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Customer accounting practices, antecedents and performance implications: insights from the financial services industry in Kuwait

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Abstract

Competing effectively in the contemporary marketing landscape is becoming increasing challenging. Equally increasing therefore is the pertinence for organisations to be customer oriented. Academic discourse emphasises the need for more customer-oriented approach. Inspired by gaps in the literature, this study explores the contingency factors and performance implications of customer accounting in the Kuwaiti financial services industry. A questionnaire was used to collect data, and data analysis was based on 115 responses from management accountants of participating firms. This study reports critical insights that enhance the no one-size fits all notion of contingency foundation. For organisations in the industrial and geographical setting covered in this study, the insights from this study offer relevant cues for optimising customer accounting operationalisation and maximising the organisational performance impact. The limitations of this study have been acknowledged and critical directions for further knowledge development flagged.

Keywords Customer accounting, Perceived environmental uncertainty, Competition intensity, Formalisation, Decentralisation, Organisational strategy, organisational performance

Introduction

For many decades, scholars have emphasised the importance of management accounting in organisational dynamics (e.g. [1–4]. Theoretically, it is contended that if organisations endorse and effectively implement management accounting practices, they would achieve improved performance. A plausible rationale for that argument is that management accounting plays the critical enabling role of providing management with relevant information to enhance managerial decision-making for overall organisational performance (e.g. [5–7]. Given this importance, there is increasing research interest on management accounting practices (e.g.[4, 6, 8–10].

Despite that increase, there is still much room for empirical research towards enhancing the understanding of this topic. (e.g. [6, 11–14]). Bearing in mind that successful managerial decisions improve overall organisational profitability [15, 16] and also that the extent to which the overall organisational profitability is improved hinges on strategic alignment (e.g. [17–19]), the focus on management accounting has evolved much for over 25-years now, with scholars emphasising more the strategic component (strategic management accounting) (SMA). Within this focus, scholars advocate for a management accounting approach that gives due attention to the need for accounting for strategic positioning [19–21]. Elaborated by Langfield-Smith [9], SMA advocates contend that accounting should be strategically tailored towards achieving a more market-oriented focus.

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Since its first mention by Simmonds [22] in the UK professional magazine, *Management Accounting* (p.12), increasing persuasive arguments in favour of SMA or SCM (across the Atlantic) have featured in the literature (e.g. [3, 6, 9, 23]). Equally on the increase is the emphasis on the pertinence for empirical efforts towards improving the understanding of the SMA foundation (e.g. [3, 6, 14, 24, 25]. To optimise organisational planning and decision-making, further illumination of strategic management accounting is pertinent [3, 6, 26]. Inspired by that pertinence, this study aims to contribute to strategic management accounting theory.

Organisations are facing increasing challenge to achieve customer retention (e.g. [27–31], and therefore organisations are inevitably endorsing customer-focused strategy [27–30, 32–34]. In their 2010 publication, Roslender and Hart noted that "the importance that businesses have accorded their customers during the past thirty years has not, as yet, been fully matched by the development of accounting for the customer" (p.739). Recognising this importance for customer accounting that is customer centric, this study aims to contribute to the understanding of the contingency perspective of customer accounting practices and performance impact. This study aims to contribute to enhancing the understanding of CAPs, internal and external contingency factors, and relationship to organisational performance (e.g. [6, 24, 25, 35, 36]). Undertaking empirical investigation of this nature that seeks to enhance the understanding of what factors determine the nature of customer accounting practices on the one hand, antecedents, and whether there is a positive association between CAPs and organisational performance on the other hand, will contribute towards filling the gap between theoretical literature and practical applications (e.g. [36–39]).

Since the contingency perspective on SMA practices remain under-explored and insights on associated factors are still inconclusive [6, 40, 41] and much of existing literature relate to Western context [6], this study explores the Kuwaiti setting, a geographical setting that has received relatively little research attention [6, 42]. Taking this contingency approach is important because countries differ in their levels of economic development and marketing dynamics [43]. Furthermore, drawing from the notion of national culture and behavioural influence (e.g. [17, 44], it would seem rational to expect differences in the nature of MAPs and contingencies between countries. Exploring customer accounting practices in Kuwaiti, one of the major economic powers in the GCC area,[1] is important, and will contribute to improving the understanding of the contingency perspective of customer accounting practices (CAPs) and strategic management accounting practices SMAPs in general. Furthermore, this study is important and will enable financial services organisations in Kuwait to understand what nature of customer accounting practices they need to use to profitably satisfy their customers. This importance is also reinforced by researches that underline that the implication of contingency theory is that the structures and systems in an organisation are a task of such elements that are related to the environment and to the company itself (e.g. [5, 24, 25]).

Within this aim of contributing to the Kuwaiti context understanding of the contingency perspective of customer accounting practices (CAPs) and performance impact, this study inspired by evident research gaps in the literature, seeks to address the following research questions:

1. To what extent are financial services organisations (FSOs) in the Kuwait endorsing customer accounting practices?
2. What are the contingency factors that influence the customer accounting practices of financial services organisations in Kuwait?
3. What is the impact of customer accounting practices on the organisational performance of financial services organisations in Kuwait?

Sensitising these theoretical domains, this study seeks to develop a theoretical framework that will not only enhance the very scant literature about customer accounting practices in Kuwait and non-Western context, but also knowledge development on customer accounting practices of strategic management accounting.

Next, the theoretical framework and hypotheses are explained. Following that, the methodological approach taken in this study is explained, and thereafter the analytical process. The findings are subsequently presented and the theoretical as well as managerial implications explained. To conclude, the study limitations are acknowledged and future research directions flagged.

Theoretical framework and statement of hypotheses

The criticality of customer value creation in steering organisational strategy has been reiterated in the literature (e.g. [27, 28]). Recognising that criticality, this study responds to prior research (e.g. [6, 10, 24, 25] and focuses on the customer accounting (CA) component of strategic management accounting. In doing that, this study follows the contingency viewpoint. Within the contingency theory logic, scholars argue that there is no single generally

[1] Economic Outlook Database, [45], International Monetary Fund. https://en.wikipedia.org/wiki/Economy_of_Kuwait.

applicable standard accounting practice that can effectively be applied to all organisations (e.g. [6, 24, 25]. Thus, accounting practices that may best suit organisation A may not suit organisation B. The theoretical premise of this study is explained in the following order. First, literature is reviewed on customer accounting practices (Sect. "Customer Accounting Practices"). Following that, the contingencies of customer accounting are reviewed (Sect. "The Contingencies of Customer Accounting"). In Sect. "Organisational Performance", literature is reviewed on organisational performance, while the conceptual framework (including hypotheses specification) is the focus of Sect. "Conceptual Framework and Statement of Hypotheses".

Customer accounting practices

Accounting perspective customer-focused research documents a modest amount of past study [24, 25]. Organisational success hinges largely on customer-centric orientation [27, 27, 29, 29, 46] and research on customer accounting should be intensified [6, 35, 36]. Beside normative commentaries that describe the nature of customer accounting (e.g. [47–50]), Guilding and McManus [51] was the first empirical appraisal of CA usage. In the last decade, scholars have increasingly echoed the need to empirically illuminate CA practice [6, 35, 36].

With customers or group of customers as a unit of accounting analysis, customer accounting technique considers all accounting practices purposed to appraise profit, sales or costs deriving from customers or customer segments (e.g. [6, 24, 25, 51]). Existing literature has distilled several dimensions of customer accounting. While Guilding and McManus conceptualised five dimension, McManus [24, 25] described seven dimensions. Following the precedence in Ojra [6], three dimensions are considered in this study: customer profitability analysis (e.g. [6, 24, 25, 51]), lifetime customer profitability analysis (e.g. [6, 24, 25, 48]), and valuation of customer as assets (e.g. [6, 51, 52]).

Customer profitability analysis (CPA): Literature describes CPA (also referred to as "customer account profitability" ([51], p.46) to involve calculating the profit earned from a specific customer [5, 6, 24, 25]. The profit calculation is based on costs and sales that are traceable to a specific customer [5].

Lifetime customer profitability analysis: Another customer accounting element of SMA technique is lifetime customer profitability analysis [5, 24, 25]. Cadez and Guilding [5] note that this CA technique involves extending the time horizon for customer profitability analysis to include future years. In other words, the focus is on all anticipated future revenue streams and costs involved in servicing a particular customer [5].

Valuation of customers as assets: In this technique, the focus is on the calculation of the value of customers to the company [5]. This is usually done by computing the present value of all future streams attributable to a particular customer (e.g. [24, 25]).

The contingencies of customer accounting

Since organisations are unique in their operations and environment, management accounting practices would differ from one organisation to another [53]. Organisational contingencies may therefore not have the same influence in every context. The contingency perspective followed in this study draws from three theoretical domains: organisational environment (e.g. [6, 24, 25, 54]), organisational structure (e.g. [6, 18, 24, 25]), and organisational strategy (e.g. [6, 24, 25, 51]), and literature is reviewed next showcasing the core debates in these domains regarding customer accounting usage and connection to organisational performance.

Organisational environment factors

Academic discourse has flagged the environment of an organisation as a core contingency factor in the strategic management accounting literature (e.g. [6, 10, 24, 25, 55]). The theoretical plausibility in that viewpoint draws from the fact that the environment is viewed as a source of information where the decision-makers' perceptions of this information prompt them to make organisational process changes (e.g. [56–58]). SMA scholars have echoed the need for further illumination of the environment as a contingency of SMA usage and organisational performance (e.g. [6, 24, 25, 59]).

The literature on environment as organisational contingency component categorises external and internal factors (e.g. [6, 24, 25, 55, 59]). External environment factors include external environment uncertainty and competitive market pressures (e.g. [6, 24, 25, 59, 60]). On the other hand, internal factors include formalisation, centralisation and specialisation [6, 24, 25, 61]. While the external factors are addressed in this section, the internal factors are addressed in Sect. "Organisational Structure Factors".

Romanelli and Tushman, [62] note that the external environment is the most influential factor of organisational actions. Reinforcing that notion, much research attention has been given to this construct. However, while it is believed that the best way to implement a management accounting technique would be shaped by the external features of the organisation [5, 6, 26], there is still much debate about how external environmental

factors impact on SMA usage and performance [24, 25, 60]. Drawing from the insight in past literature (e.g. [6, 24, 25], this study considers two components of external environment: perceived environmental uncertainty and competition intensity.

Perceived Environmental Uncertainty (PEU): According to the literature, perceived environmental uncertainty relates to managers inability to predict accurately the external environment surrounding their companies [6, 24, 25, 59].

PEU impacts profoundly on a company's information needs [63]. Indeed, these scholars observe a positive relationship between environmental uncertainty and timeliness in broader scope information. In other words, in highly uncertain environments mangers need information that is not only timely, current, but also provides rapid feedback on decisions. Furthermore, they note that managers also need information related to the external environment, and are also future orientated. It would therefore seem rational to suggest that organisations that operate in highly uncertain environments would require customer accounting information that would be timely, current, frequent and future oriented. Indeed, scholars have suggested strategic management accounting techniques usage would be influenced by the level of perceived environmental uncertainty. Contrary to conceptualisation, McManus [24, 25] found no support for the hypothesis that there would be higher CA measures usage rates in hotels where managers perceive greater environmental uncertainty. In a similar vein, Jusoh [59] conceptualised that when the perceived environmental uncertainty increases, the usage of balanced scorecard measures would also increase. Furthermore, Jusoh [59] notes that the higher the degree of PEU, the greater the extent of customer measures usage. Similar to McManus [24, 25] the statistical results in Jusoh [59] did not support the conceptualised hypotheses. Contrary to the aforementioned findings, Ojra suggests that perceived environmental uncertainty (referred to PEU-market turbulence) would negatively impact on the usage of strategic management accounting techniques (SMAU) in the Palestinian context, a finding which contrasts the hypothetical framing in Ojra [6].

Concurring to past literature (e.g. [5, 6, 24, 25], this study argues that changes in the external environmental would lead to changes in the management accounting and control systems used in an organisation [5, 24–26]. This study therefore aims to contribute to further illumination of this construct and customer accounting usage association.

Competition Intensity: According to Khandwalla [64, 65], competition, which is an element of environmental uncertainty, is positively correlated with the use of controls. For organisations wanting to effectively respond to threats and opportunities of a competitive environment, the importance of differentiation and creativity is immense, Khandwalla adds. That proposition echoes the view by Lawrence and Lorsch [58] that the more an organisation becomes differentiated, the more the need for sophisticated controls. Further literature that relates specifically to customer accounting (CA) offers supporting arguments. For example, Bellis-Jones [66] and Foster and Gupta [48] propose that CA systems may be more suitable for firms operating in highly competitive markets. Customer orientation scholars [67] underline that in highly competitive environments there is a pertinence to focus on the customer and to analyse performance in a way that insights about consumers' desires and how customer value can be created are provided. Thus, there is suggestion that CA is positively associated with competition, a viewpoint that appears consistent with Khandwalla's [64] finding of a positive relationship between management accounting system sophistication and competition intensity.

On the other hand, where there is low competition, which is often the case in government regulated markets and monopolies, there would be limited need for CA [51]. A plausible reason for this, Guilding and McManus [51] add, is that customers are not able to easily change suppliers and fixed prices imply limited variability in customer profit levels. Thus, higher levels of competition compel companies to find ways of differentiating their products and services from those of competitors [24, 25, 51]. A consequence of this competition intensity-driven response is increased number of product and service lines offered as well as increased customer segmentation [68, 69].

In their study, Guilding and McManus [51] report a contrast as well as support for their hypothesis. They argue that competition intensity does not show a significant relationship with the perceived merit of customer profitability analysis and lifetime customer profitability analysis. They also suggest that there is a positive association between competition intensity and perceived merit of customer accounting ($P < 0.05$). Statistically, that study also suggests that the square of competition intensity is significantly negatively related to customer segment profitability analysis ($P < 0.1$). In a later study, McManus [24, 25] found a positive relationship between competition intensity and CA and marketing performance measures in four of the six financial performance models. Utilising these insights, this study seeks to enhance the understanding of the association between competition intensity and customer accounting practices usage.

Organisational structure factors

Contingency perspective of strategic management accounting has recognised organisational structure as a core variable (e.g. [6, 10, 24, 25, 70]). In the literature, management accounting has been viewed as both an element of organisational structure and an outcome of chosen organisational structure [71, 72]. In this current study, the outcome context is the focus. Drawing from the range of contingencies that have been considered in past studies (e.g. [6, 17, 18, 24, 25, 61]), two organisational structure factors (also called internal environment factors) are considered in this current study: decentralisation and formalisation.

Decentralisation: Academic discourse suggests that decentralisation (delegating decision-making authority to lower levels) would enable organisations adapt the strategic management accounting practices as need arises (e.g. [73, 74]). Embracing decentralisation would enable organisations identify strategic priorities with a customer-oriented focus [70]. Further literature argues that organisations that embrace this practice of delegating decision-making authority would tend to implement changes in their management accounting systems as this would enable them link various activities across the organisation [70, 75].

In a study of Australian hotel industry, McManus [24, 25] found some support that suggests that there was greater use of CA measures in hotels with a decentralised structure than with a centralised structure. However, support was not found for some models conceptualised in McManus [24, 25], empirical insights that corroborate evidence on the influence of decentralisation from the interfunctional relationship domain (e.g. [18, 34]). These facts highlight not only the complexities with this construct but also the pertinence for more empirical efforts. This pertinence is further supported by Jusoh [59] and Ojra [6]. With regards to Ojra [6] who explored strategic management accounting techniques usage (SMAU) in Palestinian context, contrary to conceptualised hypothesis, no evidence was found that SAMU would be higher in organisations with decentralised decision-making process.

Formalisation: Furthermore, contingency literature suggests that formalisation, another component of organisational structure, influences the strategic management accounting practices in an organisation (e.g. [76]. According to Ruekert et al. [77], formalisation is the degree to which decisions and working relationships are guided by strict rules and standard policies and procedures. Hatch [78] adds that such rules and procedures serve as guide for work processes and enable coordination by ensuring that desired activities are executed in a structured manner. In such highly structured environment where responsibilities are regulated by strict rules and operating procedures, it would be expected that employees would less likely act swiftly to exploit opportunities, with the consequence being that organisations' customer orientation ability would be adversely affected.

Following aforementioned theoretical facts, this study posits that such a formalised approach will influence the customer accounting practices usage of an organisation. Drawing on the formalisation foundation, scholars across various management streams have examined the association of formalisation and organisational dynamics. In the relationship management domain, Opute et al. [61] contend that formalisation correlates positively to achieved integration between accounting and marketing functional areas in UK financial services organisations. In other words, they suggest that the more formalised the processes and structures in an organisation, the higher the achieved level of integration between the departments. In the strategic management accounting domain, Ojra [6] explored strategic management accounting techniques adoption and the association of formalisation.

In that study of the Palestinian context, Ojra [6] hypothesised that lesser level of formalisation would lead to a higher level of SMA-techniques usage. The empirical results from that study however do not support that hypothesis, a result that contrasts with the view in Tuan Mat's [79] investigation of management accounting practices (MAPs).

Given the vagueness of the literature on the influence of internal environmental factors on SMA usage and performance [60, 80], contingency scholars call for more researches that identify the specific aspects of accounting systems that associate to certain defined circumstances and demonstrate appropriate matching (e.g. [6, 80]. To contribute to knowledge in this area, this study explores the relationship between formalisation and customer accounting practices usage in Kuwaiti financial services organisations (FSOs).

Organisational strategy

Strategy literature documents different characterisation of strategy and strategic processes (e.g. [81, 82]). While management accounting scholars have drawn from strategic theory to advance knowledge, the theoretical focus embraced in accounting research (e.g. [83–85]) has often adopted an approach that assumes that strategy development and strategy implementation are formal structured processes [13]. According to Cadez and Guilding [5], the business strategy that an organisation adopts would influence its SMA systems design. Given this fact, the pertinence for enhanced understanding of

how business strategy associates with the usage of strategic management accounting practices has been reiterated (e.g. [6, 24–26]). Based on reviewed literature, there is a growing notion that SMA adoption is influenced by business strategy (e.g. [6, 24, 25, 51]). Despite that, the need for further research on their association has been repeatedly re-echoed. One plausible reason that justifies that call relates to the core weak elements in operationalising strategy [13], p.776–777). As Langfield-Smith [13] elaborates, the multidimensional nature of strategy, the difference between intended and realised strategy, the difficulty of communicating the significance of different strategy typologies to managers and the recognition of strategy as an ongoing development process are core issues in the SMA discourse.

Miles and his colleagues [86, 87] identify three strategic typologies[2]: (1) Prospectors compete primarily through product innovation, offer a wide product range and are usually pioneers in the product and market area. The principal functions in prospector organisations are marketing and research and development (R&D). (2) Defenders operate in a relatively stable environment and offer a narrow product range. Since they prefer production and engineering functions, defenders focus on efficiency. (3) Analysers, who combine both prospector and defender features, compete in a two-type product-market domain; one is more stable so, as defenders. Analysers concentrate on efficiency, while the other is more dynamic.

This typological conceptualisation has been mainly embraced in SMA literature though in diverse contextualisation. Investigating Australian hotel industry, McManus [24, 25] conceptualised a higher usage of customer accounting in prospector type companies but found no support for that hypothesis. In a more recent study, Ojra [6] examined Palestinian companies and concluded that prospector type companies would have more need of strategic management accounting practices than defender type companies. While Ojra [6], the first study to examine the Arabic context of strategic management accounting usage (SMAU), conceptualised multiple dimensions of SMAU [SMAU-Costing, SMAU-Planning, Control and Performance Measurement,SMAU-Strategic Decision Making; SMAU-Competitor Accounting; and SMAU-Customer Accounting], the statistical evaluation covered only Total-SMAU. To enhance Ojra [6], this current study examined Customer Accounting dimension.

Organisational performance

As mentioned earlier, the underlying foundation for the conceptual focus in this study proposes that when organisations are able to effectively understand the contingencies surrounding their operations, they would be better able to utilise suitable customer accounting practices that would improve organisational performance. Following that foundation, this study also examines the relationship between customer accounting practices usage and organisational performance. This conceptual approach has been depicted in past literature. For example, Ojra [6] conceptualised a positive impact of strategic management accounting techniques usage on organisational performance in Palestinian companies, while McManus conceptualised a positive impact of customer accounting on organisational performance in Australian companies. Empirically, Ojra [6] suggests a contrast as well as support. While support was found that SMAU would positively impact on non-financial element of organisational performance [$\beta = 0.550$a, Sig. = (0.000); t-value = 8.298], no support was found for the financial element of organisational performance. Investigating Australian companies, McManus [24, 25] found no direct association between financial performance and any of the six CA and marketing constructs.

Drawing from the aforementioned conceptual framing, this current study examines the association between customer accounting usage and organisational performance.

Conceptual framework and statement of hypotheses

Figure 1 summarises the conceptual framework for understanding customer accounting practices in financial services firms in Kuwait.

Conceptually, this study follows the theoretical notion that organisations that strategically manage the contingencies surrounding their operations and align that to the customer accounting adoption would achieve higher organisational performance. Drawing from core debates flagged in sections 2.3.1, 2.3.2, 2.3.3 and 2.4, this study examined six hypotheses:

H1 Customer accounting practices usage would be higher in Kuwaiti FSOs with higher competition intensity than in those with lower competition intensity.
H2 Customer accounting practices usage will be higher in prospector type than in defender type in Kuwaiti FSOs.
H3 Perceived environmental uncertainty would positively influence customer accounting practices usage in Kuwaiti FSOs.
H4 Customer accounting practices usage would be higher in Kuwaiti FSOs with decentralised decision-making process than organisations that embrace centralisation.

[2] The Prospector, Defender and Analyser typologies are explained in detail in Miles et al., 1978.

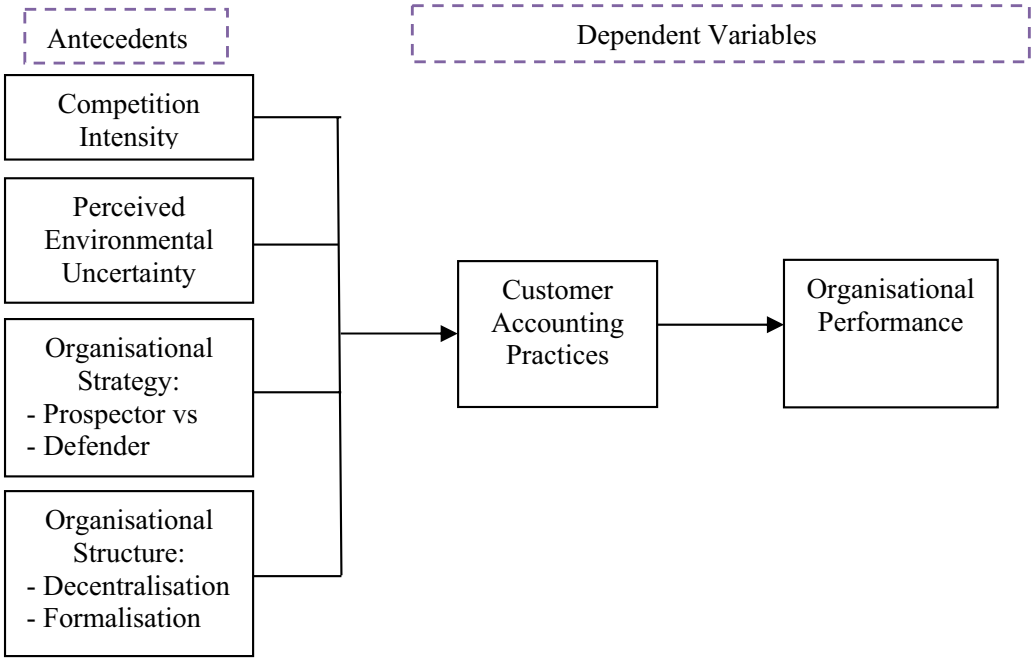

Fig. 1 The conceptual framework for this study

H5 Lower level of formalisation process would lead to higher usage of customer accounting practices in Kuwaiti FSOs.

H6 Finally, drawing from the discourse in Sect. "Organisational Performance", it is hypothesised in this study's conceptual framework that effective customer accounting usage (CAU) would positively influence organisational performance in Kuwaiti FSOs.

Methods

Research methodology

Introduction

Given the objectives of this research, exploratory research design approach which involves " .... formulating relevant hypotheses for later tests" [88], p.37) is appropriate in this study. This exploratory approach will enable the target of adequately answering the defined research questions [88, 89].

Study's location, the sample and survey instrument

The primary focus of this Section is to explain the geographical location of this study and the participating companies and respondents and why. Also, Sect. "Study's Location, the Sample and Survey Instrument" explains the ethical procedures followed in engaging with the companies and the respondents.

This study was applied on Kuwait, which is situated at the north-eastern edge of the Arabian Peninsula,[3] which consists of six governorates: Hawalli, Asimah (Capital), Farwaniyah, Jahra, Ahmadi and Mubarak Al-Kabeer.[4] Kuwait is a small petroleum-based economy[5] and the major non-petroleum industries include financial services (op. cit.). According to World Bank report, Kuwait is the fourth richest country in the world per capita[6] and the second richest GCC country per capita (after Qatar)[7]+.[8] Kuwait has witnessed immense economic growth in the recent past and is one of the major economic forces in the Gulf area.[9] Further statistics show that as of 2014, Kuwait had the highest per capita income in the Middle East region (USD 37.821) and had the second largest total assets under management (USD

[3] http://worldpopulationreview.com/countries/kuwait-population/.

[4] https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Demographics_of_Kuwait.html.

[5] "Kuwait" [90]. The World Factbook. Central Intelligence Agency. https://en.wikipedia.org/wiki/Economy_of_Kuwait.

[6] "GDP per capita, PPP [91] (current international $)", World Development Indicators database, World Bank. https://en.wikipedia.org/wiki/Economy_of_Kuwait.

[7] GDP—per capita (PPP) [92], The World Factbook, Central Intelligence Agency. https://en.wikipedia.org/wiki/Economy_of_Kuwait.

[8] Economic Outlook Database, [45], International Monetary Fund. https://en.wikipedia.org/wiki/Economy_of_Kuwait

[9] The Wages of Oil: Parliaments and Economic Development in Kuwait and the UAE". Michael Herb. https://en.wikipedia.org/wiki/Economy_of_Kuwait.

4.1 Bn) in 2013 after only KSA (see footnote 10). Studying this topic in the Kuwaiti context is important because of research vacuum. Existing literature on customer accounting reflect majorly Western context. Exploring this context would help the theorising of customer accounting practice especially from the perspective of Kuwait which is guided by Islamic principles and thus would exhibit features that may not characterise Western context. Furthermore, it is important for organisations in this area to understand how to optimise customer accounting and improve organisational performance. Finally, financial services organisations participated in this study because the financial services sectors constitute one of the major contributors to the Kuwaiti economy, and as matter of fact, the financial services sector in Kuwait is one of the biggest in the Gulf countries[10] (see also 8).

As documented in the Central Statistical Organisation[11]) report, the financial services sector in Kuwait consists of 23 local, regional and international banks, 81 local investment and finance companies, 113 local investment funds, and over 23 local, regional and international insurance companies. The Kuwaiti directory of companies was examined and 150 of the listed financial services organisations were selected for this study. Following methodological precedence on exploring strategic management accounting practices in the Arab setting [6], each selected financial services organisation had an employee capacity of at least 50.

Ethical measures were taken to ensure confidentiality and privacy of participating organisations and individuals [93, 94]. The directors of each of the participating companies were contacted and approval was obtained from the responsible personnel for management accounting to participate in this study. Participating companies were assured that survey data obtained will be used with optimum confidentiality.

Towards ensuring research validity (e.g. [95, 96]), the measurement instrument for this study was adopted from past studies (e.g. [6, 24, 25, 51]). Appendix 1 summarises the survey instrument for measuring the conceptualised framework (Fig. 1).

Following methodological tradition in the study of contingency perspective of strategic management accounting practices (e.g. [5, 6, 24, 25]), a 7-point Likert scale was used in this study. Participants in this study were asked to respond to each of the measurement items for each construct on the 7-point scale. For the competition intensity construct, the seven-point scale ranging from "1" (not at all) to "7" (to a large extent) was used, while the scale for perceived environmental uncertainty ranged from "1" (very predictable) to "7" (very unpredictable). For the decentralisation and formalisation constructs, the managers were asked to respond to the items for each construct on a scale ranging from "1" (Strongly Disagree) to "7" (Strongly Agree). For the strategy construct, managers were asked to respond, based on the description of the two FSOs, on a seven-point scale where they would place their FSO's current strategic position compared to their competitors. A "1" (FSO A) represents a defender FSO and a "7" (FSO B) represents a prospector FSO. Customer accounting usage was measured on a Likert scale ranging from 1 ("not at all"), to 7 ("to a large extent"). For the organisational performance construct, respondents were asked to indicate their company's performance relative to their competitors on a scale ranging from "1″ (well below average) to "7″ (well above average).

The questionnaire for this study, which was based on measurement items collated from past studies (see Appendix1), was pilot tested to ensure the suitability of the questions to the context of the study (e.g. Meng et al, [97]). Qualified personnel (management accountants) of 10 financial services organisations participated in the pilot testing of the questionnaire for this study (e.g. [6, 43, 61]). Taking into consideration the comments, questions, and suggestions of the participants, the questionnaire was then revised to ensure suitability for this study.

The actual survey

Management accountants (management controller in some cases) of selected financial services organisations participated in the main survey. Overall, 150 questionnaires were distributed, and 123 completed questionnaires were returned. The responses from 8 respondents were however deemed unfit for use in this study due to missing data. Thus, 115 responses were deemed fit for analysis in this study, representing a response rate of 76.67% which compares favourably well to past non-Western context study of contingency perspective of strategic management accounting usage [6] at RR = 46.15%).

Table 1 summarises the demographics of respondents and participating FSOs. While questions relating to total revenue (last financial year) and approximate balance sheet value of total assets of participating FSOs were included in the questionnaire, respondents seemed reluctant to respond to these questions.

Data analysis

Before testing the conceptualised hypotheses, several steps were taken to ensure the suitability of the data for analysis in this study [98]. Reliability and validity are

[10] https://e.kdipa.gov.kw/main/8Banking.pdf.

[11] https://e.kdipa.gov.kw/main/8Banking.pdf.

Table 1 Demographics of respondents and FSOs ($n = 115$)

Demographic variables	Categories for the Variables	Nr. of Respondents	%age of Total Respondents
Gender of Respondents	Male	101	87.83%
	Female	14	12.17%
Age of respondents	Btw. 31 and 40 years old	39	33.91%
	Btw. 41 and 50 years old	51	44.35%
	Btw. 51 and above	25	21.74%
Years respondents worked at current company	Btw. 6 and 10 years	24	20.87%
	Btw. 11 and 15 years	45	39.13%
	Btw. 16 and 20 years	31	26.96%
	Btw. 21 and 25 years	15	13.04%
	Btw 26 and above	0	0.0%
Years FSOs have operated	Btw. 5 to 10 Years	6	5.21%
	Btw. 11 to 15 Years	39	33.91%
	Btw. 16 to 20 Years	50	43.48%
	Btw. 21 to 25 Years	12	10.43%
	More than 25 Years	8	6.96%

two core elements that must be ensured in any sound research [98].

Given the low sample for this study (n = 115), we followed methodological guideline for enhancing the empirical evidence in a study [99, 100]. Salganik [100] recommends that researchers utilise bootstrap procedure to generate a set of replicate samples from the observed sample. Based on the replicate sample, researchers can then achieve replicate estimates [100]. To determine a confidence interval around the original point estimate, the variation in the replicate estimates would need to be examined [99]. In this study, a bootstrap re-sampling test was undertaken to ascertain the confidence interval for the population towards enhancing this study's empirical evidence [99, 100].

Based on the extrapolated sample (n = 1000), the bootstrap test results for all measurement items for each construct (CompInt, PerEnvUnc, Dcent, Form, CustAcct, OrgStrat, and OrgPerf) suggest a satisfactory statistical strength [100] (see Table 2). As evident in Table 2, achieved bootstrap re-sampling confidence interval matches the 95% confidence level benchmark (see [99, 100]. On the bootstrap re-sampling evidence, a satisfactory confidence level for the original data and sample is confirmed, and therefore, the conclusions in this study based on the original sample (n = 115) are statistically valid.

According to methodological literature, reliability is the degree to which a measure is free from random error and reflects the internal consistency of a measurement device [94, 101]. Cronbachs alpha coefficients were estimated to ensure the reliability of the scales used in this study [102]. Standard deviation and mean values for the constructs and each measurement item were also estimated. All Cronbach's alpha estimates measure favourably with the benchmark of 0.70 [103] (Table 3). Also, in Table 3, the standard deviation estimates and mean values support satisfactory reliability of the scale for this study. Thus, acceptable levels of internal consistency and homogeneity have been achieved in this study [104, 102].

Table 2 Bootstrap re-sampling confidence interval results

Sampling method	Simple
Number of Samples	1000
Confidence Interval Level	95.0%
Confidence Interval Type	Percentile

Validity, which implies the accuracy of measurement device and represents the ability of a scale to measure what it is intended to measure (e.g. [105]), was confirmed in this study. To understand the structure of relationship between the variables and constructs, factor analysis was conducted [98], a step which is also necessary towards confirming validity in research [106, 107]. Principal component analysis (PCA) was used to understand the factor structure in this study [103]. Following standard benchmark [98], the variables load reasonably well onto the conceptualised constructs with the least loading being 0.900. Statistically, the variables truly measure the constructs and the variable loadings for each factor are displayed in Tables 4 and 5. Tables 4 and 5 also display the percentage (%age) of variance explained, significance level, and Kaiser Meyer Olkin Measure of Sampling Adequacy Coefficient, and all statistics are satisfactory and confirm validity in this research. Furthermore, the inter-item correlation for every factor was examined. The inter-item statistics for each factor are satisfactory and range from 0.774 to 0.932 (see Tables 4 and 5). These inter-item results indicate that the items for each factor are strongly

Table 3 Reliability Estimates for Factors used in Further Analysis

Factors	No. of items	Min Pt	Max Pt	Item Mean	Item Std. dev	Factor Mean	Cronb Alpha
Competition Intensity (CompInt1-4)	4	1.000	7.000	4.208	1.694	4.285	.97
		1.000	7.000	4.208	1.694		
		1.000	7.000	4.222	1.833		
		1.000	7.000	4.500	1.744		
Perceived Environmental Uncertainty (PerEnvUnc1-5)	5	1.000	6.000	4.181	1.681	4.300	.97
	*1	1.000	7.000	4.333	1.736		
		1.000	7.000	4.361	1.629		
		1.000	7.000	4.319	1.685		
		1.000	7.000	4.306	1.781		
Decentralisation (Dcent1-3)	3	1.000	7.000	4.263	1.618	4.278	.95
		1.000	7.000	4.306	1.615		
		1.000	7.000	4.264	1618		
Formalisation (Form1-3)	3	1.000	7.000	4.333	1.574	4.379	.96
		1.000	7.000	4.375	1.605		
		1.000	7.000	4.331	1.727		
Customer Accounting (CustAcct1-3)	3	1.000	6.000	4.194	1.607	4.278	.95
		2.000	7.000	4.306	1.535		
		1.000	7.000	4.333	1.861		
Organisational Strategy *	1	1.000	7.000	4.181	1.630	4.181	
Organisational Performance (OrgPerf1-6)	6	1.000	7.000	4.347	1.493	4.287	.97
		1.000	7.000	4.319	1.599		
		1.000	7.000	4.181	1.664		
		1.000	7.000	4.194	1.797		
		1.000	7.000	4.333	1.799		
		1.000	7.000	4.347	1.762		

*One item was used to measure ability to compete/performance; therefore, Cronbachs alpha cannot be estimated. *1 = point 4 on Likert scale not ticked

close and measure the conceptualised constructs, evidence that further suggest validity in this research.

The factor analysis deduced factors considered in the regression analysis (see Sect. "Regression Analysis") include Competition Intensity, Perceived Environmental Uncertainty, Decentralisation, Formalisation, Customer Accounting, and Organisational Performance. While Organisational Strategy was also examined in this study, factor analysis was not run as one variable was used to gauge this factor.

Following methodological recommendation, discriminant analysis was undertaken by examining the correlation between the factors as shown in the factor structure deduced from the factor analysis (e.g. Lee and Scott [108]). The correlation coefficients of each pair of the independent variables fall below 0.8, thus there is no multicollinearity threat [98].

Regression analysis

In line with the conceptualisation for this study, after ensuring reliability and validity of the research tool, regression analysis was conducted to examine the conceptualised independent and dependent relationships as summarised in Fig. 1. Multiple regression analysis was carried out to examine how several independent variables predict a single dependent variable [98, 109], a methodological approach that has been identified as the most ideal technique for assessing the relationship between two or more variables (e.g. [103]). Utilising that multiple regression analysis approach, the variance in the dependent variable that is accounted for by each individual independent variable was explained.

In the regression analysis for this study, the key statistical estimates that were calculated include R^2, Adjusted R^2, and Regression F-Value. Also, the β coefficients for each independent variable, t-value and significance levels were estimated. The regression results are presented in Table 6. Also, as evident in that Table, collinearity diagnostics were estimated, and the evidence supports unidimensionality of the measured factors.

In line with the conceptualisation in this study, the influence of organisational strategy on customer accounting practices usage was examined. The empirical findings from this study suggest that in the Kuwaiti financial services setting, prospector strategy-oriented organisations would endorse customer accounting practices than defender type FSOs (empirical results are elaborated in Sect. "The Findings and Implications of the Study"). Also, the organisational performance impact of customer accounting practices usage was also examined. A bivariate correlation analysis of both factors indicates that the more Kuwaiti FSOs use

Table 4 Summary of Principal Component Analysis & Item Inter-Correlation Analysis for Organisational Performance, Perceived Environmental Uncertainty, and Competition Intensity ($n = 115$)

Measures of Organisational Performance (OP1-OP6)	**OP1**	**OP2**	**OP3**	**OP4**	**OP5**	**OP6**	**Factor Loading**
OP1	1.000						.931
OP2	.932	1.000					.943
OP3	.825	.856	1.000				.927
OP4	.825	.845	.888	1.000			.943
OP5	.784	.799	.774	.855	1.000		.903
OP6	.794	.795	.795	.815	.803	1.000	.900
Explained Variance of Organisational Performance: 85.50% Eigen-Value of Organisational Performance: 5.130	Determinant Significance of Organisational Performance: .000 Kaiser-M–O Measure of Sampling Adequacy for Organisational Performance: .89 (.000)						
Measures of Perceived Environmental Uncertainty (PEU1—PEU5)	**PEU1**	**PEU2**	**PEU3**	**PEU4**	**PEU5**		**Factor Loading**
PEU1	1.000						.937
PEU2	.896	1.000					.957
PEU3	.850	.883	1.000				.938
PEU4	.834	.863	.850	1.000			.940
PEU5	.833	.864	.835	.877	1.000		.936
Explained Var. of Perceived Environmental Uncertainty: 88.68% Eigen-Value of Perceived Environmental Uncertainty: 4.434	Determinant Significance of Perceived Environmental Uncertainty: .002 K-M–O Meas. of Samp. Adequacy for Perceived Environmental Uncertainty: .91 (.000)						
Measures of Competition Intensity (CI1—CI4)	**CI1**	**CI2**	**CI3**	**CI4**			**Factor Loading**
CI1	1.000						.959
CI2	.931	1.000					.963
CI3	.865	.878	1.000				.950
CI4	.870	.870	.890	1.000			.949
Explained Variance of Competition Intensity: 91.30% Eigen-Value of Competition Intensity: 3.652	Determinant Significance of Competition Intensity: .005 Kaiser–Meyer–Olkin Measure of Sampling Adequacy for Competition Intensity: .84 (.000)						

customer accounting practices, the more organisational performance would improve (at $\beta = 0.891$, significance level = 0.000).

To ensure discriminant validity in this study, further collinearity diagnostics were examined. According to Belsley et al. [110], multicolinearity threat exists if an estimated coefficient with a condition index higher than 20 contributes strongly to the variances of two or more variables. This is not the case in this study: as the evidence in the regression model for dependent variable Customer Accounting Practices Usage shows (see Table 7). In that Table, the condition index achieved for all independent variables in the multivariate regression analysis was far less than the aforementioned benchmark, thus, it is legitimate to conclude that the factors measured in this study are distinct.

Results

The findings and implications of the study

The core findings from this study

In line with the research focus, this study's findings are organised along three themes: extent of adoption (or usage) of customer accounting practices, antecedents and performance impact in FSOs in Kuwait. Empirically, this study suggests that Kuwaiti FSOs are embracing customer accounting practices. Majority of the participating FSOs show a high level of customer accounting usage (see Table 8). 65.% of the respondents are convinced that their organisations are adopting customer profitability

Table 5 Summary of Principal Component Analysis & Item Inter-Correlation Analysis for Decentralisation, Formalisation, and Customer Accounting ($n = 115$)

Measures of Decentralisation (DCENT1—DCENT3)	**DCENT1**	**DCENT2**	**DCENT3**	**Factor Loading**
DCENT1	1.000			.950
DCENT2	.890	1.000		.967
DCENT3	.829	.874	1.000	.944
Explained Variance of Decentralisation: 90.93% Eigen-Value of Decentralisation: 2.727	Determinant Significance of Decentralisation: .047 Kaiser–Meyer–Olkin Measure of Sampling Adequacy for Decentralisation: .76 (.000)			
Measures of Formalisation (FORM1—FORM3)	**FORM1**	**FORM2**	**FORM3**	**Factor Loading**
FORM1	1.000			.959
FORM2	.903	1.000		.969
FORM3	.864	.891	1.000	.955
Explained Variance of Formalisation: 92.40% Eigen-Value of Formalisation: 2.772	Determinant Significance of Formalisation: .034 Kaiser–Meyer–Olkin Measure of Sampling Adequacy for Formalisation: .77 (.000)			
Measures of Customer Accounting (CA1—CA3)	**CA1**	**CA2**	**CA3**	**Factor Loading**
CA1	1.000			.961
CA2	.889	1.000		.962
CA3	.878	.881	1.000	.958
Explained Variance of Customer Accounting: 92.17% Eigen-Value of Customer Accounting: 2.765	Determinant Significance of Customer Accounting: .038 Kaiser-M-Olkin Measure of Sampling Adequacy for Customer Accounting: .78 (.000)			

Table 6 Regression estimates showing the relationship between the independent variables and customer accounting usage ($n = 115$)

Independent Variables	**Beta coefficients**	***t*-value**	**Sig. Level**	**Collinearity Statistics**	
				Tolerance	**VIF**
Competition Intensity	.367	2.968	.001	.209	2.478
Perceived Environmental Uncertainty	.045	.301	.764	.095	8.544
Decentralisation	.168	1.076	.286	.172	5.682
Formalisation	.665	4.426	.000	.313	2.194
R-Square .859 Adjusted R Square .850 Sig. F Change .000 F-Change 101.774					

Table 7 Collinearity diagnostics for dependent variable customer accounting (CA)

Dimension	**Eigen-value**	**Cond Index**	**Variance Proportion of the Estimate accounted for by the Variables**			
			Competition Intensity	**Perceived Environmental Uncertainty**	**Decentralisation**	**Formalisation**
1	3.707	1.000	.01	.01	.01	.01
2	1.000	1.925	.00	.00	.00	.00
3	.164	4.751	.96	.06	.05	.02
4	.070	7.286	.02	.54	.01	.80
5	.059	7.918	.00	.40	.94	.17

Table 8 Frequency distribution for customer accounting usage (CAU) ($n = 115$)

Measurement Variables for Customer Accounting	1 (Not at all)	2 (To a very limited extent)	3 (To a limited extent)	4 (To a moderate extent)	5 (To a considerable extent)	6 (To a great extent)	7 (To a very great extent)
Customer profitability analysis	2.8%	23.6%	8.3%	5.6%	36.1%	23.6%	–
Lifetime customer profitability analysis	–	19.4%	18.1%	2.8%	33.3%	25.0%	1.4%
Valuation of customer as assets	9.7%	12.5%	15.3%	1.4%	26.4%	27.8%	6.9%

Table 9 A Summary of Findings for the Hypotheses

Hypotheses	Supported/Not Supported
H1—Customer accounting practices usage would be higher in Kuwaiti FSOs with higher competition intensity than in those with lower competition intensity	Supported
H2—Customer accounting practices usage will be higher in prospector type than in defender type in Kuwaiti FSOs	Supported
H3—Perceived environmental uncertainty would positively influence customer accounting practices usage in Kuwaiti FSOs	Not Supported
H4—Customer accounting practices usage would be higher in Kuwaiti FSOs with decentralised decision-making process than organisations that embrace centralisation	Not Supported
H5—Lower level of formalisation process would lead to higher usage of customer accounting practices in Kuwaiti FSOs	Not Supported. Apure contrast is found in this study
H6—Effective customer accounting usage (CAU) would positively influence organisational performance in Kuwaiti FSOs	Supported

analysis while 62.5% indicate that their organisations adopt lifetime customer profitability analysis and valuation of customer as assets, respectively.

These insights thus underline that these FSOs are recognising the importance of adopting a customer-oriented approach, evidence that support the strategic importance that is reflected in the literature on strategic management accounting (e.g. [6, 24, 25, 51, 111]).

The second major finding relates to the factors that influence the extent to which an organisation would adopt customer accounting practices. Five hypotheses (*H*1–*H*5) were conceptualised in this study relating to the antecedents of customer accounting practices usage. Table 6 shows the results of the regression analysis when the four independent variables (competition intensity, perceived environmental uncertainty, decentralisation and formalisation) were regressed against the dependent variable (customer accounting usage). The results show two highly significant positive relationship to customer accounting practices usage, namely for competition intensity (at Beta = 0.365, *t*-value = 2.968, and significance level of 0.001), and formalisation (at Beta = 0.665, *t*-value = 4.426, and significance level of 0.000). Taking these and other statistical evidence in Table 7 into consideration, the conclusions with regards to the hypotheses (*H*1, *H*3, *H*4, and *H*5) are legitimate.

Thus, *H*1 is supported—Customer accounting practices usage would be higher in Kuwaiti FSOs with higher competition intensity than in those with lower competition intensity. On the other hand, *H*3 and *H*4 are not supported as no significant coefficient was achieved for both. In other words, this study does not support the notion that perceived environmental uncertainty or decentralisation of decision-making authority would positively influence customer accounting practices usage in Kuwaiti FSOs. Similarly, this study does not support the hypothesis that lower level of formalisation process would lead to higher usage of customer accounting practices in Kuwaiti FSOs. As a matter of fact, not only is *H*5 not supported in this study, but the empirical results suggest a pure contrast, and argues that higher level of formalisation process would lead to higher usage of customer accounting practices in Kuwaiti FSOs (Table 9).

The result with regards to influence of formalised processes to customer accounting adoption in Kuwaiti FSOs is surprising given the wide understanding that formalised processes imply keeping to strict rules, procedures and guidelines which thus hinders swift decision-making and action taking 78. In this study, majority of the participating FSOs endorse formalised processes: 57%, 58.3% and 61.2% for items 1, 2 and 3, respectively, of the formalisation construct.

As shown in Tables 6 and 9, the hypothesis that customer accounting practices usage would be higher in prospector strategy-oriented organisations than in defender strategy-oriented organisations is supported in this study. Unlike in the case of other independent variables, the organisational strategy factor could not

Table 10 Is your company "Defender" or "Prospector" type? ($n = 115$)

Likert scale *	1	2	3	4	5	6	7
Frequency	9	19	10	13	37	21	6
Percentage	7.83%	16.52%	8.69%	11.30%	32.17%	18.26%	5.22%

*Likert scale key: 1 = High Defender type company; 2 = Medium Defender type company; 3 = Average Defender type company; 4 = Neutral; 5 = Average Prospector type company; 6 = Medium Prospector type company; 7 = High Prospector type company

be included in the multiple regression analysis. Instead, to ascertain the association of defender or prospector strategy on the customer accounting practices usage, the frequency distribution for organisational strategy (see Table 10) was examined and in tandem with the responses for customer accounting practices usage.

A close examination of the responses for organisational strategy and customer accounting practices usage shows a clear trend of prospector type FSOs (55.65%—summation of scores for points 5, 6 and 7 on the Likert scale) compared to defender type FSOs (33.04%—summation of scores for points 1, 2 and 3 on the Likert scale) showing a higher level of customer accounting practices adoption. On that evidence, *H*2—Customer accounting practices usage will be higher in prospector type than in defender type in Kuwaiti FSOs, is supported.

The third core finding from this study relates to the association between customer accounting usage and organisational performance. To find out the nature and significance of association, a 2-tailed bivariate correlation analysis was undertaken. The Pearson Correlation results indicate a positive correlation of customer accounting usage to organisational performance (at coefficient Beta = 0.891, significance level of 0.000). Based on the correlation evidence, *H*6 is supported and this study argues that effective customer accounting usage (CAU) would positively influence organisational performance in Kuwaiti FSOs. Thus, this study suggests that if organisations carefully endorse appropriate customer accounting practices, organisational performance will be enabled.

Discussion and conclusion

Theoretical implications

This study contributes to the understanding of customer accounting practices usage, contingency factors, and organisational performance impact (e.g. [6, 24, 25, 51]). With regard to customer accounting practices usage, this study contributes in the way of reinforcing prior research that underlines the importance for a customer-oriented accounting approach in management accounting (e.g. [6, 10, 24, 25]). The results from this study show that Kuwaiti FSOs are embracing customer accounting practices as a way of staying customer oriented.

Secondly, this current study contributes to the literature on the contingency factors of customer accounting practices usage (e.g. [6, 24, 25, 48, 51]). The evidence from this study offers supports and contrasts to past literature, an outcome that thus add support to the contextual intricacies that surround contingency features. This study argues that competition intensity would aid the adoption of customer accounting practices, evidence that reinforces Foster and Gupta [48] but contrasts Ojra [6] who found no support in the Palestinian context. Furthermore, this current study supports and contrasts Guilding and McManus [51] who suggest a support as well as contrast for the notion that high competition intensity would lead to high customer accounting practices usage.

A further contribution of this study relates to the influence of organisational strategy on customer accounting practices usage. This study argues that customer accounting practices usage would be higher in prospector type FSOs than in defender type FSOs, an argument that would seem rational given the understanding that prospector type organisation would have higher need for customer-oriented approaches. The findings from this current study contrasts McManus [24, 25] who found no support in the study of Australian hotel industry that prospector type firms would have higher customer accounting usage, but finds support in Ojra's [6] study of strategic management accounting techniques usage in Palestinian firms.

Finally on the point of antecedents of customer accounting practices usage, this study found a highly significant positive influence of formalisation on customer accounting practices usage. Contrary to conceptualisation, the emergent evidence suggests that Kuwaiti FSOs that endorse highly formalised processes would have higher need for customer accounting practices usage. This finding adds to the complexities surrounding formalised processes in organisations and organisational dynamics influence (e.g. [6, 61, 76, 79]). This current research provides support for cross-functional integration literature [61] which suggests that higher formalised processes in organisations would lead to higher integration between accounting and marketing functional areas. Within the strategic management accounting literature, this current study contrasts Ojra [6] which hypothesised that lower levels of formalisation would lead to higher usage of strategic management accounting techniques but found no support. This current study also contrasts

Tuan Mat [79] who in a study of management accounting practices offers a contrasting finding to Ojra [6]. Thus, Tuan Mat [79] contends that lower level of formalised processes would lead to higher level of management accounting usage.

The third theoretical domain to which the findings from this current study connects relates to the organisational performance impact of customer accounting practices usage. Based on the statistical evidence, this study argues that effective usage of customer accounting practices would lead to higher organisational performance. This finding finds support as well as contrast in past literature on strategic management accounting practices. Support is found in Ojra [6] who suggests that strategic management accounting practices would positively impact on non-financial element of organisational performance. On the other hand, contrast is provided by McManus [24, 25] who explored Australian companies and found no direct association between financial performance and the CA construct. Also, this current study contrasts Ojra [6] that found no support for the financial element of organisational performance.

Implications for organisations

From the perspective of practitioners, this study also makes useful contributions. One of such practitioner contributions relates to the steps organisations, especially financial services companies, can take in order to optimise their customer accounting practices and performance benefits. Within that focus, financial services organisations in Kuwait are reminded of the need for them to respond appropriately to their operational environment as well as internal factors that influence customer accounting usage. For example, when the market is characterised by competition intensity, there is need for financial services organisations in Kuwait to strongly embrace customer accounting practices, as doing that would enable them profitably satisfy their customers.

Towards that target of profitably satisfying customers, Kuwaiti financial services organisations are also reminded of the importance of ensuring customer accounting practices that fit the need of their operational strategy. For example, financial services organisations that are prospector oriented would require higher use of customer accounting practices to enable them cope with the requirements for their prospector strategy focus.

Empirically too, this study draws the attention of Kuwaiti financial services organisations that embrace formalised operational processes to the pertinence for them to ensure the appropriate level is maintained in the usage of customer accounting practices.

Overall, this study offers useful insight to practitioners in the financial services industry in Kuwait to enable them organise their operational activities and focus on customer orientation towards improving their competitive edge in the industry.

Limitations of the study and future research directions

No doubt, this study makes some contributions to the understanding of customer accounting practices, adoption contingencies and organisational performance impact. Caution is however advised in adopting the findings from this study, as several factors limit the extent to which the findings can be adopted. First, this study examined only financial service organisations in Kuwait. So, care must be taken in applying emergent findings to other geographical and industrial contexts. Management scholars have emphasised not only cultural diversity between countries, but also behavioural impact (e.g. [28, 30, 112]). This theoretical foundation must be taken into consideration when adopting the findings of this study onto other contexts.

A further limitation of this study relates to the population and sample size upon which the study was based. As said earlier, only financial services organisations participated in this study, and the dynamics in that industry may not match with the dynamics in other industrial contexts. Furthermore, the sample for this study includes 115 respondents, which is reasonable, but could have been more.

The final limitation of this study relates to the organisational performance construct. Six items were used in this study to measure organisational performance. While these measures included financial (e.g. market share, return on investment and sales margin) and non-financial (e.g. customer satisfaction and new service development) components, organisational performance summation was examined in this study. As a result, the financial and non-financial features of organisational performance that are associated to customer accounting practices usage have not been delineated.

Therefore, future studies should aim to address these limitations. One way forward, for example, is for future studies to use a larger sample to test this model and also in other geographical contexts. Such future studies should also aim to explore other industrial contexts. Comparative studies involving several countries and or industries would also contribute to enhancing knowledge in this theoretical domain. Towards enhancing knowledge on customer accounting, contingencies and organisational performance implications, future research should also seek to shed light on each of the components of customer accounting practices (Lifetime Customer Profitability Analysis, Valuation of Customers as Assets, Customer Profitability Analysis). Such research should enable the understanding of suitable components used by firms and contingencies (internal and external [including also national culture]). Within that focus, future research

should also aim to address the model limitation of this current study by also considering other contingency factors of customer accounting practices usage and the level of interconnections between the contingency variables.

Furthermore, on the contingency point, grounded on the conceptual notion forwarded by Ojra [6] but however not supported by that study (both for SMA summation and SMA dimensions), this study hypothesised that lower level of formalisation process would lead to higher usage of customer accounting practices in Kuwaiti FSOs but found no support for that hypothesis. While this study empirically supports Ojra [6], a pure contrast to conceptualisation was found: higher level of formalisation processes would lead to higher usage of customer accounting practices. Further exploration of the formalisation construct and association to customer accounting practices usage in Kuwaiti organisations and other geographical settings are necessary towards illuminating the nature of that association.

From the contextualisation point, future studies should also seek to enhance the understanding of how the performance dimensions (financial and non-financial) associate to customer accounting practices usage.

Appendix 1

The Instrument for measuring the Variables for this Study

Variables	Measurement Items	Sources
Competition Intensity	Four (4) items were used to measure this variable: Competition in our industry is cut-throat there are many services promotion wars in our industry competition for market share in our industry is intense price competition in our industry is intense	Khandwalla [64], Jaworski and Kohli's [113], McManus [24, 25], and Ojra [6]
Perceived Environmental Uncertainty	Perceived environmental uncertainty was measured using Kren and Kerr's [114] five-item instrument. Managers were asked to indicate how predictable or unpredictable each of the five PEU items was in the operations of their FSO Environmental factor of customers Environmental factor of suppliers Environmental factor of competitors Environmental factor of government and politics Environmental factor of technology	Kren and Kerr [114], McManus [24, 25]
Organisational Strategy: Prospector vs Defender	This construct was measured by gauging the extent to which the participating firms displayed prospector or defender features, based on these descriptions: FSO A (Defender Organisation) tries to locate and maintain a secure niche in a relatively stable service area. It offers a more limited and stable range of services than its competitors do. It concentrates on protecting its own domain by offering high quality, superior service, lower prices and so forth. Often this type of FSO is not at the forefront of developments in the industry. FSO A focuses on cost efficiency and doing the best job possible in a limited area FSO B (Prospector Organisation) makes frequent changes in, and additions to, its services and leads in innovations in its industry. It responds rapidly to early signals concerning areas of opportunity, and these responses often lead to a new round of competitive actions. It often leads other FSOs in service development and tends to offer a wider range of services than other companies of similar size in the FSO industry	Cinquini & Tenucci [26], Cadez & Guilding [5], Hwang [76], Ojra [6], Shortell & Zajac [115], and McManus [24, 25]

The Instrument for measuring the Variables for this Study

Variables	Measurement Items	Sources
Organisational Structure: - Decentralisation - Formalisation	Three items were used to measure each of decentralisation and formalisation. The measurement items decentralisation included: Even small matters in our organisation must be referred to someone higher up for a final answer Any major decision that employees make must have the approval of top managers Employees who want to make their own decisions would be quickly discouraged The measurement items formalisation included: Employees in our organisation are allowed to make their own decisions without checking with anybody else My usual experience with our organisation involves doing things "by the rule book" Many activities in our organisation are not covered by formal procedures	Hwang [76], Ojra [6], Opute [18], Khandwalla [116], Song & Thieme [117] Hwang [76], Ojra [6], Opute [18], Ferrell & Skinner [118, 119]
Customer Accounting Practices	Customer accounting dimensions examined in this study are shown below. Managers were asked "To what extent does your company use the following practices?": Customer profitability analysis Lifetime customer profitability analysis Valuation of customer as assets	McManus [24, 25],Ojra [6],Foster and Gupta [48],Guilding and McManus [51]
Organisational Performance	The organisational performance variables examined in this study include: Return on investment, Sales margin, Market share Customer satisfaction, New service development Overall performance	McManus [24, 25],Ojra [6],Cadez and Guilding [120, 5],Guilding and McManus [51],and Hwang [76]

Abbreviations

SMA	Strategic management accounting
SCM	Strategic cost management
CA	Customer accounting
CAPs	Customer accounting practices
MAPs	Management accounting practices
FSOs	Financial services organisations
CPA	Customer profitability analysis
PEU	Perceived environmental uncertainty
SMAU	Strategic management accounting usage
CAU	Customer accounting usage
PCA	Principal component analysis

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Author contributions
OJ—the lead author—has made substantial contributions in the design of this study, in the design of the methodological approach and analysis of data, as well as in writing up the conclusions for this study. OA—the corresponding author—has made substantial contributions in the design of this study, the review of literature, the methodological approach and analysis of data, as well as in writing up the conclusions for this study. AA has contributed substantially to the design of this study, review of literature, methodological approach, as well as in writing up the conclusions for this study. All authors read and approved the final manuscript.

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All authors agree that this manuscript be published in this Journal.

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