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# FACTORS INFLUENCING MANAGEMENT ACCOUNTING TECHNIQUES IN THE GARMENT MANUFACTURING INDUSTRY OF CAMBODIA

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## ABSTRACT

***Management accounting techniques are important in a garment factory as they help in the cost control, budgeting, and decision-making. They aid managers in analyzing materials use, labor efficiency and overhead costs. The adoption of management accounting techniques will help factories improve profitability, allocate resource, boost productivity, and remain competitive in market. The purpose of this study is to use an empirical analysis to examine the impact of management decision making, production technologies, and the predictability of the external environment on the implementation of management accounting techniques in garment industry of Cambodia. The analysis of the data is initiated with a Confirmative Factor Analysis (CFA) of 104 garment manufacturing cluster in Cambodia to measure the prediction of observed variables toward latent variables: Production Technology (PRT), Decision Making (DEM), Predictability of the External Environment (PEE), and Accounting Techniques (ACT). The path analysis will be conducted through the estimation of a Structural Equation Modeling (SEM) to evaluate factors that determinant the management accounting techniques. The results of this study suggested that of the three factors—PEE, PRT, and DEM—investigated, only production technology significantly and strongly influenced the adoption of accounting practices in the garment manufacturing industry of Cambodia. The positive and significant association of PRT with ACT indicated that technological development was a key motivator for the adoption of advanced management accounting practices, which were essential to ensure cost control, monitor performance, and provide decision support in a technologically oriented context. The effect of decision-making processes was positive but only marginally significant, and not significant at the 5 per cent level. By contrast, the predictability of the external environment was related to accounting techniques, but not directly, so its influence was either mediated or contingent.***

**KEYWORDS:** Production Technology; Decision-Making; Predictability of the External Environment; Accounting Techniques; Confirmative Factor Analysis; Structural Equation Modeling.

## 1. INTRODUCTION

Costing is the arms of management accounting to enhance the productivity, competitiveness and profitability of manufacturing firm. In contrast to the emphasis in financial accounting on external reporting, management accounting information is often more detailed and timely, and it is used for internal purposes. Through this, managers can monitor, control and assess different areas of operations in the company (Drury, 2013; Hilton & Platt, 2005). Various accounting systems are employed to record and report costs data include standard costing, variance analysis, Activity Based Costing (ABC), and performance measurement. For manufacturing operations where the production process is complex and multiple inputs are used, accounting systems are essential. These instruments allow managers to apply resources strategically, monitor, and control the costs of production efficiently, and to identify performance deficits. For example, a variance analysis can be used to compare actual results against budgeted expectations, leading to the ability to take immediate corrective actions to minimize waste and to protect profit margins (Horngren, 2009).

Accounting methods are important to more than just operating decisions; they also somewhat determine strategic choices. Advanced methodologies of this kind, including, but not limited to life-cycle costing, target costing and throughput accounting, enable a product's overall life-cycle profitability to be assessed, develop competitive product pricing and optimize the production flow. These capabilities are vital in such competitive global industries as textiles, electronics and automotive manufacturing, where market share is increasingly a function of informed decision-making and economy of scale. Further, accounting methods help to develop innovation and continuous improvement motivation. These approaches provide managers with actionable information related to process performance, reduced waste, and productivity improvements and assist in realizing successful lean manufacturing principles and total quality management systems and achieving superior firm performance (Fullerton et al., 2014).

A Structural Equation Modeling (SEM) methodology was used to evaluate the degree of strategic management accounting, comprising the following five independent factors: strategy type (prospector), conscious strategy development, market orientation, and size. The empirical results revealed that both the prospector and deliberate strategy formation significantly impacted accountants' strategic decision making. Moreover, the research found that the adoption of strategic management accounting was influenced by the interactions effects of prospector strategy, intentional strategy making, firm size and accountants' involvement in strategic decisions. One of the values of the study was that it assessed direct and indirect effects, leading to a better understanding of the connections between the constructs—especially the positive role that accountants can play in promoting the use of strategic management accounting and in turn, increasing firm performance (Cadez & Guilding, 2008). However, the range of the study was restricted by the exclusion of two potential contingencies that may have implications for the adoption and success of strategic management accounting practices within manufacturing and other competitive sectors: production technology and the predictability of the external environment.

Basing on contingency theory and complementary resources theory, the research empirically tested three constructs—environmental uncertainty, decentralization and organization strategy—on impacts of organization on adoption of advanced manufacturing tools and advanced managerial practices with a structural equation modeling. Also included in the model were six mediating constructs: customer orientation, internal efficiencies, research and development (R&D) innovation, quality improvement, personnel, and financial performance. Structural equation modeling path analyses indicated that environmental uncertainty and decentralization all had significant positive effects on the adoption of advanced manufacturing technologies and managerial practices. Organizational strategy, on the other hand, was not found to significantly impact these adoptions. In addition, the findings also indicated that the utilization of high technology of production machinery and new management style are positively related to the design and the implementation of performance measurement system, which also had a significant positive correlation with overall organizational performance (Lucianetti et al., 2018). This research was regarded as one of the early studies to explore the effect of contingency factors (Donaldson, 2001; Sousa & Voss, 2008) and synergistic influence (Choi et al., 2008; Khanchanapong et al., 2014) on the adoption advanced manufacturing tools and advanced managerial practices and, subsequently, their influence on performance measurement systems of the firms (Neely et al., 1995). However, one concludes that while these are useful insights, the study does

not consider two potentially significant factors, the effectiveness of modern manufacturing and managerial practices in enhancing performance in relationship to two areas, the decision-making role of management accountants, insofar as business operational decisions are concerned, and the ability to predict the external environment.

To fill the void in the literature as identified above, this research will develop an SEM to investigate the determinants of adoption of management accounting techniques in Cambodian garment sector. This study focuses on the analysis of the effects on three specific factors: the extent to which accountants and management accountants are involved in acting to assist the decision-making processes of strategic management, the degree of technology used by the garment industrial enterprises, and the degree of predictability of the external business environment. The study therefore aims to contribute to an enhanced comprehension of the interplay of internal and external factors on the usage of management accounting techniques by exploring the relationships. The results are anticipated to provide useful implications for practitioners and policy makers in various ways in promoting decision-making performance, operational efficiency, and strategic adoption of accounting practices in a complex manufacturing environment.

The remaining part of this article is divided into five sections. Section one being the introduction, which highlights background, research problem and objectives. The second section is literature review, which presents the previous research. Section three presents the research methodology, with a focus on the collection of data, instruments of measurement and methods of analysis. Empirical results are described and hypothesis testing results are discussed in section four. The fifth section gives the conclusion of the study, highlighting the main contributions, implications for policy and management, and suggestions for future research.

## 2. LITERATURE REVIEWS

Quality information contributes significantly to decision-making as it comes to management of business. One of the most effective means of obtaining this information is to develop effective management accounting system (Pedroso & Gomes, 2020). Then they deliver feedback to the business so that the business can operate on a day-to-day basis and plan for the future, with the help of sufficient data to make decisions (Faherty & Stephens, 2016). For SMEs, use of management accounting techniques strongly promotes competitive advantage by helping them to deploy scare resources better, to anticipate problems and to respond to environmental changes (Pelz, 2019). Of course, the research has also shown that such systems are not only useful for SMEs – they are essential for larger firms in their quest to remain efficient and profitable. Components of a good management accounting system are process costing, budgeting, planning and control devices, and strategic planning (Zehra & Ahmed, 2019; Godil et al., 2019). Combined, these resources help organizations make better decisions and perform at a higher level (Latif et al., 2023).

Linking of an organization's internal need to that in the external market and social environment are considered as key influencing factors often with the needs to consider dimension. Management accounting acts as the communicational link between these constituting elements, it ensures that firms can configure their activities in accordance with their internal and external objectives. Through the provision of relevant financial and non-financial data, management accounting techniques allow managers to evaluate their performance, allocate resources efficiently and respond strategically to changes in market and social conditions. These techniques are even more important in the day-by-day running of a business where they provide the basis for planning, control and informed decision making on all levels. Ultimately, there should be internal process improvement realized as well as competitive and adaptive capabilities developed (Arseneault & Gagnon, 2024; Magnacca & Giannetti, 2024).

Management accounting techniques (MATs) from a historical perspective, the increasing importance of sustainable development and accelerated pace of digitalization have contributed profoundly to the development of MATs in recent years. These changing fashions have not only shaped the nature of accounting practices but also opened up new areas for research and practice (Pramono et al., 2023). As sustainability factors are incorporated, new drivers of MATs push the frontiers from pure financial to including environmental and social of the motivations for business strategies towards greater societal objectives. At the same time, in the era of digitalization, the development of new advanced tools, technologies and accounting processes being data driven is supposed to enable more accurate, effective and dynamic accounting process. Taken together, these factors are enabling new ways for management accounting practices, providing firms new means for planning, controlling and decision-making (Pedroso & Gomes, 2024). This intersection

of the theory-driven and application-focused strains brings into focus how MATs are developing both in terms of theoretical underpinnings and practical relevance in the face of change and complexity in business and society at large (Magnacca & Giannetti, 2024).

To evaluation, the impact of strategic decision-making and market orientation on company performance a structural equation modeling was applied with the participation of 193 Slovenian large companies. The company size was also included in the model as a control variable. More interestingly, in addition to the quantitative analysis, the study also incorporated a qualitative analysis by interviewing ten expertise in the field. The results of the study supported the theory's tenet of no universally appropriate strategic management accounting system, with factors such as company size and strategy having a significant bearing on the successful application of strategic management accounting (Cadez & Guilding, 2008). The study reveals the two dimensions of the strategic management accounting (SMA) system. First, it extends previous studies that configure strategic management accounting as a set of management accounting methodologies that have been customized in order to follow the strategic approach. These approaches go beyond conventional accounting methodologies and instead serve as underpinning to long term competitive advantage and strategic goals (Guilding et al., 2000; Cravens & Guilding, 2001; Roslender & Hart, 2003). The second dimension reflects a more modern view of accountants having a widening strategic role. Strategic Management Accounting also exceeds its limiting perspective as merely information suppliers and are also treated as the active participants of the decision making process. Their role has also been argued to include involvement in the definition and result of strategic decisions, making them members of the strategic management team. This twofold perspective reflects the fact that modern strategic management accounting is simultaneously rooted in traditional technical methods and entails an emerging conceptualization of accountants as strategic business partners that have a pivotal role in the success of a firm (Palmer, 1992; Bhimani & Keshtvarz, 1999; Scott & Tiessen, 1999; Nyamori et al., 2001).

It used Structural equation modeling (SEM) to study the effect of the relatedness on organizational performance of 200 Italian manufacturing companies. The model included 12 constructs, i.e., environmental uncertainty, decentralization, network knowledge management, organizational agility, advanced manufacturing tools (AMT) adoption, managerial practices (AMP) adoption, customer measures, HR measures, internal process measures, R&D innovation measures, quality measures and finance measures and overall performance. The results indicated that the contingency factors play an important role as antecedents to the adoption of both AMTs and AMPs and influence the level of actual usage of measuring system by companies. These factors had a joint effect on the organizational results. Quality management practices were perceived to be a main driver of competitiveness, supporting the importance of quality management in improving performance. Nevertheless, the expected high association between strategy and the degree of adoption of AMTs and AMPs was weaker than believed, and other contextual factors appear to play a more salient role in determining those adoption levels (Lucianetti et al., 2018). The empirical results of the study were consistence with many researches in the region (Agarwal et al., 2013; Khanchanapong et al., 2014; Golini and Kalchschmidt, 2015; Schniederjans, 2017; Jabbour et al., 2018).

## 3. METHODOLOGY

This study began by conducting a Confirmatory Factor Analysis (CFA) to test the patterns of relationships between the manifest (observed) variables and the unobserved (latent/construct variables. Production Technology (PRT), Decision Making (DEM), Predictability of the External Environment (PEE), and Accounting Techniques (ACT) were revealed as four latent factors. In all, 30 manifest variables were developed to evaluate these constructs: six for PRT, eight for DEM, seven for PEE, and nine for ACT (Cadez & Guilding, 2008; Abdel-Kader & Luther, 2008; Uyar & Kuzey, 2016; Lucianetti et al., 2018). The first phase of the CFA focused on item factor loadings that are associated with their own constructs. Items which had factor loading less than predefined level of 0.60 were dropped from model to make it internally consistent and valid.

After these revision, the model' s goodness of fit was assessed with the help of a well-established set of fit indices, namely, the Incremental Fit Index (IFI), Tucker–Lewis Index (TLI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA), PCLOSE, and the Standardized Root Mean Square Residual (SRMR). Values of IFI, TLI, and CFI above 0.95 are considered as showing excellent model fit (Bentler, 1990). For RMSEA and SRMR,

good criteria are 0.08 or less (Browne & Cudeck, 1993; Hu & Bentler, 1999), and PCLOSE should be higher than 0.05 to indicate close fit between model and data (Kline, 2015). The CFA used these criteria to guarantee the presence of strong construct validity of the measurement model and to build a reliable basis for the following SEM analysis. In addition to the validation of the CFA with Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV) and Maximum Reliability (MaxR(H)) (Hair et al., 2019), the discriminant validation was further examined using the Heterotrait–Monotrait (HTMT) (Henseler et al., 2015). This was followed by performing path analysis and hypothesis testing using the estimated parameters from the SEM. In addition, all parameters were estimated using the Maximum Likelihood Estimation (MLE) method, which considered being a robust estimate when it was conducted under the assumption of multivariate normal distribution (Kline, 2015).

The data collection was implemented through a structured questionnaire that included two main parts. The first section of the questionnaire sought demographic information about the respondents (gender, age, what type of educational or qualification background and work experience they have). The purpose of the second section was to collect data on the observed (manifest) variables representing the study constructs. This area comprised of 30 items designed to assess four latent variables: PRT, DEM, PEE, and ACT. Note that the five point Likert scale for the level of agreement or disagreement of section two of the survey that was used to evaluate each item. Responses ranged from 1 (strongly disagree) to 5 (strongly agree). This method of measurement is selected, as the Likert scale is well known for being an effective tool in recording attitudes, perceptions, and opinions in a structured and measurable way, and provides the ability to perform more rigorous statistical analysis of the information provided.

A sampling frame of this research was collected from the Garment Manufacturers Association of Cambodia (GMAC) that provided the alphabetical list of the garment manufacturers. Factories from this list that were located in the Phnom Penh, Kandal, and Kompong Spue regions were selected and these were assigned unique number (130) on a random basis. The intended respondents were factory managers of the selected firms. In the fieldwork procedure, randomly selected new companies from the list replaced the companies that refused the participation, in order to maintain the targeted size of the factories to be contacted. This substitution carried on until the end of the time of the survey. This method guaranteed that the sample was representative for the garment industry and ensured that enough data was gathered to follow up in the statistical analyses, such as CFA and SEM.

## 4. RESEARCH RESULTS

On the survey, 130 questionnaires were given to participants who are worked as a factory manager. Of the returned questionnaire, a response rate of 86% was obtained (N = 112). Yet, eight responses were excluded for lack of participation or unsatisfactory data quality. After removing any missing data, a total of 104 valid values remained for CFA and SEM. This select sample means that only good quality and trustworthy responses were considered in the statistical analysis, thus increasing the precision and validity of the research results.

Table 1 represents the demographic profile of factory managers surveyed in the garment industry in Cambodia. As shown in the findings, most of the respondents (80.77%) were men, and women were 19.23% of the sample. This male predominance mirrors the historically gender pattern of management in the manufacturing sector. With respect to age distribution, the age group of over 40 years old made up the majority, followed by 28.85% from 35 to 40 years and 17.31% for younger than 35 years. This indicates that the garment sector management work force is relatively experienced and older. In terms of education, majority were graduates (60.58%) and 14.42% were postgraduates. None recorded having a PhD, whilst 25% had other education or training. This means that most managers have at least a college education. According to work experience, 75.96% of them have more than 5 years, 20.19% have 3 to 5 years, and only 3.85% have less than 3 years. This indicates that our sample is mainly composed of experienced practitioners, that it is good to collect informed answers on management accounting.

***Table 1: Demographic Information.***

| Variable | Items | Count | Percentage |
|---|---|---|---|
| Gender | Male | 84 | 80.77% |
| | Female | 20 | 19.23% |
| Age | < 35 years | 18 | 17.31% |
| | 35-40 years | 30 | 28.85% |
| | > 40 years | 56 | 53.85% |
| Qualification | Bachelor | 63 | 60.58% |
| | Master | 15 | 14.42% |
| | PhD/Doctor | 0 | 0.00% |
| | Other | 26 | 25.00% |
| Experience | < 3 years | 4 | 3.85% |
| | 3-5 years | 21 | 20.19% |
| | > 5 years | 79 | 75.96% |

A list of 30 measurement items for measuring the four latent constructs was prepared and administered to the respondents. For CFA, seven items were deleted because of factor loading less than the recommended value of 0.60, reflecting a lack of sufficient contribution to their overarching constructs. Furthermore, some items showed a high covariance with others, indicating redundancy and perhaps a form of overlap in measurement. More closely the removed items were two related to accounting techniques construct (ACT1 and ACT6), one to production technology (PRT5), three to decision making (DEM6, DEM7, DEM8), and one to predictability of the external environment (PEE3). After the above reduction, 23 items were left for the final CFA model (shown in Figure 1). Items were deleted step-by-step in a systematic way, and model fit statistics were assessed after each step to test changes in the overall measurement quality. These indices were the IFI, TLI, CFI and RMSEA, PCLOSE, and SRMR. Iterating on this refinement yielded a more parsimonious model with better fit, which served to support the reliability and validity of the measurement model.

The CFA was used to analyze the model of measurement with four latent variables arranged under the items: PRT, DEM, PEE, and ACT. The goodness of fit of the model was tested with different indices, listed in Table 2, and the obtained results seem to be generally satisfactory when the hypothesized model is compared with observed data. Specifically, the IFI was 0.958, which was higher than the cut-off criterion (0.95), suggesting a very good incremental fit. The TLI registered 0.952 which is also above the 0.95 threshold, indicating the strong model parsimony and relative fit by the data. Moreover, the CFI was the same as the IFI, which registered at 0.958 providing additional evidence for the quality of fit for the model. In terms of absolute fit measures, the RMSEA was 0.057, slightly less than the accepted cut-off value of 0.06, suggesting that the model adequately represented the population data. Furthermore, the PCLOSE was 0.246 which was greater than 0.05 and was evidence against the null, supporting model fit. The SRMR was 0.044, well below the cut-off point of 0.08, indicating small residuals and a good fit between the model and the observed correlations. In conclusion, the measurement model demonstrated an acceptable fit since all fit indices met or surpassed their standards. This suggests that the proposed factor model for PRT, DEM, PEE, and ACT fits the data and is appropriate for the subsequent structure analysis.

*Figure 1: Confirmatory Factor Analysis.*

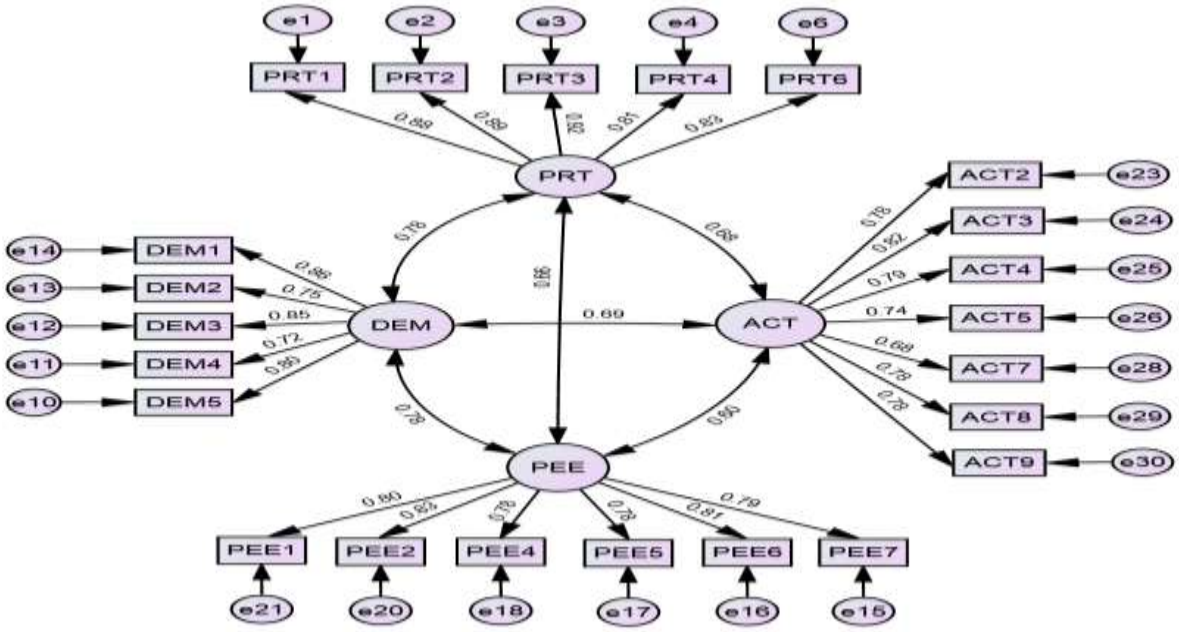



*Table 2: Model fit of CFA.*

| Index | Observed | Benchmark |
|---|---|---|
| IFI | 0.958 | > 0.95 |
| TLI | 0.952 | > 0.95 |
| CFI | 0.958 | > 0.95 |
| RMSEA | 0.057 | < 0.06 |
| PCLOSE | 0.246 | > 0.05 |
| SRMR | 0.044 | < 0.08 |

Table 3 summarizes the results of the validity test for the four latent variables: PRT, DEM, PEE, and ACT. Construct validity and convergent validity were assessed by CR and AVE. The results

highlighted that all constructs showed high CR coefficients, which were between 0.896 and 0.938, higher than the suggested cut off (0.70), representing good internal consistency. AVE values for PRT (0.753), DEM (0.635), and PEE (0.638) all surpassed the cutoff (0.50), which indicated acceptable convergent validity. ACT's average validity came with an AVE of 0.589, yet it contains to meet the minimum requirement for acceptability, denoting that the construct is valid. Discriminant validity was tested by comparing the square root of AVE (on the diagonal) with the off-diagonal values of the constructs. In addition, for all constructs the square root of AVE was greater than the respective inter-construct correlations meeting the criterion of Fornell–Larcker. Furthermore, the MSV estimates were less than the AVE estimates, which confirmed discriminant validity. High construct reliability was also attested to by the MaxR(H ) values, ranging from 0.905 to 0.945. More generally, the findings indicate that the measurement model has good convergent and discriminant validity, which means that each construct is internally consistent and distinct from the others.

***Table 3: Validity Analysis.***

| | CR | AVE | MSV | MaxR(H) | PRT | DEM | PEE | ACT |
|---|---|---|---|---|---|---|---|---|
| PRT | 0.938 | 0.753 | 0.609 | 0.945 | 0.868 | | | |
| DEM | 0.896 | 0.635 | 0.611 | 0.905 | 0.780*** | 0.797 | | |
| PEE | 0.913 | 0.638 | 0.611 | 0.914 | 0.660*** | 0.782*** | 0.798 | |
| ACT | 0.909 | 0.589 | 0.470 | 0.912 | 0.676*** | 0.685*** | 0.596*** | 0.767 |

Table 4 shows the results of the HTMT ratio correlation test, a more conservative measure of discriminant validity in CFA. The HTMT values among all pairs of the constructs are between 0.543 and 0.705. These estimates are substantially lower than the conservative cutoff value of 0.85 and much lower than the liberal cutoff value of 0.90 (Gold et al., 2001; Kline, 2011). In particular, the largest coefficient of 0.705, was recorded between PRT and DEM, closely followed by DEM and PEE (0.702). The weakest HTMT value was found for PEE and ACT (0.543), denoting a weaker overlap between the constructs. Since the HTMT ratios are substantially lower than the recommended threshold values, these results clearly support discrimination validity. This means that the individual latent constructs PRT, DEM, PEE, and ACT each measure different conceptual components and that there is little danger of multicollinearity or construct overlap in the measurement model. A follow up step, is to build a SEM representing the path analysis, to evaluate the effect of PRT, DEM, and PEE on ACT.

***Table 4. HTMT Analysis***

| | PRT | DEM | PEE | ACT |
|---|---|---|---|---|
| PRT | | | | |
| DEM | 0.705 | | | |
| PEE | 0.62 | 0.702 | | |
| ACT | 0.623 | 0.61 | 0.543 | |

Before testing the path analysis, the overall SEM model fit was assessed, as shown in Table 5. The fit statistics of the SEM were exactly the same as in CFA and showed that the measurement model was acceptable to excellent. This stability indicates that the structural model is a good fit to the data and provides evidence of the reliability of the measurement model.

***Table 5. Model fit of SEM.***

| Index | Observed | Benchmark |
|---|---|---|
| IFI | 0.958 | > 0.95 |
| TLI | 0.952 | > 0.95 |
| CFI | 0.958 | > 0.95 |
| RMSEA | 0.057 | < 0.06 |
| PCLOSE | 0.246 | > 0.05 |
| SRMR | 0.044 | < 0.08 |

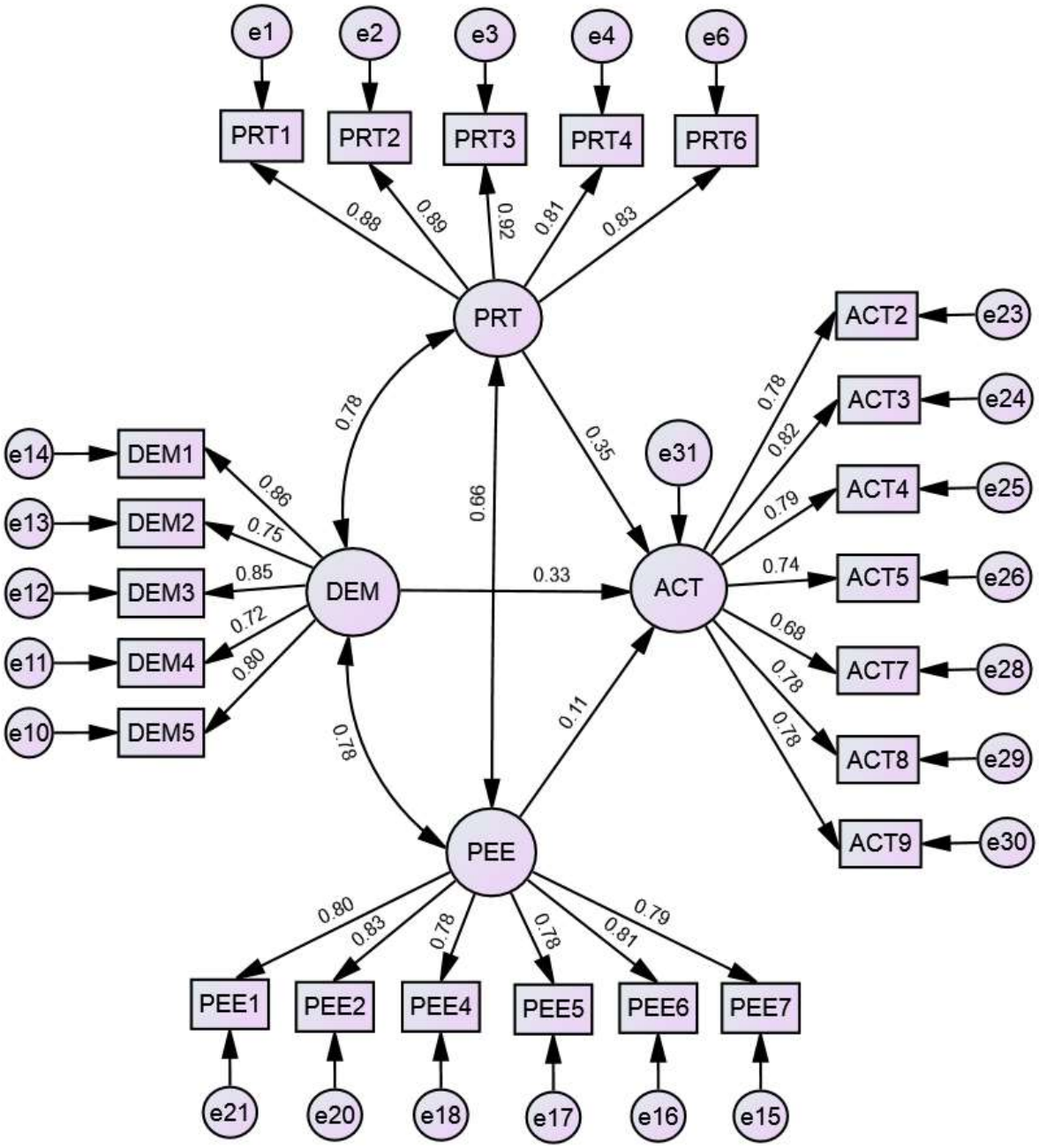
Table 6 shows the standardized and unstandardized estimates, standard errors (S.E.), critical ratio (C.R.), and p-values for the hypothesized relationship of the independent variables—PEE, PRT, and DEM and the dependent variable, ACT. The relationship from PEE to ACT had a positive standard estimate of 0.110, however, this influence was not significant (p = 0.445). That is, there is no significant direct effect on adoption of accounting techniques in this context owing to changes in the predictability of the exogenous environment.

***Table 6. Path Analysis.***

| Variable | | | Unstandardized Estimates | Standardized Estimates | S.E. | C.R. | P-Value |
|---|---|---|---|---|---|---|---|
| PEE | → | ACT | 0.107 | 0.110 | 0.141 | 0.764 | 0.445 |
| PRT | → | ACT | 0.327 | 0.346 | 0.134 | 2.440 | 0.015 |
| DEM | → | ACT | 0.355 | 0.329 | 0.200 | 1.777 | 0.076 |

Hence, it is likely that predictability by outside parties may have an indirect effect on accounting practices mediated by some other process (e.g., strategic influence or managerial bias) rather than a direct one. PRT showed a positive and statistically significant effect on ACT (Coefficient = 0.346, p = 0.015). This suggests that more sophisticated technology in production processes is strongly correlated with the adoption of more advanced management accounting techniques.

***Figure 2. Structural Equation Modeling.***




This association provides further support for the idea that recent production systems are in need for more integration of cost control, performance monitoring, and decision support systems. The DEM → ACT link also showed a positive standardized coefficient (0.329), which showed that the decision-making process might have been influenced the adoption of accounting technique. However, the search was only weakly significant ($p = 0.076$), so that while decision making-styles may be important in the development of accounting practice, the evidence is not so convincing in the present case that it can be claimed a clear effect at the 5% level. Overall, the findings emphasize that across the three antecedents, production technology is the most powerful and statistically significant determinants of accounting technique adoption, decision-making has a borderline effect and environmental predictability is not significant.

## 5. CONCLUSION

The results of this study suggest that of the three factors—PEE, PRT, and DEM—investigated, only production technology has significantly and strongly influenced the adoption of accounting practices in the garment manufacturing industry of Cambodia.

The positive and significant association of PRT with ACT indicates that technological development is a key motivator for the adoption of advanced management accounting practices, which are essential to ensure cost control, monitor performance, and provide decision-support in a technologically-oriented context. The effect of decision-making processes is positive, but just marginally significant and not significant at 5 per cent. By contrast, the predictability of the environment outside the organization was related to accounting techniques, but not directly, so that its influence was either mediate or contingent. In general, the findings emphasize production technology as the predominant determinant of accountings technique adoption, and managerial discretion as another underlying force, while environmental predictability has limited direct impact. Given the responsibility of accounting for the influential factors and the useful findings of this research for industry practitioners, which suggest that the attention should be on technological investments as a priority to improve accounting capabilities and overall management performance in the garment manufacturing industry.

Several policy recommendations for the Cambodian garment industry can be drawn from the results. To begin with, the policy makers need to give due emphasis to the encouragement and facilitation of technological improvement in production processes because production technology was found to be the most important and significant of all variables in the adoption of sophisticated accounting techniques. Various government intervention measures—including tax incentives, low-interest loans, and subsidies—could promote the establishment of factory plants equipped with advanced machinery and automatic control devices and with a direct production line making management accounting in these undertakings a precondition and a consequence. Second, capacity-building initiatives need to be designed to address managerial capacity in the use of technology-driven accounting tools. Training programs—provided in partnership with industry associations, technical schools, and global partners—can help overcome the skills gap and educate professionals on how to interpret data, track performance, and use cost management techniques in these more technological advanced spaces. Third, the marginal significance of decision-making is suggestive of the value of management development efforts aimed at creating data-generative and participative decision-making cultures. In this regard, promoting transparency and analytical reasoning may have an indirect effect on accounting. Lastly, since the predictability of the external environment has no clear implication, policy attention should be directed from the control of the environment to the ability of a country to develop its capabilities domestically, making technological infrastructure and managerial capability as primary knobs for enhancing accounting effectiveness in garment manufacturing sector.

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