

Factors that Optimize the Business Operations of Small and Medium Enterprises (SMEs) in Baguio City

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Abstract: *Optimizing business operations is crucial for several reasons, and its importance extends to various aspects of an organization's overall performance and success. For this reason, this study aims to determine the optimizing business operations of Small and Medium Enterprises (SMEs) in Baguio City. A self-made questionnaire was used in gathering data, which underwent a validation and reliability process. Its respondents were thirty (30) small and medium business owners who were accessible and willing to participate. Specifically, this study surveys the contributory factors and challenges encountered in optimizing the business operations of SMEs in Baguio City. The findings of the study showed that technology adoption, community engagement, and skill development were most of the time the contributory factors that optimize the business operations of SMEs in Baguio City. And the challenges encountered in optimizing business operations are moderately serious. Based on the findings, the conclusions were drawn, that optimizing the business operations of SMEs involves a range of factors that require a holistic approach. While the challenges encountered in optimizing business operations are noteworthy and merit attention, they may not be deemed extremely critical. By addressing these, SMEs can enhance their operational efficiency and competitiveness, adapt to changes, achieve sustainable growth, and contribute positively to the community and economy.*

Keywords: *Business, Technology Adoption, Customer Engagement, Training and Skill Development, Improvement*

I. INTRODUCTION

Small and Medium Enterprises (SMEs) play an important role in an economy, employing vast numbers of people and helping to shape innovation. These are businesses that have revenues, assets, or several employees below a certain threshold. They outnumber large firms, employ vast numbers of people, and are generally entrepreneurial, helping to shape innovation. They are also segregated from large, multinational companies because they fundamentally operate differently. SMEs may require fewer systems given their narrow scope of operations (Liberto, 2023).

Compared to corporations and other large businesses, SMEs have a unique set of challenges and considerations when it comes to the smooth operation of their business. Operations management (OM) for small businesses looks a little different. There could be one person who is responsible for all aspects of OM within the organization. OM is the process of planning, organizing, directing, and controlling the resources and activities of a business to achieve its goals. In other words, it is the backbone of any business, big or small (Neves, 2022). Most of the operations of SMEs generally assume that strategic thinking is for management, some of them feel the importance but do not know how it can be adopted into their day-to-day life operations (Ankam, 2020).

According to the Corporate Finance Institute (CFI) Team (n.d.), around the world, small to medium-sized enterprises make up a significant portion of the total number of global businesses. SMEs are defined differently around the world, it depends on the country where the business operates. It is based on several

characteristics or traits which include annual sales, the number of employees, the number of assets owned by the company, market capitalization, or any combination of these features. Generally, they are independent firms with less than 50 employees. However, the maximum number of employees is different from one country to another. Like in the United States, they defined SMEs as those with no more than 500 workers. While in the Philippines, they defined SMEs based on RA 9501 or the Magna Carta for MSMEs. It is defined as any business activity or enterprise engaged in industry, agribusiness, and/ or services that have total assets, excluding land, of up to Php 100 million (Natividad, 2016).

According to the Asian Development Bank, SMEs are the backbone of Asian economies, making up 98% of all enterprises and 66% of the national labor force from 2007 to 2012. In the Philippines, they are defined as any enterprise with 10 to 199 employees and/ or assets valued from Php 3 million to Php 100 million. Moreover, Filipino SMEs are Instagram entrepreneurs, tech startups, grocery store owners, or anyone and everyone who has the initiative to start their own business. Most especially nowadays because of technology or the internet, running a small or medium enterprise has become easier. There are now more opportunities for SMEs to thrive, grow, and even compete against larger, longer-established giants (Natividad, 2016).

SMEs play a vital role in shaping a country's economy due to their socially and economically beneficial effects. They can be considered an attractive and huge innovative system, hence, they are capable of adapting faster to the changing requirements of the market. Many technological processes and innovations are attributed to SMEs (CFI Team, n.d.). Technological adaption and innovative activities foster SME growth by allowing production and process diversification (Meng et al., 2021). As stated by Awardaroo (2022), technology is an undeniable part of working life. Nowadays, automation is expected to increase across industries, freeing up employees' time to be better devoted to more creative tasks that machines cannot do. Hence, a key characteristic of small business operations management is to ensure that you stay ahead of the curve by keeping up to date and investing in the technologies you need to streamline and improve processes. However, many SMEs face common challenges that hinder their productivity, profitability, and growth potential.

According to Monetize Technologies (2023), there are two critical areas where SMEs often encounter hurdles, which are operational inefficiencies and resource limitations. Operational inefficiencies can result in increased costs, reduced productivity, and missed opportunities. SMEs struggle with this due to limited resources or lack of streamlined processes. While limited resources are often experienced by SMEs such as a shortage of skilled personnel. In addition, the absence of specialized expertise can also pose challenges for SMEs, hindering their ability to navigate complex business environments and seize growth opportunities. By recognizing these challenges and implementing practical strategies, SMEs can navigate these obstacles successfully. One way is to embrace technology because digital transformation is vital for SMEs looking to optimize operational efficiency and resource management. SMEs can automate repetitive tasks, leverage data analytics for informed decision-making, and enhance communication and collaboration. Cloud-based solutions, project management tools, and customer relationship management systems can streamline processes, improve productivity, and foster innovation within SMEs.

In today's fast-paced digital world, to succeed small businesses in the Philippines use a Point-of-Sale (POS) system. A POS system combines both hardware and software to handle retail transactions. Hardware includes components like a computer, printer, scanner, or physical terminal that work together to operate the point-of-sale software. While the software is responsible for organizing and monitoring all the store's information. This allows customers to finalize purchases and make payments for goods and services. The use of POS systems in SMEs is becoming increasingly popular in the Philippines because of their different functionalities that help make business operations smoother and more efficient. By leveraging the power of technology, businesses can stay competitive in an increasingly digital world (Peddlr, 2023).

In the City of Baguio, SMEs play a vital role in its economy. As the summer capital of the Philippines located high in the mountains, Baguio has developed a thriving business sector dominated by SMEs over the past century. These small businesses contribute significantly to employment, innovation, and economic growth at the local level. According to the latest data from DTI-Cordillera, as of 2021, over 12,000 registered SMEs were operating in Baguio City. They account for over 99% of all businesses in the city and employ a large portion of the local workforce (Baguio City Economic Development Office, 2022). This represents approximately 99% of all businesses in the city. SMEs account for the vast bulk of employment, providing jobs for around 80,000 people. Major sectors include food manufacturing, retail trade, accommodation, and construction.

SMEs are a major employer in Baguio due to the nature of businesses in the city. As a tourism hub and center for arts and crafts, there is a large number of small shops, restaurants, hotels and other service-oriented enterprises. According to the Bureau of Local Employment, the sectors with the highest concentrations of SMEs such as food/retail and accommodation/tourism account for over half of all jobs in Baguio. Many of these roles are entry-level opportunities providing livelihoods to residents. SMEs play an important social role by absorbing workers and helping reduce unemployment rates.

In terms of economic contribution, SMEs in Baguio generated an estimated 30 billion pesos in annual sales revenue based on 2021 DTI figures. This amounts to roughly 60% of the city's total business revenues. While individual SMEs may be small, their combined economic impact is substantial. They also support a network of micro-businesses through local sourcing and supply chains. The money spent and earned within the SME sector circulates within the local economy, boosting consumer demand and commercial activity in Baguio. However, SMEs in Baguio also face numerous challenges that can hinder their growth and success.

Despite challenges from the pandemic, SMEs in Baguio have shown resilience by adapting business models and pivoting to new opportunities. For example, many restaurants shifted to delivery and take-out only, while shops utilized online selling. The DTI also implemented various assistance programs to aid SME recovery, such as low-interest loans, skills training and marketing support. As a result, the latest statistics from 2022 indicate that over 90% of Baguio SMEs have reopened post-lockdown. While revenues may still be below pre-pandemic levels for some sectors like tourism, most SMEs were able to survive the crisis with the help of government aid. According to data from the Department of Trade and Industry (DTI) in Baguio City, around 10-15% of businesses close down within the first year of operations in the city. And a 2019 study by the Baguio City Chamber of Commerce and Industry found that the one-year business closure rate was around 13%. The three-year closure rate was approximately 30%. Some of the top reasons cited for business closures in Baguio include financial difficulties, lack of profitability, cash flow problems, rising costs of operations, and inability to adapt to market changes.

SMEs are the lifeblood of the local economy in Baguio City. They provide the vast majority of jobs and account for most business activity. Through flexibility and community support, Baguio's SMEs were able to weather the challenges of the pandemic better than larger corporations.

This study can benefit various individuals and groups, including entrepreneurs and small business owners, investors, educational institutions, employees and job seekers, and students and researchers. Thus, the main purpose of this study is to understand the current business operations of SMEs in Baguio City by looking at the contributory factors that optimize their business operations and the challenges encountered therein.

II. METHODOLOGY

This study used the descriptive research design. A descriptive research design is a procedure in quantitative research in which investigators administer a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviors, or characteristics of the population (Creswell, 2014). The researchers chose the survey questionnaire to collect the data needed to answer the specific problems of this study. This method allows the researchers to collect data from the respondents.

The target population of this study is the small and medium enterprises (SMEs) located within the city limits of Baguio City. According to the Department of Trade and Industry (DTI) Baguio-Benguet, as of 2020 there are around 5,000 registered small businesses in Baguio City across various industries. Small businesses are defined as those with total asset size of no more than P100 million. This includes retail stores, restaurants, professional service firms, home-based businesses, among others. Only small and medium businesses that have been in operation for at least one year were included to ensure they have sufficient experience to assess the needed data in this study. Newly established businesses within the past year will be excluded.

A total population of 30 business owners/ managers was gathered using the convenience sampling method and passed the inclusion criteria of the study. Convenience sampling involves selecting subjects who are most accessible and willing to participate. This sampling technique is appropriate given the exploratory nature of the study and the lack of a comprehensive sampling frame. While the inclusion criteria are: 1) registered small business, 2) operational for at least one year, and 3) willingness to participate in the study.

The researcher used a survey questionnaire to gather the data needed for this study. A questionnaire is a research instrument consisting of a series of questions to gather information from the respondents (McLeod, 2018).

There were two parts of the questionnaire in this study of which, Part I is the contributory factors that optimize the business operations of small and medium enterprises (SMEs) in Baguio City. And Part II deals with the challenges encountered by the small and medium enterprises (SMEs) in Baguio City in optimizing their business operations.

The validity of the questionnaire was presented for evaluation after it had been presented to the members of the panel. To establish its validity, the questionnaire was presented to 3 experts to attest to the content validity of the instrument. The research tool has a validity of 4.4 which means that it is very highly valid. This implies that the research tool can significantly measure what it intends to measure.

Then, it was tested for reliability in twenty (20) small and medium enterprises (SMEs) who were not part of the respondents. The researcher used Cronbach's Alpha to ensure that the various items measuring the different constructs deliver consistent scores, which were calculated using MS Excel. The Cronbach Alpha resulted in 0.83 which means that there is a good intercorrelation among the items measuring the concept.

Data gathered in the study were presented in a series of tables, classified, and analyzed. Descriptive statistics such as frequency count, mean, and ranking were used to analyze the data that were taken from the respondents' answers to the questionnaire.

The data collected during this study were kept confidential at all times. There was no information released about the respondents/ participants to the public. All data and electronic documents were saved in a password-protected folder which was made accessible only to the researchers. The researchers handled all data gathered in compliance with the Data Privacy Act of 2012. And, there was no compensation for respondents/ participants who participated in this study. Moreover, the data collected will be retained for study recordkeeping purposes. After one year, the researchers will delete the softcopy files stored on their laptops. And, the data disposal process will be recorded for audit purposes.

III. RESULTS AND DISCUSSION

A. Contributory Factors that Optimize the Business Operations of Small and Medium Enterprises (SMEs) in Baguio City

Table 1 presents the contributory factors that optimize the business operations of small and medium enterprises (SMEs) in Baguio City. It has been found that the respondents agree (M=4.07) that these are contributory factors that optimize the business operations of SMEs in Baguio City. The findings indicate that optimizing the business operations of SMEs is a multifaceted process that involves various factors.

Moreover, Table 1 also shows that the respondents strongly agree (M=4.80) that technology adoption or embracing modern technologies contributes to the optimization of business operations of SMEs in Baguio City. This result of the study agrees with the statement of Meng et al. (2021) that technological adoption and innovative activities foster SME growth. This could involve using digital platforms for marketing, online sales, and communication, as well as adopting point-of-sale (POS) systems or other tech tools to improve efficiency. As stated by Peddlr (2023), POS systems in SMEs are becoming increasingly popular in the Philippines because of their different functionalities that help make business operations smoother and more efficient. It is a software and hardware solution that enables businesses to manage sales transactions, inventory, and customer data efficiently. Hence, it plays a crucial role in optimizing the business operations of SMEs by streamlining processes, improving efficiency, and providing valuable data for informed decision-making. Secondly, the respondents strongly agree (M=4.60) that customer or community engagement is another contributory factor. It implies that active engagement with the local community can enhance the reputation of SMEs. Supporting local initiatives, participating in community events, and maintaining a positive relationship with the community can contribute to long-term success. This engagement not only enhances the customer experience but also provides valuable insights and support that can positively impact various aspects of business operations. As emphasized by Coy (2019) in his study, customer engagement drives small business sustainability. And thirdly, the respondents of the study also strongly agree (M=4.40) that training and skill development is a contributory factor that optimizes the business operations of SMEs. They see this factor as vital for SMEs because it maximizes employee productivity and satisfaction. When employees are engaged and knowledgeable, they are more likely to contribute to operational efficiency. As emphasized by Walters and Rodriguez (2017), employees are the backbone of the organization, and their performance really impacts the bottom line of an organization. For this reason, it is the responsibility of organizational leaders to be aware of the importance of training and development.

In addition, having the lowest mean of 3.27, the respondents neither agree nor disagree that diversifying products or services contributes to optimizing SMEs' business operations. This could imply that the business owners or managers did not see diversification as a big factor in the improvement of the operation of their businesses. Maybe because while diversification can open up new revenue streams and attract a broader customer base, it may also introduce complexities and challenges that could potentially offset optimization efforts. As described by Ilasco (2022), even if diversification has the potential to assist poorer developing countries in creating jobs and fostering economic development, the transition involved can prove to be a great challenge. Hence, while diversification can bring growth opportunities, SMEs need to weigh the potential benefits against these challenges. It is essential to carefully plan and implement diversification strategies, ensuring that they align with the overall business goals and do not compromise the optimization of core operational processes.

TABLE 1
CONTRIBUTORY FACTORS THAT OPTIMIZE THE BUSINESS OPERATIONS
OF SMALL AND MEDIUM ENTERPRISES (SMEs) IN BAGUIO CITY (n=30)

Contributory Factors that Optimize the Business Operations of Small and Medium Enterprises (SMEs) in Baguio City	5 (SA)	4 (A)	3 (NAD)	2 (D)	1 (SD)	Mean	Descriptive Equivalent	Rank
1. Training and Skill Development	15 (75)	12 (48)	3 (9)	0 (0)	0 (0)	4.40	Strongly Agree	3
2. Building Strong Relationships with Suppliers	16 (80)	9 (36)	5 (15)	0 (0)	0 (0)	4.37	Strongly Agree	4
3. Smooth Communication	13 (65)	9 (36)	7 (21)	1 (2)	0 (0)	4.13	Agree	6
4. Technology Adoption/ Embracing Modern Technologies	17 (94)	11 (44)	2 (6)	0 (0)	0 (0)	4.80	Strongly Agree	1
5. Customer/ Community Engagement	22 (110)	5 (20)	2 (6)	1 (2)	0 (0)	4.60	Strongly Agree	2
6. Availability of Financial Resources	12 (60)	11 (44)	7 (21)	0 (0)	0 (0)	4.17	Agree	5
7. Networking and Collaboration	2 (10)	18 (72)	8 (24)	2 (4)	0 (0)	3.67	Agree	8
8. Regularly Conducting Market Research	2 (10)	11 (44)	14 (42)	3 (6)	0 (0)	3.40	Neither Agree nor Disagree	9
9. Diversifying Products/ Services	2 (10)	12 (48)	12 (36)	0 (0)	4 (4)	3.27	Neither Agree nor Disagree	10
10. Implementing Risk Management Strategies	12 (60)	4 (16)	12 (36)	2 (4)	0 (0)	3.87	Agree	7
Grand Mean						4.07	Agree	

Legend:

Statistical Limits	Descriptive Equivalent	Symbol
4.21-5.00	Strongly Agree	SA
3.41-4.20	Agree	A
2.61-3.40	Neither Agree nor Disagree	NAD
1.81-2.60	Disagree	D
1.00-1.80	Strongly Disagree	SD

B. Challenges Encountered by the Small and Medium Enterprises (SMEs) in Baguio City in Optimizing their Business Operations

Table 2 presents the challenges encountered by the small and medium enterprises (SMEs) in Baguio City in optimizing their business operations. It has been found that the challenges encountered by business owners or managers are moderately serious (M=3.13). It implies that the challenges or problems met by the respondents in optimizing their business operations are controllable. Several aspects of business operations are within the control of management, allowing them to implement strategies and solutions to address challenges and improve efficiency. As explained by Schmeizer and Walch (2024), as businesses grow and evolve, their business processes need to grow as well, and with it comes problems that they need to solve. As the business and business environment changes, these processes continuously evolve and need constant evaluation, improvement, and optimization. Like outdated processes can create customer and employee dissatisfaction,

costly operational inefficiencies, and loss of market share. But then, keeping these processes up to date, improving them as needed and continually optimizing them can be difficult.

Moreover, Table 2 shows that the respondents identified that stockouts or overstocks is a highly serious (M=3.70) challenge or problem in optimizing the business operations of small and medium enterprises (SMEs). It implies that SMEs in Baguio City encounter stockouts or overstocks that affect their businesses. Stockouts are when products are unavailable to customers who want to make a purchase. Supply shortages and improper inventory management are the common causes of stockouts. These stockouts result in unfulfilled customer demand, leading to lost sales and revenue. And when customers cannot find the products they need, they may turn to competitors affecting the SME's market share and financial performance (Indeed Editorial Team, 2022). While overstocking happens when stores purchase more products than they sell. This leaves retailers with too much stock, and that excess stock is left sitting on store shelves or in the warehouse, which hurts profitability. Stocking the correct amount of inventory is a challenging task for many retail store owners. Hence, if you overstock, you are left with costly excess inventory. On the other hand, if you understock, you miss out on sales (Jenkins, 2023). Secondly, the respondents identified inaccuracy of inventory records as a highly serious (M=3.53) challenge or problem in optimizing the business operations of small and medium enterprises (SMEs). It implies that inaccuracy of inventory records can lead to a variety of negative consequences that significantly impact the optimization of business operations. Kittisak (2023) agrees with his study that a lack of efficient inventory control systems is one of the major challenges faced by SMEs. Thirdly, the respondents also identified supply chain disruptions and limited access to financing as moderately serious (M=3.30) in the optimization of business operations of SMEs. Supply chain disruptions, such as delays in production or transportation, can lead to product shortages which can result in stockouts, negatively impacting customer satisfaction and sales revenue. While limited access to financing can restrict the ability of businesses to invest in expansion, upgrade technology, or enter new markets. This limitation on growth opportunities can hinder overall business optimization.

In addition, having the lowest mean of 2.80, the respondents identified a lack of innovation culture as a moderately serious challenge in the optimization of business operations. It implies that the respondents see this as a challenge or problem but not as a major one maybe because they are adapting to changing market conditions and staying competitive in the market. Because without an innovation culture, businesses may be more prone to maintaining the status quo which can lead to stagnant processes and a reluctance to explore and adopt more efficient or cutting-edge methods.

TABLE 2
CHALLENGES ENCOUNTERED BY THE SMALL AND MEDIUM ENTERPRISES (SMEs)
IN BAGUIO CITY IN OPTIMIZING THEIR BUSINESS OPERATIONS (n=30)

Challenges Encountered by the Small and Medium Enterprises (SMEs) in Baguio City in Optimizing their Business Operations	5 (VHS)	4 (HS)	3 (MS)	2 (SS)	1 (NS)	Mean	Descriptive Equivalent	Rank
1. Inaccuracy of Inventory Records	2 (10)	17 (68)	6 (18)	5 (10)	0 (0)	3.53	Highly Serious	2
2. Stockouts/ Overstocks	6 (30)	13 (52)	7 (21)	4 (8)	0 (0)	3.70	Highly Serious	1
3. Supply Chain Disruptions	3 (15)	6 (24)	18 (54)	3 (6)	0 (0)	3.30	Moderately Serious	3.5
4. Increased Staff Turnover	2 (10)	7 (28)	12 (36)	6 (12)	3 (3)	2.97	Moderately Serious	6
5. Inaccessibility of Training	2 (10)	11 (44)	6 (18)	8 (16)	3 (3)	3.03	Moderately Serious	5
6. Communication Breakdowns/ Chaotic Information Flow	2 (10)	5 (20)	15 (45)	5 (10)	3 (3)	2.93	Moderately Serious	7
7. Lack of Innovation Culture	2 (10)	6 (24)	10 (30)	8 (16)	4 (4)	2.80	Moderately Serious	10
8. Technology Integration/ Adoption Issues/ Barriers	0 (0)	9 (36)	12 (36)	6 (12)	3 (3)	2.90	Moderately Serious	8
9. Staff Resistance to Technology	2 (10)	7 (28)	11 (33)	5 (10)	5 (5)	2.87	Moderately Serious	9
10. Limited Access to Financing	6 (30)	9 (36)	5 (15)	8 (16)	2 (2)	3.30	Moderately Serious	3.5
Grand Mean						3.13	Moderately Serious	

Legend:

Statistical Limits	Descriptive Equivalent	Symbol
4.21-5.00	Very Highly Serious	VHS
3.41-4.20	Highly Serious	HS
2.61-3.40	Moderately Serious	MS
1.81-2.60	Slightly Serious	SS
1.00-1.80	Not Serious	NS

IV. CONCLUSIONS AND RECOMMENDATIONS

Small and Medium Enterprises (SMEs) owners and managers go along with the various factors that optimize business operations because they approve that adopting relevant technologies to automate routine tasks will improve overall efficiency. Moreover, having a well-trained and motivated workforce contributes to improved productivity and overall operational success. And building a positive reputation in the community can enhance brand image and customer loyalty. Furthermore, the challenges encountered by the small and medium enterprises (SMEs) in Baguio City in optimizing their business operations are manageable due to their commitment to improvement.

Based on the conclusions drawn, it is recommended that there is a continuous employment of technology to optimize organizational and individual performance. Implement the right software solution for accounting, customer relationship management, inventory management, and other business functions that can contribute to operational efficiency. Additionally, improvement should be continuous as businesses change, evolve, expand, and implement new technologies. When planning a business process improvement initiative, determine what the business goals are, where improvements are needed, and what needs to be optimized. By starting with optimizing single processes, involving stakeholders, and setting realistic and achievable goals, the likelihood of success will be high.

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