10-15 years and a following up of related standard concepts regularly included in standard management accounting textbooks as well as their practices. These concepts are Activity Based Costing (ABC), Activity Based Management (ABM), Target Costing, Strategic Cost Management ,Economic Value Added (EVA), and Balanced Scorecards (BSC) (AHMAD, 2017; ARMITAGE et al., 2016; CHENHALL and MOERS 2015; NIMTRAKOON and TAYLES 2015; NUHU et al., 2016) .On-going debates are abound in the literature over the nature of changes in Management Accounting. Management accounting has changed a little since the early twentieth century (JOHNSON and KAPLAN, 1987) where a considerable change took place in the environment where management accounting is practised. All these changes are due to changes in (a) different organisational structures, (b) significant advancement in information technology, (c) competitive markets, and new management practices (Al-SAYED and DUGDALE, 2016; CHIWAMIT et al. 2017; HUSSEIN, 2018; IBRAHIM and Sukeri, 2014).

Considerable interests exist in the literature as to study the diffusion and implementation of management accounting innovations

(MAIs) and the concerned factors influencing the implementation over the last two decades. GOSSELIN (2007) identified that most studies concentrated on the diffusion of MAIs by examining only the association between the diffusion and demand side factors, than that of supply-side factors. GOSSELIN (2007) states, "Future studies should focus on the influence of supply side relating to the diffusion of more sophisticated costing systems (p.665)." This suggests consequently, the need for and conduct of examining the role of supply-side factors encouraging the implementation of MAIs.

Innovation means newness by any common sense criterion. According to ROGERS (2003), "Newness is innovation; not only in terms of new knowledge, but also in terms of first persuasion to implement… one can relate innovation to new technological changes & products, new administrative techniques and services."

DAMANPOUR (1991), described "innovation" an implementation of an idea in practice; this may relate to implementing a new system or a new program or a policy or a process or a plan or even a service that a company regards new and deem valuable while implementing the idea. According to BJORNENAK (1997), the definition of diffusion is, "the process, whereby an innovation is spread or disseminated." (p. 3). Diffusion is, "a social process by which an innovation spreads through a social system over time." (OlSON, 1999, p.1).

ROGERS (2003) defined diffusion as, "The process by which an innovation is communicated through certain channels over time among the members of a social system." Rogers finds a distinction between

implementation process and diffusion process, the former relates to an individual, where the latter takes place within a society, as a group process. (p.11). He adds further: (the) "Mental process through which an individual passes from first knowledge of an innovation to a decision to implement or reject and confirmation of this decision." He also defines the diffusion process as, "The spread of a new idea from its source invention or creation to its ultimate users or adopters." (ROGERS, 2003, p.150).

BJORNENAK (1997) identifies several important social phenomena influencing the speed and range of a diffusion process; the worse is unwillingness to make organisational changes for needed diffusion process to take place. Barriers to diffusion may relate to lack of resources or cultural and or linguistic issues. Other issues may relate to the extent of contacts, a potential adopter has made, that is, the person's 'information field this may not be sufficient to convince the individual to adopt the innovation. Identification of information fields is therefore, very important. Taking the supply-side into account seems promising. (BJORNENAK, 1997. pp.15).

Earlier studies traditionally focused on organization's demand for innovations and emphasised the role of potential adopters of innovations in driving the communication process. These studies considered the information field of the adopter a passive factor. CLARKE et al., (1999) considered the demand-side perspective (factors) to study the diffusion of MAIs; they however, acknowledged the importance of supply-side factors, as an alternative explanation for

implementation on the rate of new MAI". Similarly, the results focusing rather the narrow demand side perspective, did not fully explain the diffusion process. This necessitates other perspectives to look into to understand better the diffusion process. However, other studies that are more recent have found the supply side factors as actively seeking to control over the information field of potential adopters (ABRAHAMSON, 1996). Hence, our study focuses exclusively on to the supply side factors of diffusion process.

Not many studies are available in the literature examining the impact of supply-side factors on the diffusion of MAI in last 20 years or so. BJORNENAK (1997) conducted a study investigating the diffusion of ABC; he conducted a questionnaire survey of 75 of the largest manufacturing companies in Norway; he distinguished between the supply-side factors (consultancy & mass media) and demand-side factors (specific properties of innovations and characteristics of potential adopters).

BJORNENAK (1997), identified the 'nature of the phenomenon' diffused being the most influential factors on demand-side; they related to cost structure, (existing costing systems), product diversity and competition for ABC diffusion. About the supply-side, the majority of adopters of ABC received assistance from consultants, which they found, playing an essential role. Company size also played as an important factor; large size companies have relatively a larger network of communication channels and infrastructures to adopt the accounting innovation. The study found the courses and availability of

internal change agents being the most effective communication channels.

He identified awareness and demonstration the most important persuasive factors for most adopters accepting an innovation. Those who are first set of adopters or consultants would consider the active role of drivers on the diffusion process. BJORNENAK considered infrastructure highly important a factor in the diffusion of an accounting innovation. The use of Media, such as articles, books, seminars and conferences may motivate convincing the potential adopters. ABRAHAMSON (1996) suggested that by comparing the temporal frequency of articles on innovation in the mass media with the innovation diffusion curve, one could study the impact of management fashions on the innovation adoption decision. It is asserted that this requires an increase in the number of publications preceding accompanying the take-off of an innovation.

CLARKE et al., (1999) collected more data by using a questionnaire from 511 Irish manufacturing companies; they found that ABC systems were not as widely used within the Irish companies, as those of within the companies in USA, UK, and Canada. This was because, "the practice of management accounting in Ireland is marginalised." (CLARKE et al., 1999, p.466). For instance, in Ireland, as the study found, management accountants worked more as record-keepers than innovators and decision-facilitators; this was due primarily to constraints from both supply and demand side factors. There was a prevalence that the universities did not produce and

supply the business companies with enough creative and problem-solving graduates, such as, accountants and managers; and at the same time, neither, companies and professional bodies expressed their demand for changes in the education of accountants and managers. The likelihood fact is that the Irish management accountants perhaps, did not well understand the ABC system (CLARKE et al., 1999, p.466).

Imitation process finds its essence from the act of professional engagement ABRAHAMSON (1996) where two important sources of imitation exist in the profession. The first source is from formal education and its legitimisation provided by university specialists while the second source relates to professional networks, diffusing new models rapidly. Professional managers and qualified staffs find the first source useful for the development of organisational norms where the later one helps in filtering of personnel for encouraging imitation among companies. Companies can attain this through employment of qualified individuals from companies within the same industry or they can hire top executives from financial or legal department; their work experiences and expertise would help assist in enriching the state of professional wisdom within the company.

2. METHODOLOGY

UAE has experienced an economic boom, with economic policies that have taken the country from one of the least developed in

the world to one of the strongest nations to attract foreign capital (United Arab Emirates, 2017). As mentioned earlier, our study will concentrate on the social and economic development trends, and identify how the local government supports the industrial sector encouraging and assisting them to enter into the international markets with particular focus on changes in cost structure of production in industries, to find out how leading firms implement innovations in management accounting innovation systems (MAIs). Hence, this study addresses on the industrial sector in the UAE for several reasons stated below.

1. Researcher's extensive familiarity with the region and experiences of cost accounting systems of industrial companies in UAE.

2. As we notice an existence of a discrete positive trend in the social and economic development plans of successive UAE governments, supporting the industrial sector, and encouraging and assisting its members to enter international markets, we find it imperative to assess how the leading firms implement innovations of MAIs. Further, the central engagement of the government of UAE and industry alike has been the identification & careful assertion of priorities and paying needed attention to both the development of internal capabilities of industrial companies. All these endeavours would, help assist in providing necessary environment and conditions for industrialisation.

3. INNES and MITCHELL (1991) and ASKARANY (2006) observed changes in the production cost structure in industrial

environment affecting industrial companies all around. CLARKE et al., (1999) found such changes arising from new technological manufacturing techniques. These changes, therefore, necessitate industrial companies to implement innovations in their management accounting systems.

We make use of data consisting of all industrial companies listed at (SCA) and (DFM) in UAE at the end of 2018. We select these companies for two reasons:

(i) In UAE, the listed industrial companies constitute the largest sector [both (SCA) and (DFM)]; and,

(ii) The information of industrial shareholding companies is available from the (SCA) and (DFM) listed data.

Regardless of data sources, every data collected and interpreted, has its relative advantages and relative disadvantages compared to alternatives (DE VAUS, 2007). Adoption of a multiple-method approach to data collection is one way of overcoming this issue (SEKARAN, 2003; COLLIS and HUSSEY, 2003). Multiple-method approach (a combination of questionnaire survey and semi-structured interviews) was applied in two sequential stages, the first one using the multiple-methods of data collection followed by the analysis of results in second stage.

In the first stage, we employed a questionnaire survey to determine the current status of implementation of management accounting innovations among all industrial companies listed at (SCA) and (DFM) in UAE. The study put particular emphasis on (i) identifying the main factors driving the implementation of MAIs; (ii)

the nature and degree of satisfaction of the current role of supply-side factors in encouraging the implementation of MAIs; and finally, (iii) ascertaining the main reasons for not implementing MAIs. In our approach, we adopted the previous studies in this area (BJORNENAK, 1997; CLARKE et al. 1999; MAlMI, 1999; ABRAHAMSON, 1991). Respondents found the close-ended questions quicker and easier to complete and accordingly, we followed this type of design in all questions. We employed the five-point Likert scales for all statements requiring "scaling" in the questionnaire. We sent questionnaires to the chief financial manager of each industrial company listed at SCA and DFM in UAE at the end of 2018. The response rate was 77% (we distributed 62 questionnaires and 48 questionnaires returned.

In the second stage, we employed semi-structured interviews to investigate the role of current supply-side factors encouraging the implementation of MAI as well as other factors that prevented them from implementing MAIs. To assure and secure validity and reliability of information deriving from this research type, we followed SEKARAN (2003), COLLIS and HUSSEY (2003), DEVAUS (2007) and YIN (2003). Accordingly, we performed a set of activities before the interview, during the interview and after the interview. For example, we sent a common letter to all 48 industrial sector companies describing the intention and purpose of the study as well as a list of interview questions in advance to all respondents before the interviews accompanying an agreement letter with general information about the research. This followed the telephone calls to assert their willingness and participation. In phone calls, we asked the respondents whether

they would agree their interviews to be tape-recorded. To convince them participate (without hesitation), we made sure to every respondent that all interviews including their (respective) identity would safe & private with strict confidentiality. After this exercise, 18 companies agreed for an interview at a mutually convenient time and location. We conducted the interviews in English. Each interview lasted between 20 to 50 minutes. After each interview, we prepared a transcript in English; provided a copy of transcripts to the respondents and simultaneously, invited them to discuss over any conflicting issues or any necessary changes they deem appropriate for incorporation. We found all interviewees in full agreement to the content of transcripts and approving the same for eventual analysis.

Earlier, BJORNENAK (1997) reviewed the literature on diffusion of management accounting innovations and conducted a survey to investigate the role of factors such as, consultant companies and mass media in diffusion process of MAIs. Later, CLARKE et al. (1999) examined the role of accounting education and accounting bodies. Among the supply-side factors addressed in their studies and others, including ACRAHAMSON (1991) and MALMI (1999), we found the following factors to be pertinent to focus on for our study namely, Consultant companies; Accounting education in UAE universities; Professional accounting bodies in UAE; Conferences, seminars and workshops; Co-operation between universities (academics) and companies (professionals); Specialist MA journals; Accounting research in UAE.

We undertook a historical review of empirical and contingency-based research over the last two decades following the key sources: CHENHALL and LANGFIELD-SMITH (1998); MAIGA and JACOBS (2003); ABERNETHY and BOUWENS (2005); ABDEL-KADER and LUTHER (2006); ALAWATTAGE et al. (2007); ALCOUFFE et al. (2008); ABDEL-KADER and LUTHER (2008; HUTAIBAT (2005); Al-KHADASH and FERIDUN (2006); and finally, NASSAR et al. (2009). After revealing these sources, we identified five most popular cost and MAIs in the UAE industrial sector. They are Activity based costing (ABC), Activity based management (ABM; Benchmarking; Balanced scorecard; Target costing). We asked the respondents to determine the level of importance and influence each of the above listed supply-side factor through questionnaire that has on decisions to implement MAIs. We measured the responses on a 5-point scale that ranged from 1 = vitally unimportant to 5 = vitally important.

3. RESULTS and DISCUSSION

In this study, various sector types were classified based on the reports of Abu Dhabi Securites Exchange and Commodities Authority (SCA) and Dubai Financial Market (DFM) in EAU. We also asked the respondents to classify the industry type of their ‘companies’. The engineering sector belongs to the first group with its two constituents: Electrical, and Engineering and Construction industries. Processing

sector, the second group has four constituents. They are Chemical industries, Medical industries, Glass and Ceramic industries and Mining and Extraction industries. Finally, the third & last group includes Consumers Product sector with only one constituent, call Food and Beverages. They are all shown in Table 1-1.

Table 1: Characteristics of the respondents

Industrial Sector	Frequency	Percent
Engineering Sector	29	60%
Processing Sector	7	15%
Consumers Product Sector	12	25%
Total	48	100%

Based on our analysis, we report the results addressing the following research issues raised earlier in the paper.

Issue 1: State of implementation status of MAI in the UAE industrial sector

Thirty-Three (69%) of the forty-eight respondent companies were found to have used one of the five mentioned MAIs. This is shown in Table 1-2 in details:

Table 2: Percentages of Users for each MAI

Type of MAI	No. of users	Users percentages out of the 33 user	Users percentages out of the

			total respondents (48)
ABC	22	66.6%	45.8%
ABM	12	36.3%	25%
Benchmarking	31	93.9%	64.5%
Balanced scorecard	24	72.7%	50%
Target costing	27	81.8%	65.2%

It appears from the table that 22 companies out of 48, that is, 45.8% companies were using ABC and 12 companies (25%) were using ABM. Generalizing across the sector and expressing in percentage out of 48 respondent companies, we found the rate of ABC implementation to be 25. 86% within the UAE industrial sectors. Out of those 33 companies implementing MAI shown in table 1.2, 93.9% implemented Benchmarking, while 72.7% implemented balanced scorecard. During the study period, on average, the overall implementation rate of balance scorecard was 50% within the UAE industrial sector. The study found 27 companies (81.8%) implementing Target costing.

Issue 2: Main supply-side factors driving the implementation of MAIs within the UAE industrial sector.

All those respondents (out of 23) implementing the diffusion of MAI expressed opinions to what degree the seven highlighted factors influenced their decisions to implement MAI. They rated their opinions based on a 5-point scale that ranged from 1 = vitally unimportant to 5 = vitally important. Table 1-3 describes the responses.

Table 3: Degree of Importance of the Supply-side Factors on driving the implementation of MAI

	Min	Max	Mean	SD
Consultant companies	3.00	5.00	4.04	.67
Accounting education	2.00	5.00	4.04	5
Professional accounting bodies	1.00	5.00	3.91	.69
Conferences, seminars and workshops	2.00	5.00	3.55	5
Co-operation between universities	2.00	5.00	3.22	.84
(academics) and companies				8
(professionals)	1.00	5.00	2.67	.71
Specialist management accounting	2.00	5.00	2.67	4
journals				.87
Accounting research				6
				.47
				5
				1.2
				3

Above table shows, that consultant companies and accounting education played the most important role in driving the diffusion of MAIs within the UAE industrial sector. Earlier findings of COHEN et al. (2005) were similar to this, in that they suggested that companies should make use of outside experts to help them choose a more sophisticated system to deal with problems encountered during the implementation of MAI. After identifying the specific problems associated with current management accounting systems, Anderson (1995) found the opinions of consultant companies (external experts) profoundly influencing the choices of MAI. ABRAHAMSON (1991) called this type of implementation the "fashion" perspective. As uncertain factors tend to dwell on goals and efficiency of innovations, companies would more likely tend to imitate other companies, as suggested by this perspective. Consequently, it is no wonder that companies usually in a group imitate the diffusion of MAIs promoted by consulting companies under uncertainty.

Findings of semi-structured interviews supported the above results. As per the head of cost accounting department in company 7, "I was requested to work with a consultant to replace the old cost accounting system and implement a new system to fit our business and production processes". He added, "The Company decided to deal with experts at that time. Actually, we got them here; they spoke to our managers, stock department manager, IT manager, and me. One of them (consultants) explained why ABC is an appropriate system for our operation systems and company". In similar way, the costing department Head of Company 2 said, "The implementation of ABC in

our company started with meetings between foreign experts and our top managers from various departments". Hence, consultant companies drove implementation of MAI in these two companies.

Issue 3: Degree of satisfaction on the current role of supply-side factors in driving the implementation of MAIs

Table 1- 4 reports the degree of satisfaction on the role of supply-side factors ; they related to factors such as, local consultant companies, accounting education, conferences, seminars and workshops, accounting researches, cooperation between academic universities and companies, and professional accounting bodies. Table 1-4 also shows the need for improvement of most of these factors.

Table 4: Degree of satisfaction regarding to current role of supply-side factors on driving the implementation of MAI

	Dissatisfied	**Needs improvement**	**Seems reasonable**	**Very satisfied**	**Cumulative**
Local consultant companies	10 (30.3) 10 (30.3)	9 (27.2) 8 (24.2)	10 (30.3) 12 (36.3)	4 (12.2) 3 (9..2)	33 100% 33 100%
Accounting education	15 (45.3) 4 (12.2)	11 (33.3) 14 (42.3)	4 (12.2) 11 (33.3)	3 (9.2) 4 (12.2)	33 100% 33 100%
Profession	13	8	6	6	33

al accounting bodies	(39.3) 10 (30.3)	(24.3) 17 (51.5)	(18.2) 4 (12.2)	(18.2) 2 (6)	100% 33 100%
Conferences, seminars and workshops					
Accounting research					
Co-operation between universities (academics) and companies (professionals)					

Our findings from semi-structured interviews support the results shown in Table 1-4. As per the financial manager of company 14 "there are not enough consultants that provide education about MAIs. We should have more practical MA training. Each company interested in implementing MAIs should have advisers to check and give advice". Financial manager in Company 5 similarly, said, "In UAE there is a lack of consultant companies, making the company dependent fully on expensive foreign expertise".

Our findings demonstrate the need for more conferences and seminars on accounting issues in general, and implementation process of MAI in particular, as suggested by the financial manager in company 10. The manager continued further reiterating the need for availability of journals specializing in MAI to accountants and financial managers in UAE. Additional comments relate to the shortage of management accounting research as well as PhD holders in the area of management accounting within the UAE public universities. "Our universities are not active in management accounting research. For example, this is the first time I have seen a questionnaire or participated in an interview on the factors driving the implementation of MAI in our sector in such detail as yours. Actually, I wanted to apply to do a PhD in accounting in UAE but we do not have such doctoral courses in our public universities", quoted by manager in company 10.

The head of cost accounting department in Company 13 identified the importance of cooperation between industrial companies and universities. Currently such cooperation does not exist or is very

weak. Once cooperation exists or gets the momentum, this would help assist improving the accounting practices and knowledge on the diffusion of MAI in the UAE industrial sector. He said, "To be honest with you, from the past and until today the relationship and cooperation between the accounting professionals in the field and academics in universities is very weak. I only communicate when someone ask me to fill in a questionnaire or is asking to conduct an interview. I think we should communicate more often if we really need to improve upon our costing system and implement the diffusion of MAI."

Issue 4: Main reasons for not implementing the diffusion of MAI

Those fifteen respondents operating traditional management accounting systems (TMAs), and not implementing the diffusion of MAIs were provided with a list of 7 potential reasons to choose from to explain their failure of implementing MAIs. The respondents rated the reasons on a five-point scale, where 1 represented 'strongly disagree' and 5 representing 'strongly agree'. The mean scores of each item depicted possible reasons. The responses are summarised in Table 1-5.

Table 5: Potential Reasons and Rating for Not Implementing MAI

	Min	Max	Mean	SD

Lack of Co-operation between universities (academics) and companies (professionals) in UAE	2.00	5.00	4.20	.422
Lack of Conferences, seminars and workshops in UAE	2.00	5.00	4.04	.462
Lack of local Consultant companies	2.00	5.00	3.97	.551
Poor of Accounting education	2.00	5.00	3.72	.989
Lack of Specialist management accounting journals in UAE	1.00	4.00	2.82	.557
Lack of Accounting research	1.00	4.00	2.22	.289
Lack of Professional accounting bodies	2.00	4.00	2.04	.832

Above table shows that lack of Co-operation between universities (academics) and companies (professionals) in UAE (mean score = 4.2) were most important reasons cited for not implementing the diffusion of MAIs; this is followed by the Lack of Conferences, seminars and workshops in UAE (mean score = 4.04)) and finally, lack of local Consultanant companies (mean score =3.97).

4. CONCLUSION

In this study, we investigated the role of supply-side factors on company decisions to diffusion of MAIs within the UAE industrial

sector to ascertain the level of satisfaction on the role of each supply-side factor had on influencing the diffusion process of MAI. We conducted questionnaire surveys to 65 industrial companies; only 48 companies responded. We found that among the 48 responded companies, only 33 companies (68.75%) used one of the five-mentioned MAIs.

The 33 respondent companies who implemented the diffusion of MAI rated the importance of various factors driving the diffusion of MAI. The study found the role of consultant companies and accounting education as the most important factors. On the degree of satisfaction about the role of supply-side factor, the study results showed that most of these factors needed improvement. Finally, the study found the (i) lack of co-operation between universities (academics) and companies (professionals) in UAE, (ii) lack of conferences, seminars and workshops in UAE, and finally, (iii) the lack of local Consultant companies, the most cited factors for not implementing MAIs.

In UAE there is no existence of professional accounting body; our findings therefore, strongly finds its essence to strongly recommend the role and importance of Accounting bodies for improving and supporting companies to adopt and implement the diffusion of MAI within the industrial sector. This is in similar parlance with those of advocated in the literature earlier for USA and UK.

This study finds the perceived needs among the interviewees to arrange frequent conferences and seminars in accounting issues in

general, and ABC in particular. There is a perceived need for availability of journals in areas of management accounting to the accountants and financial managers in UAE. Our findings also identified the shortage of management accounting research and PhD holders in the area of management accounting within the UAE public universities.

There are several obvious shortcomings of this study when interpreting its results restricting the generalization of its findings. The study focused only on the UAE industrial companies. The results of this research might have been different if it had selected a broader range of companies. This also suggests the need to increase the coverage of this type of surveys to obtain a more comprehensive picture of the UAE industrial sector's perceptions in implementing MAI. This limitation, however, presents opportunities for future studies to investigate the issues and problems hitherto in more depth and coverage involving other emerging economies as well.

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