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Table of Contents

Correlates of the Implementation of Internationalization Strategies of Higher Education Institutions in the Philippines Miriam P. Narbarte, Judith Mary Ann Chan	1
Balance Scorecard Perspectives and Institutional Performance of Private Tertiary Institutions Francis Osei-Kuffour	11
Effects of Job Design on Employee Motivation: The Case of a Leading Mobile Telecommunications Services in Ghana Ebenezer Owusu-Yeboah, Beatrice Djagbley Adjei	27
The Effects of Cash Management Practices on Profitability of Banks in Ghana Evans Oteng, Glenda Joy B. Lopez	36
The Effects of Corporate Governance on Financial Sustainability of Mission Institutions in West Africa Sarfo Dickson Marfo	43
Innovative Capabilities and Efficiency of Selected Financial Institutions in Ghana Emmanuel Kofi Mintah, Robert A. Borromeo	58
Establishing a Vegetarian Food Kiosk in Angeles City Lovely Jane G. Mercado	71
Factors Affecting Students' Pursuance to Complete the Bachelor of Science in Accountancy Course Ruffelle Mae M. Ayore, Merelle Rose F. Fornoles, Vivienne Rozenn G. Layto, Marie Antoinette C. Miralles, Chester Owen B. Diokno, Glenda Joy B. Lopez, Evely G. Lintao, Reynaldo P. Abas, Robert A. Borromeo	84
Blockchain Technology: Its Applicability, Challenges, and How These Challenges can be Handled in the Normal Accounting Cycle Reynaldo P. Abas Jr.	105

Correlates of the Implementation of Internationalization Strategies of Higher Education Institutions in the Philippines

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Abstract

Internationalization is currently the priority of higher education institutions (HEIs) in the Philippines and in many countries worldwide. Internationalization contributes to the development of the academic programs of HEIs. This research aimed to determine the factors that influence the internationalization of HEIs in the Philippines. The articulated institutional commitment, administrative structure and staffing, curriculum and learning outcomes, faculty policies and practices, student mobility, and collaboration partnerships were the predictor variables and internationalization as criterion variable. Online survey questionnaire was used to gather the information that addressed the objectives of the study and were distributed to the HEIs in the Philippines. Three hundred forty-three faculty from 97 HEIs answered the questionnaires. The respondents were from autonomous (25.4%), deregulated (11.7%), and regulated (63%) HEIs. The articulated institutional commitment, administrative structure and staffing, curriculum and learning outcomes, faculty policies and practices, student mobility, and collaboration partnerships were highly implemented by the HEIs and were found to be *significantly correlated* to the implementation of internationalization of HEIs in the Philippines. The results further revealed a *moderate implementation* of internationalization among HEIs in the Philippines. The regression analysis revealed that faculty policies and practices was the sole predictor of internationalization with 18% variance accounted for. Recommendations were noted to enhance the internationalization programs of HEIs in the Philippines.

Keywords: *internationalization, higher education institutions (HEIs), faculty policies and practices*

Internationalization is the process of integrating international, intercultural, and global dimensions into the goals, primary functions and delivery of higher education at the institutional and national levels. It can be described as a series of international activities, such as academic mobility for students and teachers; international networks, partnerships and projects; new international academic programs and research initiatives (Knight, 2012). Internationalization can improve national or world rankings of a university.

Currently, educational institutions all over the world are experiencing pressure from the external environment due to globalization, which implies pushing higher education institutions toward greater international involvement. HEIs engaged in a variety of international initiatives and used different approaches in response to this globalization (Cinches et al., 2017).

Although internationalization is the priority of HEIs, other countries have not taken measures to promote internationalization. Crăciun's study (2018) revealed that only 11% of countries have an official strategy for internationalization, most having been adopted in the last decade. Such strategies have been developed predominantly by developed countries—3 in 4 come from members of the Organization for Economic Cooperation and Development (OECD). European countries have taken the lead in promoting strategic thinking about internationalization at the national level—2 in 3 come from this world region, and programs. They have led to further regional harmonization of higher education systems (British Council, 2017).

According to Bedenlier and Zawacki-Richter (2015), the research on internationalization processes in higher education has steadily increased, however, there is still a lack of analysis of how these developments have affected higher education. Furthermore “universities have always had international dimensions in their research, teaching and service to society, but those dimensions were, in general, more ad hoc, fragmented, and implicit rather than explicit” (de Wit & Merx as cited in de Wit & Deca, 2020, p. 3).

Internationalization is not only currently the priorities of HEIs in many countries worldwide but also in the Philippines. The Commission on Higher Education (CHED) recognized the need for internationalization. The CHED mandate on internationalization is reflected in CMO 46, s. 2012, art. 1, sec. 2. This mandate includes “enhancement of institutional quality assurance and directs all HEIs to institute necessary mechanisms that ensure graduates can competently cope with the standards of a rapidly changing globalized world and be mindful of global competitiveness” (Cinches et al., 2017, p.2). Internationalization is hoped to improve the economic condition of the country.

Theoretical/Conceptual Approaches

Alpenidze (2015) proposed an internationalization model consisting of ten components: university leadership, strategic planning, institutionalization, infrastructure, curriculum, foreign students and scholars studying abroad, involvement of academic personnel, university life, and monitoring. This model highlights that considering internationalization aspects in each of these components will affect the internationalization process of the university. The components of internationalization present can vary; the factors influencing the implementation of internationalization models can be the same for all universities. Rudzki as cited in Alpenidze (2015) introduces two modes of internationalization of higher education: (a) the Reactive Mode and (b) Proactive Mode.

The Reactive Mode involves academic personnel making preliminary contact with foreign colleagues, the formalization of some of these contacts with formal agreements, increasing central control as these activities grow, and conflict between top management seeking to take control of this process and employees involved in it from the beginning to reaching a maturity level then switching to the other mode or allowing this work to decline.

The Proactive Mode, on the other hand, involves setting concurrent and long-term strategic plans, creating strategic policies, implementing plans, evaluating the results, and then modifying or

reinforcing further activities. These two modes are based on two different approaches: The first is based more on spontaneous activities while the other is more organized and shares the principles of general strategic management.

According to Alpenidze (2015, p. 234), “internationalization in HEIs is a long-term process that needs analysis, planning, implementation, and evaluation of achievements. Hence, it is necessary to view a university’s internationalization as a strategic process, and link concepts of strategic management with the internationalization process”.

Statement of the Problem

This research aimed to determine the correlates of the implementation of the internationalization strategies of HEIs in the Philippines and further determine the strengths of the internationalization programs of HEIs in the Philippines. Specifically, it addressed the following questions: (a) What is the extent of the articulated institutional commitment, administrative structure and staffing, curriculum and learning outcomes, faculty policies and practices, student mobility, and collaboration partnerships among Higher Education Institutions in the Philippines as assessed by the employees? (b) What is the extent of the implementation of the internationalization strategies of the HEIs in the Philippines? (c) Which of the independent variables significantly predict the extent of implementation of the internationalization strategies of HEIs in the Philippines?

The result of this study may have implications for strategic management and practice of the HEIs particularly on their respective internationalization processes. This will also benefit the educators and students of the HEIs in connection to more feasible strengthened internationalization programs.

Methods

The study used correlational design (Creswell, 2011). Content validated survey questionnaires were used to gather the information that addressed the objectives of the study and were distributed to the representative of HEIs in the Philippines.

This study adopted the non-probability sampling method, particularly the convenience approach to target the population who represent the higher educational institutions in the Philippines. Purposive sampling was used in choosing the respondents of the study. The survey was conducted online using Google Docs Form. The link was purposely sent to various colleges and universities in the Philippines. The data was generated on Google Spreadsheets. The respondents from the HEIs

Three hundred forty-three faculty from 97 HEIs answered the questionnaires. The respondents were from autonomous (25.4%), deregulated (11.7%), and regulated (63%) HEIs. The study consists of 68.5% female and 31.5% male. In terms of age, 16.3% of the sample were between 26-35 years of age, 36.7% were between 36-45 years old, 24.8% were between 46-55 years old, 15.7% were between 56-65 years old. The remaining 4.1% and 23% have ages greater than 66 years old and less than 25 years old, respectively. Majority of the respondents were school heads of the institutions.

The data was analyzed using Statistical Packages for Social Sciences (SPSS version 23). Five-point Likert scale representing *strongly disagree* (1), *disagree* (2), *somewhat agree* (3), *agree* (4), and *strongly agree* (5) was used to assess the factors implementation of the internationalization strategies and to determine if the independent variables are currently practiced in their institutions. The quantitative data were analyzed using the mean, standard deviation, correlation, and regression.

Results

Table 1 presents the descriptive statistics of the factors of internationalization. The respondents from the HEIs in the Philippines agreed that the following factors are highly evident and are being practiced in their institutions: articulated institutional commitment, administrative

structure and staffing, curriculum and learning outcomes, faculty policies and practices, student mobility, and collaboration partnerships.

Table 1. *Descriptive Statistics of the Independent Variables*

Independent Variables	Mean	Std. Deviation	Scaled Response	Verbal Interpretation
Articulated Institutional Commitment	4.24	.89	Agree	Highly Evident
Administrative Structure and Staffing	4.22	.87	Agree	Highly Evident
Curriculum and co-curriculum and Learning Outcomes	4.15	.895	Agree	Highly evident
Faculty Policies and Practices	4.08	.89	Agree	Highly Evident
Student Mobility	4.03	.87	Agree	Highly Evident
Collaboration Partnership	4.23	.91	Agree	Highly Evident
N=343				

Articulated Institutional Commitment

The respondents of this study *agreed* that they have articulated institutional commitment in their institutions. Internationalization had a great role in strategic plans and mission statements of HEIs. Internationalization should be regarded as a core function in strategic planning, and guiding principles in HEIs which are seeking global engagement and competition (Britez & Peters, 2010).

Burnett and Huisman as cited in Alhalwaki and Hamdan (2019) identified some suggestions to achieve better results and outcomes. They suggested that every institution should have the following: clear plan and mission, culture of commitment, top senior management support to down and up again interactions, financial and administrative support, and adopt and implement a systematic planning process. Added to these suggestions, the institution's engagement and response to globalization should not conflict with the values of the institution. Awareness among faculty, staff, and students on the internationalization program is also important and allows suggestions for improvement. Institutions should also market their internationalization strategies by linking it with institutions' brands, missions, and visions. International offices in HEIs can also be established and assign experts who can design plans and organize international activities for students and staff. In addition, organizing international students and staff exchanging processes, finding new opportunities for joint research for the academic staff, and encouraging new teaching and learning techniques such as videoconferencing may be done.

Administrative Structure and Staffing. This factor has something to do with the organizational flowchart, reporting structures and office configurations. The respondents *agreed* (mean = 4.22) that they have administrative structure and staffing in their institution. For sustainability of internationalization Bruce as cited Alhalwaki and Hamdan (2019) identified four organizational structures areas. These organizational structure areas include (a) the existence of supportive leadership to enhance internationalization, (b) the existence of shared governance to oversee the implementation of internationalization efforts, (c) adequate staffing level to allow tasks to be completed efficiently, and (d) international network size.

Curriculum, Co-curriculum, and Learning Outcomes. This factor refers to education and language general requirements, programs activities, and learning outcomes of the institution. The respondents of the study claimed that this factor is highly evident in their institution (mean = 4.15). Internationalizing curricula is the main priority in internationalization strategy. According to Shailer as cited in Alhalwaki and Hamdan (2019, p. 8), "curriculum internationalization is all about developing and changing processes to meet international standards, such as course content, materials, objectives, teaching and learning methodologies, as well as evaluation and fulfilling labour market requirements". If the international curriculum is introduced to the faculty and students, both

parties are learning at the same time. It will help them deal with real global issues and with cultural differences more effectively. International research collaboration through publication, exchange academic staff, and curriculum design are factors that affect achieving internationalization.

Faculty Policies and Practices. This factor is focused on faculty hiring, development guidelines and promotion policies. According to Popescu (2020), to enhance the faculty opportunities to develop their institutional skills, institutional policies and mechanisms of support are necessary. The implementation strategies that support internationalization be identified at the university level.

Student Mobility. The respondent of this study said that student mobility is highly evident in their institution (mean = 4.03). Student mobility refers to studying abroad and recruiting international students. OECD (2012) defined student mobility “as a physical movement of students to continue their study abroad with the intention to return back to their countries” (p. __). Usually, student mobility has two main activities, i.e., studying abroad and exchange programs. According to Deardorff as cited in Alhalwaki and Hamdan (2019, p.9), the aim of mobility in internationalization strategy is “to gain different perspectives, to develop languages and global skills, to become global citizens, to be better prepared for the global workforce, and so on”.

Collaboration Partnerships. It is a joint program and activities with collaborative institutions. It is a partnership or international agreement or engagement among HEIs. This partnership may include exchanging international students and faculty, cultural activities, curriculum, and research activities that may enhance internationalization. As revealed in the result of this survey, collaborative partnership is evident in the HEIs in the Philippines (mean = 4.23). This effort can benefit the institution. According to Almsafir and Bourini (2011; 2019), international recognition through accreditation is another factor that HEIs should consider achieving through redesigned curricula to fit a globalized model, which leads them meeting international standards.

Implementation of Internationalization Strategies

Table 2. *Extent of Implementation of the Internationalization Strategies*

Internationalization Strategies of HEIs and Extent of Implementation	Mean	Std. Dev	Scaled Response	Interpretation
13. Developing institutional strategic partnerships	3.36	1.20	Somewhat agree	Moderate
18. Participation in international associations	3.29	1.19	Somewhat agree	Moderate
6. Strengthening international/intercultural content of curriculum	3.27	1.14	Somewhat agree	Moderate
4. International research collaborations	3.15	1.24	Somewhat agree	Moderate
5. Addition of international subjects in the curriculum	3.15	1.15	Somewhat agree	Moderate
8. Having international dimensions within institutional infrastructure	3.12	1.17	Somewhat agree	Moderate
17. Marketing and promoting the institution internationally	3.12	1.27	Somewhat agree	Moderate
7. Hosting international research colloquia and seminar-workshops	3.06	1.31	Somewhat agree	Moderate
3. Hosting international events for training and education on culture and diversity	3.03	1.22	Somewhat agree	Moderate
12. Intercultural skill-building workshops	3.03	1.23	Somewhat agree	Moderate
2. Faculty /staff involvement in internationalization programs and activities	3.02	1.19	Somewhat agree	Moderate

{table continues on the next page}

10. Student exchange	2.97	1.29	Somewhat agree	Moderate
14. Developing joint and/or double/dual and multiple degree programs with foreign partner institutions	2.97	1.28	Somewhat agree	Moderate
11. Sharing of laboratory related resources	2.94	1.25	Somewhat agree	Moderate
16. International development and capacity building projects	2.93	1.25	Somewhat agree	Moderate
1. Implementation of Study Abroad Programs	2.90	1.25	Somewhat agree	Moderate
15. International alumni activities	2.82	1.22	Somewhat agree	Moderate
9. Faculty exchange	2.79	1.26	Somewhat agree	Moderate
Overall Mean	3.052		Somewhat agree	Moderate

Extent: 1-Very low 2-Low 3-Moderate 4-High 5-Very High

Revealed in Table 2 are the extent of the implementation of internationalization strategies of HEIs in the Philippines. The top five internationalization strategies *moderately implemented* by HEIs in the Philippines include: developing institutional strategic partnerships (3.36), participation in international associations (3.29), strengthening international/intercultural content of curriculum (3.27), international research collaborations (3.15), and addition of international subjects in the curriculum (3.15).

Moreover, the sharing of laboratory related resources (2.94), international development and capacity building projects (2.93), implementation of study abroad programs (2.90), international alumni activities (2.82), and faculty exchange (2.79) were *moderately implemented* by HEIs in the Philippines.

As presented in the results, all the mentioned internationalization strategies in Tables 2 are *moderately implemented* by the HEIs in the Philippines. Nyangau (2020) identified some barriers to faculty engagement in internationalization. In their analysis, it showed that faculty involved in activities with international dimensions encounter a variety of constraints. The most pressing of these constraints was the lack of recognition and rewards in the evaluative process for tenure and promotion. Another barrier identified in their study are commitment of faculty to internationalization, insufficient funding. In short, given the scarcity of resources, some faculty indicated that they supplemented the limited funding. Because of the scarcity of resources, some faculty indicated that they supplemented the limited funding available with personal resources while traveling to conduct university-related business.

Relationship of the Identified Factors and Implementation of Internationalization Strategies

Table 3. *Correlation between the Identified Factors and the Implementation of Internationalization*

		Implementation of Internalization Strategies
Articulated Institutional Commitment	Pearson Correlation	.376**
	Sig. (2-tailed)	.000
	N	343
Administrative Structure and Staffing	Pearson Correlation	.337**
	Sig. (2-tailed)	.000
	N	343

{table continues on the next page}

Faculty Policies and Practices	Pearson Correlation	.425**
	Sig. (2-tailed)	.000
	N	343
Curriculum and co	Pearson Correlation	.359
	Sig. (2-tailed)	.000
	N	343
Student Mobility	Pearson Correlation	.380**
	Sig. (2-tailed)	.000
	N	343
Collaboration Partnership	Pearson Correlation	.335**
	Sig. (2-tailed)	.000
	N	343
Implementation of Internalization Strategies	Pearson Correlation	1
	Sig. (2-tailed)	
	N	343

As presented in Table 2, the articulated institutional commitment, administrative structure and staffing, curriculum and learning outcomes, faculty policies and practices, student mobility, and collaboration partnerships and were found to be moderately and significantly correlated to the implementation of internationalization strategies of HEIs in the Philippines.

These results imply that the more evident that these institutions have these perceived factors in their institutions, the more they implement the different internationalization strategies. When the independent variables were correlated to the 18 internationalization strategies identified in this study, all the results revealed a moderate degree of relationship. It can be noted also in the results that the *faculty policies and practices* have higher degree of relationships on the following:

Internationalization strategies: faculty /staff involvement in internationalization programs and activities ($r = .413$), international research collaboration ($r = .413$), strengthening international/ intercultural content of the curriculum ($r = .439$), developing institutional strategic partnerships ($r = .417$). This may imply that if the institutional policies and mechanisms that support faculty should be in placed and included in the strategic plan, the implementation of internationalization strategies will also be high particularly on the strategies with higher degree of relationship. As Popescu (2020) mentioned that the international skills of faculty can be enhanced by the institutional policies and mechanisms of support. The experience gained can impact student learning, thus in the same way supporting the internationalization program of their institutions.

Predictor/s of The Implementation of Internationalization Strategies

Table 4. *Regression Analysis of the Significant Predictors of the Implementation of Internationalization*

Model		Unstandardized Coefficients		Standardized Coefficients	<i>t</i>	Sig.	<i>R</i> -squared
		B	Std. Error	Beta			
1	(Constant)	.904	.254		3.561	.000	
	Faculty Policies and Practices	.526	.061	.425	8.665	.000	.180
		$F(1,341)=75.08$		$p=.000$			

a. *Dependent Variable: Implementation of Internalization Strategies*

The regression analysis revealed that faculty policies and practices was the sole predictor of internationalization strategy implementation with 18% variance accounted for. The regression model generated from this study is $Y = .904 + .526$ (Faculty Policies and Practices). The result suggests that if the faculty policies and practices on faculty hiring, development guidelines, and promotion policies are established in an institution, implementation of internationalization strategies are also improved. The institutional policies and mechanism of support will enhance the faculty to develop their international skills. These experiences will have an impact on student learning (Popescu, 2020).

Conclusion

It is shown in the findings that articulated institutional commitment, administrative structure and staffing, curriculum and learning outcomes, faculty policies and practices, student mobility, and collaboration partnerships are highly evident and/or being implemented in HEIs in the Philippines.

The internationalization strategies identified in this study were moderately implemented by the HEIs in the Philippines. Among the top five internationalization strategies moderately implemented by HEIs in the Philippines include: developing institutional strategic partnerships, participation in international associations, strengthening international/intercultural content of curriculum, international research collaborations, and addition of international subjects in the curriculum.

Among the five internationalization strategies with lowest mean but still *moderately implemented* are the following: the sharing of laboratory related resources, international development and capacity building projects, implementation of study abroad programs, international alumni activities, and faculty exchange.

There was a *moderate degree* of bivariate relationship of articulated institutional commitment, administrative structure and staffing, curriculum and learning outcomes, faculty policies and practices, student mobility, and collaboration partnerships to the implementation of internationalization of HEIs in the Philippines. The regression analysis revealed that faculty policies and practices were the sole predictor of internationalization.

Based on the results, the HEIs may review the different internationalization strategies and have it integrated into their strategic plans. From the results, there was a moderate level of implementation of the identified internationalization strategies. Further study should be conducted to identify the reasons for this moderate level implementation and actions be done to strengthen their internationalization programs of HEIs in the Philippines.

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Balance Scorecard Perspectives and Institutional Performance of Private Tertiary Institutions

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Abstract

Business managers around the globe have tested the effectiveness of the Balanced Scorecard (BSC) model since its inception in the early 90s in their bid to enhance business performance to achieve financial sustainability and transform developments in their economies. Other sectors of world economies have tried to emulate the BSC concept to achieve institutional goals for financial freedom. Research on the investigation of the replicability of the BSC model and its effectiveness in addressing the continued financial sustainability challenges of educational institutions, especially the private ones, is scarce. This study aimed to increase awareness on the influence of BSC application in addressing financial performance challenges besetting the private educational sector. This descriptive-correlational study examined the relationship between BSC perspectives and institutional financial performance of private tertiary institutions. Forty-five out of the 77 private tertiary institutions in the Greater Accra, Ashanti, Central, and Western Regions of Ghana were randomly sampled to answer self-constructed survey. Data were analysed through the use of descriptive statistics based on the central tendency with SPSS and Regression Process v3.2 model by Hayes. The extent of BSC application in private tertiary institutions' performance reviews was *small*. The study also revealed *low levels* of financial performance indicators. The study, however, revealed a *moderate, positive significant relationship* between BSC perspectives and institutional financial performance. The study recommends that private tertiary institutions should, as part of their strategic evaluation, review institutional performance based on BSC perspectives to enhance financial performance for sustainability and development in the new normal.

Keywords: *balanced scorecard, financial performance, learning and growth, internal business processes, customers*

Governing Councils and Boards of Trustees of private educational institutions meet either annually, bi-annually or quinquennially, to strategically plan on how their institutions will progress into the future in today's competitive environment as they strive to restructure and reform their institutions to provide quality education in training fruitful members of society.

The visions and strategies for quality service provision, growth, and sustainability are communicated to the workforce through management, the drivers of strategic planning process. Management is expected to device tactics to achieve the long-term objectives of stakeholders as expectations are relayed down to the operational managers and the workforce for implementation (Institute of Chartered Accountants, Ghana [ICAG] Study Text 2015).

Fiduciary duties of managers require that the outcomes of tactics adopted for achieving short to medium-term and long term objectives of institutions are reviewed, based on financial and non-financial matrix, and made known to governing bodies for assessment of management's stewardship and institutional long-term survival (Malgwi & Dahiru, 2014). Such strategic evaluative processes seemed absent in educational institutions, especially the private ones. This phenomenon places limitations in assessing institutions' financial and non-financial performance, which partly, accounts for the continued reverberation of financial sustainability challenges of private educational institutions (Addo, 2018; Afful, 2019; Ferdinand, 2020; Molele & Tefu, 2020; Mugo & Ngahu, 2015).

Strategic performance assessment by management to reduce financial sustainability challenges is one of the critical areas in institutional operations. In recent times, the urge to improve performance measurement of not-for-profit institutions has increased for several reasons, among which management decision-making and the institution's going concern and external credibility are the most important (Vu, 2018).

Educational institutions in the private sector form part of the most dynamic and fast-growing ventures in world economies because they have made significant impacts on the world's socio-economic development over the years. They make considerable contributions to the provision of quality educational services to the population (Kharusi & Murthy, 2017; Yanka, 2017). It is, therefore, imperative, that researchers investigate and recommend all possible intervention mechanisms for the long-term survival of private sector educational institutions.

Various studies have looked at the review and adoption of the balanced scorecard framework in higher educational institutions (Aboajela & Amar, 2017; Al-Hosaini & Sofian, 2015; Aljardali et al., 2012; Bissessar, 2017; Camilleri, 2021; Gündüzalp & Arabacı, 2017; Vu, 2018). However, none of the studies considered the replicability of the balanced scorecard framework and its influence on financial performance of private tertiary institutions.

This study, therefore, sought to address this research gap by ascertaining the extent of balanced scorecard model application in performance measurement and its relationship with financial performance in private tertiary institutions. The results of the study focused on a national and international audience of educational institutions, especially the private ones, who seek innovative means of facing new challenges to improve the quality of education while sustaining their institutions for long-term survival.

The study aimed to address the financial sustainability challenges of private educational institutions by increasing awareness of the relationship which exist between the balanced scorecard perspectives and financial performance. Consequently, this study sought to address the following questions:

1. What is the extent of balanced scorecard model replicability in private tertiary institutions?
2. Is there a significant relationship between balanced scorecard perspectives and financial performance of private tertiary institutions?

The null hypothesis of this study is:

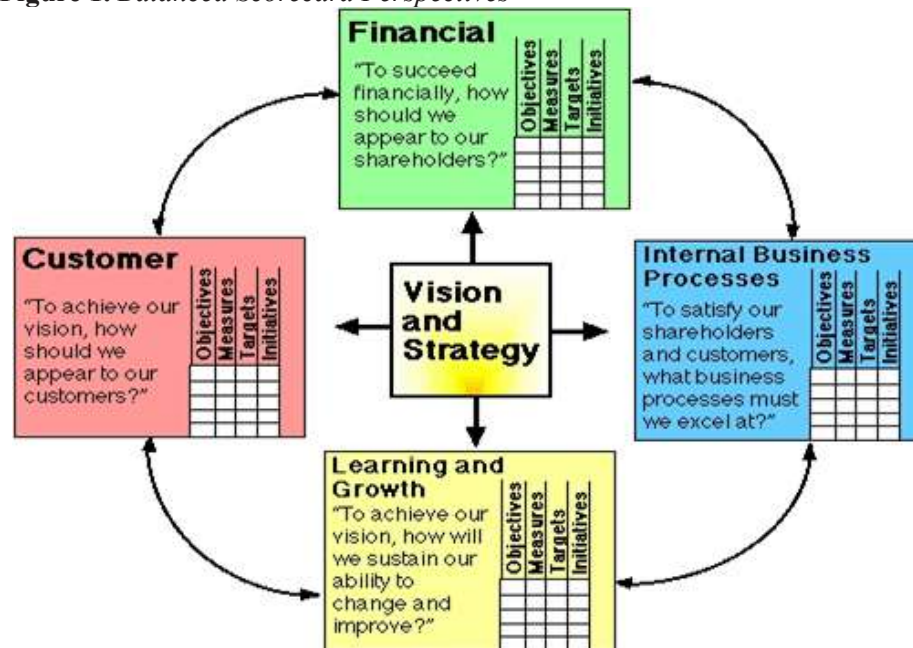
1. There is no significant relationship between balanced scorecard perspectives and financial performance of private tertiary institutions.

Given the ever-expanding technical, regulatory, and competitive climate, Gupta and Sharma (2017) alluded that managers are supposed to achieve financial as well as non-financial goals in their bid to satisfy multiple stakeholders and stay financially sustainable. The researchers further asserted that, as a result of the tangible and intangible expectations of stakeholders, current performance measurement had been the balanced scorecard approach developed by Kaplan and Norton in 1991.

Kaplan and Norton (2010) added that the evolution of the balanced scorecard idea began with the conviction that managers ought to measure more than financial results to stay sustainable, and proposed a matrix with four types of measures: financial, internal processes, learning and growth, and customer.

According to the authors, the balanced scorecard model expects institutional managers to view performance measurement as a set of cause-and-effect relationship between the four balanced scorecard perspectives, as shown in Figure 1. The model is also seen as a strategic planning and management system which takes into accounts non-financial aspect of institutional performance, such as customer satisfaction and business processes, to create a picture of how the company is likely to perform, going forward (Gupta & Sharma, 2017).

Figure 1. Balanced Scorecard Perspectives



Note. The figure demonstrates the links in the balance scorecard perspectives (Dudic et al., 2020)

Kaplan and Norton (as cited in Dudic et al., 2020; Farokhi et al., 2018; Gupta & Sharma, 2017) stated that the strategic ties between the balanced scorecard perspectives enable managers to use 'if-then' sensitivity analysis to assess their approach to institutional management, which aims to provide continuous progress in each of the three non-financial perspectives, which are tracked to determine if they eventually translate into sustainable financial results. Accordingly, the balanced scorecard perspectives tell institutions the knowledge, skills and systems that employees will need (Learning & Growth) to innovate and build the right strategic capabilities and efficient processes (Internal Business Process) that deliver specific value to the market (Customers) which will, eventually lead to positive financial performance for sustainability.

Figure 1 pictures that the learning and growth outcomes (lowest level in the hierarchy) lead to improved internal business processes and procedures (second level), which in turn improves the value proposition offered to customers (third level) and finally culminate into financial performance,

considered to be the highest level, for sustainability. The balanced scorecard transforms the mission and strategy of an institution into a full set of performance evaluative actions (Farokhi et al., 2018) because the model enables an institution to recognize its benefits, as well as its shortcomings, and thus strengthen its operations (Dudic et al., 2020).

Learning and Growth Perspective

Learning and growth perspective seeks to build institutional capacity by improving knowledge, skills, and technology. Theories of learning and growth hold that learning and growth within an institution drives the success of institutional processes and customer satisfaction that leads to financial stability (Oracle & Affiliates, 2013). In this perspective, Kaplan and Norton stated that institutions measure their ability to provide the employee capacity and skills, along with the technology and institutional climate, necessary to support institutional strategy. Strategic efforts to increase the skills and knowledge of employees enable institutions to make higher investments, which are required to achieve the desired strategic skill coverage ratio to attract and retain competent employees who enhance institutional internal and external branding.

Learning and growth perspective deals with the building up of a mechanism to fill gaps in knowledge, processes, information system, and institutional culture and to be continually innovative (Gupta & Sharma, 2017). According to the authors, these attributes are expected to, all things being equal, lead to smooth running of an organization because the perspective works at the ability of employees and quality of information. Learning and growth perspective identifies sets of skills and processes that drive educational institutions to continuously improve their critical internal processes (Vu, 2018).

Learning and growth perspective places emphasize on the investment in employees who are responsible for critical internal processes to achieve organizational set targets because if institutions take care of their employees, employees will, in turn, take care of customers (Al-Hosaini & Sofian, 2015; Bissessar, 2017). The learning and growth perspective is argued to facilitate the performance of the other three perspectives (Camilleri, 2021).

Mair (2016) placed the learning and growth perspective into human capital, information capital and organizational capital. Sarkin (2016) added that these categorization deal with employee capabilities (core competences and skills), information systems capabilities and strategy awareness, involvement and motivation, which form the bottom foundation of institutional strategy and show how intangible assets determine the performance of the critical internal processes for financial performance.

Internal Business Processes Perspective

This perspective seeks to improve process efficiency for operational excellence and lower cycle time. Internal business processes revolve around efficiency and effectiveness of an institution's operations (Gupta & Sharma, 2017). The internal business processes perspective encompasses key business processes that institutions have to perform well to deliver customer value and satisfaction to enhance brand loyalty (Patidar, 2013). According to Kaplan and Norton, as cited in Dudic et al. (2020), a key process described in the balanced scorecard model is innovation, which enables institutions to continuously develop new products and services to penetrate the competitive environment.

Efficient internal business processes enhance academic branding and urge-up enrollment because it strengthens strategy that broadens marketing's application in the education sector by identifying institutional unique competitive advantages that differentiate one institution from another and builds relationships with current and prospective stakeholders in the long-term (Aboajela & Amar, 2017; Bissessar, 2017; Camilleri, 2021; Manea & Purcaru, 2017;). This assertion implies that increased brand awareness and customer loyalty as a result of efficient service provision increase brand association and demand for products and services with a resultant growth in revenue for financial performance.

Gordon et al. (2016) believed that brand association stems from brand image composed of sets of memories regarding the brand in customers' minds. Mondkar (2017) added that brand image is the total impression formed in customers' minds from the features of an institutional behavior and processes. Vazifehdoost and Negahdari (2018) considered brand association as the strength of a customers' positive outlook towards a brand in terms of emotional bond and long-term attachment, which are unearthed through efficient and innovative processes for customer satisfaction.

Customer perspective

The customer perspective seeks to improve customer acquisition and retention. Customer services are based on identifying and satisfying customer needs and exceeding customer expectations and measure value propositions that an institutional strategy has identified for targeted customer groups because customer focus and satisfaction form integral part in the key objectives of any institution (Camilleri, 2021; Gupta & Sharma, 2017).

The customer perspective involves how institutions need to consider customers to succeed and achieve institutional mission. A critical consideration of customers begins with employee empowerment through learning and growth for efficient internal business process (Al-Hosaini & Sofian, 2015; Bissessar, 2017).

Financial perspective

Financial perspective seeks to lower cost and increase revenue, a measure of financial performance for sustainability. Theories of financial perspective act as a focal point or culmination of all the objectives and measures in the other perspectives (Gupta & Sharma, 2017). The financial perspective reflects the degree of success of the other balanced scorecard perspectives in achieving institutional strategic objectives, placing it at the highest level in the hierarchy of balanced scorecard perspectives because decisions made under the other perspectives will ultimately culminate in financial results. This is usually actualized through the provisions of institutions' mission and vision statements and their transformation into financial performance (Aboajela & Amar, 2017). The cause-and-effect trend can be seen through the financial index, irrespective of whether they are: tangible or intangible.

Financial performance measures an institution's financial health over time as a result of management initiative used to generate revenue to achieve and fulfill their fiduciary duties (Naz et al., 2016). Profitability, revenue, and capital and financial resource utilization are all indicators of an institution's financial performance (Matar & Eneizan, 2018). According to Mugambi (2016), financial health of an institution illustrates whether it will be able to perform its duties and meet the needs of its stakeholders over time, calculated by the measurement of revenue surplus over expenditure, the availability of cash to cater for expenses, and the comparison of institutional assets and liabilities.

Financial performance is a measure of what an institution has accomplished over time which shows favorable conditions obtained from useful data about fund flow, usage, effectiveness, and performance (Batchimeg, 2017; Dragusin et al., 2016). Financial performance in this study was measured by institutional self-sufficiency, which considered liquidity, financial leverage and debt service coverage of private tertiary institutions.

Liquidity looks at the extent to which liabilities being matured in the next one year can be repaid from quick assets. It can be measured by calculating the ratio between current assets to current liabilities (Cernostana, 2017; Kharusi & Murthy, 2017). Financial leverage as measured by the ratio of total debt to equity considers the extent to which an institution utilizes its borrowed funds. Institutions that are more leveraged are likely to face negative results as there is risk of default, in case the institution is unable to meet its obligations (ICAG, 2015).

Debt service coverage ratio, which divides an institution's earnings before interest and taxes by interest expenses, indicates an institution's ability to generate enough cash to pay its interest expenses on outstanding debts (Wijewaradana & Munasinghe, 2015). One of the pillars of

financial sustainability, according to Leon (2001), is effective management with strategic planning that measures the total financial performance of an institution, which determine the sturdy state of institutions' financial success.

Institutions' ability to create and earn operating revenue to meet the cost of current operations as well as future commitments without impairments in future activities to enhance survival and growth as a result of ability to evaluate financial and non-financial performance promotes institutional survival (Beg, 2016; Esampally & Joshi, 2016; Wachira, 2018).

Replication of Balanced Scorecard in Private Tertiary Institutions

Readings on balanced scorecard model from previous studies show that there are scanty existing literatures in exploring its applicability in operations of private tertiary institutions. The BSC model has widely been adopted and replicated in the corporate business world for improved performance and thousands of other enterprises were projected to use the model by 2017 (Kaplan & Norton, 2010). Other not-for-profit organizations have also replicated the model to enhance performance through efficient provision of services (Bisbe & Barrubés, 2016).

Private educational institutions' service provision may not be motivated, solely, for profitability, but are expected to, at least, break-even and continue in business for the good of their owners and society (Oketch et al., 2010). As a result, private tertiary institutions have adopted educational strategies that broaden marketing applications by identifying unique competitive advantages that differentiate one institution from another, as a result of enrollment crisis, and build relationships with current and prospective stakeholders in the long-term (Manea & Purcaru, 2017).

According to Rohn (as cited in Aljardali et al., 2012), the vision and mission of these institutions focus mainly on stakeholder satisfaction through the provision of clear structures for continuous quality improvement, establishment of culture of academic quality, evaluation of efficient use of resources for academic programs, documentation of contribution of activities towards institutional mission, promotion of academic excellence, and determination of priorities on future planning and survival, among others.

Provision of quality services to students are key ingredients in attracting and retaining students; for decreasing trend in enrollment are equivalent to operating deficits, especially at tuition-dependent educational institutions (Pavlov & Katsamakas, 2019). Provision of quality services lead to excellence in business education as it deals with customers' perceptions about the supremacy of an institution's services as compared to others within similar categories or close substitutes. Educational institution's failure to satisfy students because of process inefficiencies impact negatively on students' recruitment, retention, and ultimately, the financial performance of private tertiary institutions (Narteh, 2018).

Sudirman (2012) demonstrated how the balanced scorecard could well be implemented in Hasanuddin University of Indonesia. The author placed organizational structure, policy, systems and procedures, staff performance, infrastructure and facilities under the learning and growth perspective whiles academic atmosphere, good governance, social responsibility, learning process and research came under internal business processes. The study further placed learning quality, learning accessibility and mutual benefit under customer perspective whiles funding from grants, government and society were placed under the financial perspective. The study concluded that the proposed BSC approach will help Hasanuddin University to translate its vision, mission, and strategies into series of measurement indicators for enhanced financial performance for sustainability.

In a study that sought to replicate the balance scorecard in Trinidadian higher education, Bissessar (2017) placed measures such as student satisfaction survey, culture of care, number and rate of staff publications, culture of students as life-long learners, and mentor for new staff under customer perspective whiles value creation, meeting established standards, global networking, and sharing were placed under the internal business processes perspective. Under the learning and growth perspective, the study placed staff satisfaction, budget spent on teacher professional

development, most improved worker, and creation of professional communities/collaboration. Cost efficiency and productivity and beneficial use of tangible and intangible resources were, however placed under the financial perspective. The study concluded that adoption of the balanced scorecard model is expected to increase revenues and surpluses that can be ploughed into Trinidadian higher education institutions for further growth and development.

Aljardali et al. (2012) investigated the adoption of the balance scorecard in Lebanese public higher education institutions and proposed a model for the creation of a framework for performance measurement. In measuring customer perspective, the study placed students' satisfaction survey, alumni evaluation, alumni satisfaction survey, and number of alumni in public service. Meeting service standards, number of new services introduced, number of internships available, and number of departments in specialized areas, were placed under the internal business processes perspective. Measurements under learning and growth included number of faculty presentations, percentage of budget spent on staff development, number of courses incorporating new technologies, and number of curriculum reviews. Tuition fee comparison, year-end budget variance, and budget allocation to instruction were some of the measures that were placed under financial perspective. The study called on deans in Lebanese higher education institutions to begin the process of implementing a balanced scorecard to achieve performance for sustained operations.

Al-Hosaini and Sofian (2015) reviewed relevant perspectives of the balanced scorecard in the context of higher educational institutions. The study revealed that applicability of the balanced scorecard in higher educational institutions is possible and that the balanced scorecard perspectives are relevant for higher educational institutions. The study concluded that the model can be used to monitor educational institutions performance and enable them to adjust to emerging challenges that come as a result of implementing key strategies for long-term sustainability

In a study that looked at applicability of balanced scorecard system in primary schools according to opinions of education inspectors, managers and teachers at Elazığ Province-Turkey, Gündüzalp and Arabacı, (2017) sampled opinions of 110 managers, 340 teachers, and 20 inspectors and found that participants generally approve the implementation of the balanced scorecard in educational institutions because BSC improves school performance and development.

Aboajela and Amar (2017) explored the acceptance, importance and usefulness of balanced scorecard as one of performance measurement techniques in Libyan higher education. A quantitative approach was used to gather data from public universities. Results indicated that decision makers in Libyan higher education institutions, moderately, use balanced scorecard to evaluate institutional performance which was considered highly useful in enhancing the sustenance of their institutions.

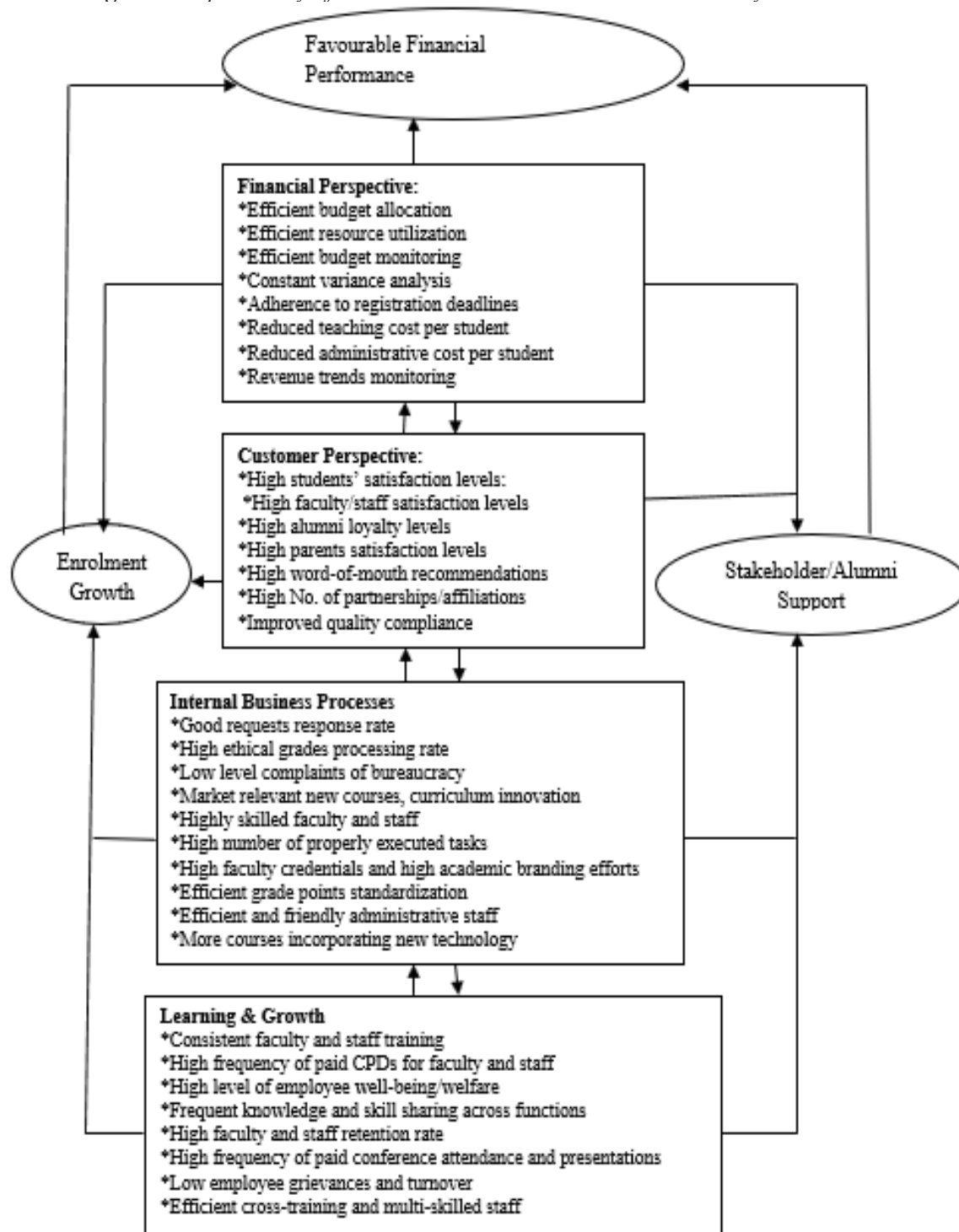
Camilleri (2021) investigated the adoption of balanced scorecard in performance measurement appraisal system of higher education service providers within the Southern European countries. Purposive sampling technique was adopted to identify respondents who were academic members working in Southern European high education institutions with more than 10,000 students from 82 countries. The study found that performance reviews, based on balanced scorecard, will help higher educational institutions' leaders to identify institutional value-creating activities. The study concluded that higher education institutions' leaders can utilize the BSC model as a reasonable performance measurement tool to evaluate institutional improvements in financial results, among other positive outcomes, for survival.

Al-mawali et al. (2010) studied balanced scorecard usage and financial performance of branches in Jordanian banking industry and found that there is positive relationship between balanced scorecard perspectives and financial performance.

Olasunkanmi and Asaolu (2019) studied balanced scorecard and private universities' performance in South-Western, Nigeria using three private universities in a descriptive survey design with 300 structured questionnaires and interviews. The study revealed that the balance scorecard is suitable and that private universities have the capacity to implement the system for performance evaluation.

Based on the ongoing discussion, Figure 2 represents the conceptual framework of the proposed replication of the balanced scorecard model in the operations of private tertiary institutions. This study adopted the resource-based theory, which suggests that financial and non-financial resources constitute valuable and unique properties that are key to the success of an institution (Andrews et al., 2015). The resource-based theory is relevant to this study given that it aids in understanding educational institutions' unique internal characteristics to generate, manage and control institutional resources to provide unique services to society and survive.

Figure 2. *Replicability of the Balanced Scorecard in Private Tertiary Institutions*



Methodology

Research Design

The study employed a descriptive correlational design and parametric inferential statistics to examine the relationship between balanced scorecard perspectives and financial performance.

Population and Sampling Technique

The study was conducted among 45 private tertiary institutions from four regions in Ghana. This sample was randomly selected from a population of 77 to answer self constructed questionnaire.

Instrumentation

The study used standardized questionnaire as the tool for collecting data. The questionnaire used 4-point Likert Scale and Vagias (2006) response anchors. Expert validators evaluated the validity of the research instruments. Balanced scorecard perspectives yielded Cronbach alpha of 0.750. In determining the strength of the relationship between the study variables, Cohen (1998) absolute correlation values were used. In determining the strength of relationships among the study variables, Cohen (1998) absolute correlation values were used where $r = .10$ to $.29$ (small), $r = .30$ to $.49$ (moderate), and $r = .50$ to 1.0 (high).

Analysis of Data

MS-Excel and IBM Statistical Package for Social Sciences (SPSS) were used to analyze the descriptive statistics. Pearson Product-Moment Correlation was used to determine the relationship between balanced scorecard perspectives and financial performance.

Ethical Consideration

Ethical considerations were observed during the data collection exercise. The respondents were assured that the survey would not collect identifying information, which makes them and their data anonymous and confidential.

Results and Discussion

The study aimed to assess the extent of balanced scorecard application in the operations of private tertiary institutions and the relationship between balanced scorecard perspectives and financial performance.

Extent of balance scorecard application

The study ascertained from the respondents the extent of balanced scorecard application in the operations of private tertiary institutions. The findings, in terms of means and standard deviations, are as shown in Table 1. Respondents *disagreed* that managers of private tertiary institutions review performance based on balanced scorecard perspectives ($M = 2$, $SD = 0.63$), which was verbally interpreted as *poor*.

The results indicated that private tertiary institutions apply, to a small extent, the principles of balanced scorecard in review of institutional performances. Though institutions have quality assurance departments ($M = 4$, $SD = 0.77$), which was verbally interpreted as *very good*, surveys that measure customer perspectives were not carried out ($M = 2$, $SD = 0.52$). Respondents *disagreed* that customer request response time ($M = 2$, $SD = 0.69$) and peer reviews were carried out ($M = 2$, $SD = 0.51$), which were verbally interpreted as *poor*. Respondents further *disagreed* that their institutions allocate resources based on activity levels and carry out alumni tracer studies ($M = 2$, $SD = 0.59$) and ($M = 2$, $SD = 0.58$) respectively. These were verbally interpreted as *poor*.

Table 1. *Extent of Balanced Scorecard Application (N=45)*

	Mean	Std. Dev.	Response Scale	Verbal Interpretation
My institution invests in faculty and staff training	3	0.67	Agree	Good
My institution carries out inter-faculty peer review	2	0.51	Disagree	Poor
My institution reviews response rate of customers requests	2	0.69	Disagree	Poor
My institution has a Quality Assurance Department	4	0.77	Strongly Agree	Very Good
My institution carry out students' satisfaction surveys	2	0.52	Disagree	Poor
My institution measures student's satisfaction index	2	0.61	Disagree	Poor
My institution reviews teaching cost per student on yearly basis	2	0.66	Disagree	Poor
My institution allocates resources based on activity levels	2	0.59	Disagree	Poor
My institution organizes Parent Consultative Forums	3	0.73	Agree	Good
My institution carry out alumni tracer studies	2	0.58	Disagree	Poor
Balanced Scorecard Perspectives	2	0.63	Disagree	Poor

Legend: 4 = Strongly Agree, 3 = Agree, 2 = Disagree, 1 = Strongly Disagree

The results imply that private tertiary institutions do not review their activities based on the balanced scorecard perspectives. The results confirmed the studies of Sudirman, 2012, Aljardali et al., 2012, and Al-Hosaini and Sofian, 2015 that educational institutions lag in the adoption of the balanced scorecard in performance measurement processes.

In terms of financial performance, the study assessed the financial health of private educational institutions. Liquidity ratio, Debt-to-Equity ratio, and debt servicing coverage ratio were calculated using five-year average financial statements extracts from respondents. Results of the calculated figures showed average percentage liquidity, debt-to-equity, and debt service coverage of 49, 75, and 34 respectively. These results indicated that private tertiary institutions could meet less than half of their current obligations, have 3 units of debts for every unit of equity, and had only enough cash to cover 34 percent of annual debts payment respectively. Liquidity and debt service coverage ratio results were lower than average percentage figures of 60 and 100 respectively. Financial leverage result was higher than recommended average percentage of 45 (Cernostatna, 2017; Lattz, 2017).

The Pearson Correlation Coefficient was used to investigate the relationship between balanced scorecard perspectives and financial performance. The findings are as shown in Table 2. Results showed *statistically moderate, positive significant* relationship between the variables, $r = 0.412$, $n = 45$, $p = 0.005$. The results imply that the better the review of performance based on balanced scorecard perspectives, the better the financial performance.

Table 2. *Relationship Between Balanced Scorecard Perspectives and Financial Performance*

		Financial Performance
Balanced Scorecard	Pearson Correlation	.412
	Sig. (2-tailed)	.005
	N	45

The study, therefore, rejects the null hypothesis that *there is no significant relationship between balanced scorecard perspectives and financial performance*. The results supported Al-mawali et al. (2010) study, which found a positive relationship between balanced scorecard perspectives and institutional financial performance.

The core of this study was to examine the replicability and the influence of the balanced scorecard perspectives on financial performance of private tertiary institutions. The data collected and analyzed revealed that private tertiary institutions do not review operational performance based on balance scorecard perspectives. Financial performance measures were below recommended averages. The study, however found a moderate, positive significant relationship between balanced scorecard perspectives and financial performance.

Favorable financial performance for sustainability is vital to all businesses including, private tertiary institutions. The study, therefore, recommends the replicability of the balanced scorecard model in private tertiary institutions' performance review processes. The causal relationships among the perspectives encourage feedback loops which guide strategic planning processes for continuous operations

The study recommends training and getting management commitment of private tertiary institutions' managers and employees. Clear understanding of concepts and meanings are rudimentary requirements in the successful implementation of any new concept. Training leaders and employees on the applicability of the balanced scorecard perspectives in day-to-day operations will help to avoid resistance to change, lack of commitment, and fear of accountability by departmental heads.

Clear strategic map should also be developed and performance indicators clearly identified in addition to causal relationship between strategic objectives. The linkages among the perspectives aid in strategic analyses because employees better trained in quality customer care reduce process cycle time and service defects

The study further recommends constant review process. The effectiveness and real benefit of balanced scorecard's replicability is achieved through efficient review process. The review process will help in fine tuning the key performance indicators and identify corrective actions and new initiatives.

The study contributes to existing literature on the implementation of the balanced scorecard in the educational sector. Adoption of the balanced scorecard within this sector is becoming more and more important because educational institutions, for that matter private tertiary institution, need to identify and replicate the balance scorecard perspectives in their performance review processes to reap the benefit of the model as evident in the corporate business setting to remain financially sustainable. The limitation of this study was that data were gathered during the corona virus pandemic. Participants in online data gathering may not contribute valid data, especially, in stressful life events (Al-Salom, 2017) such as the Covid-19 pandemic. This data gathering procedure might affect the validity of the facts and figures provided by the respondents. Future qualitative research is required to identify challenges of replicating the balanced scorecard in private tertiary institutions.

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Effects of Job Design on Employee Motivation: The Case of a Leading Mobile Telecommunications Services in Ghana

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Abstract

Human capital plays a significant role in achieving successful business results in every business entity. Despite this pressing need, the impact of job design on employee motivation has remained a very much under-researched topic in Ghana. This study investigated the effect of Hackman and Oldham's job characteristics model in terms of job design on employee's motivation. The effectiveness of job design among 219 employee's motivation was calculated using a 5-point Likert scale questionnaire. The results revealed that skill variety, task identity, task significance, autonomy, and feedback were significantly correlated to employee motivation. Findings from the stepwise multiple regression analyses indicated that job design dimensions predict 66.8 percent of employee motivation. It further explained that autonomy can predict up to 45.7 percent of the variance in employee motivation whilst skill variety, task significance, task identity, and feedback contributed 12.1%, 5.3%, 1.7%, 2% of the variance in employee motivation, respectively. The study therefore recommended that much attention be devoted by leaders to their employees' autonomy and task variety to enhance job motivation.

Keywords: *job design, employees' motivation, autonomy*

Employee motivation has been an issue in many organizations. Employees are demotivated due to many factors. Cook and Artino Jr in 2016, stated that goals, incentives, needs or wants, aims and wishes or desires are the common enclosures of words that motivation have. In recent times finding the best way to ensure employees are motivated has become an arduous task for Human Resource practitioners and organizations. Many a time, pay is assumed as the most valuable motivator at work. Nevertheless, studies point out different factors as the significant influence of employee motivation (Ekhsan et al., 2019; Peiró et al., 2020). An established body of knowledge supports the idea that specific jobs and goal setting can enhance motivation (Munyiri, 2018; Obiekwe, 2016). A well-designed job can positively impact employee satisfaction and the quality of performance. In this research, it was found that a well-defined job will enhance the motivation of employees. Thus, great significance is attached to job design in today's human resources management. It is essential to design jobs so that stress can be reduced, motivation can be enhanced, and employee satisfaction and performance can be improved to effectively compete in the global marketplace (Dewhurst et al., 2010).

Research on job design and employee motivation have dominated much of the literature on organizational behavior in recent years. Results from a number of studies indicate "enriched" jobs (i.e., jobs containing more variety, autonomy, and feedback) are often associated with increased satisfaction, reduced turnover and absenteeism, and in some cases, increased positive work attitudes such as motivation and performance (Brief & Aldag, 2011). For an organization's human resource to perform effectively and efficiently, attention should be paid to attracting, developing, and maintaining employees. Hackman (2010) indicated that job design plays an essential role in influencing employees' behavior in most organizations.

Generally, employee motivation leads to a positive feeling or attitude exhibited by individual employees towards their job (Obiekwe, 2016). This feeling is experienced when employees value or appreciate their jobs, especially when there is enough motivation worth the risk related to their jobs and when their employers make them feel like they are assets to the organization they work for (Ramlall, 2008). In modern times, the business environment has become highly unpredictable. As a result, managers and, for that matter, business owners are beginning to appreciate the need to retain the best employees, increase customer satisfaction, strengthen the workforce, improve organizational culture, increase sales and most importantly, succession planning (Deci & Ryan, 2000). This can only be effective when employees are properly motivated.

In early studies of employee motivation, Taylor (1911) studied workers' level of motivation earning a piece-rate pay based on production hours and units. The study concluded that employees are sufficiently pay-motivated. Besides, he concluded that employees are inspired to do better and produce a higher number of production units when they know the monetary motivation associated with the performance. However, Mayo (2004) later criticized Taylor's conclusion, who argued that financial motivation is insufficient since workers are prone to being bored with their routine job assignments, thus reducing performance regardless of monetary incentive. Mayo's (2004) assertion was in line with the emergence of the human relations movement in the mid-20th century. The emergence of the human relations movement placed individual motivational needs in the limelight in job design (Garg & Rastogi, 2006).

Hackman and Oldham (1976) also opined that people with strong growth needs will react more positively to jobs that are high on the core job dimensions because such jobs offer opportunities for career advancement while individuals with weak growth need will have little internal motivation from difficult jobs, either because they do not acknowledge or value the chances for career development. This fact suggests the need for a well-structured job to ensure that there is a highly motivated staff that positively impacts work outcomes (Dewhurst et al., 2010). Studies posit that job design has long been seen as an essential influence on individuals' intrinsic motivation and later contributes to employees' higher work performance.

Furthermore, Christian et al. (2011) argued that job design dimensions, task variety, task identity, task significance autonomy, and feedback were positively linked with employee motivation. Thus, a well-tailored job design increases the motivational levels of employees. In aggregate, the way a job is designed has a significant impact on employees' motivation at different levels; hence, line managers and human-resource practitioners should invest a considerable number of resources on job design to attain optimum results.

Human capital plays a significant role in achieving successful business results in every business entity. The ability to positively influence employees to achieve positive business outcomes therefore remains imperative. In this light, it is valid to argue that continuous research is required in the discipline of work and employee motivation to unearth innovative ways to elicit positive work attitudes from employees.

Despite this pressing need, the impact of job design on employee motivation has remained a very much under-researched topic in Ghana. This can be a problem since a developing economy like Ghana requires more research in this discipline to find contextually relevant ways to motivate employees to elicit positive work attitudes to improve the country's economic fortunes. Therefore, this study bridged the gap in literature by assessing the impact of Job design on employee motivation in Ghana

Herzberg's Two-Factor Theory of Motivation

The Two-factor theory by Fredrick Herzberg is also referred to as the motivator hygiene theory and has its exploration based on employee satisfaction in organizations (Herzberg, 1966). The theory postulates that hygiene and motivational factors cause satisfaction and discontentment of employees. According to Herzberg as cited in Alrawahi et al., (2020), hygiene factors are those job factors that are essential for the existence of motivation at the workplace. These factors do not lead to absolute satisfaction in the long term. However, if these factors are absent or non-existent at the workplace, as a result, they cause dissatisfaction. In other words, hygiene factors are those aspects of a job that, when sufficient or appropriate, pacify workers and prevent them from being dissatisfied. Hygiene factors include pay, fringe benefits, physical working condition, status, interpersonal relations, and job security.

The Job Characteristics Approach to Job Design

Hackman and Oldham's (1976) job characteristics model is another theory that promoted job enrichment and has survived over time. This theory is the most important to this investigation because it proposes a vital link between job design and motivation. Hackman and Oldham (1976) identified five job characteristics related to employees' motivation and satisfaction.

1. Skill Variety: extent to which the job incumbent has to use a wide variety of skills and abilities.
2. Task Identity: a worker's sense of responsibility for completing a whole, recognizable piece of work rather than just a portion of it
3. Task Significance: the extent of the impact that the job has on others inside and outside the organization.
4. Autonomy: the degree of freedom and independence workers have in exercising choice and discretion in their work.
5. Feedback from the job – the extent to which the job provides jobholders with feedback on their performance

These five job characteristics, according to this theory, trigger vital psychological states in the job holder. From the first three job characteristics, skill variety, task identity, and task significance result in increasing work meaningfulness. Autonomy was thought to improve accountability for job outcomes, and feedback was linked to knowing how work tasks had turned out. As a result, the five

core job characteristics are thought to be responsible for the above-mentioned critical psychological states, but also, these psychological states are assumed to influence four primary outcomes: internal work motivation, growth satisfaction, general job satisfaction and work effectiveness.

In the study of Sarwat (2012), job characteristics was used as predictors of employees' work motivation and job satisfaction and found that the appropriate combination of skill variety, task identity, task significance, autonomy, and feedback can facilitate organizations to motivate and satisfy their employees.

Also, Choge et al., (2014) investigated the relationship between task identity and employee motivation and found a significant positive correlation between task identity and employee motivation (either $r = 0.531$, $p = 0.000 < 0.05$; $B = 0.060$ which implied that task identity has a positive effect on employee motivation. Therefore, the study recommended managers of organizations should develop a job design that will enhance the task identity component of job design.

Hadi and Adil (2010), using multiple regression analyses, studied Job Characteristics as Predictors of Work Motivation and Job Satisfaction of Bank Employees, and found that job characteristics constituted significant models for predicting intrinsic motivation, extrinsic motivation, and job satisfaction. Specifically, task identity turned out to be the essential positive predictor of job satisfaction and intrinsic motivation, whereas extrinsic motivation was only predicted by feedback.

Zhao et al. (2016) studied the intrinsic motivation for hospitality jobs and the effects of job characteristics on job satisfaction, job stress, and life satisfaction. Results from the study stated that autonomy, task identity, and task significance reduced job stress. The composite motivating potential score of the study was positively associated with job satisfaction,

Azash et al. (2012) studied job characteristics as a predictor of work motivation and job satisfaction using correlation and multiple regression analysis. Their study found that task significance, autonomy, and feedback are significant and positive predictors of intrinsic motivation.

Thus, this study determined the relationship of job design on motivation among the employees of mobile telecommunications services in Ghana.

The research questions and null hypothesis for the study are as follows:

1. Is there a relationship between the following dimensions of job design and employee motivation?
 - a. skill variety and employee motivation?
 - b. task identity and employee motivation?
 - c. task significance and employee motivation?
 - d. autonomy and employee motivation?
 - e. feedback from job and employee motivation?
2. Which of the subdimensions of job design significantly predicts employee motivation.

The null hypothesis for the study are as follows:

H1: there is no relationship between skill variety and employee motivation.

H2: there is no relationship between task identity and employee motivation

H3: there is no relationship between task significance and employee motivation.

H4: there is no relationship between autonomy and employee motivation.

H5: there is no relationship between feedback and employee motivation

3. H6: None of the variables- skill variety, task identity, task significance, autonomy, Feedback predicts job motivation.

Methodology

The study used correlational research design. A self-constructed questionnaire was used to establish the relationship between the independent variable job design (skill variety, task identity, task significance, autonomy, and feedback) and the dependent variable, job motivation. Mobile telecommunications services employees in Ghana are categorized into three groups,

namely, permanent, direct contractors and third-party contractors. The study involved all three categories of employees working at the head office in Ridge. With a population of 689 staff of mobile telecommunication services in Ghana and based on Krecjie and Morgan's (1970) sampling determination table, 248 respondents were chosen for this research. For ethical consideration, the researchers ensured informed consent, anonymity, and confidentiality of respondent information. Pearson-product -moment correlation was used to address the hypotheses of this study.

Results and Discussion

Job Design and Employee Motivation

Table 1. *Skill Variety and Employee Motivation*

		Skill Variety	Motivation
Skill Variety	Pearson Correlation	1	.652**
	Sig. (2-tailed)		.000
	N	223	219
Motivation	Pearson Correlation	.652**	1
	Sig. (2-tailed)	.000	
	N	219	219

**Correlation is significant at the 0.01 level (2-tailed).

Closer scrutiny of the results in Table 1 revealed a *strong and significant positive linear relationship* between motivation and skill variety ($r = 0.652$, $p > 0.05$). Saunders et al. (2012) noted that the values between 0.2 and 0.35 indicate a weak positive relationship. The correlation coefficient (r) values of 0.652 implies that there is a *strong relationship* between skill variety and MTN Ghana staff's motivation. The findings agreed with Sarwat (2012) study, which posits that skill variety has a significant positive relationship with job motivation. The results to MTN Ghana imply that statistically, d component of job design predicts 65.2 per cent of employees of MTN Ghana motivation level; however, the positive relationship indicates that when there is an increase in the Skill Variety component of employee's job design, there will be a corresponding increase in the employee's motivation. Based on the findings, the management and human resource department of MTN Ghana should give critical attention to skill variety to influence employee motivation.

Table 2. *Correlation of Task Identification and Employee Motivation*

		Task Identity	Motivation
Task Identity	Pearson Correlation	1	.463**
	Sig. (2-tailed)		.000
	N	219	215
Motivation	Pearson Correlation	.463**	1
	Sig. (2-tailed)	.000	
	N	215	219

**Correlation is significant at the 0.01 level (2-tailed).

Furthermore, it was observed in Table 2 that there are a medium or *moderate weak and significant positive linear relationship* between motivation and task identity ($r = 0.463$, $p > 0.05$). Kent State University (2020) noted that r values in the range of $0.3 < |r| < 0.5$ indicate a medium / moderate positive relationship. The correlation coefficient (r) values of 0.463 imply that there is a *moderate relationship* between task identity and staff MTN Ghana's motivation. In other words, task identity only predicts 46.3 percent of MTN Ghana staff's motivational level. Thus, the study

has demonstrated the predictive validity of task identity in relation to work motivation and was consistent with Choge et al.(2014). Hadi and Adil (2010) found a significant positive relationship between task identity and employee motivation.

Table 3. *Correlation of Task Significance and Employee Motivation*

		Task Significance	Motivation
Task Significance	Pearson Correlation	1	.667**
	Sig. (2-tailed)		.000
	N	219	215
Motivation	Pearson Correlation	.667**	1
	Sig. (2-tailed)	.000	
	N	215	219

**Correlation is significant at the 0.01 level (2-tailed).

Inferring from Table 3 is a *strong and significant positive linear relationship* between motivation and task significance ($r = 0.667$, $p > 0.05$). Saunders et al. (2012) stated that r values between 0.2 and 0.35 indicate a weak positive relationship. The correlation coefficient (r) values of 0.667 imply that there is a *strong relationship* between task significance and staff MTN Ghana's motivation. This implies task significant component of job design predicts about 66.7 percent of MTN Ghana staff motivation. Besides, the positive relationship indicates that when there is an increase in the task significant component of an employee's job design, there will be a corresponding increase in the employee's motivation. The study's findings synchronize with the study of Zhao et al. (2016), which found that task identity and task significance contribute significantly to job satisfaction and motivation.

Table 4. *Correlation of Autonomy and Employee Motivation*

		Autonomy	Motivation
Autonomy	Pearson Correlation	1	.676**
	Sig. (2-tailed)		.000
	N	219	215
Motivation	Pearson Correlation	.676**	1
	Sig. (2-tailed)	.000	
	N	215	219

**Correlation is significant at the 0.01 level (2-tailed).

The job design dimension autonomy was also successful in demonstrating a *statistically significant predictive* model of motivation, as shown in Table 4. However, closer scrutiny of the regression analysis results of Table 4 revealed that autonomy only explained the 45.7% of the variance on job motivation. From the correlation results in Table 6, the positive relationship between autonomy and job motivation of MTN Ghana employees indicates that an increase in autonomy causes an increase in job motivation. The findings are at par with the study of Azash et al. (2012), which asserted that autonomy is a significant and positive predictor of intrinsic motivation.

Table 5. *Correlation Between Feedback and Employee Motivation*

		Feedback	Motivation
Feedback	Pearson Correlation	1	.493**
	Sig. (2-tailed)		.000
	N	219	215
Motivation	Pearson Correlation	.493**	1
	Sig. (2-tailed)	.000	
	N	215	219

There is a *moderate and significant positive linear relationship* between motivation and feedback. However, the relationship between feedback and motivation is significant even though the strength is low compared with the other variable either task variety task identity task significance or autonomy.

Table 6. *Regression Coefficient of Correlation of Predictors of Job Motivation*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.676a	.457	.455	6.25914	.457	179.497	1	213	.000
2	.760b	.578	.574	5.53042	.121	60.831	1	212	.000
3	.795c	.631	.626	5.18360	.053	30.318	1	211	.000
4	.805d	.648	.641	5.07630	.017	10.014	1	210	.002
5	.817e	.668	.660	4.94328	.020	12.454	1	209	.001

From Table 6 it could be observed that the r square change column that the predictors of motivation are autonomy (0.457), skill variety (0.121), task significance (0.053), task identity (0.017), and feedback (0.020). Thus, autonomy is the predictor of motivation with the highest contribution of 45.7%, followed by skill variety (12.1%), task significance (5.3%), task identity (1.7%), and feedback (2%). In aggregate, the independent variables put together predicts job motivation employees by 66.8%. Thus, about 33.2 % of the variance in employee motivation is influenced by factors other than job design. Inferring from the above, management should give key attention to autonomy and skill variety since they both contribute to predicting motivation by predicting 57.8 % representing 87% of the maximum aggregate variable prediction of 66.8%.

Conclusion and Recommendation

This study was able to establish that the job design in terms of skill variety, task identity, task significance, autonomy, and feedback can motivate employees. The Two-factor theory by Fredrick Herzberg is also referred to as the motivator hygiene theory was confirmed based on the result study and an additional literature support for future studies. The study recommends that much attention should be devoted by leaders of the organization to autonomy, skill variety, task significance, task identity and feedback to enhance job motivation.

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The Effects of Cash Management Practices on Profitability of Banks in Ghana

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Abstract

In today's economy, despite achievements and advances in the banking and financial institutions, there are challenges that will require intensive attempts on the portion of the banks in Ghana. Perceived decline in profitability of banks seem to have emanated from cash mismanagement. Hence, this study looked at the effects of cash management practices on profitability of banks in Ghana banks. This descriptive-correlational study was conducted to 116 purposively sampled bank finance officers in Ghana. Self-constructed Likert scale questionnaires were administered to the finance officers of the banks. The results revealed good cash management practices ($M = 3.40$, $SD = 0.38$) among banks in Ghana; hence, banks have strong liquidity position to avoid bank run. The correlation coefficients showed that cash management has *small positive correlation* with profitability but *statistically not significant* ($r = .058$, $sig. = .538$) so as cash management improves, profitability is projected to improve marginally. As the banking industry retains its best practices and discusses the areas that require change, the findings provide objective proof to banks. Future researchers can consider other factors beyond cash management such as financial innovation.

Keywords: *cash management, profitability, liquidity position*

In today's economy, banking and financial industries have become a reality, as they are experiencing growth both in terms of the number of such organizations or in terms of the quantity of cash managed by its operations. While finance researchers have focused more on the connection between corporate value and capital structure, cash management issues, and their effects on banks have drawn very little attention. Cash is the primary asset individuals and companies use to pay their obligations on a regular basis. In business, companies have a multitude of cash inflows and outflows that must be prudently managed to meet payment obligations, plan for future payments, and maintain adequate business stability. For corporate entities, maintaining cash balances while also earning a return on idle cash are usually top concerns (Muthama, 2016). Cash management involves the administration of liquid assets and liabilities, and the raising of funds to finance a business. Cash-flow control is therefore crucial to ensuring that a business remains liquid and able to meet payment obligations. This is carried out through the effective management of cash receipts and payments, cash balances and cash transfers between the different parts of a business. Cash management as a part of treasury management is the main responsibility of the central finance management team (Dalci et al., 2019). According to Olutayo et al. (2017), cash management involves the process of cash collection, monitoring of cash and its application in investment activities. Oluoch (2016) defined cash management as the process which involves the collection and management of cash to ensure optimal cash balances by the business entities. The management of cash focuses at ensuring adequate cash is maintained by the business entities and any surplus is put into the correct use. There are many internal controls used to manage and ensure efficient business cash flow. In the words of Njeru et al. (2015), cash management is finding out the desire level of cash and cash equivalents in line with the day to day activities of the business. In general, cash flows pertaining to operating activities will be heavily focused on working capital which is impacted by accounts receivable and accounts payable changes. Investing and financing cash flows are usually extraordinary cash events that involve special procedures for funds. Abulaila and Alhathloul (2016) opined that financial institutions holding of optimal funds at all times to offset the incompatible profitability objective is cash management. According to Augustine and Jacob (2017), cash management is the collection and maintaining of information to allow optimal use of the available funds, thus recognizing related risks. Cash management is the art and science of managing the short-term resources of a company to keep up with its ongoing activities and mobilize funds so that the liquidity is optimized (Abioro, 2017). Nyabwanga (2012) argues that cash management is the process of planning and controlling cash flows into and out of the business, cash flows within the business and cash balances held at a point in time by a business.

Cash management reduces the amount of time that cash is linked to the operating cycle which improves the profitability and market value of a business. Cash management is the development of a cash reserve strategy that ensures responsible cash budgeting and capital allocation surplus. Cash budgeting is useful for anticipating capital shortages and surpluses and influences businesses' financial results. Nwarogu and Iormbagah (2017) conducted a study and the purpose was to examine the cash management and performance of listed companies in Nigeria. Using descriptive statistics, correlation matrix, and Pool Ordinary Least Square Regression, the study used ex-post factor research design, the secondary data collected were evaluated. The outcome demonstrates a positive relationship in the return on assets model between the cash conversion cycle, money holding and return on company assets, while cash flow and company size have a negative relationship with return on investments. The factors of firm size, firm development and cash flow in the Return on Equity model suggested negative relationship with the company performance variable. Only the company size variable, however, showed negative relationship with the dependent variable at 5 percent level. Meanwhile, a positive relationship exists between the Cash Conversion Cycle variable and Equity Return. Alshatti (2015) examined the effect of cash management on the financial performance of the Jordanian commercial banks during the period (2005-2013), thirteen commercial banks have been chosen to express on the full Jordanian commercial banks. The results concluded that the cash

management and the leverage ratio do not affect the profits of the Jordanian commercial banks as measured by ROE, suggesting that other variables besides capital adequacy ratio, credit interest/credit facilities, and the leverage ratio affect banks' profitability. Pandey (2020) did a study to determine the effect of cash management on profitability. A correlational analysis design was used in this study. During the study, a purposeful sampling method was used. A total of 80 samples were collected. Questionnaires with a five-point Likert scale were used to collect data. Mean, correlation, and regression models were used to analyze the data. According to the study, cash management has an insignificant but positive impact on profitability. Based on the above argument, thus this study was conducted to the effects of cash management practices on profitability of banks in Ghana.

Methodology

Research Design

This is quantitative method research study and hence quantitative analysis is followed. A correlational analysis design was used in this study. During the study, a purposeful sampling method was used. A total of 80 samples were collected. Questionnaires with a five-point Likert scale were used to collect data. Mean, correlation, and regression models were used to analyze the data. According to the study, cash management has an insignificant but positive impact on profitability. The study used analysis based on descriptive research. The variable cash management, among banks in Ghana was described in descriptive design research. A parametric inferential statistical treatment was applied to the study.

Population and Sampling Technique

Based on data from the Bank of Ghana (BOG) there are 24 commercial banks and 137 rural banks in Ghana, therefore, the total population is 161 banks. The research used the technique of total population sampling as the respondent unit is small. The study used the overall population sampling, which is also a purposeful sampling method, because of the manageable small number and the well-defined characteristics of the respondents (Etikan et al., 2016). However, 116 questionnaires were retrieved.

Instrumentation

To collect information from the respondents, the researcher created a survey questionnaire. Based on the literature review, the items of instruments were self-constructed. Experts from the Adventist University of the Philippines (AUP), Valley View University, and the Banks in Ghana were asked to validate the instrument externally. A Cronbach Alpha was used to assess the internal consistency of the instruments, and the decision was based on the thumb rules of George and Mallery (2003) stating that "> .9-Excellent, > .8-Good, > .7-Acceptable, > .6-Questionable, > .5-Poor, and < .5-Unacceptable" (p. 231).

Questionnaire items was measured using a 4-point Likert-type scale for cash management (1 = *strongly disagree* with 4 = *strongly agree*). The relationship magnitude of effect was interpreted based on Cohen (1998) of absolute correlation values in determining the strength of the relationship between the study variables, where $r = .10$ to $.29$ meaning small or low, $r = .30$ to $.49$ meaning medium or moderate, and $r = .50$ to 1.0 meaning large or high. Below was the scoring system.

Table 1. *Scoring System Table for Cash Management*

Numeric Scale	Numerical Likert Scale average weight	Degree of Intensity	Verbal Interpretation
4	3.51 – 4	Always	Excellent
3	2.51 – 3.5	Often	Good
2	1.51 – 2.5	Rarely	Poor
1	1 – 1.5	Never	Very Poor

Table 2. *Scoring System table for Profitability*

Numeric Scale	Numerical Likert Scale average weight	Degree of Intensity	Verbal Interpretation
4	76-100%	Stronger	Excellent
3	51-75%	Strong	Good
2	26-50%	Weak	Poor
1	0 –25%	Weaker	Very Poor

Analysis of Data

The study was cross-sectional survey. The quantitative data based on survey questionnaire was collected at once from the financial controllers of the banks who are the respondents (Diehr, 2014). The researcher obtained introduction letter from the AUP to the banks for permission to obtain the data. The data was encoded in excel when collecting the data and transferred to SPSS to produce the results required for interpretation for the various analyses. The study adopted quantitative analysis as a result, questions were analysed with mean, standard deviation, frequencies by descriptive statistics and Pearson correlation coefficient.

Ethical Considerations

In this research studies, the researcher took ethical concerns into account. The identity of the respondents as well as the questionnaire response was not revealed. It is used for purposes of analysis. The completed questionnaires were destroyed after encoding. Again, to vet the manuscript and the research instrument, the researcher applied to the Ethical Review Board at the AUP. Anonymity and confidentiality of the respondents were maintained. There was no way for the researcher to identify participants in the study directly, based on anonymity.

No personally identifying information was gathered by the researchers. The confidentiality was to takes steps to protect that identity of the respondents to be discovered.

Results and Discussion

The results of the questionnaire aimed to find out the extent of the effect of cash management among banks in Ghana and the significant relationship between cash management and profitability among banks in Ghana are presented in this section.

Cash Management

From the table 3, eight (8) questions were tested for cash management, and it was revealed that the mean with its standard deviation are 3.40 and .38, respectively. Cash management in terms of its verbal interpretation is good.

The mean and standard deviation of 3.65 and .64 can be ranked as highest and therefore banks are excellent in terms of having money to satisfy the withdrawal needs of present customers. On the other hand, the mean and standard deviation of 3.09 and .72 is rated as the least and hence in terms of banks minimizing account receivables or non- performing loans it is good, but they need to improve on it.

Table 3. *Descriptive Table Cash Management*

	Mean	Std. Dev.	Response Scale	Verbal Interpretation
Earning a return on idle cash is usually a top concern of my bank	3.16	.86	Often	Good
My bank has effective management of cash receipts and payments policy	3.56	.64	Always	Excellent

{table continues on the next page}

My bank has desired level of cash and cash equivalents in line with the day-to-day activities of the business	3.48	.64	Often	Good
In my bank, minimizing account receivables is a priority.	3.09	.72	Often	Good
My bank correctly invests excess cash in appropriate short term investments.	3.37	.69	Often	Good
My bank has adequate cash to finance business activities at all times.	3.49	.55	Often	Good
My bank has cash budgeting that anticipates capital shortages and surpluses	3.39	.57	Often	Good
My bank has money to satisfy the withdrawal needs of present customers	3.65	.63	Always	Excellent
Overall Mean	3.40	.38	Often	Good

The highest mean results showed that banks in Ghana whether commercial or rural are strong as they have adequate capital to support daily operations. The lowest mean also implies that banks account receivables or non-performing loans is a challenge to banks in Ghana and there is the need for banks to do more to keep non-performing loans in check. Cash management practices among the banks in Ghana.

The results of this study is in line with what Abulaila and Alhathloul (2016) have suggested that financial institutions should hold optimal funds at all times to offset the incompatible profitability objective.

Relationship Between Cash Management and Profitability

Pearson product-moment correlation coefficient was used to determine the relationship between cash management and profitability. Initial analyses were carried out to ensure that normality, linearity, and homoscedasticity were not overlooked. Cohen (1988) absolute correlation values were used to assess and interpret the strength of the relationships, with $r = .1$ to $.29$ indicating *small/low*, $r = .30$ -. $.49$ indicating *medium/moderate*, and $r = .5$ to 1.0 indicating *large/high*.

The research investigated the cash management-profitability relationship. The correlation coefficients showed that cash management has a *small positive correlation* with profitability but is not significant ($r = .058$, $sig. = .538$) as shown in the Table 4.

Table 4. *Correlation of Cash Management and Profitability*

	ROA			ROE			NIM			Profitability		
	R	Sig.	VI	R	Sig.	VI	R	Sig.	VI	r	Sig.	VI
Cash Management	.162	.081	NS	.080	.391	NS	-.159	.088	NS	.058	.538	NS

ROA=Return of Asset, ROE=Return of Equity, NIM=Net Interest Margin, NS=Not Significant, VI=Verbal Interpretation

This means the study failed to reject the null hypothesis that there was no significant relationship between cash management and profitability. This result implies that as cash management improves, profitability is projected to improve marginally. The adoption of strong cash management strategies does not necessarily mean profit will rise sharply. The result is confirmed by Pandey (2020) study that there is insignificant but positive cash management-profitability relationship.

The results showed that cash management from Ghanaian banks perspective is good, however, its relationship with profitability is statistically not significant. As the banking industry

retains its best practices and discusses the areas that require change, the findings provide objective proof to banks. Future researchers can consider other factors beyond cash management such as financial innovation.

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The Effects of Corporate Governance on Financial Sustainability of Mission Institutions in West Africa

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Abstract

Despite the existence of corporate governance in West Africa, there are still cases of collapse of many mission institutions. Therefore, this study examined the relationship between corporate governance and financial sustainability of mission educational and health institutions in West Africa. Accountability, disclosure and transparency, and board practices were chosen as proxies for corporate governance and financial sustainability was measured by self-support ratio, working capital ratio, debt ratio, and liquidity ratio. Specifically, the study explored the respondents' perceptions of corporate governance and its relationship to financial sustainability of mission institutions in West Africa. The study used a descriptive correlational research design. Survey data were collected from 900 respondents from 300 institutions and a multiple linear regression analysis was performed using Smart PLS. Results showed a *small, negative statistically significant correlation between corporate governance and financial sustainability*. The results imply that an improvement in corporate governance is associated with a fall in financial sustainability signifying that corporate governance is not managed to a level that can improve financial sustainability. The overall perception of corporate governance was *poor* and suggests that corporate governance structures in mission educational and health institutions are generally weak. The study has therefore revealed the need for future qualitative study to explore respondent's perception on corporate governance and financial sustainability.

Keywords: *corporate governance, accountability, disclosure and transparency, board practices, financial sustainability*

Maintaining the capacity to be financially alert over the long term is especially vital for mission institutions given that most of them serve high-need communities that require consistent and continually available services (Lash & Sanchez, 2019). According to Mawudor (2016), due to the decrease in economic assistance from their traditional funders, mission institutions continue to experience countless financial crises, especially in developing nations. The net worth of most of these institutions is shrinking, a trend that is accompanied by uncontrolled chronic budget deficits. Mawudor (2016) further noted that a research undertaken by the Christian Organizations Research Advisory Trust (CORAT) indicated that out of the 17 church-related organizations surveyed, 18 percent claimed to be relatively viable while 82 percent claimed financially. In Ghana, most of the denominational institutions have been cited to seeking financial support to survive due to lack of liquidity and not diversified their source of income (Peprah et al., 2019).

Corporate governance defines procedures, customs, policies, and regulations that direct institutions in their manner of acting, administering, and controlling activities. It operates to accomplish the organization's objective and manages the stakeholder relationship including the board of directors and shareholders. It also addresses individual responsibility through a mechanism that decreases the organization's principal-agent issue (Hotte et al., 2018). Mertzanis et al. (2019) investigated the views of governance. Interviews were conducted among 15 internal auditors working in firms with different sizes, sectors, and positions. They stressed the inadequate monitoring role of the board and shareholders in corporate governance and perceived corporate governance-related information as important for meeting formal compliance needs. They concluded that audit committees are weak in implementing effective monitoring. Kemei and Mweberi (2017) studied the effects of corporate governance practices on financial management in non-governmental organizations in Kenya. The study considered 50 non-governmental organizations. Using questionnaires, primary data was acquired and concluded that responsibility, transparency, integrity, and accountability were high with a positive impact on the financial management.

Dragomir (2019) defined accountability as a means of concretizing relations between institutions, delineating responsibilities, controlling power, enhancing legitimacy, and ultimately promoting democracy. This implies that individuals and organizations, by offering timely data to interested groups, are released from their responsibilities. Accountability, as Hall et al. (2017) emphasized, the lower the accountability of the institution, the greater the likelihood of management helping themselves. Decastri and Buonocore (2020), however, argued that policymakers have increasingly based their attention on organizations' accountability and transparency. The introduction of more rigid controls and company-like management strategies also clashes with the organization's members and weakens their deep self-driven dedication. A study in the United State of America by Han and Hong (2016) examined the federal government on the impact of accountability on organizational performance. The results of the study revealed that the levels of accountability were significant on organizational performance. Alobari et al. (2019) studied the effect of corporate governance on the improvement or otherwise of the financial performance of microfinance banks in Nigeria. The study used a secondary data obtained from financial reports of selected banks in South East Nigeria for a period of thirteen years. The analysis used the board of directors as a proxy for corporate governance, with board size and composition as independent variables and dependent variable as profit before tax. The results indicated that the correlation between the size of the board and profitability does not imply that the size of the board improves profitability as the number of shareholders has a negative relationship with profit before tax.

Maulidi (2017) defined corporate disclosure as any intentional (financial and non-financial) disclosure, whether numerical or qualitative or through official or casual processes. From the perspective of Lumentut et al. (2017), transparency can be postulated as behaviour that makes an issue apparent, simple to comprehend, and certainly its reality. Transparency can be described as a situation in which all the necessary information accessible can be supplied or acquired by an associated group or the wider society. A study conducted by Ullah et al. (2016) to examine

the performance of the manufacturing sector firm on transparency. The study was conducted among 200 respondents. The results showed that the companies were transparent in their business. A comparative analysis was done by Isukul and Chizea (2017) to examine the banks in South Africa and Nigerian on their disclosure on corporate governance. The results revealed that the banks in South Africa and Nigerian have a high level of disclosure on corporate governance. Additionally, Valverde and Moore (2019) discussed the characteristics and future implementations of documents made available by the public and private sectors in Canada. They discovered that information practices that function and generate transparency can only provide a fictitious sense of accountability. The rate at which information is made available, the material used in the documents, and the most widely used information formats are all given special consideration. They concluded that the information made available does not necessarily inspire the people concerned: When 'real' records are made public, neither the substance nor the framing allows for meaningful transparency, obstructing accountability.

In the 21st-century setting, boards are being scrutinized more than ever, and governance remains a critical compliance mechanism. As a result, good board practices are becoming increasingly relevant for businesses (Schulz et al., 2020). Good corporate governance practices, as stated by Rowley et al. (2017), can reduce an organization's capital cost by decreasing the danger (imagined or real) connected with the corporation's financing. Elsbach and Stigliani (2018) found that boards that adopt board-level sustainability procedures and strategies are more successful in hiring representatives of minority organizations. According to Hart et al. (2016) good board practices enable employees to think critically on the standards and principles of the organization to promote growth. Zabri et al. (2016), on the other hand, investigated the impact of corporate governance practices on firms' success among top 100 public listed companies in Bursa, Malaysia. The outcome revealed poor standards in corporate governance practices with negative relationships with ROA and ROE. Wondem and Batra (2019), using the panel regression approach, investigated the effect of board practices on the financial performance of Ethiopian share companies. The study concluded that corporate governance activities are not in line with the evolving corporate business environment landscape. Corporate governance knowledge gap resulted in poor board practices.

Furthermore, Kim (2018) defined financial sustainability as the capacity to retain financial capacity overtime to retain or enhance services within an organization while building resilience to occasional economic shocks. An alternative definition, according to Song et al. (2019), centered on accounting standards specifies that economic sustainability hangs on the ability of an organization to obtain revenue in response to the demand to maintain productive procedures at a constant or increasing pace to generate outcomes and acquire a surplus. Mbuya and Osodo (2018) investigated the relationship between funding and financial sustainability in Kenya. The study utilized 146 in Uasin Gishy County. The results showed that there is a significant positive relationship between funding and financial sustainability. Therefore, sources of funds would increase the financial sustainability of organizations.

Current ratio, also called the working capital ratio, assesses a company's ability to fulfill short-term commitments due within a year. The weight of total current assets and total current liabilities is taken into account in this ratio. It shows a company's financial health and how it can make the most of its existing assets to repay debts and payables (Myšková & Hájek, 2017). Thus as Kung'u (2017) ranted, current ratio measures a company's ability to pay current liabilities with current assets. A company's current assets are divided by its current liabilities in this measurement formula. The portion of the company's assets with a high or medium degree of liquidity is referred to as current assets. These assets are unique in that they can be turned into cash within a year. A working capital ratio of 2:1 or more is considered satisfactory, and the minimum acceptable ratio is 1:1 (Shahid & Amir, 2017). Durrah et al. (2016) investigated the relationship between liquidity ratios and financial performance measures in food industrial companies listed on the Amman Bursa during the period of study (2012-2014). The study used 8 food-related industrial companies. The

findings revealed no connection between all liquidity ratios and the gross profit margin, but a poor positive relationship between the current ratio and each of the operating profit margins and the net profit margin. Liquidity ratios (current ratio, quick ratio, cash ratio) and return on assets have a positive relationship.

Total revenue divided by complete expenditures is self-support and this can be expressed in percentage terms. An institution is considered self-supporting when it has sufficient earned operating income to cover its operating expenses (Peprah et al., 2019). Peprah et al. (2019) investigated the relationship between working capital and financial sustainability for a group of Ghanaian Christian denominations. The financial statements of 15 Christian Council of Ghana denominational members were sampled and analyzed using the bivariate correlation application in SPSS 23. Working capital and financial sustainability were found to have a positive relationship. In a detailed study, there was a statistically small positive significant relationship between self-support and cash ratio and a statistically strong positive significant relationship between self-support and cash ratio. between self-sufficiency and the current ratio.

Godswill et al. (2018) defined liquidity as an institutions' state or condition that determines its ability to fulfil its maturing obligation. It is a measure of the relative amount of cash assets that can be converted quickly into cash without any loss of value. Liquidity ratio defines the relationship between liquid assets and current liabilities. Liquidity ratio is more advanced than the current ratio since it represents the most liquid position. The liquidity ratio represents the firm's immediate cash availability to fulfill its obligations (Saini & Bansal, 2020). Liquidity Ratio of 1:1 is thought to be ideal. It ensures that the company has enough cash on hand to meet its short-term commitments. A higher liquidity ratio is advantageous because it implies the ability to meet liquid liabilities, while a lower ratio is unacceptable because it may pose a serious problem for any business (Saini & Bansal, 2020). In his study, Njue (2020) investigated the effect of liquidity management on the financial results of Kenyan microfinance institutions. The study used 26 institutions. Questionnaires were used to gather primary data, while audited financial statements were reviewed for secondary data. The data showed that liquidity management activities had a major effect on microfinance institutions financial results in Kenya. Asset quality and maturity gap had a negative but negligible impact on MFI financial performance, while capital adequacy had a positive and substantial impact.

Debt ratio is a financial ratio which measures the extent of the leverage a business has. The debt ratio, expressed as a decimal or percentage is known as the ratio of total debt to total assets. It can be defined as the debt-financed proportion of a company's assets (Negussie, 2019). It is an expression of the relation between the total debt and assets of a company and a measure of a company's ability to service its debt. This shows what proportion of the funding asset of a business is from debt, making it a good way to test the long-term solvency of a company. A lower ratio is healthier (Otekunrin et al., 2018). In the debt sustainability analysis phase, the debt level assessment is calculated at the end of the simulation horizon with debt levels of 60% and 90%. A green assessment is granted if the debt ratio is less than 60%, yellow if the debt ratio is between 61 and 90%, and red if more than 90% (Bouabdallah et al., 2017). Kimathi (2019) conducted a research aimed at exploring the impact of debt financing on the financial performance of public universities in Kenya calculated as return on assets and return on equity. The outcomes of the study showed a positive relationship between debt financing and financial performance. Yoke and Lee (2018) investigated the nonlinear effect of debt on the economic performance of Trans-Pacific Partnership countries (excluding Brunei and Vietnam) as a whole. Unbalanced panel data of the annual public debt-to-Gross Domestic Product ratio and real GDP per capita from 1984 to 2015 was collected. The study showed that increasing debt has a positive impact on economic performance.

There has been extensive literature on the impact of corporate governance on financial sustainability. Most of the studies were conducted on non-mission institutions and developing economies. In Ghana, until recently that Peprah et al. (2019) did a study on financial sustainability among selected Christian institutions, with working capital management, not much literature have

been cited to address mission institution financial sustainability. Therefore, this study sought to find a causal relationship which exist among these variables and contribute to providing literature and a solution to the lack of financial sustainability among mission institutions. As a result, this study answered the following questions:

1. How do respondents perceive corporate governance in terms of:
 - a. Accountability
 - b. Disclosure and transparency
 - c. Board practices
2. What is the level of financial sustainability in mission institutions when considering their:
 - a. Self-support ratio?
 - b. Liquidity ratio?
 - c. Working capital ratio
 - d. Debt ratio
3. Is there a significant relationship between corporate governance and financial sustainability?
4. Does corporate governance predicts financial sustainability?

Null Hypotheses

The null hypothesis of this study is:

1. There is no significant relationship between corporate governance and financial sustainability.
2. Corporate governance does not predict financial sustainability.

Methodology

Research Design

This is a quantitative study based on a descriptive correlational research design. The study explored and observed the relationship between corporate governance and financial sustainability as well as the predictors of financial sustainability.

Population and Sampling Technique

The population of the study was 320 educational and health institutions, referred to as Mission Institutions, of religious denominational organizations in the West African countries including Cameroun, Togo, Nigeria, Ghana, Liberia, Sierra Leone, and Equatorial Guinea. The study used total population sampling in selecting 320 institutions from seven countries in West Africa. Three officers comprising the Chief Finance Officer, Administrator, and any other senior worker from each institution were made to answer the questionnaires for the institution.

The population of the study was based on 320 educational and health institutions, referred to as Mission Institutions, of religious denominational organizations in the West African countries including Cameroun, Togo, Nigeria, Ghana, Liberia, Sierra Leone, and Equatorial Guinea. The above population was based on 2019-year book of West central Africa division of Seventh-day Adventist Church and 2019 annual report of Christian Health Association of Ghana. The health institutions were made up of clinics and hospitals and the educational institutions also consisted senior high schools as well as tertiary institutions.

These mission institutions were selected by using total population sampling. According to Etikan, et al. (2016) total population sampling is a method of purposive sampling in which the entire interest population that is a group whose members share a particular characteristic is studied.

It is most realistic if the population as a whole is manageable, such as a well-defined subgroup of a larger population. The aim of this sampling technique was to meet the mediation study where at least 300 respondents are required (Hayes, 2017). The number of health and educational mission institution in West Africa was large enough to allow for selecting a sample but to use the total population. The respondents for each institution in this study were three comprising the Chief

Finance Officer, Administrators, and any other senior worker. The average (mean) of the responses of each institutions' respondents were considered as one data for each institution as found in.

Instrumentation

To achieve the purpose of the study, the researcher used both primary and secondary data. A survey questionnaire was formulated in the English language to get information from the respondents. The corporate governance instrument for accountability was adopted and modified from Said et al. (2018). The instruments for disclosure and transparency, and board practices were self - constructed. Secondary data were gathered through financial statements analysis.

Analysis of Data

The data collected through research questionnaires and financial statements were analyzed using Statistical treatment of Pearson correlation and linear regression.

Ethical Considerations

As human research, the researcher considered ethical considerations throughout the study. The questionnaires were reviewed by the Ethics Review Board at the Adventist University of the Philippines. The researcher informed respondents not to indicate their names, identity, and location for the purpose of the research in accordance with what was stated on the research. Respondents were also informed that their participation will not attract any monetary or other benefits but rather voluntary.

Results and Discussion

Accountability

Table 1 shows the results of respondents' perception of accountability as an element of corporate governance and analyzed based on 15 items. The overall score for the perception of accountability was *agree* ($M = 3.08$, $SD = 0.28$) which was verbally interpreted as *high*. The results implied that workers and board members were highly accountable which is likely to motivate workers to improve their performance and increase their commitment to the institution. All 15 items scored *high* which implies that workers in the mission health and educational institutions are responsible for their actions by reporting outcomes in a transparent manner. The highest score was that the "board ensures that management has explicit goals" ($M = 3.19$, $SD = 0.64$) indicating that boards in mission institutions in West Africa are more focused on setting explicit goals for management. The least agreeable was "when board's professional or ethical responsibilities are doubtful, necessary actions are taken" ($M = 2.98$, $SD = 0.60$) implying that stakeholders of mission institutions in West Africa pay less attention to addressing doubtful ethical and professional responsibilities of board members.

Table 1. *Accountability*

	Mean	Std. Dev.	Degree of intensity	Verbal Interpretation
Board ensures that there is a strategy for regular communication with stakeholders	3.01	0.5	Agree	High
Board ensures fairness to all sections of the community.	3.05	0.64	Agree	High
Board upholds the principles of equality	3.07	0.61	Agree	High
Board recognizes the organization's responsibilities towards the society	3.07	0.60	Agree	High
Board ensures that funds are used appropriately	3.13	0.64	Agree	High

{table continues on the next page}

Board produces performance measures for quality of services.	3.00	0.6	Agree	High
Board places high emphasis on giving prompt assistance to resolve complaints from customers	3.09	0.61	Agree	High
Board places high responsibility on its employees to be highly efficient	3.15	0.66	Agree	High
Board ensures that management has explicit goals	3.19	0.64	Agree	High
Board ensures that management maintains up-to-date records for supplies	3.12	0.65	Agree	High
Board ensures that management maintains up-to-date records for office equipment.	3.08	0.62	Agree	High
Board provides complaints and redress mechanism	3.09	0.64	Agree	High
There exist a well-defined code of ethics which is followed.	3.12	0.63	Agree	High
Board regularly reviews the performance of institutions against targets.	3.04	0.62	Agree	High
When Board's professional or ethical responsibilities are doubtful, necessary actions are taken	2.98	0.60	Agree	High
Grand Mean	3.08	0.28	Agree	Good

Legend: 3.6 - 4.0 = very high, 2.6 - 3.5 = high, 1.6 - 2.5 = low, 1.0 - 1.5 = very low.

The results rendered support to the studies of Han and Hong (2016) and Kemei and Mweberi (2017) emphasizing the importance of high level of accountability in promoting organizational efficiency. Decastri and Buonocore (2020), however, stated that policymaker's have increasingly based their attention on organizations' accountability and transparency where the introduction of more rigid controls and company-like management strategies weakens their deep self-driven dedication.

Disclosure and Transparency

Table 2 shows the results of the respondents' perception of disclosure and transparency. The disclosure and transparency element of corporate governance was analyzed based on 14 items. The overall score for the perception of disclosure and transparency was rated *agree* ($M = 3.04$, $SD = 0.29$) which was verbally interpreted as *high*. This result indicated that board and management are highly transparent in their dealings with workers and the public and discloses relevant information accurately and timely. This high level of disclosure and transparency in terms of open communication, disclosure of health and safety measures, and detailed information of all business affairs to stakeholders is likely to motivate workers to improve their performance. All 14 items scored high indicating that boards in mission health and educational institutions ensure high disclosure and transparency. The highest score was that the "board ensures that policies regarding related party transactions are accurately disclosed" ($M = 3.11$, $SD = 0.60$). This finding implied that the boards in the mission institutions in West Africa disclose related party transactions before any engagement. ON another hand, the least was that the "board ensures that information pertaining to operational matters are disclosed timely" ($M = 2.97$, $SD = 0.60$) implying that the boards neglect their duty of ensuring that the information relating to operational matters are disclosed in a timely manner.

Table 2. *Disclosure and Transparency*

	Mean	Std. Dev.	Degree of intensity	Verbal Interpretation
Board ensures that information pertaining to operational matters are disclosed timely	2.97	0.6	Agree	High
Board ensures that disclosed information about operational matters are true	3.02	0.60	Agree	High
Board ensures that disclosed information about operational matters are correct	3.03	0.66	Agree	High
Board ensures timely disclosure of financial data	3.09	0.58	Agree	High
Board ensures that disclosed economic information are true	3.06	0.63	Agree	High
Board ensures that financial data are true	3.07	0.59	Agree	High
Board ensures that policies regarding related party transactions are accurately disclosed	3.11	0.6	Agree	High
Board ensures that policies regarding related party transactions are disclosed timely	3.09	0.61	Agree	High
Board ensures that information regarding health measures are accurately disclosed	2.99	0.65	Agree	High
Board ensures that policies regarding safety measures are accurately disclosed.	3.02	0.64	Agree	High
The institution provides detailed information of all business affairs to its stakeholders.	3.02	0.65	Agree	High
The institution's environment encourages open communication, to resolve challenges.	3.04	0.65	Agree	High
The institution provides up-to-date information of all business affairs to its stakeholders.	3.01	0.62	Agree	High
There is a strong finance committee which includes professional non- workers	3.06	0.68	Agree	High
Grand Mean	3.04	0.29	Agree	High

Legend: 3.6 - 4.0 = very high, 2.6 - 3.5 = high, 1.6 - 2.5 = low, 1.0 - 1.5 = very low

The results supported the study of Ullah et al. (2016) and Isukul and Chizea (2017) indicating a good perception of disclosure and transparency. Valverde and Moore (2019), however, concluded in their research in public and private sectors in Canada that the information made available does not necessarily inspire the people concerned: When 'real' records are made public, neither the substance nor the framing allows for meaningful transparency, obstructing accountability.

Board Practices

Table 3 shows the results of respondents' perception of board practices. The board practices element of corporate governance was analyzed based on 11 items and the overall score for the perception of board practices is rated *agree* ($M = 2.78$, $SD = 0.54$) which is verbally interpreted as high. This result implies that board members have the required skills, expertise, and orientation to be able to perform. This high level of board practices results gives direction which improves the performance of the institutions. All 11 items scored *high*. The highest score was "the board has the required skills" ($M = 2.86$, $SD = 0.69$) implying that board members have the needed skills to function effectively and the least scores were "independent directors constitute at – least one third

of the board” and “there are board committees in place which have explicit job description on procedure to report” ($M = 2.69$, $SD = 0.78$) and ($M = 2.69$, $SD = 0.78$) respectively, suggesting that mission institutions do not pay much attention in ensuring that board committees have explicit job descriptions and one - third independent members on their board committees.

Table 3. *Board Practices*

	Mean	Std. Dev.	Degree of intensity	Verbal Interpretation
The board has the required skills	2.86	0.69	Agree	High
The board has the required experience.	2.82	0.80	Agree	High
New board members are oriented	2.75	0.74	Agree	High
Independent directors constitute at – least one third of the board	2.69	0.78	Agree	High
There is a mechanism to regularly evaluate board's performance	2.74	0.74	Agree	High
The board regularly presents a true performance report to stakeholders	2.79	0.79	Agree	High
There is an approved strategy	2.85	0.75	Agree	High
Board receives accurate information	2.85	0.83	Agree	High
Board receives timely information	2.82	0.75	Agree	High
There are Board committees in place which have explicit job description on procedure to report.	2.69	0.78	Agree	High
The Board of the institution observes the practices of goods corporate governance in letter and spirit	2.75	0.73	Agree	High
Grand Mean	2.78	0.54	Agree	High

Legend: 3.6 - 4.0 = very high, 2.6 - 3.5 = high, 1.6 - 2.5 = low, 1.0 -1.5 = very low

The results were in line with the studies of Elsbach and Stigliani (2018) showing a high perception of board practices leading to high performance. The results, however, contradicted with Zabri et al. (2016), that poor standards in corporate governance practices has negative relationships with ROA and ROE. Furthermore, it also contradicts Wondem and Batra's study in 2019. Their study concluded that corporate governance activities are not in line with the evolving corporate business environment landscape. Corporate governance knowledge gap resulted in poor board practices.

Corporate Governance

Corporate governance perception had a scaled response of agree which is verbally interpreted as high ($M = 2.98$, $SD = 0.25$) as showed in Table 4.

Table 4. *Corporate Governance*

	Mean	Std. Dev.	Degree of Intensity	Verbal Interpretation
Accountability	3.08	0.28	Agree	High
Disclosure and Transparency	3.04	0.29	Agree	High
Board Practices	2.78	0.54	Agree	High
Grand Mean	2.98	0.25	Agree	High

Legend: 3.6 - 4.0 = very high, 2.6 - 3.5 = high, 1.6 - 2.5 = low, 1.0 -1.5 = very low

The results of the overall findings showed *agree* ($M = 2.98$, $SD = 0.25$) which is verbally interpreted as *high* and suggested that corporate governance structures in mission educational and health institutions are *high*. The results supported the study of Kemei and Mweberi (2017) but opposed the *low* perception concluded by Mertzanis et al. (2019). The disagreement might be due to different locations and institutions of study.

The Level of Financial Sustainability

Table 5 presents the scaled responses for the level of financial sustainability for mission educational and health institutions. From the results, working capital ratio scored *low* ($M = 1.85$, $SD = 0.349$). Self-support and liquidity ratios scored *high* ($M = 3.36$, $SD = 0.856$) and ($M = 2.99$, $SD = 0.913$), respectively. Debt ratio scored *low* ($M = 2.17$, $SD = 0.886$). This finding implied that the institutions are able to generate enough operating incomes to cover operating expenses but could be improved looking at the large areas they cover and the support they receive from donors. The inadequacy of the income can be deduced from the low debt ratio which indicates that the institutions depend on debt to finance other non-operating expenditures.

Table 5. *Financial Sustainability*

Variable	N	Average Weight	Mean	Std. Deviation	VI
Working Capital	851	2:1 and above	1.95	0.349	Low
Self Support	851	1:1 - 1.49:1	3.36	0.856	Very High
Liquidity	851	1:1 - 1.49:1	2.99	0.913	Very High
Debt Ratio	851	0.9:1 and above	2.17	0.886	Low

Debt ratio has a high score of 90% and above from table 21 but low in terms of performance. The overall score is high ($M = 2.84$, $SD = 0.456$). The high level of financial sustainability is in line with the study of Song et al. (2019) postulating that without the security of earning more than it spends, a non-profit cannot attain economic sustainability. The study, however, contradicts the study of Mawudor (2016) postulating that mission institutions are financially constrained. The difference in results might be the area and location of study.

Correlation Between Corporate Governance and Financial Sustainability

Table 6 presents the correlation between corporate governance (as measured by accountability, board practices, and disclosure and transparency) and financial sustainability (as measured by self-support, working capital, liquidity, and debt ratio) was analyzed using Pearson correlation coefficient. The study indicated that there is a small negative statistically insignificant correlation between corporate governance and financial sustainability ($r = -0.004$, $n = 851$, $p = 0.918$). The study shows that there is a small significant inverse correlation between the two variables and therefore failed to reject the null hypothesis that there is no significant relationship between corporate governance and financial sustainability.

Table 7. *Correlation Between Corporate Governance and Financial Sustainability*

	WC			SS			LR			DR			FS		
	r	Sig	VI	r	Sig	VI	r	Sig	VI	r	Sig	VI	r	Sig	VI
AC	-.051	.138	NS	-.033	.341	NS	-.052	.132	NS	-.053	.124	NS	-.037	.282	NS
DT	-.057	.095	NS	.001	.973	NS	-.064	.061	NS	.003	.933	NS	-.057	.119	NS
BP	.038	.272	NS	-.046	.183	NS	-.013	.700	NS	.113**	.001	S	.042	.223	NS
CG	-.013	.713	NS	-.042	.217	NS	-.050	.142	NS	0.097**	.004	S	-.004	.918	NS

** Correlation is significant at the 0.01 level (2-tailed).

This findings suggested that an improvement in corporate governance does not have any significant effect on financial sustainability signifying that corporate governance is not managed to a level that can improve financial sustainability. The results supported the studies of Alobari et al. (2019) indicating that the correlation between the size of the board and profitability does not imply that the size of the board improves profitability. Salim and Iskandar's (2017) investigated into the effect corporate governance dimensions on the performance of 27 Jordanian insurance firms and suggested a negative association between the performance and the separation of CEO and chair positions. The results, however, contradicted the study of Kemei and Mweberi (2017) who concluded that responsibility, transparency, integrity and accountability were high with a positive impact on the financial management. The differences in conclusions might be due to differences in location and the type of institution.

Predictors of Financial Sustainability

Regression analysis was used to determine the predictive ability of corporate governance on financial sustainability. After going through the process, the total variance explained by the model was r -squared = 1%, $F = 8.535$, $p = 0.004$ as shown in Table 8.

Table 8. *Predictors of Financial Sustainability*

Independent Variables	Unstandardized Coefficients	t value	p -value	Verbal Interpretation	R-Squared Change
Constant	3.381	18.237	0.000	Significant	
Corporate Governance	-0.181	-2.922	0.004	Significant	0.010

Dependent Variable: Financial Sustainability, R-Square=0.010 F= 8.532, p=.004

From Table 9, corporate governance predicts 1% of financial sustainability. The results indicated that there is 99% variance of financial sustainability which are still not accounted for in this study. The unstandardized beta coefficients of corporate governance have given a negative relationship with financial sustainability. Corporate governance resulted from the regression analysis with a negative unstandardized beta coefficient of -0.181, t-value of -2.922 which is significant at 0.004 level. The negative beta coefficient implies that, for every unit of corporate governance, the financial sustainability of mission health and educational institutions institution deteriorates by 0.181 units. This result shows that boards and management should formulate corporate governance skewed towards improving financial sustainability. the model resulted from this study is Financial Sustainability = $3.381 + -0.181$. Therefore, the study *rejects* the null hypothesis that none of the independent variables predict financial sustainability.

This result supports the studies of Mahmood et al. (2018) which studied the sustainability of 100 companies in Pakistan on their corporate governance and showed that corporate governance is significantly linked with financial sustainability. The results, however, contradict the study of Salim and Iskandar's (2017) who investigated into the effect corporate governance dimensions on the performance of 27 Jordanian insurance firms and suggested a negative association between the performance and the separation of CEO and chair positions. The differences in conclusions might be due to differences in location and the type of institution.

The study concludes a *high* perception of accountability ($M = 3.08$, $SD = 0.28$), disclosure and transparency ($M = 3.04$, $SD = 0.29$), and board practices ($M = 2.78$, $SD = 0.54$). The results showed a *small, negative statistically significant correlation* between corporate governance and financial sustainability which imply that an improvement in corporate governance is associated with a fall in financial sustainability signifying that corporate governance is not managed to a level that can improve financial sustainability. The overall perception of corporate governance was *high* and suggests that corporate governance structures in mission educational and health institutions are

active. The study results indicated that corporate governance predicts 1% of financial sustainability. and indicate that 99% variance of financial sustainability which are still not accounted for in this study. The study also revealed the need for future researchers to investigate into 99% financial sustainability variance which corporate governance could not account for but can be applied to predict financial sustainability and the need for qualitative study to explore respondent's perception on corporate governance and financial sustainability.

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Innovative Capabilities and Efficiency of Selected Financial Institutions in Ghana

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Abstract

In a dynamic business environment characterized by financial instability and corporate governance flaws that jeopardize the efficiency of financial institutions, developing robust innovative capabilities in an organization is becoming increasingly important. This study offered new insights regarding the impact of innovative capability on organizational efficiency. Specifically, this study explored the impact of the dimensions of innovative capability- marketing, learning, and research and development capabilities on financial institution's efficiency. This descriptive correlational and prediction study was conducted to purposively sample 290 Ghanaian financial institutions. Self-constructed questionnaire based on the related literature reviewed was used to collect data from the respondents and the data were analyzed by statistical tests of Pearson correlation coefficient and linear regression. The findings revealed that Ghanaian financial institutions have *high* innovative capability. Further, a *strong positive* correlation between the dimensions of innovative capability, and operating efficiency ratio and quality of service. The study also showed a *strong positive significant* correlation between innovative capability and organizational efficiency. However, the correlation between the dimensions of innovative capability and asset turnover was not significant. In addition, the study revealed that marketing and learning capabilities, dimensions of innovative capability, *significantly predict* organizational efficiency. This study suggests that managers and policy makers of financial institutions consider investing to and developing in marketing and learning potentials of the firm since they enhance the firm's efficiency.

Keywords: *innovative capability, organizational efficiency, asset turnover, quality of service, research and development*

The rapid pace of globalization, changing customer demands, increased competitiveness, and rapid technological advancements have created an environment that threatens the survival and hampers the efficiency of financial institutions (Turulja & Bajgoric, 2018). It has become even worse in recent years due to increased economic uncertainty and a lack of efficient resource management (Madura, 2020). In response to this menace, financial institutions require more robust innovative capabilities. Many financial institutions in the United States failed due to inefficiency (Carmona, Climent, & Momparler 2019; Guerron-Quintana & Jinnai 2019). Similarly, inefficiency in the financial industry is blamed for the failure of Lehman Brothers and the European financial crisis (Buyl et al., 2017). According to McKinsey and Company (2019), the root cause of Asia-Pacific banking difficulties is a lack of financial sector efficiency. The Bank of Ghana revoked the licenses of 418 financial institutions and two non-banking institutions due to inefficiency (Benson, 2019).

This complicated global economic turmoil calls for sophisticated methods for efficiency enhancement through innovative practices (De Abreu et al., 2018). The ability of a firm to respond to pressures and changes in the business environment is found in a firm's marketing, learning, and research and development processes. Since customers' needs and expectations continually evolve and service delivery requires ongoing responsiveness, firms need to double their innovation efforts. Therefore, an important driver of firm competitiveness and success is the ability to innovate in dynamic business environments (Turulja & Bajgoric, 2018).

Yeşil and Doğan (2019), described innovation capabilities on four premises. The ability to (a) develop new products to meet market requirements, (b) use suitable process systems to create these new goods, (c) develop and adopt the new product and processing techniques to meet future requirements, and (d) respond to future needs. Cohen and Caner (2016), consider innovation capacity as an individual and collective learning capability and process that promotes problem solving. The definitions of innovation capability, though, has few discrepancies (Behnam & Cagliano, 2019; Castellani et al., 2018; Zhang et al. 2018); there is, however, consensus on the validity of the term as suggested in the Oslo Manual (OECD, 2018). In this manual, an innovative capability is described as the ability to identify relevant external challenges, learn from experience, and incorporate various processes to achieve strategic goals, as well as develop and use new ideas to achieve excellence.

According to Da Costa et al. (2018), the complex nature of the service market demands that firms develop robust innovation capabilities that provide better services, including best procedures and practices. They added that service firms are market-driven, therefore, their conduct should be based on the market condition (Da Costa et al., 2018). In the current literature on business and management sciences, marketing innovation does not only implement fresh or enhanced marketing and marketing techniques for existing products or procedures but also modify or improve the design of products/services, packaging, process, delivery, cost, or advertising of product/service (OECD, 2018). Connecting partners, according to Mu (2015), is the ability of the firm to create superior customer value at lower cost and partner linking which offers the firm an opportunity to develop network ties and access to diverse information sources and resources. Accordingly, marketing innovation is generally defined as the ability of companies to advertise and sell existing products and services in organizations, adapting them to the preferences and needs of clients, customers, and level of competition, costs, benefits, and level of business performance (Maldonado-Guzmán et al., 2018). Lagat and Frankwick (2017) defined marketing capability as integrative procedures designed to apply the company's collective knowledge, skills, and resources of the firm to the market-related needs of the business, enabling the business to add value to its goods and services and meet competitive demands. Marketing capabilities have been discovered to improve company efficiency and effectiveness in competitive settings by enhancing the market-based performance of a firm (Lagat & Frankwick 2017), as well as economic performance.

All organizations are knowledge-based. Even organizations that heavily use technology depend on complicated knowledge structures stored through practices, procedures, processes, habits, and culture that enable businesses to thrive in even harsh environments. Cheng et al. (2019) define organizational learning capability as the characteristics of the organization and its management that facilitate learning processes in the workplace. According to Brix (2019), learning capability is the organizational practices that enhance an individual's abilities, talents, attitudes, and behavior and develop an organization's internal structures and processes for efficient performance. Brix (2019) extended the definition of learning capability to cover an organization's ability to identify, assimilate, and exploit new knowledge essential for its competitive success. Bartz and Kritsonis (2019) noted that the efficient use of learning concepts and processes is critical to the career advancement of employees for their present role and growth. According to them, the responsibility for learning rests with every individual member of the organization. Brix (2019), on the other hand, believed that capacity building is a responsibility of both the individual and the organization. Capacity building processes may be used by managers to empower the employees to make appropriate decisions to reach both their own individual goals and to work towards realizing the firm's intended strategy.

According to the resource-based perspective (França & Rua 2018; Lamont et al., 2019; Nason & Wiklund 2018), the primary determinant of a firm's performance is its capacity to accumulate and apply suitable kinds of resources. Companies that possess and integrate resources that are valuable, rare, immobile, and hard to imitate are more likely to maintain a competitive edge and improve performance. In support to this argument, Diéguez-Soto et al. (2019) emphasized that research and development investment has a positive and significant impact on the efficiency and performance of the firm. They added that organizations that do not take research and development activities seriously are not likely to thrive in a corporate environment that is highly competitive. In this view, investment in R&D should be the priority of firms since it is seen as an essential resource for both innovation creation and knowledge development (Roper et al., 2017). Lome et al. (2016) empirically investigated the effect of a high R&D intensity on performance during a financial crisis. They use binary logistic regression on a sample of 247 Norwegian firms, and the study found that firms that devote considerable resources to R&D activities performed significantly better than other firms during the global downturn in the late 2000s. In addition, Zang et al. (2018), investigate the impact of R&D cultural and creative enterprises in China from 2011-2013. They observe that investment in R&D has a positive effect on the financial performance of cultural and creative enterprises. In the literature, a consensus seems to exist on the positive impact of innovative capabilities on the efficiency and performance of a firm, both from resource-based theories and empirical results.

The studies by Boussemart et al. (2019), Maldonado-Guzmán et al. (2018), and Zhu et al. (2018) revealed that innovative capabilities positively correlate with organizational efficiency. Mohamed et al., (2019) used modeling structural equations through AMOS to identify factors that influence the productivity of the organization. Results indicated that innovation significantly projects creativity, which in turn influences efficiency. Similarly, Heredia Pérez et al. (2018), evaluated inner and external variables influencing innovation kinds and their relationships with business efficiency and performance in Peru and Chile's manufacturing sector. The research discovered that innovation increases export performance in both nations.

The literature on business innovation is extensive, including company, industry, and regional approaches. Most surveys, nevertheless, have concentrated on developed economies, focusing on the company's technology, innovative results, and profit. Less emphasis has been placed on emerging markets, such as Africa and Ghana in specific, and the process of innovation in learning, marketing, and R&D development. Therefore, this paper explored the impact of dimensions of innovative capabilities on the efficiency of financial industry and contribute to literature by providing a solution to financial institutions' inefficiency in Ghana.

This paper answered the following research questions and hypotheses:

1. What is the level of innovative capability of the financial institutions as perceived by the respondents in terms of:
 - a. marketing
 - b. learning
 - c. research and development
2. What is the level of efficiency of financial institutions when considering:
 - a. operating efficiency ratio
 - b. asset turnover ratio
 - c. quality of service
3. Is there a significant relationship between innovative capability and organizational efficiency?
4. Does innovative capability and its dimensions predict organizational efficiency?

Hypotheses

The null hypotheses of this study are:

1. There is no significant relationship between innovative capability and organizational efficiency.
2. There is no significant relationship between the dimensions of innovative capability and dimensions of organizational efficiency.
3. Innovative capability does not predict organizational efficiency.

Methodology

Research Design

The descriptive-correlational design was used in the study to determine the relationship between innovative capability and organizational efficiency, as well as the predictors of organizational efficiency.

Population and Sampling Techniques

The population of this study comprised the 847 financial institutions in Ghana grouped into 415 for-profit entities and 432 not-for-profit entities. A purposive sampling technique was used in selecting 290 financial institutions: 152(52%) not-for-profit entities and 138(48%) for-profit.

Instrumentation

To achieve the purposes of the study, primary and secondary sources of data were used. The primary data were collected through self-constructed questionnaires. The instruments were developed through a thorough analysis of related literature. The secondary data were gathered from the financial statements of the institutions.

Data Analysis

The data gathered through survey questionnaires and the financial reports were analyzed by statistical tests of Pearson correlation coefficient and linear regression.

Ethical Consideration

The following ethical considerations were adhered to:

- Permission was obtained from the Ethics Review Board (ERB) of the Adventist University of the Philippines (AUP)
- A letter of introduction from AUP was sent to the Bank of Ghana and Credit Unions Association of Ghana seeking their consent and explaining the purpose of the study.
- Participants' involvement was voluntary and those who were willing to participate in the survey were given the questionnaires to answer.

Results and Discussion

The Level of Innovation Capability in Financial Institutions

The ability of an organization to identify, create, integrate, and restore critical capacity and resources to sustain its competitive edge and to execute its overall strategy is essential in a fast-moving world. This can be achieved through marketing, learning capability, and research and development.

Marketing Capability

The level of marketing capability of financial institutions was analyzed based on ten items. The average score for marketing capital of financial institution was agree implying a high ($M = 3.37$, $SD = 0.47$) marketing capabilities.

Table 1. *Marketing Capability*

	Mean	Std. Deviation	Response Scale	Verbal Interpretation
My institution:				
has clear strategies for creating new services	2.75	0.55	Agree	High
has clearly designed policies to enhance market growth	2.73	0.55	Agree	High
has clearly defined strategies on service innovation	2.72	0.52	Agree	High
implements the designed service innovation strategies	2.69	0.54	Agree	High
provides cost-effective services to the needs of its customers	2.65	0.57	Agree	High
generates market intelligence to develop innovative services that meet customer needs	2.67	0.51	Agree	High
employees are aware of my institution's market growth strategies	2.67	0.57	Agree	High
has a strategy for creating new marketing methods when consumers' preferences change	2.66	0.56	Agree	High
uses standardized electronic interfaces to make us more accessible to our customers	2.67	0.57	Agree	High
every day, gets new customers who have never previously patronized our services	2.70	0.59	Agree	High
Marketing Capability	2.69	0.46	Agree	High

Scoring System: 1-1.5 = Strongly Disagree, 1.6-2.5 = Disagree, 2.60-3.5 = Agree, 3.6-4.0 = Strongly Agree

The highest scored item was *My institution has strategies for creating new services* ($M = 2.75$, $SD = 0.55$) and the lowest scored item was *My institution provides cost-effective services to the needs of its customers* ($M = 2.65$, $SD = 0.57$) as shown in Table 1.

The results indicate that financial institutions in Ghana have a high ability to design and provide services that meets customer needs and implement an enhanced marketing technique for both new and existing services. The study also shows that while cost management is fine, organizations can do better than their current results. This result was supported by the Da Costa et al. (2018),

suggesting that service firms are market-driven and therefore need high marketing capabilities. The research also affirmed the study of Da Costa et al. (2018) and Mu (2015) emphasizing that high marketing capability keep cost down and produce high economic returns.

Learning Capability

The capacity of the company and its management to promote work-related learning processes that improve the skills, attitudes, and actions of individuals, as well as the growth of the ability of the firm to recognize, assimilate and exploit new information that is necessary for efficient performance was assessed with ten items as shown in Table 2.

In all, most of the respondents agreed to all items which implies a high institutional learning capability. Two items were rated the highest: *My institution offers workers the opportunity to acquire new knowledge for higher performance* ($M = 2.77$, $SD = 0.50$), and *My institution provides training that responds to employees' needs* ($M = 2.77$, $SD = 0.54$) while the lowest scored item was *My institution puts the responsibility of capacity building on the institution* ($M = 2.62$, $SD = 0.59$).

Table 2. *Learning Capability*

	Mean	Std. Deviation	Response Scale	Verbal Interpretation
My institution:				
offers workers the opportunity to acquire new knowledge for higher performance.	2.77	0.50	Agree	High
has built an internal network for skills development.	2.75	0.50	Agree	High
offers work which stimulates employees to improve their skills.	2.72	0.52	Agree	High
provides training that responds to employees needs.	2.77	0.54	Agree	High
provides its workers with a forum to retain the expertise accumulated for the skill needs of the institution.	2.67	0.48	Agree	High
has structures that enhance the learning capabilities of its employees.	2.70	0.53	Agree	High
puts the responsibility of capacity building on the institution.	2.62	0.59	Agree	High
puts the responsibility of capacity building on the individual.	2.72	0.49	Agree	High
applauds creative workers whose experience drives the innovation capability of the institution.	2.71	0.58	Agree	High
has designed strategy with an emphasis on the continuous learning process.	2.70	0.55	Agree	High
Learning Capability	2.71	0.42	Agree	High

Scoring System: 1-1.5 = Strongly Disagree, 1.6-2.5 = Disagree, 2.60-3.5 = Agree, 3.6-4.0 = Strongly Agree

The study revealed that Ghanaian financial institutions have high learning capability by creating opportunities for workers to learn and providing training that meets the needs of the workers. However, the responsibility of capacity building does not rest with the institutions. This result was supported by the study of Brix (2019) that described learning capability as organizational practices

that enhance an individual's abilities, talents, attitudes, and behavior for efficient performance. Cheng et al. (2019) also indicated that high learning capability impacts positively on organizational innovativeness.

Research and Development Capability

Ten elements were used to determine the extent of R&D capability of financial institutions as shown in Table 3. Most of the respondents agreed implying the financial institutions have high R&D capabilities with *My institution gathers the information for efficient performance* ($M = 2.66$, $SD = 0.55$) and *My institution works rapidly on the feedback gathered from marketing* ($M = 2.66$, $SD = 0.51$) scoring highest. This result means that financial institutions in Ghana have a high capacity to leverage and discover the potentials in their internal and external environment that are likely to sustain a competitive advantage and boost efficiency. The findings supported the resource-based theory that posit that a primary determinant of the innovativeness of a firm is its capacity to accumulate and apply suitable kinds of resources.

This result indicates that financial institutions put priority on the investment of R&D and it confirms the study of Roper et al. (2017) who stated that investment in R&D is the priority of firms because it is an essential resource for both innovation creation and knowledge development. Furthermore, the study of Zang et al. (2019), on the impact of R&D cultural and creative enterprises in China from 2011-2013, revealed that that investment in R&D has a positive effect on the financial performance of cultural and creative enterprises

Table 3. *Research and Development*

	Mean	Std. Deviation	Response Scale	Verbal Interpretation
My institution('s):				
gathers the information for efficient performance.	2.66	0.55	Agree	High
gathers rapid feedback from service design.	2.59	0.50	Agree	High
works rapidly on the feedback gathered from marketing.	2.66	0.51	Agree	High
has built capabilities that are suitable for dealing with crises.	2.63	0.52	Agree	High
has policies that harmonize its product and process innovations.	2.58	0.52	Agree	High
research and development aligns innovative ideas, product development, and marketing strategies.	2.54	0.57	Agree	High
product innovation is based on formal research and development.	2.57	0.57	Agree	High
exploits external innovation sources to improve its processes.	2.61	0.53	Agree	High
has the capability to draw on external resources.	2.60	0.59	Agree	High
has the capability to identify new uses for already-available technologies.	2.56	0.54	Agree	High
Research and Development Capability	2.60	0.45	Agree	High

Scoring System: 1-1.5 = Strongly Disagree, 1.6-2.5 = Disagree, 2.60-3.5 = Agree, 3.6-4.0 = Strongly Agree

In sum, the level of innovative capability of financial institutions is high ($M = 2.87$, $SD = 0.44$) as shown in Table 4. According to Baia et al. (2019), for firms to create competitive edge for a business, the innovative capabilities need to be high.

Table 4. *Innovative Capability*

	Mean	Std. Deviation	Response Scale	Verbal Interpretation
Marketing Capability	2.69	0.46	Agree	High
Learning Capability	2.71	0.42	Agree	High
Research and Development Capability	2.60	0.45	Agree	High
Innovative Capability	2.67	0.44	Agree	High

Scoring System: 1-1.5 = Strongly Disagree, 1.6-2.5 = Disagree, 2.60-3.5 = Agree, 3.6-4.0 = Strongly Agree

Correlation Between Innovative Capability and Organizational Efficiency

The study examined the relationship between innovative capability and organizational efficiency. Table 5 shows that, in the case of Ghana, innovative capability has a strong positive association with the efficiency of financial institutions, $r = .682$, $\text{sig.} = .000$ at a 99% confidence interval. This result implies that an improvement in innovative capability is likely to bring about a significant improvement in the efficiency of financial institutions. The study therefore rejects the null hypothesis that there is no significant relationship between innovative capability and organizational efficiency.

Table 5. *Correlation of Innovative Capability and Organizational Efficiency*

	OER			ATR			QoS			OE		
	r	Sig.	VI	r	Sig.	VI	r	Sig.	VI	r	Sig.	VI
MC	.497**	.000	S	.041	.485	NS	.546**	.000	S	.641**	.000	S
LC	.487**	.000	S	.049	.409	NS	.582**	.000	S	.664**	.000	S
R&DC	.466**	.000	S	.021	.719	NS	.531**	.000	S	.613**	.000	S
InC	.516**	.000	S	.039	.505	NS	.590**	.000	S	.682**	.000	S

** Correlation is significant at the 0.01 level (2-tailed).

Legend: S=Significant, NS=Not significant

Further, all the dimensions of innovative capability (marketing, learning capability, and R&D capabilities) have a *significant positive relationship* with organizational efficiency, with the coefficient between learning capability and quality of service $r = .582$, $p = .000$ been highest. It is observed that the dimensions of innovative capability (marketing, learning capability, and R&D capabilities) *do not significantly correlate* with asset turnover ratio as shown in Table 5. This result implies that the dimensions of innovative capability do not influence asset turnover ratio of financial institutions in Ghana. Nonetheless, there is a *high positive relation* between innovative capability and organizational efficiency. This suggests that a high innovative capability in financial institutions would lead to a higher positive organizational efficiency. This is because the current fragile nature of the financial industry due to the global financial crisis could be better managed by robust marketing, learning and research and development strategies.

Boussemart et al. (2019) used a non-parametric approach to evaluate banking performance about economic and credit risk efficiencies. In this study, data covering 30 Chinese financial institutions from 2005 to 2012 in different scenarios were used. The study reveals that if banking managers are more innovative, average rate of revenue will increase by 16%.

Zhu et al. (2018) analyzed the effects of marketing innovation on firm efficiency. The findings of hierarchical regression analysis using 494 samples of Chinese SMEs indicate that marketing innovation has strongly significant relationship with financial efficiency. Garcia Martinez et al. (2018), using panel information from production and service companies in Spain for the period 2009–2015, argued that during economic crisis, companies with high learning and R&D capabilities were more efficient and better positioned to survive under unpredictable and unfavorable financial and economic circumstances. Maldonado-Guzmán et al. (2018), in exploring the impact of innovation capability on the performance of small and medium-sized businesses in Mexico found a positive and significant impact of innovation on firms' performance. Mohamed et al. (2019) used modeling structural equations through AMOS to identify factors that influence the efficiency of the organization. Results indicate that innovation significantly projects creativity, which in turn influence efficiency.

Predictors of Organizational Efficiency

Linear regression application approach was used to test the extent to which marketing, learning capability, and research and development capabilities significantly predict efficiency ratio of financial institutions. The results revealed that marketing and learning capabilities used in this study were predictors of organizational efficiency. The total variance explained by the model was $r\text{-square} = 26.2\%$, $F = 50.994$, $p = .000$ as shown in Table 6.

Table 6. *Predictors of Efficiency Ratio*

Independent Variables	Unstandardized Coefficients	t-value	p-value	Verbal Interpretation	R-Square Change
Constant	-.499	-2.040	.000	Significant	
Marketing Capability	.478	3.145	.000	Significant	.247
Learning Capability	.407	2.441	.000	Significant	.015

Dependent Variable: Efficiency Ratio, R-Square=.262, F= 50.994, p=.000

Similarly, the extent to which marketing, learning capability, and research and development capabilities significantly predicts quality of service among financial institutions. The results revealed that learning capabilities and research and development capabilities used in this study were predictors of quality of service. The total variance explained by the model was $r\text{-square} = 34.9\%$, $F = 76.899$, $p = .000$ as shown in Table 7.

Table 7. *Predictors of Quality of Service*

Independent Variables	Unstandardized Coefficients	t-value	p-value	Verbal Interpretation	R-Square Change
Constant	1.011	6.689	.000	Significant	
Learning Capability	.503	5.434	.000	Significant	.338
R & D Capability	.187	2.159	.032	Significant	.011

Dependent Variable: Quality of Service, r-square = .349, F = 76.899, p = .000

The extent to which marketing, learning capability, and research and development capabilities significantly predicts the organizational efficiency of financial institutions. The results revealed that learning and marketing capabilities significantly predict organizational. The total variance explained by the model was $r\text{-square} = 46.30\%$, $F = 84.631$, $p = .000$ as shown in Table 8.

Table 8. *Predictors of Organizational Efficiency*

Independent Variables	Unstandardized Coefficients	t-value	p-value	Verbal Interpretation	R-Square Change
Constant	-4.505	-15.654	.000	Significant	
Learning Capability	.854	3.969	.000	Significant	.411
Marketing Capability	.483	2.559	.011	Significant	.052

Dependent Variable: Organizational Efficiency, r-square = .463, F = 84.631, p = .000

From the regression analysis, learning capability is the highest predictor of organizational efficiency contributing 41.1% and marketing capability 5.2%. The results indicate that there was a 53.70% variance of organizational efficiency which was still not accounted for in this study.

The unstandardized beta coefficients of the variables showed a *positive relationship* with organizational efficiency. Learning capability came out of the regression analysis with unstandardized beta coefficient of .854, *t*-value of 3.969 which is significant at 0.01 level. The positive beta coefficient implies that, for every unit of audit quality the efficiency of financial institution improves by 0.854. Similarly, marketing capability came out of the regression analysis with unstandardized coefficient beta of 0.483, *t*-value of 2.559 which is significant at 0.05 level. This result implies that the better marketing capability a firm has, the higher its efficiency. The model resulted from this study is organizational efficiency = $-4.505 + 0.854 \text{ learning capability} + 0.483 \text{ marketing capability}$. Therefore, the study *rejects* the null hypothesis that none of the dimensions of innovative capability predict organizational efficiency. This study is in line with Heredia Pérez et al. (2018) which noted that innovation adds value to organization's efficiency. In addition, Mohamed et al. (2019) mentioned that innovative capability is essential tool for a firm's efficiency. These findings provide important implications for managers and relevant authorities to enhance learning and marketing capabilities of the firm for higher efficiency and performance.

The findings of the study indicate that financial institutions in Ghana have high marketing, learning capability, and research and development capabilities with weighted mean of 2.69, 2.71, and 2.60, respectively. Overall, the study revealed the level of innovative capabilities of financial institutions as *high*, with a weighted mean of 2.67. Financial institutions had a high level of innovative capability because they had high levels of marketing, learning capability, and research and development capabilities. The study also showed *low levels* of efficiency among financial institutions when considering operating efficiency ratio and asset turnover ratio with weighted mean of 1.89 and 2.20, respectively. However, there was a *high level* of quality of service with weighted mean of 2.89. Overall, the assessment of financial institutions efficiency was found to be low, with weighted mean of 2.32.

The study indicated that marketing capability had a *strong positive association* with organizational efficiency, $r = .641$, sig. = .000 at 99% confidence level, learning capability has a *strong positive relationship* with organizational efficiency, $r = .664$, sig. = .000 at 99% confidence level and research and development also has a *strong positive association* with organizational efficiency, $r = .613$, sig. = .000 at 99% confidence level. Similarly, the correlation analysis indicated that innovative capability has a *strong positive association* with the efficiency of financial institutions, $r = .682$, sig. = .000 at 99% confidence interval. The study further revealed that learning and marketing capabilities were predictors of organizational efficiency. These predictors accounted for 46.30% explanation to organizational efficiency.

The study concludes that higher innovative capabilities enable firms to understand market changes and improve their ability to develop service strategies for long-term competitive advantage. Marketing, learning, and research and development capabilities all have a positive relationship with organizational efficiency, thus, increased levels of these variables act as catalysts for higher efficiency. The predictors of organizational efficiency were learning and marketing capabilities. The study recommends that financial institutions' management consider these variables when looking

for ways to improve efficiency. Further, managers should collaborate with other department heads to develop strategies for integrating innovation capability dimensions to improve organizational efficiency. Finally, future researchers should investigate into the 53.70% variance which innovative capability dimensions could not account for but can be used to predict organizational efficiency among financial institutions.

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Establishing a Vegetarian Food Kiosk in Angeles City

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Abstract

People nowadays became conscious of their health because of the pandemic that struck the world. Some became mindful of the food they eat and many turns into vegetarians not just for religious reasons but because they want to have a healthy diet. But at present, only a few vegetarian restaurants exist in Angeles City. Therefore, the researcher wants to add an affordable but healthy food kiosk so that health enthusiasts will have another option where they can buy vegetarian food. This study determined the viability of establishing a vegetarian food kiosk in Angeles City, Pampanga by identifying who have tried vegetarian food and who are willing to patronize the proposed business. This quantitative research distributed online survey questionnaires through Google form since it is inexpensive, generates fast results, and practical in the current situation of the pandemic. Through simple random sampling, 410 Angeleño aged 16-60 years old participated in the study conducted within Angeles City. Descriptive statistics were utilized for data classification and simple percentages and frequency count. The results revealed that only 36% have already tried vegetarian food and there are 94% are willing to patronize the business. There is only 11.41% supply available in the market and there are still 88.59% unmet demand. Moreover, 88.60% want to try vegetarian sisig, 83.70% to vegetarian barbeque, 41.90% to pininyahan, 78.80% to plant-based chicken skin, and 71.10% wants to try plant-based chicken fillet. Based on the results, several people want to try eating vegetarian food. Hence, the proposed business has potential in the market.

Keywords: *vegetarian, food, kiosk, health, pandemic*

Food is a source energy to fulfill man's daily activities. Since March 2020, because of the pandemic COVID-19, many people have become cautious and conscious of their health. A study in Finland (Doan, 2011) mentioned that people in their country became extra conscious of their health. They believe that the food they intake influences their body. Many of them gradually shift from their old diets to vegetarianism. So, the need of having a vegetarian restaurant in the said country is increasing day by day. However, the supply is still low. There were few to no vegetarian stores in most of the cities, especially in Varkaus. So, Doan (2011) conducted a feasibility study that aimed to know the people's opinion if ever a vegetarian restaurant will open in the said area. The findings were positive and by analyzing the result, people considered visiting the proposed vegetarian restaurant. Though there was a risk in putting up a business like this, the company needed to construct a contingency plan.

In another study initiated by Dhakal (2014) in India focused on identifying the viability of putting up a vegetarian restaurant in his country. The research included recognizing its market environment and giving the researcher an understanding of its advantage in the industry. The study was conducted by surveying the potential customer, and the people that were investigated gave positive feedback to the study.

Additionally, according to Figus (2014), as of 2014, there were 375 million total people vegetarians in the whole world. Eleven percent of it is from the United States of America, Thirty-one percent in India, and an estimated ten percent in Europe. Shifting their diet has several causes. One reason is their faith. One-fourth of India's population were Hindus and Buddhists who believe in reincarnation. People with that kind of faith are very loving to all living things, so they do not kill even a small insect. Another reason for being vegetarian is empathy for the animals. Many people are animal lovers who could not stand to see killing them because poultry and livestock animals also have a life like the common pet. Lastly, some people became vegetarian because they became more conscious of their health. Some studies say eating meat can increase the risk of having cancer and other diseases (Figus, 2014).

However, despite the growing number of vegan and vegetarian eaters especially in the Philippines, few or even limited numbers of restaurants or food stalls and kiosks serve purely plant-based and meatless dishes on their menu. In Angeles City, there was only one established restaurant that serves vegetarian food. There were also small vegetarian restaurants, but some of them closed already, and maybe there others were homebased therefore they are not known to the public. So, putting up a vegetarian food stall or kiosk in the middle of the city proper is an excellent opportunity to introduce or normalize the selling of meatless or plant-based menus. This study is focused on identifying the viability of establishing a vegetarian food kiosk in Angeles City. This research will give benefit the different stakeholders especially the customers since they will have an additional option to eat healthy and good food. However, it is important to note that this study has limitations. The target market is the people residing in Angeles City, specifically near Nepo Quad in the province of Pampanga in Central Luzon. The research span was from November 2020 to March 2021. All the data and related information of this study were gathered through primary and secondary sources such as the survey questionnaires, books, journal articles, personal observations, and the web. The study was conducted during quarantine caused by the pandemic COVID-19. The researcher's movement was constrained, and the data gathering was done mostly online through Google Form.

Methodology

This part determines the sources of data and instrumentation, the research design, population and sampling techniques, data gathering procedures, and the analysis of data.

Research Design

The researcher used the descriptive statistical method. This method collects information from the population then described their characteristics. The information was gathered from a sample group that represented the whole population. The method suits the study since its aim was to identify if the business will be patronized by the proposed target market.

Population and Sampling Techniques

Through simple random sampling, 410 *Angeleños* aged 16-60 years old participated in the study conducted within Angeles City. The researcher chose the residents of Angeles City since they were the possible customers of the proposed business. Additionally, because they were students who have money allowance and employees that could afford the proposed product.

Instrumentation

Primary and secondary data were utilized for the study. Primary data includes the results of the survey questionnaire and the result of an interview with the related business. On the other hand, the secondary data were collected from the different published books and articles primarily online because of the restrictions in the movement caused by COVID-19.

Analysis of Data

The advantage of utilizing Google Forms is that it automatically counts the number of respondents and tally the results. When the respondents reached 410, the google form automatically closed and the researcher started to tabulate the results and immediately transferred it to Microsoft Excel to analyze the data. Financial Ratios (Gitman & Zutter, 2012) was used to identify if the proposed project is viable. Some financial ratios utilized were Capital Budgeting Techniques, Internal Rate of Return (IRR), and Profitability Index.

Ethical Considerations

Ethical considerations were practiced to ensure confidentiality and anonymity in handling the data. Names of the respondents were not collected, and the form has a letter informing them that all the data collected will be treated with utmost confidentiality.

Results and Discussion

This part discusses the results of the data collected. Data were translated to analyze if the project is feasible. The results of the study aim to identify the viability of establishing vegetarian food kiosk in Angeles City proper. A total of 410 *Angeleños* participated in the online survey. When asked if they already tried eating a meatless of plant-based food, 36.2% said yes. However, a total of 94.60% were willing to patronize the product if a vegetarian food stall/kiosk will be opened in Angeles City.

Marketing Study

Marketing is a vital aspect of a feasibility study because it talks about its customers' needs and wants. According to Barringer and Ireland (2013), one characteristic that made an entrepreneur successful is to have a product or service focused on customers.

The proposed business offers products and services in meals such as vegetarian sisig, vegetarian barbeque, vegetarian *pininyahan*, plant-based chicken skin, and plant-based chicken fillet. The said products will be served as rice toppers. The rice of each menu is done in a paper box of fried rice.

The researcher collected the historical population of Angeles City from 2015. Historical data were utilized to project the demand then used the statistical straight-line method in projecting the population. The generated projection of the population was important to the supply and demand analysis.

Table 1 shows the projected demand in quantity per order of the proposed vegetarian kiosk from the year 2020-2026. The quantity demanded was computed by multiplying the projected population by the percentage of respondents in the conducted survey that are willing to avail and try the said service.

Table 1. *Projected Demand of Vegetarian Food kiosk in Quantity per Order 2020-2026*

Year	Total Orders	Increase/Decrease	Growth Rate
2020	3,373,815.28	0	0
2021	3,555,198.34	181,383.06	5.38%
2022	3,736,581.41	181,383.06	5.10%
2023	3,917,964.47	181,383.06	4.85%
2024	4,099,347.54	181,383.06	4.63%
2025	4,280,730.60	181,383.06	4.42%
2026	4,462,113.67	181,383.06	4.24%
TOTAL	27,425,751.31	1,088,298.39	28.62%
AVERAGE	3,917,964.47	155,471.20	4.09%

Table 1 shows That the average growth rate per year is 4%. The growth rate was computed by getting the difference between the present and past year divided by the past year. The total quantity demanded per order is expressed annually.

According to the survey, only 32.6% of the respondents have tried to eat in vegetarian restaurants or food stalls. So, even though the food industry, specifically the food stall industry is saturated, there is still a lot of potential for the proposed business.

Table 2 shows the projected supply of vegetarian restaurants and food stalls in quantity per order from 2020-2026.

Table 2. *Projected Supply of Vegetarian Restaurant in Quantity per Order, 2020-2026*

Year	Total Orders	Increase/Decrease	Growth Rate
2020	385,080.31	0	0
2021	405,783.00	20,702.69	5.38%
2022	426,485.68	20,702.69	5.10%
2023	447,188.37	20,702.69	4.85%
2024	467,891.06	20,702.69	4.63%
2025	488,593.75	20,702.69	4.42%
2026	509,296.44	20,702.69	4.24%
TOTAL	3,130,318.61	124,216.13	28.62%
AVERAGE	447,188.37	17,745.16	4.09%

It is seen in Table 2 that there is an average growth rate of 4% from the year 2020 to 2026.

The projected supply in quantity was computed by multiplying the projected population by 32%, the percentage of the respondents who said they eat in vegetarian restaurants.

After computing demand and supply per quantity and in peso, the next thing to compute is the unmet demand and the market share.

Table 3 shows the unmet demand, capacity, and market share of the vegetarian kiosk.

Table 3. *Demand and Supply Analysis of Vegetarian Food Kiosk in Quantity per Order, 2020-2026*

Year	Demand	%	Supply	%	Unmet	%	Capacity	Market Share
2020	3,373,815.28	100%	385,080.31	11.41%	2,988,734.97	88.59	88,920	2.98%
2021	3,555,198.34	100%	405,783.00	11.41%	3,149,415.35	88.59	93,366	2.96%
2022	3,736,581.41	100%	426,485.68	11.41%	3,310,095.72	88.59	98,034	2.96%
2023	3,917,964.47	100%	447,188.37	11.41%	3,470,776.10	88.59	102,936	2.97%
2024	4,099,347.54	100%	467,891.06	11.41%	3,631,456.48	88.59	108,083	2.98%
2025	4,280,730.60	100%	488,593.75	11.41%	3,792,136.85	88.59	113,487	2.99%
2026	4,462,113.67	100%	509,296.44	11.41%	3,952,817.23	88.59	119,161	3.01%

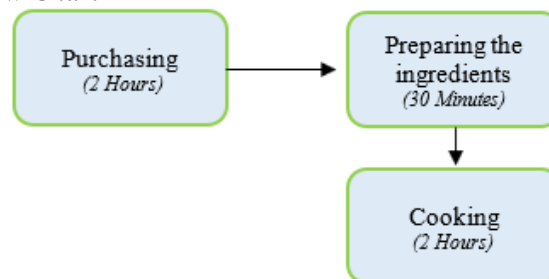
The “unmet” label that can be seen in the table was the difference between demand and supply. It can also be seen in the table that there were still 89% that need to satisfy in the market. The capacity is identified by the researcher based on the ableness to produce orders per day. The market share is the quotient of capacity divided by the unmet demand.

In venturing into a business, all departments and aspects should be in harmony. All are dependent on each other. The proposed business will serve five menus. The pricing strategy that will be utilized in the proposed business venture is a cost-plus method and psychological pricing (Armstrong & Kotler, 2011).

Since the proposed business is small, the researcher will just utilize the different social media and will create a commercial page. The boosting feature of Facebook will be used to reach more people.

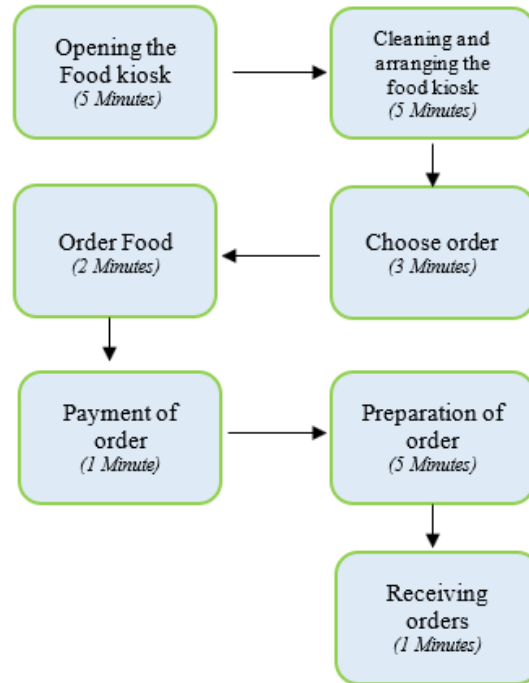
Technical Study

The production process is one of the vital parts of a business of any kind. It is critical because it is where the actual product is done. Customers especially in the food industry are very sensitive when it comes to the production of any dish. So, preparation should be done effectively and efficiently. The production process of the proposed business is summarized in Figure 1.

Figure 1. *Production Flow Chart*

On the other hand, the service processes of the proposed business comprise, the opening of the kiosk, cleaning and arranging the kiosk, receiving the chosen order of the customer, receiving the payment of an order, preparation of order then lastly is serving the orders to the customer. The service process is summarized in Figure 2.

Figure 2. Service Flow Chart



Equipment, machinery, furniture, and fixtures will be used for the whole operations of the business. These are the things that will be utilized by the employees to perform the necessary task to deliver the service to the customers. The list is summarized in Table 4.

Table 4. List of Equipment, Furniture, and Fixtures

Items	Total Price	Estimated Life (Years)	Depreciation Expense Per year
Food Kiosk	50,000	10	4,800
Small Chest Freezer	9,450	5	1,790
Rice Cooker	5,000	5	960
Kitchen Exhaust Hood	8,990	5	1,698
Cash Register	14,100	5	2,720
Total:	Php 87,540		Php 11,968

Table 4 shows the list of the equipment and machinery that cost Php 5,000 and above. The total cost for capitalization is Php 87,540. The total depreciation cost is Php 11,968, it is computed using the straight-line method.

Table 5 presents the cost of small equipment.

Table 5. List of Small Equipment

Items	Qty	Unit Price	Total Price
Gas Stove Double Burner	1	2,300	2,300
Gas Tank	2	600	1,200
Fire Extinguisher	1	1,100	1,100
Cellphone	1	2,000	2,000
Monoblocs	4	500	2,000
Total			8,600.00

The researcher will rent a space in one of the commercial buildings in Nepo Quad, Angeles City. The proposed location of the food kiosk is in the heart of Angeles City proper. The location is very strategic because it is near the 3 malls, schools, church, and BPO offices. It is strategically located to places accessible among the residents of the nearby municipalities like San Fernando City, Porac, Magalang, and Mabalacat, Pampanga. The length of the proposed food kiosk is 12 feet and the width is 5 feet. The food kiosk will be customized based on the ergonomics of the operations.

The vegetarian kiosk will operate at least 57 hours (fifty-seven hours) in a week. The operation will start from 10:00 A.M. to 7:00 P.M. from Sunday to Thursday and from 10:00 A.M. to 5:00 P.M. on Friday. Because the owner is an Adventist, they will all have a day-off every Saturday.

The researcher assumed that the average cups that will be sold per hour per menu is 6 cups, so a total of 30 cups per hour. There will be an increase of 5% in the business capacity per year due to developing customer loyalty. Table 6 presents business capacity from 2020 to 2026.

Table 6. *Business Capacity*

Year	Total no. cups that can be sold per hour	Operating Hours in a week	Capacity in a week	Annual Capacity in Quantity	Annual Capacity in Peso
2020	30	57	1,710	88,920	7,113,600.00
2021	32	57	1,796	93,366	7,693,358.40
2022	33	57	1,885	98,034	8,320,367.11
2023	35	57	1,980	102,936	8,998,477.03
2024	36	57	2,079	108,083	9,731,852.91
2025	38	57	2,182	113,487	10,524,998.92
2026	40	57	2,292	119,161	11,382,786.33

The vegetarian food kiosk will have a lot of waste from the peeled vegetables and plastics. So, the business itself will practice proper waste segregation.

The proposed Vegetarian Kiosk will incur utility costs such as electricity, water, waste load allocation, and waste disposal. The mentioned costs are very important for the production and operations of the business. The computed cost for electricity is Php 5,000, water is Php 2,000, the mobile load is 300, and waste disposal is Php 500. The total monthly utility cost is Php 7,800 and the computed annual utility cost is Php 93,600.

On the other hand, the estimated total annual general fees and supplies expense is Php 175,448. Lastly, the total raw materials cost of the proposed business was computed. The total cost of raw materials is Php 194,712.00 monthly cost, and Php 2,541,656.00 annual cost.

Entering the food and beverage industry is not difficult. However, sustaining the business is the challenge. One of the things that the owner should look at and strictly monitor is the quality of the service they provide. The staff must be oriented on how to always maintain the cleanliness in their workplace and they must always take care of all the ingredients. The staff must wear hairnet and gloves, and cutleries should be given to customers along with table napkins.

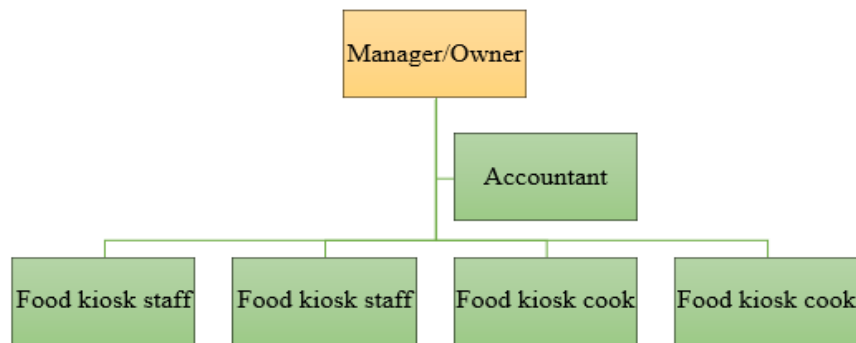
Organization and Human Resource Study

Sole proprietorship form of business was chosen because it is the most common and the simplest, and because the business will be new in the market.

To avoid legal disputes and for the business to run ethically and legally, it should apply for permits and licenses. The necessary legal papers for the proposed business are DTI registration, Bureau of Internal Revenue certificate of registration, barangay permit, mayor's permit, sanitary permit, and fire inspection certificate.

Organizational structure is the formal arrangement of jobs within an organization (Robbins & Coulter, 2012). Deciding the organizational structure depends on the size and the type of business that the researcher wants to enter. Figure 3 shows the illustration of the organizational structure of the proposed vegetarian kiosk.

Figure 3. *Organizational Chart*



It is shown in the organizational chart that the proposed business will have 5 employees. The owner will serve as the manager. Below the manager are the two food kiosk staff and two food kiosk cooks. Two of each so that they will have alternate day-offs and that if the other one is not available, there will still be one who will stay. The accountant will be outsourced. The owner may also ask an accounting firm to process the necessary papers. The researcher assumed the number of employees will be constant for the next five years but any decisions to increase or decrease the employees during this period shall be made as needed.

The employees' salary will be divided into two cut-offs. The service rendered from the 1st day to the 15th day of each month will be given on the 25th, and the service that they rendered from the 16th day to 30th or 31st day will be given on the 10th day of the month. 10 days will be allotted for the process and computing of salaries, including the computation of mandatory benefits, deduction of late and absences, overtime pay, and commission.

The employees will get a one-month basic salary that is equivalent to the minimum wage set by the Department of Labor and Employment, overtime pay if applicable, mandatory benefits such as Social Security System (SSS), Philippine Health Insurance Corporation (PhilHealth), and Home Development and Mutual Funds (HDMF) or the Pag-IBIG Fund. A 13th month pay every year that will be given as early as November 25 of each year, 3,000 cash gift, and a commission if the business exceeded its yearly quota.

The employees will only be required to work 5 days a week. Saturday is a mandatory day-off for all the employees. Additionally, they will be entitled to another day-off on any day of the week depending on the schedule assigned to them. Table 7 summarizes the salary and wage expenses for the employees.

Table 7. *Annual Employee Benefit 2020*

Position	Net Monthly Income	Net Annual Pay	13th Month Pay	Christmas Bonus	Annual Compensation
Manager	18,400.00	220,800.00	20,000.00	5,000.00	245,800.00
Staff 1	10,701.64	128,419.66	11,626.05	3,000.00	143,045.71
Staff 2	10,701.64	128,419.66	11,626.05	3,000.00	143,045.71
Cook 1	11,950.35	143,404.20	12,990.00	3,000.00	159,394.20
Cook 2	11,950.35	143,404.20	12,990.00	3,000.00	159,394.20
Total	Php 63,703.98	Php 764,447.72	Php 69,232.10	Php 17,000.00	Php 850,679.82

Every business endeavor should be organized, and the plan should be clear so that there will be a higher degree of success especially for the start-ups. Hence, it is important to set a timetable so that the entrepreneur has a guide and target for each procedure. The projected timetable indicates the length of time the researcher will need before the project feasibility study is formally implemented. Figure 4 illustrates the projected timetable of the business.

Figure 4. *Gantt Chart of the Projected Timetable*

Activities	1	2	3	4	5	6	7	8	9	10
Preparation of the feasibility										
Formal Organization										
Constructing the Food Kiosk										
Acquisition of equipment										
Recruitment of employees										
Promotion										
Start the business operation										

Strategic Management Study

Strategic management can be defined as the art and science of articulating, executing, and assessing cross-functional choices that enable an organization to accomplish its purposes. A strategic plan is a firm's game plan. The established plan will be the guide of all the department units in an organization, it is like a map. Its purpose is to generate new and different opportunities for tomorrow (David, 2011).

The proposed business' vision is to be the region's leading healthy food kiosk by 2027 and its mission is to provide excellent, quality, healthy, clean, and affordable foods with a deep sense of truthfulness, stewardship, and cleanliness to every service offered. Figure 5 shows the proposed business' logo.

Figure 5. *Business Logo*



The proposed business name is Garden Box. It means garden in a box. The word Garden represents the plant-based food of the menu added with the word box because it signifies the food will be served in a paper box. The color of the logo is different shades of green because it indicates the color of plants. There is a letter "V" in the middle of the circle that means vegetarian.

The proponent established different contingency plans for the different circumstances that may occur. They are mentioned in the proceeding paragraphs.

Since the life of workers is still important than the profit, before natural calamities occur, the worker will undergo training at least to the basic first aid actions so that they will know what to do. Additionally, the workers should be given an insurance benefit.

The workers should also be familiar with the different fire exits of the working areas to know where to go in times of fire. The food kiosk will also own fire extinguishers.

In times of power interruptions, the food can be cooked in the house of the owner.

In case one employee is on leave, or just absent without filing leave, the manager should take over the duty.

If the situation is unfavorable and the business incurs financial losses, the company will decide on the areas of business appropriate for cost-cutting.

In case the proposed business did not work as planned, the proponent decided to move to another location if necessary, such as placing the kiosk on the sidewalk so that rent cost will be reduced. The manager or owner will also decide whether to reduce the number of workers.

Lastly, If the worst-case happened, if the business does not do well financially, the manager will sell the food kiosk to other vendors, and the other assets will also be disposed of to pay the creditors. The owner also has the option of selling the business to any food kiosk or food stall owner. All legal procedures in closing the business will be followed.

Financial Study

All businesses and organizations will not run without financial support. So, it is very important to plan in terms of its finances. This part is very significant especially if one wants to gain investments from different sources of funds (Gitman & Zutter, 2012).

All aspects of the business were computed and mentioned in the preceding chapters and collected here to prepare the Statement of Comprehensive Income, Statement of Financial Position, and Statement of Cashflow of Garden Box Vegetarian Food Kiosk.

An assumption on how much is the necessary investment to start the business was made. It includes the pre-operating expenses, working capital, and capital expenditures.

The computed pre-operating expenses are Php 13,100. This amount includes the cost of securing different permits, the feasibility study budget, and the hiring of upcoming employees.

The needed working capital was also computed. At least 50% of the expenses needed or an amount equivalent to 6 months of production cost was secured. The computed working capital is Php 2,124,459.39.

Lastly, the amount of money for capital investment such as equipment, machinery, furniture, and fixtures were also computed. In this case, the 50% amount for will be secured 6 months. The total capital expenditures required to start the business operation is Php 47, 020. Should the needed capital is not met, the proponent will seek help from loved ones who will be willing to cover up the initial expenses needed.

Every decision in the company must be accompanied by figures. So, financial statements have a big usage to every business. Financial statements are comprised of Statement of Comprehensive Income, Statement of Financial Position, and Statement of Cashflows. The said statements are used by several stakeholders such as creditors, suppliers, and investors to assess if the proposed business is worth pursuing. Table 12 shows the projected Statement of Comprehensive Income of the Garden Box Vegetarian Food Kiosk in the year 2022-2026.

Table 8. *Statement of Comprehensive Income*

Garden Box Vegetarian Food Kiosk Projected Statement of Comprehensive Income for the years ended December 31, 2022-2026					
	2022	2023	2024	2025	2026
Gross Sales	8,320,367.11	8,998,477.03	9,731,852.91	10,524,998.92	11,382,786.33
Less: COGS	3,271,143.50	3,434,700.67	3,606,435.70	3,786,757.49	3,976,095.36
Gross Profit	5,049,223.61	5,563,776.36	6,125,417.20	6,738,241.43	7,406,690.97
Less: Operating Expenses	911,723.29	972,875.05	1,019,339.40	1,068,126.97	1,119,353.92
EBIT	4,137,500.33	4,590,901.31	5,106,077.80	5,670,114.46	6,287,337.05
Less Income tax expense	1,174,000.10	1,319,088.42	1,483,944.90	1,664,436.63	1,861,947.85
Income after tax	2,963,500.22	3,271,812.89	3,622,132.90	4,005,677.83	4,425,389.19

As presented in Table 8, the net income after tax of the proposed business is Php 2,963,500.22 in the year 2022 and will increase up to Php 4,425,389.19 in the year 2026.

Table 9 shows the Statement of Financial Position of Garden Box Vegetarian Food Kiosk.

Table 9. *Statement of Financial Position*

Garden Box Vegetarian Food Kiosk Projected Statement of Financial Position for the years ended December 31, 2022-2026					
	2022	2023	2024	2025	2026
ASSETS					
Total Current Assets	6,483,443.62	9,929,134.62	13,745,673.88	₱17,962,191.42	₱22,616,277.82
Non-Current Assets					
Total Non-Current Assets	82,552.00	68,964.00	55,376.00	₱41,788.00	₱28,200.00
Total Assets	6,565,995.62	9,998,098.62	13,801,049.88	₱18,003,979.42	₱22,644,477.82
LIABILITIES AND EQUITY					
Liabilities					
Total Liabilities	₱1,478,036.00	₱1,638,326.11	₱1,819,144.47	₱2,016,396.18	₱2,231,505.39
Total Equity	₱5,087,959.61	₱8,359,772.50	₱11,981,905.41	₱15,987,583.24	₱20,412,972.43
Total Liabilities and Owner's Equity	₱6,565,995.62	₱9,998,098.62	₱13,801,049.88	₱18,003,979.42	₱22,644,477.82

Table 9 shows that the total assets are Php 6,565,995.62, equity is Php 5,087,959.61, and liabilities is Php 1,478,036.00. The researcher also used financial ratios in analyzing the financial capability of the proposed business.

Capital Budgeting Techniques analyzes the status of the business if it is acceptable to pursue or not. The researcher used Net Present Value (NPV), Internal Rate of Return (IRR), and benefit-cost ratio as an instrument to compute the capital budgeting.

The computed net present value (NPV) is Php13,185,270.92, the internal rate of return is 189% and the benefit/cost of a ratio is 9.57. The results in computing the capital budgeting method are all positive, therefore, the proposed project is accepted.

Profitability results also show positive outcomes. Table 10 summarized the Gross Profit Margin, return on sales and Return on Investment.

Table 10. *Profitability Ratio*

	2022	2023	2024	2025	2026
ROS	50%	51%	52%	54%	55%
ROI	139%	154%	170%	189%	208%
GPR	170%	170%	169%	168%	167%

Liquidity Ratios are used to assess the payment ability of the firm to meet its short-term debt or accounts payable and current long-term debt position. Table 11 summarizes the Liquidity ratio of the projected project.

Table 11. *Liquidity Ratio*

	2022	2023	2024	2025	2026
Current Ratio	439%	606%	756%	891%	1013%
Quick or Acid-test Ratio	424%	592%	743%	879%	1002%

Socio-Economic Responsibility

Each business owner should keep in mind that their success is not solely from their strength and efforts alone. They should recognize that many players aside from the organization is responsible for their success. Thus, it is also important to mention and distinguish in the planning process what could be the impact of the proposed business on their stakeholders.

The proposed vegetarian food kiosk will not just sell simple food, but also assures that the food is healthy and clean. The benefit that the client will get is a healthier food option aside from what they usually eat in their meals. The proposed business is planned to be establish in the heart of Angeles City where the Angeles Business Center is located and is surrounded by several BPO companies, malls, schools, and churches.

Additionally, the proposed study will not just give benefits to the customers but to the employees as well. The proposed business can give additional jobs to at least 5 people. The proponent plans to hire Adventist people so that they will have the same mindset when it comes to keeping the sabbath. Though the researcher is open if there is a capable non-Adventist applicant, we know in human resource management lesson that it is better to hire employees who have the personality and values that are a match to the organization's culture (Robbins & Judge, 2017).

The business cannot run without having resources to use. They will need equipment, machines, supplies, and raw materials. In the case of the proposed vegetarian kiosk, the business will need ingredients every day. So, the supplier will get benefit from having the proposed business as their customer. As long as the business is running, they will have a customer.

The study will also benefit the owner. The owner will get financial reward if the business goes smoothly. Another is the satisfaction of having their own business as part of the goals of the proponent.

The proposed business will give tithes to the church which is 10% of its net income. Tithing will be done because the 10% is not owned by the proponent but by God and should be returned religiously.

Lastly, the government will also benefit from businesses as long as they are legal. Businesses pay taxes monthly, quarterly, and annually. Taxes paid will go to the government. The government will now return the money gathered from taxes to the public by providing public goods like public hospitals, public schools, and the like.

Lastly, the income of the proposed business will contribute to the total market and industry income and eventually to the gross domestic product and gross national income.

After discussing the results in methodology, it is shown that there is a possibility that the business is feasible.

The study focuses on identifying the feasibility of establishing the Garden Box Vegetarian Food Kiosk at Nepo Quad, Angeles City considering all business aspects including marketing, technical, organization and management, and financial aspect of the business.

Based on the findings of the study, the proposed business has the potential to be successful and will generate profit. It is therefore concluded that the “Garden Box Vegetarian Food Kiosk” is feasible and viable.

The researcher recommends to the future researcher about vegetarian food business to study venture in the different menu and study if catering services is feasible. The researcher also recommends studying the different locations aside from Pampanga.

It is also recommended to invest to this project since the results showed a positive impact to the lives of many people.

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Factors Affecting Students' Pursuance to Complete the Bachelor of Science in Accountancy Course

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Abstract

PThe accounting profession has played a vital role in the business world because of the financial information that helps in the decision-making of businesses. Statistics from several studies indicate a downward trend in accounting graduates. Therefore, this study determined the factors affecting the students' pursuance to complete the Bachelor of Science in Accountancy (BSA) program given that several studies indicated a decline in the enrolment in accounting degrees. The factors considered were stereotypes, social conditions, social status, and economic reasons. The cross-sectional design was employed to gather information using survey questionnaires. The study was conducted in three selected higher education institutions in the Philippines with a total of 145 freshmen and sophomore students, chosen through stratified sampling. Regression analysis revealed that stereotypes and economic reasons significantly influence the students' degree of pursuance to BSA course. The findings implied that students who are less likely to stereotype and have stronger economic reasons are more likely to complete the accountancy program. On the contrary of the results, the factors social conditions and social status *do not significantly influence* the pursuance of the students. The study also revealed that regardless of year level and sex, the students' degree of pursuance remains unaffected. One implication of this study is for students to disregard the stereotypes on the accounting profession and focus more on the economic reasons to have a higher level of pursuance to finish the accountancy course. They must understand the scope of the profession to be more dedicated to becoming an accounting professional.

Keywords: *pursuance to complete the Bachelor of Science in Accountancy (BSA) stereotypes, social conditions, social status, and economic reasons*

When choosing a field of study, students are influenced by their perceptions and other factors around them. Students may have perceptions about the accounting profession from people who influence them, making them choose it as their career in the future. It only means that perception and social factors have a significant role for students when pursuing a career. On the other hand, many students are not pursuing to continue the course in the following years of their study in college.

The accounting profession has always played a vital role in the business world because of the financial information that helps in the decision-making of businesses. Tysiac (2017) stated that in the school year 2015-2016, the number of first-year undergraduate accounting students reached a new high of 216,482 and will continue to rise in the following years. However, despite the high number of accounting enrollees in the country, there is still a low number of graduates in the course. It is shown in the data presented by Tysiac that there is a decrease in the number of CPA Exam takers every year. It only shows a decline in enrollment for level 2 to level 3 students in college. Some students chose to shift due to the factors that affect their decisions on pursuing the course.

In the years in the accounting course, the number of enrollees is continuously declined. In this case, the accounting students may have encountered some factors that affect their decision to pursue the course or not. It is essential to know these factors to know if it has influenced them to make an accounting career choice. Poskitt and Bonney (2016) stated that perceptions impact decision-making about the choice of subjects, the course of education, and training, and overall career ambition. Aside from their perception, there are other factors such as personal influences of their families or friends and the course's level of difficulty.

Going through an accounting course is not easy, as it requires discipline and hard work. Despite the hardships, many are still choosing the degree because of the factors influencing them to pursue the accounting profession. Students choose to remain in accounting because they are sincerely interested in the subject, but some choose not to. Accordingly, Costa et al. (2015) mentioned that introductory courses have made students change majors because they perceive accounting as dull. The study showed that the students did not value the first year of the accounting degree. Besides, the findings indicated that these students were not persuaded that they would be helped to excel in their careers by the accounting courses. Introductory courses given to level 1 and level 2 accounting students may be the reason for them to know the real work of accountants in the business world. As a result, they chose to shift to another field of study. Students at both levels are the most prone when it comes to shifting. Hence, it is vital to know the considerations that affect their decision in pursuing a profession in accounting.

Statistics from several studies indicate a downward trend in accounting graduates in recent years such as the enrollment data in James Madison University (JMU) School of Accounting (Gabbin, 2019). In the U.S. News and World Report rankings for the Best Undergraduate Accounting Programs 2019, JMU ranked with Belmont University for 6th place in Regional Universities South and yet for the past four years a substantial decrease in enrollment of 34% from the accounting program was seen.

A number of researchers found considered various career determinants (intrinsic, extrinsic, interpersonal, geographical, and psychological factors) such as the 150-credit hours mandate (Sugahara, 2008), personal interest with the profession (Jaradat, 2017), and interests in a specific higher education program (Vulperhorts et al. 2019). These studies, however, were conducted with secondary students or those who are still deciding on a career path, rather than those who are already enrolled in or have completed accounting introductory courses.

The continuous decline in the enrollment of the Bachelor of Science in Accountancy course has led to this research. Accordingly, the factors around these accounting students may have influenced their decision to pursue the accounting profession or not while at the college level. As a result, the aim of this research paper is to investigate specific factors that influence students' degree of pursuance to complete the accountancy program. This study determined the factors affecting

students' pursuance to complete Bachelor of Science in Accountancy course. The following questions were addressed in this study:

1. How do accountancy students perceive the following?
 - a. Stereotypes
 - b. Social Conditions
 - c. Social Status
 - d. Economic Reasons
2. What is the students' degree of pursuance to Complete the Bachelor of Science in Accountancy Course?
3. Do the following factors significantly correlate to students' pursuance to Complete the Bachelor of Science in Accountancy Course?
 - a. Stereotypes
 - b. Social Conditions
 - c. Social Status
 - d. Economic Reasons
4. Which of the following factors significantly predict the students' pursuance to Complete the Bachelor of Science in Accountancy Course?
 - a. Stereotypes
 - b. Social Conditions
 - c. Social Status
 - d. Economic Reasons
5. Is there a significant difference in students' extent of pursuance to Complete the Bachelor of Science in Accountancy Course considering the following?
 - a. Year level
 - b. Sex

Null hypothesis

1. The following factors do not significantly correlate to students' pursuance to Complete the Bachelor of Science in Accountancy Course:
 - a. Stereotypes
 - b. Social Conditions
 - c. Social Status
 - d. Economic Reasons
2. The following factors do not significantly predict the students' pursuance to Complete the Bachelor of Science in Accountancy Course:
 - a. Stereotypes
 - b. Social Conditions
 - c. Social Status
 - d. Economic Reasons
3. There is no significant difference in students' extent of pursuance to Complete the Bachelor of Science in Accountancy Course considering the following:
 - a. Year level
 - b. Sex

Review of Literature

Many accounting programs have seen a drop in enrollment, and concerns about accounting standards have been raised. Even though the number of freshmen enrolling in business schools has risen dramatically, the number of students choosing an accounting course as a major has declined. Evidence and pressure from various factors have prompted the calls for a change. Intrinsic principles, financial incentives, the job market, and the cost-benefit analysis are all commonly

used as determinants. Studies identified several other factors such as stereotypes, social conditions, social status, and economic reasons

Stereotypes

Madon et al. (2001) defined that a stereotype, according to the Oxford English Dictionary, is a commonly accepted belief but static and oversimplified image or concept of a specific sort of individual or object." Stereotypes abound in our society. They discuss ethnic groupings ("Asians excel at math."), political parties ("Republicans have a lot of money"), genders ("Math is a male-dominated field."), and a variety of other topics. Only social classes are included in the sociological approach to stereotyping. It sees stereotypes as inherently flawed and negative generalizations of group characteristics that represent the stereotype's prejudices (Steele 2010).

Tavares and Dantas (2017) examine the portrayal of accountants in 21st-century films, concluding that the characters were presented positively and given more screen time, even becoming heroes in some cases, such as in the film *The Accountant*. The shift in the profession's definition nevertheless fosters the recognition of public opinion and society's influence on how accountants perform (Tavares & Dantas, 2017). It can also cause changes in the self-image of students and accounting professionals, as well as enhance their self-esteem. Film productions have influenced changes in the social representation of accountants, beginning with the classic stereotype and progressing to the contemporary stereotype.

According to a study conducted by Sawyer (2019), accounting is a field dominated by men and only for men. But according to the American Institute of Certified Public Accountants, in 2015-2016, the number of males and females who got a bachelor's degree in accounting was about 50-50, with 47 percent males and 53 percent females. The male-female ratio for those who got a master's degree in 2015-2016 was exactly 50-50. Individuals must put in extra effort to overcome the negative motivating effects of gender stereotyping (Ellemers et al., 2018). When women are given adequate help to develop resilience skills in businesses and a larger proportion of women are visible in leadership roles, change will occur (Tabassum et al., 2019). Accountancy is a job that requires long periods of concentrated attention at a desk. However, it is not exclusively a career for introverts. Accountants are expected to play a prominent role in today's organizations, contributing to meetings and business studies that can influence a company's direction and profitability (Zimmel, 2021).

Social Conditions

Accountancy as profession is relatively elite. The majority of accountants in United Kingdom have a professional background and a degree from a top university (Paisey et al., 2020; Friedman et al., 2017; Duff, 2017). In 2009, 73 percent of ICAS members who qualified had parents who worked in high-powered positions, and these accountants grew up in affluent locations with low levels of deprivation (Paisey et al., 2020). The pressure to retrain or upgrade their skills will only increase. Accountants must continue to learn and develop new abilities to stay relevant and competitive in the field. Professionals should improve their skills in areas like decision-making assistance, analytic data, management, and plan that are not easily automated (Hood, 2018).

Social Status

One of the factors that influences accounting students' career choices is the possibility of advancement in the profession. Prospects for accounting advancement sectors are better than in other professions. These opportunities motivate people to outperform obstacles and demonstrate that they can perform at a high level on the job (Cohen et al., 2020).

Salary, according to Ozsoy (2019), is a hygienic component that drives people to work. Harun (2020) also claims that the initial income is the most important factor influencing a student's job decision. Demel et al. (2019) also claim that the starting wage is a strong predictor of accounting

students' motivation in pursuing a career in the field. According to Duff (2017), the Big Four's goal to hire the best people is motivated by a desire to build reputational capital as well as an awareness that these people must pass difficult professional exams. One factor that these big firms are looking for is the cultural capital, where it appears in both institutionalized and embodied forms of credentials such as academic or professional titles. Accounting is powerful in today's world because of its unique position as a major tool for guiding and governing businesses, economies, and society. Appreciating accounting's social dimension allows its moral dimension to shine through, dispelling the myth that accounting is amoral. The full dimension of accounting is the appreciation of accounting as technical activity, social practice, and moral practice (Carnegie and Tsahuridu, 2018).

Economic Reasons

The accounting profession contributes to economic growth by assisting in the maintenance of global standards, industry standards, sustainability, capacity building, and integrated reporting. When a market's financial infrastructure is sound, investors can be assured of its competitiveness and long-term viability. It is held by governments, but the monies are mismanaged and mismeasured. Citizens have a right to demand more as the true owners of these properties. If public wealth was properly estimated, controlled, and understood, society would prosper. Modern accounting and trained accountants are, nonetheless, required in the public sector to assist in the development of healthy public finances. Accounting and accountants in the public sector are needed if the world is to expand (Gray, 2011).

The scarcity of public sector accountants is reflected in the poor quality of information utilized by governments to manage their finances. This is bad for everyone because improper accounting procedures may sway entire societies and eventually bring them down (Detter, 2019).

According to Hunter (2021), accountancy is increasingly confronting a flood of social memes that claim, without evidence, that robots will take over occupations, that demand for accountants is declining (which is false), and that technical accounting abilities are being automated. Accountant and auditor occupations are expected to expand 10% over the next decade based on the Bureau of Labor Statistics (BLS). This is far faster than the rate of increase for other occupations. The increasing complexity of the financial sector, on the other hand, is putting pressure on accountants to improve their skills. Advanced degrees, according to the BLS, provide applicants an advantage ("Five Accounting Jobs to Watch Over the Next Five Years," 2019). Those who work in the financial industry, such as Accountants and jobs in the accounting field, earn some of the highest salaries in the Philippines. Financial professions are ranked number four in the top ten highest-paying careers in the Philippines for people with one year to five years of experience according to Jobstreet. Accounting jobs pay an average of ₱27,188 for those with one year to five years of experience. Starting pay for an entry-level accounting assistant is ₱21,345. For newcomers to accounting, a starting salary that would assist in getting started would be really beneficial ("Three Reasons Accounting Job is the Top Choice in the Philippines," 2017).

Student's Pursuance in Bachelor Courses

Pursuing a bachelor's degree in college is essential to achieve the desired career in the future. Recent research has found that students' interests are vital in making a well-informed higher education decision, but it is unclear how students choose the interests they want to pursue. According to Vulperhorts et al. (2019), students need to weigh their interests in a specific higher education program before pursuing it. Because students cannot follow all their interests in a higher education program, they must weigh their various, sometimes divergent, interests and agree to a specific set of interests. It is challenging to choose which interests to follow because committing to one requires sacrificing other interests, leading to students regretting their decision. Subsequently, this may lead to changes in the program to pursue or shift to another course.

Higher education institutions are confronted with several issues that necessitate a deeper knowledge of the variables that affect students' decisions to change majors. Many researchers stated that some students shifted majors because the new majors captivated their attention, inspired them, allowed them to use and demonstrate their abilities, and made them happier because the coursework was enjoyable. It only means that the level of their pursuance in their previous course became low, and they eventually lost interest. Jaradat (2017) mentioned that students' pursuance of a specific major in college is based on their interests. Being interested in the major they are currently in made them pursue it. However, there may be factors that influenced them to pursue another. In this study, the second-year students have the highest number of students who changed their majors. Therefore, the level of pursuance for students is based on their interest in a specific major. Their personal and course preferences served as their basis for their pursuance to finish the major they have chosen.

Extrinsic motivation is a force that motivates people to do things they do not want to do because they are enticed by external incentives (Thing & Jalaludin, 2018). Extrinsic motivation, such as a high salary and job availability, has no bearing on accounting students' career paths. (Porter & Woolley, 2014; Ng et al., 2017). They came to the conclusion that extrinsic incentive has a minor impact compared to intrinsic motivation.

Stereotypes and Pursuance

Since the 1980s, accounting education has been the topic of heated discussion. According to previous studies, starting accounting students have a negative perspective of the profession. Accounting is a common occupation among students, but "negative views about the essence and role of accounting persist." (Fisher & Murphy, 1995).

According to a well-known study (ACCA, 2012), accountants should strive to maintain high moral standards to improve the public's view of the profession. It is perceived that accounting is a dull course and accountants are introverts (Ticoi & Albu, 2018) and antisocial lacking a sense of humor (Smith, 2017).

Social Conditions and Pursuance

According to Pascual (2016), their career plans must be developed on an ongoing basis, begins with the first grade, to assist students in determining the best direction for them. It means that parents have a significant factor in the career choice of their children.

Law (2010), they discovered that the parental effect and social status play a significant role in predicting accounting students' career choices.

Social Status and Pursuance

Students are more inclined to pick a profession with a high social standing. Students of Accounting may have positive perceptions of accountants regarding appreciation, acknowledgment, and credibility, just as they may have negative perceptions. Because of the profession's demands, some of the students view accountants as trustworthy and esteemed people as defined by Germanou et al. (2013).

This study is unique in that it focuses on the Philippine environment, which is well-known internationally for the quality of its accounting experts. ("Defining the Filipino CPA's Winning Edge," 2013). In addition, the conjoint approach was used to measure student perceptions of preferred communication skills in accounting practice. The first portion of this study focused on employers' assessments of English language skills, which are especially crucial in entry-level accounting jobs. The Business Communication Skills' Leverage model (Tenedero & Vizconde, 2015), which defines interviewing ability as the first relevant job skill, synthesizes key findings from the qualitative inquiry.

Economic Reasons and Pursuance

Many studies show that work stability and security are important factors for students considering a career as an accountant. Mustapha and Abu Hassan (2012) studied that work stability and security among final year accounting students at a Malaysian public university to be firmly and substantially associated with respondents' decision to pursue a career.

Porter and Woolley (2014) stated that most students choose an accounting course for the profession's extrinsic principles. It can be noticed that when teaching students about the discipline, it is necessary to demonstrate career security and promotion opportunities, all of which are likely to be significant factors in making choices to pursue an accounting major. Salary is not an essential factor in encouraging students to pursue a CPA career (Mustapha & Abu Hassan, 2012).

Theoretical/Conceptual Framework

The related studies that elaborated the importance of selected factors used in students' perception of the accounting profession are also necessary to discuss the theory-based studies.

Social Identity Theory

There is a considerable amount of evidence that it is difficult to change stereotypes despite the endeavor of the accounting industry to change the public perception about the accounting profession. The Social Identity Theory developed by Tajfel and Turner (1979) can explain the reason behind the latter statement. It explains that the groups such as family, social circle, friends, and others where people belong give a feeling of being a part of the social world. According to this theory, members of groups with negative stereotypes are more likely to seek efforts in changing the stereotype to enhance their self-image in the social group.

Socioeconomic Theory

For those who seek satisfaction in work, their choice of profession is a never-ending process of deliberation. It is also essential to identify the different factors affecting the career choices of the students. Hence, this theory emphasizes that structural variables such as social conditions (including the influences of parents, peers, and professors), social status, and economic reasons (such as work salary and job opportunities) affect the students' career development (Hellmich, 2017).

Theory of Reasoned Action

This psychological model devised by Ajzen and Fishbein (1980's) determines what exactly affects an individual choosing accounting as a profession. According to the theory of reasoned action, a person's conduct is influenced by their perspective, standards, and intentions. (Cohen and Hano 1993). This model was used in several studies where one found out that accounting students are opposed to other business students who had chosen other majors. In addition to that, students with majors other than accounting have a strong negative impression of the accounting profession and viewed it as too boring.

Methodology

Research Design

To collect and analyze the variables specified in the research questions, the quantitative method was used with appropriate statistical tests. This study used a quantitative method to identify, analyze and describe the factors affecting the students' pursuance to complete the accountancy program. This method allowed the identification of both the independent and dependent variables and its measurements in the research questions outcome. In this method, it has emphasized objective measurements and statistical analysis of data acquired through conducting surveys, as well as innovating the pre-existing statistical data using computing and digital methods.

Population and Sampling Techniques

The study population consists of first- and second-year accounting students of three selected HEIs. The population totaled 327 students; however, only an appropriate sample size is enough to prove the study's validity and accuracy of results. According to St. Olaf College, a minimum ratio of 30% is recommended for populations under 1,000 to assure the representativeness of the population. Hence, a conducive sample of 145 students from the selected year levels were chosen. Levels 1 and 2 students were the chosen respondents since they are most vulnerable to changes in their programs. In addition to that, they are the students engaged in the introductory courses in the accounting course

The participants in this analysis were chosen using a stratified random sampling procedure. The procedure was used to ensure that the variables in the sample were equally represented. The stratification was based on levels 1 and 2 accounting students in the three selected HEIs in Luzon and used to prorate and get the percentage needed to represent a level from the chosen HEIs, with a selection of students done by simple random sampling. Out of 145 respondents, 110 were female which corresponds to 75.9% of the total sample, while 35 were males that represents 24.1%.

The frequency for each level were prorated based on their population per school and the total sample of 145. Out of 145 respondents, 65 represents the level 1 or freshman which is 44.8%, and 80 were level 2 or sophomores that corresponds to 55.2% of the total sample.

Instrumentation

The researchers used and adapted a questionnaire from various studies by Odia and Ogiedu (2013), Calma (2020), and Hashim and Embong (2015), to collect data on students' views on accounting as their major. Ten experts content validated the questionnaires. Seven of which are experts in the area of study specifically, out of seven, three were professors in the field of psychology, two were the panel members and the last two are the thesis adviser and methodologist. Three laymen, distinctively, BSA students were approached to verify the understandability of the instrument.

With the limitation of face-to-face data collection, the instrument was made by using Google forms. The form enabled the researchers to filter the responses by limiting the response to only one per student. Filtering responses helped to ensure that the data given by the respondents were truthful enough to be used. To ascertain students' accounting-related job choices, the questionnaire will be answered using a 5 – point Likert Scale, ranging from *Strongly Disagree* (1), through *Disagree* (2), *Somewhat Agree* (3), *Agree* (4) to *Strongly Agree* (5). The respondents were asked to rate their degree of compatibility with the questions in the instrument. Included in the instrument was the informed consent for each student. The instrument is divided into four parts.

A pilot study of the instrument to test its reliability was conducted on 30 respondents that answered the questionnaire. The Cronbach's alpha of each variable was considered accepted aside from the third variable which is the social status with an alpha of .685. Despite of being the lowest, the overall alpha of the research instrument was .812 which was considered good. (Statistics Solution n.d.-a).

Table 1. *Scoring System and Interpretation for Social Conditions*

Range of Mean Values	Scale Value	Scaled Response	Verbal Interpretation
4.51 – 5.00	5	Strongly Agree	Very Poor
3.51 – 4.50	4	Agree	Poor
2.51 – 3.50	3	Somewhat Agree	Fair
1.51 – 2.50	2	Disagree	Good
1.00 – 1.50	1	Strongly Disagree	Very Good

Table 2. *Scoring System and Interpretation for Social Status, Economic Reasons, & Stereotypes*

Range of Mean Values	Scale Value	Scaled Response	Verbal Interpretation
4.51 – 5.00	5	Strongly Agree	Very High
3.51 – 4.50	4	Agree	High
2.51 – 3.50	3	Somewhat Agree	Moderate
1.51 – 2.50	2	Disagree	Low
1.00 – 1.50	1	Strongly Disagree	Very Low

Ethical Considerations

In conducting the research, the researchers considered the respondents' willingness to volunteer, and their responses were anonymously treated. It was also made sure that there is confidentiality regarding their personal information and all the data they have inputted. The researchers have included the instructions on answering the questionnaire and made themselves available by providing an email that the respondents can contact in case of any clarification.

The researchers ensured that there was no breaching of ethical protocol and guidelines. The respondents have the right to withdraw if they feel the study was not appropriate for them or they have other personal reasons for not participating in the research.

Data Analysis

Statistical methods were used to assess and classify the results of the gathered data to address the research questions developed. With the aid of Statistical Package for Social Sciences (SPSS), the data gathered were evaluated and carried out to be analyzed. Descriptive and inferential statistics such as mean, standard deviation, Correlation, ANOVA, Regression, t-test, and Mann-Whitney U Test.

Results and Discussion

Students' Perceptions of Factors for Pursuance

There are numerous aspects to consider that affects the pursuance of the students. These factors are considered by the students to weigh their interest in a specific higher education program before pursuing it (Vulperhorts et al., 2019).

Stereotype. The Stereotype is measured by six descriptive statements. As shown in Table 9 below, the results show an overall response of disagree which is verbally interpreted as *low* ($M=2.50$, $SD=0.661$) which indicates that the respondents disagree with the public's perception of accounting professionals' negative behavior/stereotypes. Regardless of the general public has a poor perception of accountants, and authors Miley and Read (2018) recognize that people today still believe in accounting stereotypes, the findings of this study show otherwise. This implies that the public stereotypes are unlikely to have a detrimental impact on future accountants' perceptions and career choices.

Table 3. *Stereotypes Descriptive*

	Mean	Std. Deviation	Scaled Response	Verbal Interpretation
I believe accountants are for math geniuses.	2.43	.934	Disagree	Low
Accountants focus on tax and tax related activities.	3.55	.971	Agree	High
Accountants have limited social life.	2.77	1.080	Somewhat Agree	Moderate
Accountancy is a male-dominated field.	1.77	.799	Disagree	Low

{table continues on the next page}

I believe accountants just sit at a desk in a cubical, crunching numbers regularly.	2.52	1.191	Somewhat Agree	Moderate
Being an accountant is for introverted people.	1.97	.971	Disagree	Low
Stereotypes	2.50	.661	Disagree	Low
<i>Scoring System: 1.00-1.50 = Strongly Disagree, 1.51-2.50 = Disagree, 2.51-3.50 = Somewhat Agree, 3.51-4.50 = Agree, 4.51-5.00 = Strongly Agree</i>				

This study found three low scored items implying that the respondents from the chosen HEIs believe that accountants are not necessarily for *math geniuses* ($M=2.43$, $SD=0.934$) and *introverted people* ($M=1.97$, $SD=0.971$), nor a *male-dominated field* ($M=1.77$, $SD=0.799$). These findings are consistent with that of the following authors. Norton (2020) specified that many accountants do not identify as introverts. Hiring individuals with good communication skills and technical competence is becoming more important in the profession. Sawyer (2019) stated that for financial accounts, accounting normally simply requires fundamental math skills such as addition, multiplication, and subtraction. Other than accountancy requires more than simply “soft math” skills, good accountants must have advanced analytical skills, be able to communicate well verbally and in writing, and be skilled in professional writing. The highest measured single item was *Accountants focus on tax and tax related activities* ($M=3.55$, $SD=0.971$). Taxes are only a small part of the accounting industry, and many CPAs don’t deal with them at all. All accountants will have basic tax knowledge from school, but many people are surprised to learn that those who are not tax specialists will not know as much as a real tax accountant.

Social Condition. This refers to components of social and physical settings that can influence a person’s decision-making, such as features of households, schools, workplaces, and communities. The Social Condition is measured by six descriptive statements. As shown in Table 10 below, the results show an overall response of *disagree* which is verbally interpreted as *good* ($M=2.19$, $SD=0.703$). This finding implies that respondents perceive social conditions as not influential on their career decision making. The findings are supported by Alanezi et al. (2016)’s study on the factors that impact the decision-making of students to major in accounting. According to their study, the least important reasons in students’ decisions are the reference factors that includes the influence of friends, family, and counselors.

Table 4. *Social Conditions Descriptive*

	Mean	Std. Deviation	Scaled Response	Verbal Interpretation
I want to take the course the same as my friends.	2.08	.954	Disagree	Good
My parents wanted me to choose an accountancy course.	2.79	1.322	Somewhat Agree	Fair
My friends encouraged me to take an accountancy course.	2.08	1.017	Disagree	Good
My brother/sister encouraged me to take an accountancy course	2.10	1.132	Disagree	Good
My teachers suggested that I should take an accountancy course.	2.03	1.017	Disagree	Good
My parent’s educational background influenced me to choose an accountancy course.	2.06	1.215	Disagree	Good
Social Conditions	2.19	.703	Disagree	Good
<i>Scoring System: 1.00-1.50 = Strongly Disagree, 1.51-2.50 = Disagree, 2.51-3.50 = Somewhat Agree, 3.51-4.50 = Agree, 4.51-5.00 = Strongly Agree</i>				

The lowest result of this factor was *My teachers suggested that I should take an accountancy course* with a mean of 2.03 and standard deviation of 1.017. The children's performance is indirectly influenced by parental and teacher direction (Villalobos, et.al., 2016). The highest measure among the items was *My parents wanted me to choose an accountancy course*. This is because parental participation in a child's life, whether favorable or poor, can have an influence on the child's future professional choices. As also evidence by the research conclusion of Dr. Nawabi et al. (2018), parents have a significant influence on their children's professional choices, which can be purposeful or unintentional. Their influence can either encourage youngsters to explore a wide range of possible careers or encourage them to stick to a route that they believe their parents will approve of.

Social Status. The hierarchy of profession in society refers to the social value attributed to it. It refers to an individual's, group's, or organization's level of respect, integrity, competency, and ethics in a society. The honor or prestige associated with one's social position. The Social Status is measured by six descriptive statements. The results in Table 5 show an overall response of *agree* which is verbally interpreted as high ($M=3.91$, $SD=0.619$). This means that the students rated a positive perception of the reputation of accounting profession. Thus, they hold a high regard for the profession and have high hopes for what it may offer them. Another study was conducted by Alanezi et al. (2016) on the factors that influence students' decision to major in accounting. The most important reasons that motivated students to choose accounting as a major were employment chances, prestige, and an engaging subject, according to their research. Kumar (2017) discovered that financial reasons such as salary and job opportunities are the most influencing elements in deciding on an accounting major.

Table 5. *Social Status Descriptive*

	Mean	Std. Deviation	Scaled Response	Verbal Interpretation
The accountancy profession is well respected.	4.37	.780	Agree	High
Being an accountant brings a lot of prestige and social status.	3.72	.886	Agree	High
I believe accountancy is a profession on par with medicine and law.	3.74	.943	Agree	High
I believe accountancy can provide me with a better career life and job security.	4.05	.861	Agree	High
Accountancy is a field with the highest moral standards.	3.79	.927	Agree	High
Being an accountant is a way to give back to society.	3.77	.858	Agree	High
Social Status	3.91	.619	Agree	High

Scoring System: 1.00-1.50 = Strongly Disagree, 1.51-2.50 = Disagree, 2.51-3.50 = Somewhat Agree, 3.51-4.50 = Agree, 4.51-5.00 = Strongly Agree

The findings of this factor measured a high response for each of the items from the students. The scores are hardly different from one item to another having *The accountancy profession is well respected*, as the highest among them ($M=4.37$, $SD=0.780$). This is true as many studies lend support to these findings. One of which is the study of Writers (2021) where it was concluded that accountants are well-respected business specialists, and accounting is regarded as one of the most reliable fields. Another study conducted by Owusu et al., (2018) that accounting students place a higher value on advancement chances, social prestige, and remuneration than non-accounting students.

Economic Reason. The state of the profession in the global economy of the country, including job security, unemployment rates, typical starting salaries, and job possibilities. The Economic Reason is measured by six descriptive statements. As shown in Table 6 below, the results show an overall response of *agree* which is verbally interpreted as *high* ($M=3.65$, $SD=0.656$). This would mean that the students strongly believe that the demand for accounting jobs in the economy is increasing and outnumbering the supply. Accounting graduates have more opportunities than ever before in today's industry with a wide range of work prospects, which include practice to industry, practice to government, and practice to education. Ozsoy (2019) stated that salary is a hygienic component that drives people to work. Another study conducted by Harun (2020), who claims that the initial income is the most important factor influencing a student's job decision. Another study by Thing and Jalaludin (2018), the most major benefit of aspiring to be a professional accountant is the availability of work options.

Table 6. *Descriptive Results for Economic Reasons*

	Mean	Std. Deviation	Scaled Response	Verbal Interpretation
There will be more jobs available for accountancy graduates.	3.90	.828	Agree	High
I can get a high-paying job if I graduate with an accountancy degree.	3.57	.927	Agree	High
There will be a great job market demand for accountancy graduates.	3.86	.799	Agree	High
I want to work independently and put up my own company related to accountancy.	3.53	1.074	Agree	High
My starting salary will be satisfying if I graduate with an accountancy degree.	3.45	.889	Somewhat Agree	Moderate
Being an accountant means long-term earnings potential.	3.77	.850	Agree	High
Economic Reasons	3.65	.656	Agree	High

Scoring System: 1.00-1.50 = Strongly Disagree, 1.51-2.50 = Disagree, 2.51-3.50 = Somewhat Agree, 3.51-4.50 = Agree, 4.51-5.00 = Strongly Agree

With the highest weighted mean of 3.90 ($SD=0.828$) among the six items under economic reasons criteria, students strongly consider that *there will be more jobs available for accountancy graduates*. Followed by the belief that *there will be a great job market demand for accountancy graduates* ($M=3.86$, $SD=0.799$) and being an accountant means long-term earnings potential ($M=3.77$, $SD=0.850$). This is supported by the study of Gabbin (2021) that accounting majors' job prospects appear to be promising in the future. The Occupational Employment Statistics program of the United States Bureau of Labor Statistics forecasted an economy-wide job growth rate of 6.5 percent (9.78 million jobs) from 2014 to 2024. However, job growth for accountants and auditors is expected to be 10.7% (142,400 jobs) over the same time period. The item *My starting salary will be satisfying if I graduate with an accountancy degree* had the only *moderate* response from the students ($M=3.45$, $SD=0.889$). Accounting students viewed accounting as a career based on the amount of money they expect to make as a starting salary. As a recent graduate, they will anticipate that an accounting position will provide them with valuable experience and a competitive income. Students were aware of the beginning income for new accounting graduates. Although accountants are thought to earn great salaries in the long run, their starting salaries are frequently lower than those of other commercial jobs (Ghani and Said, 2008).

Degree of Pursuance to Complete the Bachelor of Science in Accountancy Course

One of the most crucial decisions in life is choosing a career. However, it is a continuous process where it does not guarantee that students will complete their studies with the chosen major. The degree of pursuance in an education for a particular program could be the first step in the process of establishing a more committed and fulfilling career. The degree of pursuance of the respondent in this study is shown in Table 7.

Table 7. *Profile and Degree of Pursuance to Complete the BSA Course*

	Frequency	Percent	Mean	Standard Deviation	Degree
Very low	8	5.5	3.52	1.125	High
Low	15	10.3			
Moderate	50	34.5			
High	38	26.2			
Very high	34	23.4			
Total	145	100.0			

Scoring System: 1.00-1.50 = Very low, 1.51-2.50 = Low, 2.51-3.50 = Moderate, 3.51-4.50 = High, 4.51-5.00 = Very high

In determining the degree of pursuance of the respondents, the five level of response scale was used. It may be noted that students in first- and second-year levels are still in the process of career decision-making as the responses are shared in all scale.

The overall response shows a mean of 3.52 which is interpreted as high and a standard deviation of 1.125 that shows the individual responses were on average a little over 1 point distant from the mean. Though accounting is a difficult major that requires four to five years of significant dedication to complete, leaving a major halfway would mean students have to take additional classes, lengthen their time to graduation, and pay more money as a result.

Correlation of Factors to Students' Pursuance to Complete the Bachelor of Science in Accountancy Course

There has been a decline in both the quantity and quality of students pursuing accounting as a profession. Gabbin (2019) stated that accounting education has reached its crossroads where a paradigm shift in the industry is occurring and students are responding in careers that are perceived by society to be more profitable, prestige, and people-pleaser. Consequently, due to a variety of factors, not all students are able to or given the opportunity to continue pursuing this course. It's possible that they have failed, or it has occurred to them to finally choose another course as some students where influence by perceptions, reference factors, career prestige, and job-related reasons (Calma, 2020; Miley and Read, 2015). Thus, it has been a challenge for higher education institutions to produce a fully committed accountancy students.

In this study the influencers of pursuance are grouped into four categories such as stereotypes, social conditions, social status, and economic reasons. To measure the statistical association between the four factors and pursuance of the students, the Pearson's correlation coefficient test was used. A correlation between variables means that when the value of one variable changes, the value of the other tends to change in another particular direction. The researchers will be able to forecast the value of one variable based on the value of the other after they have a better knowledge of correlational relationship. Cohen's standard was used to evaluate the strength of the relationship, where coefficient value lies below + .29 represent a low effect, between + .30 and + .49 represent a moderate effect, and between + .50 and + 1 implies a high effect (Cohen, 2020). The correlation analysis of each factor is presented by the following tables as shown below.

Table 8. *Correlates of Pursuance to Complete Accountancy Course*

Factors	Degree of Pursuance		
	r	p	Verbal Interpretation
Stereotypes	-.237	.004	Significant
Social conditions	-.140	.094	Not significant
Social Status	.076	.367	Not significant
Economic reason	.217	.009	Significant

Stereotypes. Data in Table 8 shows a significant negative correlation between stereotypes and students' pursuance ($r_p = -0.237$, $p < 0.01$). The correlation coefficient value of $-.237$ indicates a low degree of relationship between the two variables. Also, with the coefficient of determination ($r^2 = -.237^2 = .056$) the result denotes that 5.6% of the variability in students' pursuance can be explained by stereotypes. The significance level is $.004$, which means that the relationship is highly significant, implying that there is a relationship between the stereotypes and students' pursuance in both the population and the sample. The decision rule is to reject the null hypothesis in favor of the alternative (*the stereotypes significantly correlate to students' pursuance to complete the Bachelor of Science in accountancy course*). The negative relationship suggests that as the factor stereotype increases, student's degree of pursuance decreases. So, on average students' who do not believe on public perceptions (stereotypes) of accounting profession have higher level of pursuance to complete the BSA course.

Social Condition. Data in Table 8 shows no significant correlation between social condition and students' pursuance ($r_p = -0.140$, $p > 0.01$). The significance level is $.094$. This is greater than $.01$ which means that the relationship is not significant, implying that there is not a relationship between the social condition and students' pursuance in both the population and the sample. The decision rule is to accept the null hypothesis (*the social conditions do not significantly correlate to students' pursuance to complete the Bachelor of Science in accountancy course*). The result suggests that whether the factor social condition increases or decreases, student's degree of pursuance remains unaffected. Rababah (2016) studied students' decision to study in accounting was also examined to see if there was a link between personal interest, job opportunities, family members and peers, and the media. According to his research, there is a strong link between the students' choice of accounting as a major and their family members and peers. Friendships and family recommendations, on the other hand, were determined to be the least influential elements in their decision to pursue an accounting degree. (Alanezi and Alfaraih, 2011).

Social Status. Data in Table 8 shows no significant correlation between social status and students' pursuance ($r_p = -0.076$, $p > 0.01$). The significance level is $.367$. This is far greater than $.01$ which means that the relationship is not significant, implying that there is not a relationship between the social status and students' pursuance in both the population and the sample. The decision rule is to accept the null hypothesis (*the social status does not significantly correlate to students' pursuance to complete the Bachelor of Science in accountancy course*). The result suggests that whether the factor social status increases or decreases, student's degree of pursuance remains unaffected. Because accounting is not considered an outstanding vocation for honors students who require a demanding work environment, the society believes it is not a good fit for them. Prestige is a significant determinant in accounting students' decision to pursue professional degrees. Accounting students place a higher value on advancement chances, social prestige, and remuneration than non-accounting students, according to Owusu et al., (2018) and Sugahara and Bolland (2006).

Economic Reasons. Data in Table 8 shows a significant positive correlation between economic reasons and students' pursuance ($r_p = 0.217$, $p < 0.01$). The correlation coefficient value of $.217$ indicates a low degree of relationship between the two variables. Also, with the coefficient

of determination ($r^2 = .217^2 = .047$) the result denotes that 4.7% of the variability in students' pursuance can be explained by economic reasons. The significance level is .009, which means that the relationship is highly significant, implying that there is a relationship between the economic reasons and students' pursuance in both the population and the sample. The decision rule is to reject the null hypothesis in favor of the alternative (the economic reasons significantly correlate to students' pursuance to complete the Bachelor of Science in accountancy course). The positive relationship suggests that as the factor economic reason increases so does the student's degree of pursuance. So, on average students' who continue to positively perceive the economic reasons of accounting profession have higher level of pursuance to complete the BSA course. Harnovinsah (2017) investigated the objectives of accounting students from a number of Jakarta universities. The findings revealed that accounting students' job choices were influenced by the expectations and possibilities that the profession would provide.

Predictors of Students' Pursuance to Complete the Bachelor of Science in Accountancy Course

Students' commitment to a career plays an important role in higher educational institutions, as it is often used as a criterion for measuring the institution's performance. With the detection of the various factors affecting students' pursuance, it would help universities address the reduction in both the number and quality of accounting students. The Regression Analysis and ANOVA (*Analysis of Variance*) were used to predict the outcome degree of pursuance from the various independent factors such as stereotypes, social condition, social status, and economic reasons.

Table 9. *Regression Coefficients with dependent variable Degree of Pursuance*

Model Summary						
Model	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>R</i> ² Change	F	Sig.
1	.237a	.056	.050	.056		
2	.323b	.105	.092	.048	8.288	.000b
Unstandardized Coefficients						
Model		B	Std. Error	<i>t</i>	Sig.	
2	(Constant)	3.165	.604	5.237	.000	
	Stereotypes	-.409	.135	-3.023	.003	
	Economic Reasons	.376	.136	2.764	.006	

a. Predictors: (Constant), Stereotypes

b. Predictors: (Constant), Stereotypes, Economic Reasons

The statistical result of regression analysis accounted for only two significant predictors out of four independent variables in the study as presented in Table 9, namely, the stereotypes and economic reasons. Notice that the result is supported by the data findings of correlation analysis where only the stereotypes and economic reasons are significantly correlated to the students' pursuance to complete the BSA course.

The relationship between stereotypes and the degree of pursuance, and the independent variable economic reasons were tested. The R square .105 as seen in this regression model 2 indicates that 10.5% of the variability in students' degree of pursuance is explained by the model 2. Within the 10.5% of the variance in degree of pursuance, 5.6% is accounted by the stereotypes and the remaining 4.8% is from the economic reasons. In determining the best-fit model, the ANOVA function was used. The result reveals that the model 2 (both stereotypes and economic reasons are predictors) is statistically significant and the better model that fits the regression's equation ($F=8.28$, $p=.000$). The decision rule is to reject the null hypothesis of stereotypes and economic reasons in favor of the alternative.

The multiple linear regression equation provides a standard form $Y_i = \beta_0 + \beta_1 X_i + \epsilon_i$ for the population regression line, where Y_i is the dependent variable, β_0 is the population Y constant, β_1 is the population slope coefficient, X_i is the independent variable, and ϵ_i is the random error term. The equation is then replaced with values generated from the data presented in Table 9 of model 2 of the unstandardized coefficients and is defined by $Y_i = 3.165 - 0.409 (\text{Stereotypes}) + 0.376 (\text{Economic Reasons})$. From the regression equation, notice that the beta coefficient of stereotypes is presented with a negative sign that indicates for every unit increase, there is a unit of decrease for the predicted value. While the beta coefficient of economic reasons entails a direct relationship where a unit increase would also mean a unit increase for the predicted value. Thus, students with lower belief on stereotypes and highly perceive the economic reasons will more likely pursue to complete the Bachelor of Science in Accountancy course. Another study conducted by (Tan & Laswad, 2018; Abbott & Palatnik, 2018; that some students believe that a professional accounting program requires less communication skills than an accounting degree program. Students' career choices in accounting are influenced by this view. The findings suggest that students' positive attitudes toward professional accounting examinations influence their decision to pursue accounting as a career. Accounting students place a higher value on advancement chances, social prestige, and remuneration than non-accounting students, according to Owusu et al. (2018).

Difference in the Extent of Pursuance to Complete the Bachelor of Science in Accountancy Course considering the Year Level and Sex.

Moderator variables are the "third variables" that affects direction, nature, or size of the link between the independent and dependent variables. It can either enhance, nullify, strengthen, or otherwise alter the association between the two variables.

In this study, sex was considered as evidenced by the study of Miller (2018), which explains that Asia Pacific regions, particularly the developing countries have a huge number of female professionals in the accounting career. The study also mentioned that a research conducted by Grant Thornton International shows that in the Philippines, 47% of senior management positions were dominated by females, compared to the average globally of less than a quarter. Both usage of these moderating variables would be beneficial in aiding the explanation of the relationships between the independent and dependent variables of this study. It would also provide additional information on the relationship between two variables by describing what factors can make that relationship stronger, weaker, or even disappear.

In determining the significant difference of moderator variable sex and year level, the T-Test and Mann-Whitney U Test were applied. The T-Test is a parametric comparison tool used for statistic hypothesis testing in determining if there is a significant difference particularly in the means of the year level and student's degree of pursuance. On the other hand, the Mann-Whitney U Test is a non-parametric comparison tool used for the moderator variable sex where the conclusions can range from simply declaring whether the female and male are different through verifying their median base. The results analysis and interpretation of the tests are presented in Tables 10 and 11.

Table 10. *Degree of pursuance by year level*

Year Level	N	Mean	Std. Deviation	t-value	df	Sig.	Verbal Interpretation
Freshmen	65	3.52	.970	-.058	142.791	.954	Not Significant
Sophomore	80	3.51	1.243				

Year level. The mean for freshmen is 3.52 (.97) for 65 participants. While the mean for sophomore is 3.51 (.243) for 80 participants that totals 145 number of respondents. The t-test result reveals that the degree of pursuance to complete the accountancy course between freshmen and sophomore is statistically comparable ($t=0.954$, $p=.954$).

Table 11. *Degree of pursuance by sex*

Sex	N	Mean Rank	Mann-Whitney U-test	Sig	Interpretation
Female	110	72.66	1888.000 a	.859 a	Not Significant
Male	35	74.06			

a. Grouping Variable: Sex

Sex. Table 11 shows the non-parametric comparison between the dependent variable which is the degree of pursuance and sex. The mean rank shows the degree of pursuance for each gender. Higher mean rank implies higher degree of pursuance. The mean rank of 74.06 shows that male have higher degree of pursuance however, the results are not significant ($p > .05$). The statistical output shows that there was no significant difference ($U = 1888$, $p = .859$) between the genders and their pursuance to complete the BSA course. The results indicate that regardless of sex, it does not contribute to their degree of pursuance, a difference that is not statistically significant. Therefore, the decision rule is to not reject the null hypothesis. This is supported by the study of Okafor and Egbon (2011), that shows between male and female accounting students, there is no difference in their academic pursuance.

When it comes to the accounting profession, there are many factors which attract students to pursue this career like stereotypes. However, despite the stereotypes regarding the accounting profession, many students don't believe in it. For instance, even though the public perceive accountants as math geniuses, there are students who don't like math but still chose to pursue this career. Hence, students disregard these stereotypes which do not have a detrimental effect on their level of pursuance. The next factor, which is the social conditions, is not influential to the students' decision making as well. In this case, their family or friends don't affect the career choice of the students. Although many perceived that the social conditions of a student have a big impact towards the decision making of a child, the results of the study showed otherwise. On the other hand, the social status of the accounting profession has influenced the students in pursuing this career. They know that the profession has a high reputation which attracts them to complete the accountancy course. The economic reason also received a high response in the study which means that it is also influential to the students' level of pursuance. Many believe that they will have many opportunities if they pursue this profession.

The first- and second-year college students have the tendency to shift to another program due to sudden career changes. The study showed that some students are still in the process of career decision making. This means that they are still unsure if they will complete the accountancy course. On the contrary, the majority have still shown interest in completing the program. Despite the fact that accounting is a challenging course that needs four to five years complete, many students are nevertheless committed to completing the course and becoming an accounting professional. Therefore, those who have a positive attitude towards the profession are more likely to finish the accountancy course.

According to the study, stereotypes, and students' pursuance to complete the course has a negative correlation. This means that students who do not believe in the accounting stereotypes are more likely to pursue the accountancy course. Students have a higher level of pursuance if they disagree with the public's perceptions towards the profession. Social conditions and students' pursuance don't have a significant correlation. This factor is irrelevant to the students' career choice, which is why there is no relationship between the two. Even though social conditions will be changed, the choice of the students on whether to pursue the course or not remains unaffected. Like the previous factor, social status and students' pursuance have no significant correlation.

The study concluded that there is no relationship between the two which means the social status of the profession is not relevant. Finally, economic reasons and students' pursuance have a significant positive correlation. This means that there is a relationship between the two wherein

economic reasons affect the level of pursuance of the students. Students who see the economic benefits of the accounting profession have a higher level of pursuance to finish the accountancy course.

In the four factors that are analyzed, only two are significant predictors to pursuance to finish the accountancy course: the stereotypes and economic reasons. This means that both influence the students' level of pursuance to finish the accountancy course. When students don't believe in the accounting profession stereotypes, they are more likely to complete the course. On the other hand, economic reasons have a direct relationship with the students' pursuance. When students highly perceive the economic benefits of the accounting profession, they also have a high level of pursuance and have higher possibilities to complete the course.

The moderator variables, year level and sex, are also considered to affect the relationship between the independent and dependent variables. The first- and second- year accounting students showed no difference in the mean level scores. This means that there has no difference when it comes to their level of pursuance. Even though they are in different year levels, their level of pursuance is unaffected. For the sex of the students, it has no effect to the level of pursuance. Whether a student is a male or female, their dedication to finish the course remains unaffected.

The findings revealed that the researchers accomplished their intended results. Based on the results of the study, the following recommendations are given:

1. Teachers are tasked to prepare students not only academically but also psychologically. They should build students' confidence and dedication to finish the course. Students should be advised to disregard the stereotypes on the accounting profession and focus more on the economic reasons to have a higher level of pursuance to finish the accountancy course.
2. Since the study determined the significant factors which affect students' level of pursuance, the institution can utilize these factors to increase the number of graduates under the degree Bachelor of Science in Accountancy. The institution must support the faculty with their initiatives in helping students to have enough determination to finish the course.
3. Follow-up research should be conducted to a greater sample and to further include other variables that have significant bearing on the pursuance to finish the accountancy course.

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Blockchain Technology: Its Applicability, Challenges, and How These Challenges can be Handled in the Normal Accounting Cycle

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Abstract

The tremendous advances in digital technology continue to affect people's lives nowadays. In the fields of education, business, medicine, and science, among others, the fast-paced modernization of different processes is evident by adopting the latest digital resources to add value in the provision of services. In finance and accounting, the presence of cryptocurrencies and the prevalent use of electronic wallets and blockchain technology (BCT) are indicative of the revolutionary impacts of digitization along with their potentials and challenges. Despite the available literature about the use of BCT, no study has been conducted yet on how it would be possibly applicable in the normal accounting cycle. The purpose of this paper was to give a general overview of the potential applicability of BCT in the normal accounting cycle. This study used the theory synthesis method which included an examination of 17 recent or current literature published from 2017 to 2021 about the BCT and its potential applicability in the accounting cycle including its challenges and how these challenges can be handled. The potential benefits of BCT in terms of security, digital identity, and cost savings might be considered on its applicability in the normal accounting cycle. However, the potential challenges shall also be considered to have a holistic perspective on dealing with the subject matter.

Keywords: *blockchain, blockchain technology, normal accounting cycle*

The latest technological advancements have contributed various changes in the way organizations do their businesses, especially in the midst of the present pandemic. For instance, in the field of education, teachers and students have been adopting the different modes of online teaching-learning modes like Google Classroom, Zoom, Cisco Webex, Google Meet, Skype, etc. (Mishra et al., 2020). In accounting, Alsaqa et al. (2019) believed that the latest developments in the digital technology would be an opportunity to improve the different accounting processes. Meanwhile, aside from the aforementioned platforms, the potential of using BCT has become one of the major trends lately, as evidenced by several research studies. In the study of Bonson and Bednarova (2019), they cited that the Big Four accountancy firms have expressed their interest in BCT, which led them to launch different projects on the technology's potential in accounting. Conway (2018) stated that BCT has the potential to increase the efficiency in the bookkeeping side of accounting.

Smith and Castonguay (2019) believed that the use of BCT could have potential positive implications on financial reporting. "Blockchain's functions of protecting data integrity, instant sharing of necessary information, as well as programmable and automatic controls of processes, could facilitate the development of a new accounting ecosystem" (Dai & Vasarhelyi, 2017, p. 5). For hundreds of years, accounting ledgers have existed to track economic transactions. Although new technologies such as Big Data and machine learning have begun to change the landscape of accounting, transaction records continue to be necessary (Coyne & McMickle, 2017).

The aim of this study was to discover how the BCT might be applicable in the normal accounting cycle, considering its benefits, challenges, and how these challenges can be overcome. Despite the available literature about the use of BCT, no study has been conducted yet on how it would be possibly applicable in the normal accounting cycle.

Blockchain Technology

Bonson and Bednarova (2019) defined blockchain as a distributed digital ledger. The term "distributed" pertains to a network of computers where transactions are being consummated. The users in those distributed computers are called nodes as defined by Kokina et al. (2017). One transaction will require the approval of all the users or nodes in the network before a "block" can be formed. A block represents an approved transaction with a security feature called hash, which is a long alphanumeric character. Liu et al. (2019) explained that with this kind of peer-to-peer network setup, all stakeholders like suppliers, customers, creditors, regulators, etc., would have the ability to share information on a real-time basis. In the study of Meth (2019), it was explained that each block formed is interlinked with each other and can be retrieved without any difficulty. Figure 1 shows a simple example of how blockchain works in a sale transaction.

Figure 1. *How Blockchain Works*



Source: *How Blockchain Works*, 2018

Potential Benefits of BCT

There are different potential benefits of BCT that are noteworthy. The first one is security. Conway and Byrne (2018) pointed out that there will be a rare chance for the blockchain to be hacked because of its cryptographic hash feature. It will be very difficult for a potential hacker to attack the network as it would need to discover the alphanumeric coding of each block. Aslam et al. (2021) agreed that such security feature of blockchain is an example of advanced technology development in the modern times. The second one is digital identity. Conway and Byrne (2018) explained that the members of the blockchain network will no longer need to always identify the ones transacting at any given point of time. Unlike with banks and other regulatory offices, when a transaction occurs, a lot of verification shall be done first. In blockchain, the digital identities of the users are already established. Further, another potential benefit would be cost savings. BCT, according to Conway and Byrne (2018), would save much time and energy on dealing with routine transactions. One of the features of BCT is the presence of smart contracts, which pertains to self-executing, pre-programmed criteria. Once a routine transaction is recognized, it will just automatically execute, thus saving time, cost, and energy.

Potential Challenges of BCT

Despite the enumerated potential benefits, there are also potential challenges on using BCT. As cited by Acikgoz and Apak (2019), blockchain faces different challenges despite its promising benefits. The first challenge is that the technology is complicated. Swan (2017) pointed out that even the basics of BCT is difficult to understand, conceptually and technically, and might be a challenge to decision-making process. The second challenge is its technical aspects. No matter how promising the benefits, there is still a chance that the network might be attacked by hackers. The third challenge is scalability. Swan (2017) explained that scalability is the ability to process voluminous transactions on a real-time basis. The fourth challenge is the regulation. Swan (2017) pointed out that blockchain transactions involve money and as of the moment, there are no available laws or even accounting standards being created or legislated to regulate the possible use of cryptocurrency and BCT as a whole.

Normal Accounting Cycle

It is noteworthy to be reminded that the focus of this study is to discover the applicability of BCT, with its challenges and how those challenges can be handled in the normal accounting cycle. Ballada and Ballada (2021) defined accounting cycle as “a series of sequential steps or procedures performed to accomplish the accounting process” (p. 119). The steps in the cycle and their aims are as follows:

1. Identification of events to be recorded. This aims to gather information about transactions or events generally through the source documents.
2. Transactions are recorded in the journal. This aims to record the economic impact of transactions on the firm in a journal, which is a form that facilitates transfer to the accounts.
3. Journal entries are posted to the ledger. This aims to transfer the information from the journal to the ledger for classification.
4. Preparation of a trial balance. This provides a listing to verify the equality of debits and credits in the ledger.
5. Preparation of the worksheet including adjusting entries. This aids in the preparation of financial statements.
6. Preparation of financial statements. This provides useful information to decision-makers.
7. Adjusting journal entries are journalized and posted. This aims to record the accruals, expiration of deferrals, estimations and other events from the worksheet.
8. Closing journal entries are journalized and posted. This closes temporary accounts and transfers profit to owner's equity.

9. Preparation of a post-closing trial balance. This checks the equality of debits and credits after the closing entries.
10. Reversing journal entries are journalized and posted. This simplifies the recording of certain regular transactions in the next accounting period.

In the foregoing steps enumerated, definition of terms might be helpful to understand better the accounting cycle. Journalizing pertains to the recording of business transactions chronologically in a journal, in terms of debits and credits (Ballada and Ballada, 2021). This process marks the initial recording of transactions in the books of accounts. Meanwhile, posting refers to the recording of business transactions from the journals to the ledgers. A ledger is a record, which summarizes all the entries from the journals. In other words, journalizing precedes posting.

Despite the numerous studies about BCT and its potential advantages, no study has been conducted yet on its potential applicability in the normal accounting cycle. Thus, this paper aimed to provide general insights on how BCT may be used in the normal accounting cycle, considering its potential advantages and disadvantages. The typical accounting cycle involves the aforementioned steps (Ballada and Ballada, 2021).

This study was a theory synthesis, which included an examination of recent or current literature about the BCT and its potential applicability in the accounting cycle including its challenges and these challenges can be handled. This type of review was chosen as it is the most applicable at the time of study, considering that blockchain is not yet fully adopted in the accounting process by organizations.

The following research questions were addressed by this study:

1. What are the features of BCT that may be applicable in the normal accounting cycle?
2. What are the potential benefits of BCT in accounting?
3. What are the potential challenges of BCT in accounting?
4. How can these challenges be handled?

This study might be helpful to the following: (a) accountants in public practice as this study might be helpful to make them aware on how BCT might be beneficial in the conduct of their independent audits; (b) accountants in commerce and industry as this study might be helpful to make them aware on how blockchain may improve their current accounting processes; (c) accountants in the academe to make them aware on the BCT and possibly its incorporation in their students' accounting curricula; (d) accountants in the government to make them aware on how BCT may be adopted in the government accounting processes; and (e) researchers as this paper may serve as a reference for further research considering its scope and limitations.

This research covers only the insights generated from the literature review on how BCT may be applicable in the normal accounting cycle represented by the ten steps enumerated above. Further research will be highly recommended to explore the potential adoption of BCT in other branches of accounting like audit, taxation, managerial accounting, and regulatory framework for business transactions.

Methodology

This study used the theory synthesis, a method which included an examination of 17 recent or current literature published from 2017 to 2021 about the BCT and its potential applicability in the accounting cycle including, its challenges, and how these challenges can be handled. The analysis was done by synthesizing the different studies obtained from journals, textbooks, and other published materials pertaining to BCT. The benefits and challenges of BCT were the sole determinants used in this study to indicate its applicability in the normal accounting cycle.

Results and Discussion

BCT Features Applicable in the Normal Accounting Cycle

To answer Research Question No. 1, “What are the features of BCT that may be applicable in the normal accounting cycle?”, three themes emerged: distributed ledger, security, and interconnection.

Distributed ledger

Bonson and Bednarova (2019) defined blockchain as a distributed digital ledger. The term “distributed” pertains to a network of computers that where transactions are being consummated. The users in those distributed computers are called nodes as defined by Kokina et al. (2017). One transaction will require the approval of all the users or nodes in the network before a “block” can be formed. Alsaqa et al. (2019) pointed out that having a distributed ledger system, parties in a particular transaction have access to a complete copy of the ledger, which promotes transparency and accessibility.

Security

In addition to the distributed ledger feature, BCT provides security mechanisms in handling financial transactions. A block represents an approved transaction with a security feature called hash, which is a long alphanumeric character. Liu et al. (2019) explained that with this kind of peer-to-peer network setup, all stakeholders like suppliers, customers, creditors, regulators, etc. would have the ability to share information on a real-time basis. Swan (2017) concluded that BCT, with its decentralized storage records, which are protected by the cryptographic hashes, would make it difficult to potential hackers to attack the data.

Interconnection

Aside from the features of distributed ledger and security, BCT promotes interconnection. In the study of Meth (2019), it was explained that each block formed are interlinked with each other and can be retrieved without any difficulty. This means that all the participants (nodes) in the blockchain network can easily communicate together on a real-time basis, without the necessity of verifying their identities.

BCT Potential Benefits Applicable in the Normal Accounting Cycle

To answer Research Question No. 2, “What are the potential benefits of BCT in accounting?”, three themes emerged: cost savings, digital identity, and security, which are presented in Table 1.

Table 1. *Applicability of BCT in the Normal Accounting Cycle*

Potential Benefits of BCT	Normal Accounting Cycle	Applicability of BCT in the Normal Accounting Cycle
Costsavings/digital identity/security	Step 1. Identification of events to be recorded	BCT has the ability to self-execute transactions thru the pre-programmed smart contracts. (Conway & Byrne, 2018). Routine transactions like sales and purchases can be processed thru smart contracts.
Cost savings	Step 2. Transactions are recorded in the journal.	BCT can accommodate different transaction entries as it is conceptually a distributed ledger. (Bonson & Bednarova, 2019)

{table continues on the next page}

Cost savings	Step 3. Journal entries are posted to the ledger.	BCT can accommodate different transaction entries as it is conceptually a distributed ledger. (Bonson & Bednarova, 2019)
Cost savings	Step 4. Preparation of a trial balance.	The trial balance can be programmed after the results of the first three steps.
Cost savings	Step 5. Preparation of the worksheet including adjusting entries.	The worksheet and adjusting entries can be done thru the smart contracts.
Cost savings	Step 6. Preparation of financial statements.	The formats of the complete set of financial statements namely, the statement of financial position, the statement of comprehensive income, the statement of changes in equity, and the statements of cash flows can be programmed.
Cost savings	Step 7. Adjusting journal entries are journalized and posted.	The adjusting entries can be done thru the smart contracts.
Cost savings	Step 8. Closing journal entries are journalized and posted.	The closing entries can be done thru the smart contracts.
Cost savings	Step 9. Preparation of a post-closing trial balance.	The post-closing trial balance can be generated after following the preceding step.
Cost savings	Step 10. Reversing journal entries are journalized and posted.	This will be an optional step.

Source: Conway and Byrne (2018); Bonson and Bednarova (2019), Ballada and Ballada (2021)

BCT Potential Challenges Applicable in the Normal Accounting Cycle

To answer Research Question No. 3, “What are the potential challenges of BCT in accounting?”, four themes emerged: complicated technology, technical aspects, scalability, and regulation.

Complicated Technology

The first challenge is that the technology is complicated. Swan (2017) pointed out that even the basics of BCT is difficult to understand, conceptually and technically, and might be a challenge to decision-making process.

Technical Aspects

The second challenge is its technical aspects. No matter how promising the benefits, there is still a chance that the network might be attacked by hackers. Swan (2017) argued that there seem to be unresolved technical issues on BCT.

Scalability

The third challenge is scalability. Swan (2017) explained that scalability is the ability to process voluminous transactions on a real-time basis.

Regulation

The fourth challenge is the regulation. Swan, 2017 pointed out that blockchain transactions involve money and as of the moment, there are no available laws or even accounting standards being created or legislated to regulate the possible use of cryptocurrency and BCT as a whole.

Handling the BCT Potential Challenges Applicable in the Normal Accounting Cycle

To answer Research Question No. 4, “What are the potential challenges of BCT in accounting?”, three themes emerged: training, engaging technical experts, technology development, and public consultation.

Training

One of the ways on how to address the technicality of BCT is training. Accountants can undergo series of trainings in order to get acquainted with the technology, especially its basic features that are necessary to their daily tasks. Conway and Byrne (2017), citing the study of Rooney et al. (2017), stated that accountants need to be well trained to deliver value to their respective organizations.

Engaging Technical Experts

With regard to the technical aspects, engaging technical experts would be recommendable to address those matters that are highly technical in nature. Bonson and Bednarova (2019) believed that a company might struggle to find a business partner with whom to share its decentralized architecture.

Technology Development

The scalability may be addressed by performing periodic and close maintenance of the whole system to preserve the integrity of records and to prevent it from being hacked. Swan (2017) cited that “the development of consensus algorithms that are scalable, efficient, and secure is a challenge for the long-term viability of BCT” (p. 10).

Public Consultation

Lastly, a public consultation may be conducted in order to influence the legislators and standard-setters to come up with ideas on how to make the use BCT as legal and practicable. Bonson and Bednarova (2019) mentioned that one of the areas of challenges is the environmental context, which refers to the role of regulators in the adoption of BCT in the accounting ecosystem.

The different BCT features, namely, being a distributed ledger, its security, and interconnection capabilities might be applicable in the normal accounting cycle. Its underlying ability to self-execute transactions thru smart contracts and to accommodate different transaction entries are just among the possible advantages that might be obtained when BCT would be applied in the normal accounting cycle.

However, despite the potentiality of those features and benefits, there are also underlying challenges that need to be considered. BCT is a technical and complicated technology, which needs special knowledge and skills to operate. The issues on its scalability to accommodate voluminous transactions on a real time. Moreover, there are not yet laws and/or regulations governing its use, which would pose challenges on its implementation. The challenges may be addressed by conducting trainings, engaging technical experts, development of BCT, and public consultations.

Further research is highly recommended to discover the applicability of BCT to the normal accounting cycle. One suggestion is to conduct a pilot testing in a micro entity to assess its applicability on handling small amounts of transactions. If it becomes applicable, then it may be applied to bigger categories of entities like small entities, medium-sized entities, and large and/or public interest entities.

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