Adoption of Target Costing in South African Higher Education: Factors, Challenges, and Strategic Implications

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ABSTRACT

Purpose: This study explores the factors influencing the adoption of target costing by higher education institutions in South Africa, along with the potential implications for pricing strategies.

Design/methodology/approach: Conducted at a selected South African HEI, the research adopts a quantitative approach, utilizing both closed-ended and open-ended questions in a questionnaire survey targeting 52 heads of departments and 15 finance staff members.

Findings: The findings reveal that institution size, data management system adequacy, staff collaboration, support, resource availability, lack of expertise, and sector competition significantly impact the delay and rejection of target costing adoption. This study enriches the existing body of knowledge by identifying barriers to the successful implementation of target costing in higher education, suggesting ways for its advanced application in the sector and beyond.

Practical implications: This research contributes valuable insights for improving cost management and pricing strategies within HEIs, offering implications for policy and decision-making in the education sector.

Paper type: Research Paper

Keyword: Target Costing, Higher Education Institutions, Cost Management Strategies, Pricing Strategies

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I. INTRODUCTION

The global higher education sector, including South Africa, has undergone significant evolution and adaptation to keep pace with changing influences. Nevertheless, the HEI sector has been trying to adapt to changing business activities (Africanews 2023). Currently, South Africa's Higher Education Institutions (HEIs) face mounting challenges such as increasing operational costs, diminished government grants, and student protests demanding lower fees (Deshpande 2018). Gap in government funding has made it challenging for HEIs to offer quality education while keeping operating costs low. The traditional method where costs are simply generalized has dominated for many decades and still holds sway in the market, but it has failed to plan, develop, and manage costs (Kocakülâh and Austill 2006). Target costing is viewed as a strategic pricing method for cost management (Bendlin 2017). Target costing provides a better alternative by beginning with the market price and target returns to determine service costs (Bendlin 2017). This is essential for HEIs as they strive to maintain their costs to reduce fees and achieve expected profit returns (Deshpande 2018). However, there is limited literature on the adoption of target costing in the education sector, especially in South Africa. Target costing is a helpful management accounting tool used to comprehensively manage prime costs in service development and maximize profits (Sharafoddin 2016). Many studies have been conducted on the adoption of target costing, with a focus on the manufacturing sector, particularly the automotive industry. However, there is little research on the adoption of target costing in HEIs (Tang 2015).

This study aims to bridge this gap in the literature by investigating the factors that influence the adoption of target costing by HEIs in South Africa. The study seeks to provide insights into how target costing can be

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effectively implemented to manage costs and improve the affordability of higher education in South Africa. The study employs contingency theory as its theoretical framework. This theory suggests that there is no one best way to organize or manage an organization, and that the most effective approach depends on the specific circumstances of the organization. In the case of HEIs in South Africa, the adoption of target costing depends on various factors, such as the size of the institution, its funding model, and the political and economic context in which it operates

(Helms, Ettkin, and Baxter 2005). By taking these contingencies into account, the study offers a more nuanced

understanding of the factors that influence the adoption of target costing in the higher education sector.

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A. Literature review

Several studies have been conducted to explore the factors that impact the public universities operations. Nevertheless, the results of these studies exhibit disparities. HEIs have faced budget management challenges due to the reduction in the availability of public funds (Africanews 2023; Naidoo and Wu 2011). There has been a significant decrease in the allocation of funds to public HEIs, caused by the recent global economic crisis. As a result, public HEIs have advocated for internally generated revenue and full cost fees to students (Naidoo and Wu, 2011; Onuoha 2013). This is an alternative means of raising funds for HEIs to achieve balanced planning on revenue and costs for sustainability (Onuoha, 2013). Therefore, HEIs must apply cost management tools to reduce their costs. Target costing is a cost management tool known for cutting down costs and should be adopted. Bendlin (2017) investigated the use of target costing in universities and provided evidence that target costing can significantly reduce operating costs. This was tested by accounting for general and administrative expenses with target costing to evaluate the outcome. The study also showed that universities that implement cost goal specificity (target costs) will have more cost savings and improved financial performance, which can minimize the burden of student fees (Bendlin 2017).

Target costing is a concept that originated in Japan, and it is derived from the term "Genka Kikaku," which means "costs planning." Prior studies have shown that target costing is a cost management tool used for cost planning and projection (Kostrzewa-Nowak and Gos, 2022; Lima, da Silveira, da Silva, and Ching 2016). This pricing system provides firms with a plan to manage potential profits. It incorporates strategic variables to plan how to satisfy consumers, gain market share, generate profits, and manage coordinate costs simultaneously (Hibbets, Albright, and Funk 2003). Most importantly, several organizations still consider target costing as a cost management tool with the goal of managing costs and accessing additional profits (Piercy, Cravens, and Lane 2010). Target costing involves comprehensive cost planning, cost management, and a process to reduce costs, motivated by service planning choices. Its ultimate focus is to establish cost-cutting through extensive cost planning. Target costing is important in preparing management to plan for future costs and implications. This establishes a state of readiness for cost-cutting by management at the cost-planning stage (Jayeola and Onou 2014). Unlike the traditional method, where the existing costs of the products are used to determine the sales price, target costing starts with managing the sales prices. This means that in the traditional method, if the price is not accepted in a market, it must be reworked through efficiency opportunities and cost reduction. Target costing offers an alternative by reverse working from the sales price and profit to determine the targeted costs (Pajrok 2014). Briciu and Capusneanu (2013) add that target costing determines the cost of production and simultaneously manages the costs. Moreover, it is market-oriented and encourages cost competition.

Target costing is a management accounting technique that helps ensure a product yields a profit through strategic planning. It is a tool used to manage product costs throughout its life cycle (Cooper and Slugmulder 1999). Target costing takes into account customer value and willingness to pay the price, and is proactive in managing costs for the entirety of the product life cycle (Marimuthu, du Toit, Jodwana, Mungal, du Plesis and Panicker 2015). This method allows firms to select low-cost activities and eliminate non-profit yielding costs. This leads to improved efficiency through a culture of collaboration amongst departments and enhanced management levels (Yazdifar and Askarany 2012). Target costing is capable of meeting customer needs while managing costs (Jalaee 2012). Table 1 shows the process of the establishment phase of target costing in an organization.

Table 1: Target costing adoption process

STEPS	PROCESS
Step 1	Conduct market research
	Competitor analysis

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Step 2

Determine customer interest

Step 3

Overlook customer requirements

Step 4

Define customer product features

Step 5

Determine the market price

Determine the required profit

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Source: Authors (Cooper and Slagmulder 1999; Paschia 2016)

The factors influencing the adoption of target costing can be attribulable into organizational factors, individual factors, and external factors (Hammami et al. 2019; Sarokolaei and Rahimipoor 2013; Goncalves et al. 2018; Mendes and Machado 2012; Reen et al. 2017; Alwadan et al. 2018).

Organizational factors include the size of the business, management style of leadership and staff inclusion, information system and technological advancement, vertical differentiation and centralisation, formal accounting support for target costing, and resource adequacy for implementation of target costing. When designing management accounting systems, a firm's size is an important consideration (Joshi 2001). Larger firms tend to use both traditional and new management accounting techniques more often than smaller firms (Joshi 2001). Studies have shown a correlation between firm size and the adoption of modern accounting practices such as target costing (Drury 2012). However, the effect of firm size on the adoption of target costing is not always clear and may vary. Some studies have found that larger firms are more likely to adopt target costing due to their production capacity and available resources (Hammami et al. 2019 and Joshi 2001). But, others have found no significant relationship between firm size and the adoption of target costing (Rattray et al. 2007). Therefore, firms should evaluate their production capacity before deciding on a suitable cost management tool.

According to Piercy, Cravens, and Lane (2010), pricing decisions were previously limited to junior marketing and finance personnel, as well as salespeople who negotiated with customers. Tang (2015) notes that top management support is crucial for the adoption of target costing, but pricing decisions have received less attention. Target costing requires the participation of all staff and departments, so the firm must have high-quality management, a flat organizational structure, advanced information systems, and leadership with strong skills (Weiyi and Luming 2009). The implementation of target costing can fail due to poor teamwork among stakeholders (Sarokolaei and Rahimipoor 2013).

Target costing is a technique that involves analyzing potential cost-saving ideas during the development of a new product. It is important to have a robust information system and technological advancement during the design phase, where up to 80% to 95% of a product's costs are committed (Helms et al. 2005). Clear analysis and understanding of a corporation's technology and organization are also necessary for effective target costing. Enhanced technological innovation can ease the amount of work required to create quality and cost savings, making target costing relevant when used in conjunction with technological innovation to manage product costs (Okpala 2016). The adoption of target costing intensifies as technology becomes more advanced, indicating a positive relationship between target costing adoption and technological advancement (Goncalves et al. 2018). However, Rasit and Ismael (2017) found an insignificant relationship between the adoption of target costing and technological advancement.

Vertical differentiation refers to the allocation of decision-making responsibilities within the organizational structure, which can either be centralized or decentralized. The emphasis of vertical differentiation is on the extent to which sub-unit managers function as quasi-entrepreneurs, while integration refers to the degree to which sub-units act in accordance with organizational goals (Abusalama 2008). It is important to note that the key factors for the effective implementation of target costing are management support, alignment of profit planning, and cross-functional teamwork.

The accounting department also needs adequate support since the adoption of target costing requires their intensive involvement in these teams. The entire process makes these teams responsible for accelerating the integrity of the product from conception to the finished product (Mendes and Machado 2012). Firms tend to give the least support or focus to the accounting department, which offers the lowest involvement in the adoption of target costing (Dekker and Smidt 2003). However, Rattray et al. (2007) measured the extent of involvement of the accounting department in target costing adoption and found a mean frequency involvement of 3.42 on a scale of 1 to 5, with 1 being not at all involved and 5 being very much involved.

cost management plans to achieve target costing.

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Researchers have suggested that organizations require adequate internal resources to effectively implement and execute target costing (Nassar, Al-Khadash, Sangster, and Mah'd 2013). Large corporations are particularly well-positioned to adopt management accounting techniques like target costing, as they have the necessary resources and find them useful for their operations (Hamood et al. 2013). Cost management innovations are often embraced by larger companies, given their complex and varied facilities (Smith, Abdullah, and Razak 2008). Al-

Qady and El-Helbawy (2016) suggest that resource management is essential for management decision-making on

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Target costing adoption may face individual factors such as lack of education and expertise, job security fears, and unclear organizational goals (Reen et al. 2017; Motuba et al. 2016; Weiyi and Luming 2009). While some argue that target costing is easy to use through continuous communication (Briciu and Capusneanu 2013), others suggest that cost-cutting may pose a real threat to employees (Briciu and Capusneanu 2013; Alwadan, Alsinglawi, and Alhawatmeh 2018). To overcome these challenges, organizations can train employees and remove threats of job loss (Briciu and Capusneanu 2013). Clear management goals are also essential for effective implementation (Hamood et al. 2013), and staff must have access to useful information and be motivated to meet target costs (Mendes and Machado 2012). Target costing can contribute effectively to an entity's financial efficiency and is crucial in meeting the firm's goals, including cost reduction, customer satisfaction, quality, and timeliness of new products (Dekker and Smidt 2003: 296; Keay 2008).

External factors affecting the adoption of target costing include competition intensity and government regulations (Hibbets et al. 2003; Drury 2012; Alwadan et al. 2018). Target costing is useful in highly competitive environments where minimizing costs can give firms an advantage (Hamood et al. 2013). Studies have shown a positive relationship between the adoption of target costing and competition intensity (Khandwalla 1972; Ax et al. 2008). Government policies such as market price controls can also impact cost management, with interventions on price controls potentially affecting market prices (Mohr 2015; Harrington 1984). While the literature on the adoption of target costing in HEIs is limited, this study provides valuable insights into the factors that influence the adoption of target costing.

Based on the review of prior findings, the following hypotheses were proposed:

H1: There are no significant differences in the agreement levels of the respondents with regards to the factors influencing the implementation of target costing.

H2: There are no significant differences in the agreement levels of the respondents with regards to the factors delaying the adoption of target costing.

H3: There are no significant differences in the agreement levels of the respondents with regards to the factors resulting in the rejection of target costing.

The aforementioned hypotheses were assessed using the methodology which follows.

II. METHODS

The study was conducted from a selected South African HEI employing a quantitative research approach, utilizing closed-ended and open-ended questions in a questionnaire survey. The analysis was conducted through the Statistical Package for Social Science (SPSS version 27 ®) and guided by contingency theory. The study employed an online distribution of a 5-point Likert scale questionnaire to 67 university staff members, comprising of 52 Heads of Departments (HODs) and 15 staff members from the university finance department. Of the 50 returned questionnaires, only 43 were usable, with a response rate of 64.18% (43 staff members), including 31 HODs and 12 finance staff members. The questionnaire was distributed through QuestionPro and pre-tested among academic experts within the university to assess clarity and understanding.

III. RESULTS AND DISCUSSION

A. Findings

This study examined the factors that influence the adoption of target costing in HEIs. As indicated in table 2, the respondents were requested to indicate the extent to which HEIs had implemented target costing.

Table 2. The extent to which target costing is adopted in HEIs

No	Frequency		Valid Percentage (%)
T1	Implemented target costing as a pilot project	2	6.3
T2	Currently under consideration	10	31.3
Т3	No consideration of target costing to date	7	21.9
	Tota;	32	100.0

According to the results in table 2, 40.6% of the respondents reported that target costing is implemented in selected areas of HEIs, indicating that target costing has not yet been fully adopted as a pricing strategy for the entire institution. Additionally, 31.3% of the respondents indicated that target costing is under consideration, suggesting that it is being evaluated for suitability as a pricing method. On the other hand, 21.9% of the respondents reported that no consideration had been made for target costing, indicating a lack of willingness to change from the current pricing system. Only 6.3% of the respondents reported that target costing had been implemented as a pilot project, implying that it is currently being tested for feasibility.

Table 3 highlights the factors that resulted in the adoption of target costing. The mean values are used to assess the respondents who agreed with the factors listed above as factors that influence the adoption of target costing.

Table 3: Factors influencing the implementation of target costing

No	Statement	Mean	Standard Deviation	P-Values
F1	The size of the institution fits the use of target costing.	3.85	1.214	0.086
F2	Target costing is relevant in the merged institutions.	3.62	1.325	0.587
F3	Enough support for implementation from the top management.	3.46	0.967	0.557
F4	Possibility that all staff across all departments can be included.	3.92	0.494	0.004**
F5	Efficiency in the current information system for data management.	3.31	1.032	0.024**
F6	Clear organisational structure creating collaborations and cross-functional teams.	3.77	1.013	0.024**
F7	Sufficient formal support to accounting or finance department.	3.62	1.325	0.597
F8	The institution has the ability to assign the resources.	3.92	1.115	0.209
F9	There is adequacy of resources to adopt target costing.	3.54	1.266	0.472
F10	Sufficiency in the expertise of target costing.	2.62	1.325	0.211
F11	The institution has interests in gaining competitive advantage in a market.	4.31	0.855	0.146

F12	Easy to understand the perception of students on the quality of education.	2.85	1.281	0.597
F13	The limited restriction by government rules and regulations on pricing.	3.17	1.337	0.127

a Likert scale of 1 = strongly disagree (SD), 2 = disagree (D), 3 = neutral (N), 4 = agree (A), 5 = strongly agree (SA).

The mean value measurement for the following statements was greater than 3: F1 , F2 ,F3 , F4 , F5 , F6 , F7 , F8 , F9 ,F11 and F13 statements. This means that the respondents agreed that the F1, F2. F3. F4. F5, F6, F7, F8, F9, F11 and F13 statements were the factors that influence the implementation of target costing. The 11^{th} statement had the highest support level from the respondents which indicates that the institution has an interest in gaining the market advantage. This result has yielded the (M= 4.31 ± 0.855). On the contrary, the mean values for the F10 and F12 statements were lower than 3.0. This suggests that the respondents disagreed with two statements more than they agreed with them. Therefore, the results reveal that many respondents agreed with several statements on the factors that were considered to influence the adoption of target costing.

Table 4 presents the results on the factors that influence the delay in the adoption of this target costing. The mean value measured for the F14, F16, F17, F18, F19, F20, F21, F22, F23, F25, and F26 statements are greater than 3.5, indicating that the respondents agreed that these statements are the factors that delay the adoption of target costing.

Table 4: Matters delaying the adoption of target costing

NO	Statement	Mean	Standard Deviation	P-Values
M1	The size of the institution.	4.00	1.054	0.572
M2	Target costing is rrelevant in the merged institutions.	2.70	1.059	0.079
M3	Support from the top management.	4.50	0.707	0.150
M4	Inclusion of all staff across all departments.	3.80	0.919	0.308
M5	Adequacy of information system for data management.	3.90	1.101	0.572
M6	Creating of collaboration and cross-functional teams.	3.90	1.101	0.572
<i>M7</i>	Formal support to accounting or finance department.	3.90	1.449	0.199
M8	Cost of implementing target costing.	3.50	1.509	0.558
M9	Assigning of resources.	3.90	1.197	0.572
M10	Resources availability for target costing.	3.60	0.966	0.572
M11	The institution is still safeguarding threats to job losses.	3.30	1.160	0.940
M12	Expertise on target costing.	3.60	1.075	0.753

^{*}Level of significance P>5% (2-tailed)

^{**}Level of significance P<5% (2-tailed)

M13	Students perception on the quality of education.	3.60	1.350	0.736
M14	Government rules and regulations on pricing.	2.10	1.101	0.572

A Likert scale of 1 = strongly disagree (SD), 2 = disagree (D), 3 = neutral (N), 4 = agree (A), 5 = strongly agree (SA).

However, the statement with the highest contributing influence on the delay of target costing adoption is the M3 statement, indicating "support from top management," with a result of $(M=4.50\pm0.707)$, followed by the M1 statement indicating "size of the institution" with a result of $(M=4.00\pm1.054)$. On the other hand, the M2 and M14 statements had mean values lower than 3.0, indicating that the respondents disagreed with these statements as factors delaying the adoption of target costing. Specifically, the respondents disagreed that delays were caused by government rules and regulations on pricing decisions and that the adoption of target costing was irrelevant in merged institutions.

Table 5 presents the results on why target costing was never considered as a viable pricing method for fees at the university.

Table 5: Reasons resulting in the rejection of target costing

No	Statement	Mean	Standard Deviation	P-value
R1	Target costing cannot be implemented in large institutions.	2.71	1.113	0.368
R2	Irrelevant in merged institutions.	2.57	0.787	0.368
R3	Lack of top management support.	3.43	0.976	0.666
R3	Difficulty in including all staff across all departments.	3.14	0.900	0.867
R4	No collaboration or cross-functional teams in an institution.	3.00	1.155	0.666
R5	Inadequacy of formal accounting or finance support.	3.43	1.272	0.666
R6	Accounting information management system is not compatible for target costing.	3.43	1.512	0.565
<i>R7</i>	High cost for implementing target costing.	3.29	0.488	0.257
R8	Inadequacy of resources to implement target costing.	3.86	1.215	0.666
R9	Lack of knowledge to adopt target costing.	4.29	0.756	0.565
R10	Inadequacy of research relating to target costing.	3.43	1.272	0.666
R11	Fear of job losses by the employees.	2.43	0.976	0.666
R12	Staff has no clarity on the goals and objectives of an institution.	2.86	0.900	0.102

^{*}Level of significance P>5% (2-tailed)

^{**}Level of significance P<5% (2-tailed)

R13	Insufficiency in the target costing expertise.	3.57	0.787	0.368
R14	The institution will not be competitive in strong competitive market.	3.00	0.816	0.867
R15	There is no intensity of competition in the public higher education institutions.	3.57	1.134	0.666
R16	Challenges in figuring the perception of students on the quality of education.	3.00	1.000	0.368
R17	Government regulations imposed on the establishment of fees.	3.43	1.272	0.934

A Likert scale of 1 = strongly disagree (SD), 2 = disagree (D), 3 = neutral, 4 = agree (A), 5 = strongly agree (SA).

The results show that the R8, R9, and R13 statements have a mean value greater than 3.5, indicating that respondents agreed these are the factors contributing to the rejection of target costing. The R9 statement, which suggests a "lack of knowledge to adopt target costing," had the highest influence on the rejection of target costing with results of $(M=4.29\pm0.756)$, followed by the R6 statement which indicates "inadequacy of resources to implement target costing" with results of $(M=3.86\pm1.215)$. The R1, R2, and R11 statements were closest to disagreement, indicating they are not the contributing factors for the rejection of target costing. Respondents disagreed that target costing was rejected because "target costing cannot be implemented in large institutions" with results of $(M=2.71\pm1.113)$, "irrelevant in merged institutions" $(M=2.57\pm0.787)$, and "fear of job losses by employees" $(M=2.43\pm0.976)$.

The study's hypotheses were evaluated through Chi-square analysis, wherein a p-value less than 0.05 indicated statistical significance. Conversely, a p-value greater than 0.05 indicated no statistical significance. The results revealed that the Chi-square analysis demonstrated a significant discrepancy in agreement levels for the R4 (p<0.003), R5 R6, and R15 statements (p=0.024), leading to the rejection of these hypotheses. However, for the remaining statements, no substantial difference in agreement or disagreement levels was observed among the respondents, indicating the acceptance of the hypotheses. As shown in table 6, the respondents in the open-ended questions section expressed their belief that the method of setting costs is unknown, but the institution is achieving its objectives and is not facing any financial difficulties, without considering the impact of the COVID-19 pandemic.

Table 6: Respondents reasons for and or against the university current pricing method

	Yes				No		

The university does not restructure fees annually and bases increases on historic judgement, while considering current resources and market norms. Financially, the institution is not in distress and is benchmarking with other institutions to cap prices. The university is able to cover its operational costs without difficulty and provides quality education distinct from other universities.

The method of setting costs is unknown, and the cost allocation is based on previous judgement rather than updated information. The structure of fees needs to be reconsidered to reflect changes in cost basis.

They also revealed that the university benchmarks with other higher education institutions, which limits prices to a comparable rate. The current costing approach enables the university to offer high-quality education, which differentiates it from other universities. Therefore, it can be inferred that the implementation of target costing has positively contributed to the institution's objectives and competitiveness within the higher education sector.

B. Discusion of the findings

The respondents were asked to indicated if whether HEIs had implemented target costing in selected areas. The majority of the respondents reported that HEIs had implemented target costing. This is consistent with previous research, such as Yazdifar and Askarany (2012), which found that less than half of firms adopt target

^{*}Level of significance P>5% (2-tailed)

^{**}Level of significance P<5% (2-tailed)

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costing. Only 23.5% of firms were still piloting this pricing method. Target costing has not yet established itself in the marketplace, as indicated in studies by Ax et al. (2008), Rattray et al. (2007), Atieh (2014), and Tang (2015). The study found that the implementation of target costing is influenced by the organizational factors, individual factors, and external factors. These results are line with those of the previous authors who found that there are factors delaying the adoption of target costing and those resulting in the rejection of it (Hammami et al. 2019; Sarokolaei and Rahimipoor 2013; Goncalves et al. 2018; Mendes and Machado 2012; Reen et al. 2017; Alwadan et al. 2018). The findings of this study have significant implications for policy decisions related to pricing strategies in the higher education sector. HEIs in South Africa could benefit from implementing target costing as a cost management strategy to remain competitive in a dynamic environment. To achieve successful implementation of target costing, it is important for institutions to address the factors that delay adoption, such as improving financial resources, providing training on target costing, and promoting a culture of change and commitment from top management.

IV. CONCLUSION

This study aimed to provide insights into the factors that influence the adoption of target costing by HEIs in South Africa. The study found that the implementation of target costing in the education sector is limited, and certain factors delay or hinder its adoption. The study found that target costing has been implemented in some areas. But the organizational factors, individual factors, and external factors were identified as significant contributors to the adoption of target costing in HEIs. The study's findings suggest that the adoption of target costing in the education sector can be enhanced by addressing the identified barriers through awareness campaigns, training and support, and allocating sufficient resources. Furthermore, policymakers can use the study's findings to inform decisions related to pricing strategies in the higher education sector. This study contributes to the literature on cost management systems in the education sector and provides a basis for further research on the implementation of target costing in other regions and contexts. The study recommends that HEIs prioritize the achievement of successful implementation of target costing by addressing factors that hinder its adoption. This entails fostering a culture of change and securing commitment from top management.

REFERENCES

- Abusalama, F.A. (2008). Barriers to adopting activity-based costing systems (ABC): an empirical investigation using cluster analysis. Doctor of Philosophy (Ph.D), Technological University Dublin, 2008.
- Africanews. 2023. South Africa's university students denounce increasing cost of education [Online].
- Available: https://www.africanews.com/2023/03/12/south-africas-university-students-denounce-increasing-cost-of-education// [Accessed 29 April 2023].
- Al-Awawdeh, I. W. M. and Al-Shararairi, J. A. 2012. The relationship between target costing and competitive advantage of Jordan Private University: Introduction. International Journal of Business and Management, 7(8): 123-142.
- Aladwan, M., Alsinglawi, O. and Alhawatmeh, O. 2018. The applicability of target costing in Jordanian hotels industry. Academy of Accounting and Financial Studies Journal, 22(3): 1-13.
- Al-Qady, M. and El-Helbawy, S. 2016. Integrating target costing and resource consumption accounting. Journal of Applied Management Accounting Research, 14(1): 39-54.
- Atieh, S.H. 2014. The adoption and implementation of target costing approach in manufacturing companies in Jordan. International Journal of Business and Social Science, 5(6): 72-81.
- Ax, C., Greve, J. and Nilsson, U. 2008. The impact of competition and uncertainty on the adoption of target costing. International Journal of Production Economics, 115(1): 92-103.
- Bendlin, L. 2017. Cost Management from the application of the target costing in the educational resources of a university: Cost in university institution. International Journal of Innovation and Research in Educational Sciences, 4(3): 2349-5219.
- Briciu, S. and Căpușneanu, S. 2013. Pros and cons for the implementation of target costing method in Romanian economic entities. Accounting and Management Information Systems, 12(3): 455-470.
- Cannella, G. 2011. Target costing and how to use it. Journal of Cost Management: 39-50.
- Cooper, R. and Slagmulder, R. 1999. Developing profitable new products with target costing. MIT Sloan Management Review, 40(4): 23-33.
- Dekker, H. and Smidt, P. 2003. A survey of the adoption and use of target costing in Dutch firms. International Journal of Production Economics, 84(3): 293-305.

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- Deshpande, S. S. 2018. Various pricing strategies: A review. International Journal of Business and Management, 20(2): 75-79.
- Drury, C. 2012. Management and cost accounting. 8th ed. Cengage Learning.
- Gonçalves, T., Gaio, C. and Silva, M. 2018. Target costing and innovation-exploratory configurations: A comparison of fsQCA, multivariate regression, and variable cluster analysis. Journal of Business Research, 89:378-384.
- Hammami, H., Al-Omiri, M., Bouraoui, T. and Anam, O.A. 2019. Target costing: adoption and its relationships with competition intensity, intended strategy and firm size. Asia-Pacific Management Accounting Journal, 14(3): 223-250.
- Hamood, H.H., Omar, N. and Sulaiman, S. 2013. Target Costing Implementation and Organisational Capabilities: A Research Framework. Asia-Pacific Management Accounting Journal, 8(2): 47-61
- Harrington, S. 1984. The impact of rate regulation on prices and underwriting results in the property liability insurance industry: A survey. Journal of Risk and Insurance: 577-623.
- Helms, M. M., Ettkin, L. P., Baxter, J. T. and Gordon, M. W. 2005. Managerial implications of target costing: Competitiveness Review. An International Business Journal, 15(1): 49-56.
- Hibbets, A.R., Albright, T. and Funk, W. 2003. The competitive environment and strategy of target costing implementers: evidence from the field. Journal of Managerial Issues, 15(1): 65-81.
- Jalaee, H. 2012. Advantages of target costing in organisation. International Journal of Research in Management, 2(1): 10-18.
- Jayeola, O.L.A.B.I.S.I. and Onou, D.P. 2014. Implementing target costing in small and medium scale enterprises in Ogun industrial metropolis. International Journal of Humanities and Social Science, 4(8), 222-233.
- Joshi, P.L. 2001. The international diffusion of new management accounting practices: the case of India. Journal of International Accounting, Auditing and Taxation, 10(1): 85-109.
- Keay, A. 2008. Ascertaining the corporate objective: An entity maximisation and sustainability model. The Modern Law Review, 71(5): 663-698
- Khandwalla, P.N. 1972. The effect of different types of competition on the use of management controls. Journal of Accounting Research, 275-285.
- Kocakülâh, M. C. and Austill, A.D. 2006. Product development and cost management using target costing: A discussion and case analysis. Journal of Business and Economics Research, 4(2): 61-72.
- Kostrzewa-nowak, D. and Gos, W. 2022. Practical Applications of Target Costing in a Multidisciplinary R&D Project. Sustainability, 15, 124.
- Lima, A., da Silveira, H. A. G., da Silva, S. H. F. and Ching, H. Y. 2016. Target costing: Exploring the concepts and its relations to competitiveness in agribusiness. Custos e @gronegócio online, 12(3): 10-25.
- Marimuthu, F., du Toit, E., Jodwana, T., Mungal, A., du Plesis, A. and Panicker, M. 2015. Cost and Management Accounting fundamentals: Pricing decisions. Claremont: Juta Publishers.
- Matarneh, G.F. and El-Dalabeeh, A.R.K. 2016. The role of target costing in reducing costs and developing products in the Jordanian public shareholding industrial companies. International Journal of Academic Research in Accounting, Finance and Management Sciences, 6(4): 301-312.
- Mendes, H.R. and Machado, M.J. 2013. Target costing: Review of empirical studies in the automotive sector. Tourism & Management Studies, 3: 792-801.
- Mohr, P. 2015. Economics for South African students: A general definition of elasticity. 5th ed. Pretoria: Van Schaik Publishers.
- Motuba, L., Nogqala, N., Monyane, T., G. and Emuze, F.M. 2016. Target costing in construction: Perceptions from quantity surveyors. Research Gate, 1-10.
- Naidoo, V. and Wu, T. 2011. Marketing strategy implementation in higher education: A mixed approach for model development and testing. Journal of Marketing Management, 27(11-12),1117-1141.
- Nassar, M., Al-Khadash, H.A., Sangster, A. and Mah'd, O. 2013. Factors that catalyse, facilitate and motivate the decision to implement activity-based costing in Jordanian industrial companies. Journal of Applied Accounting Research, 14(1): 18-36.
- Okpala, K.E. 2016. Target costing implementation and competition: A case study of breweries industry. European Journal of Applied Business and Management, 2(2): 18-35.
- Onuoha, L.N. 2013. Financing higher education in Nigeria: The role of internally generated revenues and how university managements can maximise the sources. Canadian Social Science, 9(1): 9-14.
- Pajrok, A. 2014. Application of target costing method in the hospitality industry. The Journal of Education, Culture, and Society, 5(2): 154-165.
- Paschia, L. 2016. Implementing target costs method in Romanian higher education institutions. Hyperion Economic Journal, 4(1): 21-28.

- Piercy, N.F., Cravens, D.W. and Lane, N. 2010. Thinking strategically about pricing decisions. Journal of Business Strategy, 21(5): 38-48.
- Rasit, Z.A. and Ismail, K. 2017. Incorporating contingency theory in understanding factors influencing target costing adoption. Advanced Science Letters, 23(8): 7804-7808.
- Rattray, C.J., Lord, B.R. and Shanahan, Y.P. 2007. Target costing in New Zealand manufacturing firms. Pacific Accounting Review, 19(1): 68-83.
- Reen, N., Hellström, M., Wikström, K. and Perminova-Harikoski, O. 2017. Towards value-driven strategies in pricing IT solutions. Journal of Revenue and Pricing Management, 16(1): 91-105.
- Sarokolaei, M.A. and Rahimipoor, A. 2013. Studying the obstacles of applying a target costing system in firms accepted in Tehran Stock Exchange. Journal of Economics and International Finance, 5(1): 17 -20.
- Sharafoddin, S. 2016. The Utilisation of Target Costing and its Implementation Method in Iran: Introduction. Procedia Economics and Finance, 36: 123-127.
- Smith, M., Abdullah, Z. and Razak, R.A. 2008. The diffusion of technological and management accounting innovation: Malaysian evidence. Asian Review of Accounting, 16(3): 197-218.
- Tang, Y. 2015. A survey on target costing (TC) in New Zealand's Private Training Establishments (PTEs): the level of awareness among managers and the degree of adoption. Ph.D dissertation. Auckland University of Technology.
- Tani, T., Okano, H., Shimizu, N., Iwabuchi, Y., Fukuda, J. and Cooray, S. 1994. Target cost management in Japanese companies: current state of the art. Management Accounting Research, 5(1): 67-81.
- Wangenge-Ouma, G. 2012. Tuition fees and the challenge of making higher education commodity in South Africa: Funding and higher education access. Higher Education, 64(6). 831-844.
- Weiyi, F. and Luming, Y. 2009. The discussion of target cost method in logistics cost management. In 2009 ISECS International Colloquium on Computing, Communication, Control, and Management, 4: 537 -540.
- Wilkins, S., Shams, F. and Huisman, J. 2012. The decision making and changing behavioural dynamics of potential higher education students: The impacts of increasing tuition fees in England. Educational Studies, 39(2): 125-141.
- Yazdifar, H. and Askarany, D. 2012. A comparative study of the adoption and implementation of target costing in the UK, Australia and New Zealand. International Journal of Production Economics, 135(1): 382-392.