IMPACT OF INNOVATION ON FIRM PERFORMANCE OF GOLDSMITH INDUSTRY IN YANGON

MASTER OF BUSINESS ADMINISTRATION

AYE THANDAR MYINT

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A Thesis Presented

By

AYE THANDAR MYINT

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Approved as to style and content by:

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Dr. Paing Soe, Chair
President, Centre for Professional Development

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_____

Dr. Than Thu Zar, Supervisor
Professor, Centre for Professional Development

Dr. Stephen Harrison
Dean
Swiss School of Business Research

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Aye Thandar Myint

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ABSTRACT

This study aims to analyze the impact of innovation on firm performance within the goldsmith industry in Yangon, Myanmar. It focuses on four key dimensions of innovation for product, process, marketing, and organizational innovation and their contributions to business success. Employing quantitative research design, data are collected through structured surveys from 86 goldsmith firms in Yangon by using simple random sampling method. Descriptive statistics is used to examine the respondent perception on innovation and firm performance. Multiple regression analysis is used to assess the relationship between innovation dimensions and firm performance. Process, marketing and organizational innovation have positive and significant impact on firm performance of goldsmith industry. However, product innovation is not significant with firm performance. The results highlight that organizational innovation has the most significant impact on firm performance. Goldsmith firms should focus on improving internal structures, employee training, and inclusive decision-making processes.

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CHAPTER I
INTRODUCTION

The goldsmith industry in Myanmar holds a central place in the country's history, culture, and economy. Known for its exquisite craftsmanship, Myanmar has been producing fine gold jewelry for centuries, with designs deeply rooted in religious and cultural traditions. From royal courts to ordinary citizens, gold ornaments have been integral to religious practices, social ceremonies, and personal wealth preservation. Goldsmiths in Myanmar have maintained their craft for generations, passing down traditional techniques through familial lines, ensuring the preservation of unique Burmese designs.

Traditional craft industries have often focused on how artisans navigate the tension between preserving heritage and adopting modern technologies. A study on the jewelry sector, which is also rooted in tradition, explored how technology like CAD (Computer-Aided Design) and 3D printing improved productivity without compromising craftsmanship. The study revealed that businesses which adopted these technologies while preserving traditional aesthetic saw improved performance, enhanced product quality, and increased international competitiveness.

Myanmar is undergoing a significant political and economic transformation. To succeed, Myanmar must embark on a more rapid, sustainable, and equitable path of development. This requires a shift from a largely agrarian economy dependent on smallholder agriculture to a broad-based modern economy. Industrialization is a key engine for economic growth and job creation. Businesses are now bringing new ideas to the market through innovation. Economic reform programs in Myanmar for various sectors aim to adopt a market-oriented system that encourages private investment and entrepreneurship.

Industrial zones are designed to create jobs in new townships, relocate industrial zones to residential areas, and promote national entrepreneurship. However, industrial zones face a lack of infrastructure, a shortage of skilled labor, and the inability to compete with bank loans. High production costs, Land speculation and disputes between workers and employers are on the rise (The New Light of Myanmar, August 30, 2014). Many questions arise about how to deal with and overcome these problems. Therefore, it is necessary to consider the factors that contribute to competitiveness and business survival in the industry.

Since innovation is one of the most important ways to contribute to economic growth, many research studies have been conducted to determine the factors that positively affect the innovation efforts of businesses. To be successful in the long term, companies need to be able to innovate and develop their businesses to benefit from that innovation (Nelson, 1991). Innovation is an important driving force for a company's growth. On the other hand, various factors influence the innovative capacity of companies. It is necessary to examine the internal and external drivers of innovation. Therefore, this study aims to explore and analyze the factors that influence the innovation and performance of bakery enterprises.Operation management is the administration of business structure, practices, and processes to enhance efficiency and maximize profit. It refers to the management of functions that a business needs to run effectively day-to-day. Operation Management is important as operations are the foundation of a business, including how it deals with supply chain and logistics. Profits rely on lean, efficient operations. Poor business operations can threaten a business's survival, so processes must be optimized, the right staff needs to be employed, and physical locations must be strategic, ethical, and safe (Coursera, 2024).

Innovation is the process of creating or improving products, processes, marketing strategies, and organizational structures to add value and respond to market demands. This concept is integral to maintaining competitiveness, driving growth, and ensuring long-term sustainability. Product innovation involves developing new products or significantly enhancing existing ones to improve functionality, performance, or aesthetics, thereby offering greater value to customers. This type of innovation often results in a competitive advantage as it allows businesses to differentiate themselves. Process innovation focuses on enhancing the methods used to produce or deliver goods and services. This can involve implementing new technology, refining workflows, or adopting new techniques that reduce costs, increase efficiency, or improve product quality. Marketing innovation is about implementing new marketing strategies that alter product design, packaging, positioning, promotion, or pricing. It aims to increase market reach, customer engagement, or brand visibility. Organizational innovation involves making significant changes in an organization's structure, management methods, or internal culture to enhance efficiency, knowledge-sharing, or decision-making. This type of innovation often leads to a more adaptable and collaborative work environment (Roy, 2023).

Firm performance refers to a company's ability to achieve its objectives and maintain competitive advantage by effectively using its resources. It is often assessed through financial metrics, operational efficiency, market share, and customer satisfaction. Firm performance is multi-dimensional, involving several factors that reflect a firm's success over time and its capacity to adapt to external and internal challenges.

Operational performance measures efficiency and productivity in a firm's internal processes, supply chain, and production quality. Improved operational performance often leads to cost savings and enhanced customer satisfaction. Market performance reflects a company's position and growth in its industry. This dimension assesses competitive advantage through metrics like market share, customer satisfaction, and brand loyalty.

In recent years, non-financial performance indicators like employee satisfaction, social responsibility, and environmental sustainability have gained importance. These measures are crucial as stakeholders (employees, customers, communities) increasingly value companies that contribute positively to society. Innovation is key to sustaining performance in dynamic markets. Companies that prioritize research and development, as well as adaptability to market changes, often achieve long-term success.

The adoption of similar technologies can help Myanmar's goldsmiths scale their production and improve precision while maintaining the cultural authenticity that is central to Burmese designs as relevance to Myanmar's goldsmith industry. The handicrafts industry itself highlights the importance of preserving cultural identity in traditional craft industries while innovating for growth (Saridakis, 2016). The local artisans who embraced new business models such as online sales, e-commerce platforms, and international partnerships experienced an increase in market reach and revenues, but maintaining the cultural essence of their products was key to their success in both local and global markets.

Sareachesis et al. (2016) demonstrated that firms that successfully adopted both product innovation (new designs, materials) and process innovation (new technologies, automation) managed to expand their market reach beyond Southeast Asia into Western markets. Innovation was the key factor in enabling Thai jewelry firms to improve their performance, increase exports, and achieve a competitive advantage.

The impact of globalization on small-scale artisanal industries, focusing on sectors in Southeast Asia examined its revealed that access to global markets and international collaborations helped firms gain new customers and resources for innovation. However, it also emphasized the risk of losing cultural identity if innovation

was not carefully managed. The research highlights the importance of strategic partnerships with international designers and brands to promote innovation while maintaining cultural integrity.

Economically, goldsmith represents a significant part of the country's artisanal sector, employing thousands of craftsmen, artisans, and traders. Myanmar's abundance of natural resources, including gold, has enabled the development of a domestic industry that sustains livelihoods across many regions. Particularly in cities like Mandalay and Yangon, goldsmith plays a vital role in the local economy, attracting both domestic buyers and tourists.

1.1 Background of the Study

Goldsmith industry in Myanmar has been an integral part of the country's cultural and religious life for centuries. It is deeply embedded in the Buddhist traditions of the country, with gold playing a vital role in the decoration of religious artifacts, pagodas, and statues. Myanmar's rich natural reserves of gold and precious stones have allowed the craft to flourish, with artisans developing intricate techniques passed down through generations. Myanmar's craftsmanship, particularly in gold and silver, is tied to religious devotion, and this centuries-old tradition continues to influence the techniques and styles in the country.

The traditional designs often reflect the deep spiritual and cultural values of Myanmar society. Common motifs include floral patterns, mythical creatures, and religious symbols, which are intricately handcrafted to produce unique jewelry pieces. However, despite its historical richness, the industry has remained largely artisanal, relying on manual skills and techniques that limit scalability and modernization. This has left Myanmar's goldsmiths at a competitive disadvantage in the global jewelry market, which is increasingly dominated by firms employing modern technologies and processes.

Another critical challenge is financial constraints. Small-scale artisans often operate on tight budgets, with limited access to credit or investment. This financial pressure makes it difficult for goldsmiths to invest in modern tools or expand their operations. In many cases, goldsmiths work in family-owned workshops that are passed down through generations, relying on limited domestic resources. The Myanmar Gold Entrepreneurs Association noted that "most goldsmiths cannot afford to invest in new technology, leading to stagnation in production methods and design innovation.

The rise of e-commerce and digital marketing also offers a significant growth opportunity. Myanmar's goldsmiths can leverage online platforms to showcase their unique products to a global audience. In Southeast Asia, small artisans have been able to expand their reach and significantly increase their revenues by adopting digital marketing strategies and engaging with global consumers through online marketplaces. For Myanmar's goldsmiths, establishing a presence on these platforms could provide access to new markets and generate demand from international consumers who appreciate high-quality, culturally significant jewelry.

Another area of potential growth lies in design innovation. Myanmar's rich cultural heritage, combined with contemporary design trends, can create a unique niche in the global market. By fusing traditional Burmese elements with modern styles, goldsmiths can appeal to a wider range of consumers who seek authentic, culturally meaningful, and aesthetically contemporary jewelry. Studies have shown that artisans who combine cultural heritage with innovation can create products that stand out in a crowded global marketplace.

Yangon's goldsmith sector has long been celebrated for its intricate designs and masterful artisanship, reflecting the city's cultural heritage. However, the growing demands of today's consumers extend beyond traditional craftsmanship. Modern buyers seek personalization, ethically sourced materials, and cutting-edge designs that blend tradition with contemporary aesthetics. Meeting these demands requires goldsmith firms to adopt advanced technologies and innovative practices while maintaining the cultural essence of their craft.

This dynamic tension underscores the industry's pivotal moment: firms must innovate to stay competitive while safeguarding their artisanal roots. Advanced tools such as 3D printing and Computer-Aided Design (CAD) software enable goldsmiths to conceptualize and produce highly customized designs more efficiently than ever before. Meanwhile, digital marketing and e-commerce platforms offer opportunities to reach broader audiences, transcending geographical barriers.

This study seeks to explore these dimensions in depth, providing actionable insights and real-world examples that empower Yangon's goldsmith businesses to harness innovation as a tool for sustained success. Despite these challenges, there are significant opportunities for innovation that could transform the goldsmith industry in Myanmar. One key area is the adoption of modern technology. Technologies such as Computer-Aided Design (CAD) and 3D printing are revolutionizing the global jewelry

market by allowing artisans to create more intricate designs with greater precision, reducing production costs, and increase scalability. Studies have shown that artisans who embrace technology while maintaining traditional craftsmanship are able to reach new markets and expand their customer base.

The goldsmith industry in Myanmar faces numerous structural and operational challenges. Technological limitations represent a major hurdle. Most goldsmith workshops in Myanmar continue to rely on manual production processes, which, while preserving the craftsmanship, restrict efficiency, scalability, and precision. A report by the United Nations Industrial Development Organization (UNIDO) highlights that Myanmar's artisanal crafts, including goldsmith, are struggling to adapt to new technologies such as computer-aided design (CAD) and laser cutting, which are widely used in global jewelry production. This lack of technological adoption has led to inefficiencies in production and difficulty in meeting international standards for quality and precision.

Additionally, market access remains a critical issue. Myanmar's goldsmith industry is heavily reliant on local demand, with limited access to international markets. High tariffs, complex regulatory procedures, and limited exposure to global consumers have further isolated the industry from the international arena. The lack of branding and marketing strategies to promote Burmese gold jewelry on global platforms has been noted as one of the key factors limiting the sector's growth potential. According to a study by the Asian Development Bank (ADB), the inability of Myanmar's artisanal sectors to engage in international trade and e-commerce is a significant impediment to their growth and innovation.

1.2 Problem Statement of the Study

This research aims to explore how innovation can drive the growth and sustainability of Myanmar's goldsmith industry while preserving its cultural heritage. It seeks to identify the key drivers and barriers to innovation and propose strategies for modernizing the sector. By addressing the unique challenges faced by Myanmar's goldsmiths, this study will provide a framework for balancing tradition with technological advancement.

Firm performance is a critical indicator of a company's success and sustainability. It directly influences financial health, stakeholder satisfaction, market competitiveness, and long-term viability. Innovation is crucial for the survival, competitiveness, and

growth of any organization. It enables businesses to adapt to market demands, drive efficiencies, and create value in ways that support long-term sustainability (Sharp, 2023). The goldsmith industry holds significant importance globally due to its economic impact, cultural value, and role in preserving skilled craftsmanship.

Innovation is essential for the future growth of Myanmar's goldsmith industry. Technological adoption, market expansion, and design innovation will allow Myanmar's goldsmiths to modernize without losing the unique cultural elements that define their craft. By investing in technology, expanding their reach through e-commerce, and staying attuned to global trends in consumer preferences, Myanmar's goldsmiths can maintain their heritage while becoming competitive players in the global jewelry market.

1.3 Research Objectives

The primary objective of this research is to analyze the innovation and firm performance of the goldsmith industry. The specific objectives are:

1. To identify the innovation dimensions of Goldsmith Industry in Yangon
2. To analyze the impact of innovation dimensions on firm performance of Goldsmith Industry in Yangon
3. To explore the most influencing innovation dimension on firm performance of Goldsmith Industry in Yangon

1.4 Research Questions

This thesis will address the following key research questions:

1. Are there innovation dimensions of Goldsmith Industry in Yangon?
2. What is the impact of innovation dimensions on firm performance of Goldsmith Industry in Yangon?
3. Which factor is the most influencing innovation dimension on firm performance of Goldsmith Industry in Yangon?

1.5 Scope of the Study

This study emphasizes the innovation dimensions and firm performance of Goldsmith industry in Yangon. As the innovation dimensions, product innovation, process innovation, marketing innovation and organizational innovation are used independent variables. Among the Goldsmith firms, only firms in Yangon area are

considered in this study. Owners of Goldsmith firms are considered as the respondents of this study.

1.6 Significant of the Study

The relevance of this study on innovation in Myanmar's goldsmith industry is multifaceted. It is economically relevant in terms of increasing productivity, expanding market access, and creating employment opportunities in Myanmar. Culturally and socially, it helps preserve the rich artisanal traditions of the country while making the industry more attractive to younger generations. Academically, it contributes to the literature on innovation in traditional industries and informal sectors, offering insights into how traditional crafts can modernize in a globalized world. Policy-wise, it provides a foundation for designing interventions that support innovation, technology adoption, and market expansion. Finally, on a global scale, the study offers valuable lessons for other countries seeking to balance cultural preservation with economic growth in their own artisanal sectors.

1.7 Organization of the Study

The study is systematically structured into five main chapters, each addressing critical aspects of research on the operation management of the goldsmith industry in Yangon. Chapter I is introduction which provides an extensive overview of the study, encompassing the background, problem statement, research objectives, research questions, scope, limitations, and the organization of the study. It lays the groundwork for understanding the research context and its importance within the goldsmith industry.

Chapter II is a literature review which explores the existing knowledge relevant to operation management in the goldsmith industry. It examines theoretical concepts, principles, key variables, and empirical studies, culminating in the development of the conceptual framework. This review establishes the research's connection to prior studies and theoretical foundations.

Chapter III is methodology that details the research methods, including the design, data collection techniques, and ethical considerations. It provides a systematic approach to how the research is conducted, ensuring clarity, transparency, and replicability.

Chapter IV is analysis and results which analyzes the data to assess operational management practices and their influence on firm performance in the goldsmith industry

in Yangon. It interprets the results and highlights key insights, with a focus on identifying significant trends and implications for stakeholders.

Chapter V is conclusion and recommendations that synthesize the findings, offering a summary of key conclusions and discussions. It presents actionable recommendations for improving innovation in firm performance of the goldsmith industry and highlights areas for future research to build on the current study's contributions.

CHAPTER II
LITERATURE REVIEW

This literature review aims to explore the multifaceted impact of innovation on the firm performance of the goldsmith industry. It focuses on understanding how innovation, in its various forms as product, process, marketing, and organizational contributes to productivity, market expansion, and profitability. Additionally, the review highlights the challenges and opportunities that goldsmith firms face in adopting innovation, especially in a traditional industry where heritage and craftsmanship are deeply valued.

To provide a comprehensive understanding, the review is structured around key themes, including innovation theories, the relationship between innovation and firm performance, the role of production and operations management, and the adoption of technological advancements in traditional industries. By synthesizing insights from academic research and case studies, this review underscores the critical need for an integrated approach to innovation that respects the cultural heritage of the goldsmithing craft while addressing the competitive pressures of the modern market.

2.1 Production and Operations Management

Production and Operations Management (POM) is pivotal in determining a firm's efficiency, productivity, and overall performance. It focuses on transforming input into finished goods and services in a way that optimizes resources, reduces waste, and enhances value creation. Studies by Slack et al. (2019) emphasize the role of POM in driving cost efficiency, quality assurance, and customer satisfaction, all of which contribute significantly to a firm's competitive edge. These principles are especially relevant for industries balancing artisanal craftsmanship with scalability, like the goldsmith industry, where both precision and tradition must be preserved.

Traditional industries such as goldsmithing face unique challenges in implementing modern POM strategies. Literature suggests that family-owned small-scale businesses in sectors like Yangon's goldsmith industry often operate without standardized processes, hindering operational efficiency and scalability. Bailey and Alexander (2016) highlight the role of lean manufacturing and inventory management practices in improving resource allocation, even in informal industry setups. However, these businesses often engage with constraints such as limited technological adoption

and market uncertainties, which inhibit their ability to modernize and compete effectively.

Innovation plays a crucial role in the intersection of POM and firm performance. Recent advancements, such as the introduction of Computer-Aided Design (CAD) and 3D printing, allow traditional industries to streamline production without compromising craftsmanship. Stevenson (2020) emphasized that integrating these technologies with POM frameworks leads to improved efficiency, reduced waste, and better-quality control. For Yangon's goldsmith industry, combining innovative POM strategies with skilled craftsmanship presents a pathway to sustainable growth, preserving the cultural heritage of the craft while meeting modern production demands.

2.2 Innovation

Innovation is widely recognized as a critical driver of firm performance, enabling organizations to remain competitive, respond to market changes, and achieve long-term growth. Schumpeter (1934) conceptualized innovation as the process of creating new combinations in production, including product, process, marketing, and organizational innovations. Studies have highlighted that innovation not only enables a firm to introduce different products, but also improves operational efficiency and market responsiveness. These dimensions of innovation are particularly important in industries such as the goldsmith industry.

Innovation and the rate of innovation are critical to the success of industries. Collaboration helps accelerate the innovation process (Luzzini, et al. 2015). In today's environment, innovation is the key to success for every business, But the speed with which an organization responds to customer needs is even more important (Zhang et al., 2019). Innovation is often the result of teamwork rather than individual effort, so customers should involve suppliers or other partners in the design and development of new products to gain a competitive advantage over their competitors (Luzzini, et al., 2015).

Innovation, which focuses on introducing new or significantly improved products, has been identified as a key factor influencing customer satisfaction and strong competitiveness. Industry-specific research has shown that integrating modern design trends into traditional sectors such as jewelry making while maintaining cultural elements enhances appeal to domestic and international customers (Roy, 2023).

Similarly, Process innovation, including technological advancements such as CAD and 3D printing, enables companies to improve manufacturing accuracy, reduce costs, and increase scalability. Researchers such as Porter and Stern (2001) emphasize that process innovation is essential for aligning manufacturing practices with global quality standards.

Organizational and marketing innovations are equally important for driving firm performance. Organizational innovation involves reorganizing internal processes that lead to better collaboration and flexibility, and improving knowledge-sharing systems. The need and demand for innovation have increased due to the need to meet today's diverse environmental challenges. Innovation refers to ideas, ways of operating, products, and processes that help reduce environmental burdens or achieve environmental sustainability goals.

The Latin word for innovation (as cited in Hsu 2005, Ottosson 2006) means new or youthful or new. There are various accepted meanings. For most people, "innovation" means creativity and the creation of something new. For some, it means a new idea, for others, an invention (a new idea), for some, a new product (an invention), for some, it means the art of creating a new product or process, and for some, it means creating a new business. For most people, "to innovate" means to create and/or create something new.

Since invention and innovation are related processes, innovation scholars often make a point of clarifying the difference between the two. Invention is essential for many innovations, but innovation only occurs when an invention is commercially exploited (Brenner, 1990). A less popular approach to classifying innovations is to argue that while innovations are generally related to new ideas, innovations are ideas that are new within a specific context (Damanpour, 1987).

Research and development (R&D) is the commitment of resources to research and the refinement of ideas aimed at developing commercially viable products and processes, while innovation is also related to the process of developing subsequent products (or services). However, innovation is considered a broad concept. Godin (2002) believes that the ambiguity of definition is due to the following factors:

1. It is defined as a result or an activity, depending on the researcher's research focus and the availability of data.

2. An innovation is a process that has a significant impact on the world, the country, There is no clear-cut definition of what should be new for the industry or for the company.

3. In terms of the innovation process, a company can innovate by developing new production processes, as well as by using new technologies developed by others.

4. In addition to R&D, both the acquisition of advanced technologies and the use of a skilled workforce are considered innovations.

Innovation is the introduction of new ideas, products, services, and practices that are intended to be useful (many failed innovations can be found throughout history). The main driver for innovation is often the desire to improve the world. An essential element of innovation is its application in a commercially successful way. Consider the developments that have revolutionized and changed human history (electricity, the steam engine, automobiles, etc.). Furthermore, innovation seems to involve not only new ideas and their development, but also change and risk (Norris, 1981).

Although the importance of innovation is widely recognized, there is no universally accepted definition of what innovation is. Comparing the numerous definitions, Goffin and Mitchell (2010) note that they cover common elements:

1. The things that change (products, services, business processes, and manufacturing processes),

2. The extent of change (completely new product or some modification implemented to a previous version of the product).

In this regard, there are radical innovations, which represent complete changes to existing products, and incremental innovations, which represent small changes to existing products.

Promoting economic growth through wealth and job creation is the only way to reduce poverty in a sustainable way. Similarly, innovation is recognized as an important contributor to organizational success, performance, and survival. Drucker (1985) argued that innovation is a tool of entrepreneurship. Furthermore, both innovation and entrepreneurship require creativity. Creativity is a process that changes a symbolic space in a culture. Furthermore, successful new product development is one of the ways in which companies can gain competitive advantage. New product development (NPD) is a process that carries a lot of risk.

According to Halila & Rundquist (2011), the increasing pressure from government and the market regarding the sustainability of machinery makes it important to develop an effective and efficient innovation program and make it a permanent part of the company's management plans. There are several types of innovation to be implemented. Product innovation, process innovation and organizational innovation.

Each type of innovation has its own determinants, attributes and contributions to business performance, but without a holistic view, implementing innovations is not possible.

Innovation is one of the basic tools of growth strategies to enter new markets, increase existing market share and provide the company with a competitive advantage. Companies are starting to understand the importance of innovation as the value of existing products and services is rapidly eroding due to rapid technological change and intense global competition. Therefore, innovations are an essential part of corporate strategies for many reasons, including the need to deploy more productive manufacturing processes, perform better in the marketplace, seek a positive reputation in the eyes of customers, and achieve sustainable competitive advantage. Innovation has gained its power, especially in the last two decades.

Impacts of Innovations on Firm Performance

Innovations can indeed enhance firm performance in many areas. In particular, four different performance dimensions have been used in the literature to represent firm performance. These dimensions are innovative performance, production performance, market performance, and financial performance.

Innovation has a significant impact on corporate performance by producing an improved market position that demonstrates competitive advantage and superior performance (Walker, 2004). Many studies focusing on the innovation-performance relationship support a positive assessment of high levels of innovation as enhancing corporate performance. However, these studies are generally conceptual in nature and/or focus on a single type of innovation and explore its impact on performance, rather than considering all four defined types of innovation. Process and product innovations are the most commonly examined types of innovation. Marcus (1988), Studies by Ittner and Larcker (1997), Whittington et al., (1999), Olson and Schwab (2000), Knott (2001), and Baer and Frese (2003) report on product innovations. While many of these studies have found a positive relationship between innovations and firm performance, there are also some studies that report a negative or no relationship (Capon et al., 1990; Chandler and Hanks, 1994, Subramanian and Nilakanta, 1996).

Miller (2001) states that most companies seek technological innovation to gain a competitive advantage in their markets. All these efforts therefore need to be supported by marketing and organizational measures. In general, researchers have neglected organizational and/or marketing innovations, which are equally essential for the growth

and efficient operation of a firm (e.g. Damanpour and Evan, 1984, Damanpour 1991). Few studies on innovative capacity support organizational and marketing innovations. They point out that more innovative firms place greater emphasis on management techniques (Baldwin and Johnson, 1996) and reach higher sustainable levels of performance (Han et al., 1998; Ravicandran, 2000; Hult and Ketchen, 2001; Guan and Ma, 2003). Wolff and Pett (2004) and Walker (2004) conducted comparative research on the effects of product and process innovations on firm performance. In particular, they indicated that product improvements are positively related to firm growth. Gopalakrishnan (2000) broadened the topic by emphasizing that both innovation speed and innovation volume are related to innovation characteristics that have a positive effect on firm performance.

Although the link they found was weak, Lin and Chen (2007) also found a strong relationship between firm sales promotion and innovation. They argued that organizational innovations, rather than technological innovations, were the most important factor for total sales. On the other hand, Johne and Davies (2000) found that marketing innovations increased sales by increasing product consumption and generating additional profits for firms. Furthermore, Oke (2007) found in a recent study of British firms that different types of innovation are associated with innovative performance.

Innovative performance is a composite construct that considers various aspects of firm innovation and is the result of efforts to innovate and improve, i.e. processes, products, organizational structure, etc. Innovative performance is therefore a composite construct (Hagedoorn and Cloodt, 2003), e.g. new products, new processes, new projects, organizational arrangements.

Based on the above discussion, it is reasonable to propose that all different types of innovation have positive effects on firm innovative performance. Then, the indirect effects of these four types of innovation will lead to improvements in production and market performance through the mediation of innovative performance. In this regard, Innovation performance is the measure of innovation in various aspects of firm performance.

2.2.1 Product Innovation

Product innovation involves developing goods or services with features or purposes that differ significantly from a company's previous offerings (Olaru, 2016). Among the strategic options for product or market development, introducing a new

product is a key choice (Maier, 2014). This strategy is often pursued for several reasons such as existing products no longer meet consumers' needs or changing preferences. Market conditions evolve, creating new demands. Competition drives the obsolescence of current products through innovative offerings. Market growth potential is limited due to its size or intense competition.

In the maturity stage of the product lifecycle, firms may have a portfolio generating surplus cash flow. Seasonal demand variations lead to under-utilized production capacity. Intensified competition in certain markets necessitates new product introductions. Product innovation has been extensively studied. Product innovation model demonstrating how product design is an integral part of the innovation process. This model highlights that planning activities, including production development and marketing strategies, shape the type of product to be designed.

Product innovation is the improvement of original products, the modification of the design of recognized products, or the application of fresh inputs to the construction of recognized products (Alegre, Lapiedra, & Chiva, 2006). Peters (2009) defined it as follows. Product innovation is new and not previously known to the market. Product innovation is defined as a new product that is completely different from the old product, and the term product innovation is associated with the term novelty (Herrmann, Tomczak, & Befurt, 2006). According to J.E. & Elsenbach (2007), product innovation is a process that involves practical design, research and development, management, and marketing activities related to the promotion of novel products. Product innovation is a key factor in business development and performance, and the measure of how companies innovate new products is that most companies benefit in the future with the help of product innovation (Wheelwright, 1992).

There are three types of product innovation: line extensions, ‘me too’ products, and radical product innovation. The first two types of innovation are commonly referred to as incremental innovations. Line extensions refer to minor modifications of an existing product, while ‘me too’ products are imitations of competitors’ products already in the market. Both incremental and radical innovations play an important role. Managers design incremental innovations to satisfy market needs with products that can be developed in a short period of time (Ali, 1994, Radas and Bozˇic´, 2009). The introduction of incremental innovations is crucial for the long-term survival of firms (Banbury and Mitchell, 1995, Shankar, 2008). According to Gunday, Ulusoy, Kilic and Alpkan (2011), product innovation is a process of changing the organizational structure,

processes, It is widely viewed as an essential component of competitiveness embedded in products, operations, and services. Product innovation is one of the fundamental tools of growth strategies to enter new markets, increase existing market share, and provide a competitive advantage to the company.

Product development can be defined as "the process of transforming technological ideas or market needs and opportunities into a new product." It includes strategy, organization, concept generation, product and marketing plan creation and evaluation, and commercialization of the new product. The product development process is a disciplined set of tasks, steps, and phases that describe how a company transforms ideas into marketable products and/or services. The product development process can be divided into three phases: policy formulation, ideation, and rigorous development.

Isaksen and Smith (1997) presented a report on the strengths and weaknesses of small firms in terms of innovation. This report identified a number of issues related to SMEs in the Norwegian industry and innovation system. Companies in the food sector focus more on incremental innovation as opposed to radical innovation, and they are more involved in product and process innovations than in packaging, position and paradigm innovations (Baregheh, Rowley, Sambrook and Davies, 2012). The need for innovation is very strong for companies in this sector and plays a key role in maintaining and improving their competitiveness (Capitanio, Coppola and Pascucci, 2010; Grunert and Ottowitz, 1997; Rama, 2008 and Von Tunzelmann and Acha, 2005).

The definition of product refers to both goods and services. Polder et al. (2010)

Product innovation is defined as the introduction or development of new products/services.

The improvement of existing products/services. The improvement may include features, software, intended use, components or materials. Not only can product innovation be applied but also new uses.

It involves not only existing knowledge and technology but also new knowledge and technology. Product innovation is a process that takes place due to technological advances, changes in customer needs, wants and preferences, increased global competition and shortening of the product life cycle. The OECD (2005) points out that design changes can change the use and characteristics of a product. A product can also be considered a product innovation. Product innovation can provide. Success, customer satisfaction, Competitive advantage and efficiency for firms (Polder et al., 2010).

Roberts (1999) stated that product innovation is helpful in the introduction stage. Since it can face only low competition, it can increase profits. According to the findings. Ettlie and Reza (1992) found a positive relationship between new products and product innovation. It has an impact on market share and firm performance. Olson et al. (1995) stated that Innovation can be divided into three types: (1) product line extension, (2) new products, and (3) globally innovative products. Hauser et al. (2006) also explained. Product innovation is a key factor for the long-term survival of firms.

Therefore, many researchers argue that product innovation is a key factor in the long-term survival of firms. Market, firm performance, market share, Profitability, competitiveness, and sustainability are important.

In the business perspective, product innovation involves the development of new products, quality improvements and technical specifications, or the addition of new materials, components, or value-added functions to an existing product. It encompasses the enhancement of goods and services or the development of new categories (Rennings, Andreas, Kathrine, & Esther, 2006). According to Alegre, Lapiedra, & Chiva (2006), the recent intense and dynamic climate has made it very important to explore and survive product innovation, and product innovation is usually the result of three main factors. High global competition, challenging markets, and thirdly, rapid technological change and differentiation. Product innovation can be characterized by the use of new knowledge, technology, or materials, and can vary significantly in terms of uniqueness (Rogers M. 1998).

According to Lo (2014), the ability to generate a continuous flow of product innovations is crucial for business operations or to improve business performance or growth, and product innovation is essential for survival in the market and to capture market share due to intense competition. Due to high competition, the life cycle of a product is shortened due to intense competition and product innovation. Therefore, the main focus of businesses is on improving the product or developing new products or product innovation (Alegre, Lapiedra, & Chiva, 2006).

2.2.2 Process Innovation

Process innovation refers to the adoption of new production methods or significant changes in technologies, equipment, or software. The goal is to reduce production and distribution costs, improve quality, or increase the production and distribution of new or improved products. It also aims to improve efficiency, increase flexibility in operations or supply, and reduce environmental risks (Maier, 2015).

One of the most important benefits of process innovation lies in its ability to reduce production costs and improve operational efficiency. By investing in advanced equipment and automated manufacturing systems, companies can achieve significant improvements in production output, product consistency, and overall efficiency. Reducing costs allows businesses to implement competitive pricing strategies, which are essential for maintaining relevance and profitability in markets characterized by intense competition (Mairesse & Mohnen, 2010).

Process innovation is a new or significant improvement in the production or delivery of a product or service. Methodology such as changing technologies, software and/or equipment. OECD (2005) stated. Process innovation can reduce unit costs in production and delivery and improve quality. Products, new products are improved and are more efficient and effective in both production and distribution. Distribution. Damanpour and Gopalakrishnan (2001) proved that product.

Innovation is market-driven, process innovation is more relevant internally. Process Innovation is a new and intentional organizational effort to change production processes and service (Baer & Frese, 2003). In other words, process innovation can be defined as. Seeking to achieve a different output in a different and unique way.

Thus, the products may be original, but the extraction process is different. Productivity is improved due to new technology and/or equipment. Process innovation usually occurs when a business needs a radically different way of doing things. A process that can provide expected benefits or when a business is faced with a problem, An existing process. However, many researchers say that innovation is a process.

It also depends on the nature and development of the production method. Process innovation can be carried out. It can help to streamline the supply chain, including employees, the organization itself, suppliers, business partners, and customers. Purchasing, maintenance, accounting, and billing (Polder et al., 2010). Olson et al. (1995) pointed out that most businesses implement processes along with innovation.

It aims to reduce unit production costs. Furthermore, Ettlie and Reza (1992) showed that process innovation has a strong positive impact on efficiency and productivity.

In the goldsmithing industry, where skilled workers play a key role in the production process, technological advances have revolutionized traditional methods. Tools such as laser cutting and precision CNC (Computer Numerical Control) machines have been instrumental in facilitating mass customization. These technologies empower

artisans to work more efficiently while ensuring that the quality of their creations meets or even exceeds traditional standards. Adopting such innovations shortens production cycles and allows companies to respond quickly to market demands while maintaining their signature craftsmanship.

Innovation is a process that directly impacts companies practicing innovation through tools, equipment, New or improved processes are defined as the introduction of new or improved materials, equipment, and other technologies. These companies produce products that are then sold in the market. There is a big difference between process innovations and product innovations. New or improved product technologies are sold by an organization to satisfy its customers or its customers (Bogers, 2009). Process innovation refers to the implementation of a new or partially improved production/production or recovery system.

It allows a given amount of output, such as goods and services, to be produced with less input. The latter can be interpreted as eco-efficiency (Raymond, Aaron, & Bertha, 2006).

This is a type of innovation that has received little attention in the literature, but has become very important in recent years. An innovation is the adoption of new or significantly improved production methods that include the means of delivering the final product (Rogers M. , 1998).

Process innovation ranges from incremental changes to more radical changes. Process innovation brings about significant adjustments in equipment, technology, or software. Innovations seek to reduce the unit cost of production or delivery, increase value and value, or produce or deliver new or improved products (Brown & Frame, 2004). Process innovation can play a very important strategic role. It allows companies to produce something that others cannot or to design it in a better way than other competing companies. Through the innovation process, companies can create a very useful competitive advantage (Hall & Andriani, 2002).

In addition, the innovation process increases agility, allowing companies to adapt more easily to fluctuating market demands and changing consumer preferences. The goldsmithing industry, which is particularly sensitive to design trends, benefits greatly from this flexibility as consumer purchasing power and seasonal demand patterns change. For example, innovations such as Just-in-time (JIT) manufacturing processes

allow companies to produce products on demand, reduce excess inventory, and reduce storage costs. Similarly, modular production lines allow companies to market

2.2.3 Marketing Innovation

Marketing innovation is a critical component of organizational success, focusing on the development and implementation of new marketing methods that significantly enhance market engagement, customer acquisition, and brand positioning. Kotler (2003) defines marketing innovation as innovative approaches to product promotion, pricing strategies, communication, and customer engagement. This dimension of innovation allows firms to differentiate their offerings, penetrate new markets, and build lasting relationships with customers. Marketing innovations are particularly vital in industries such as jewelry and goldsmithing, where consumer perceptions of quality and design heavily influence purchasing decisions.

Digital marketing and e-commerce have emerged as pivotal aspects of marketing innovation in recent years. Studies highlight how traditional industries can benefit from adopting online sales channels and digital platforms to reach a broader audience. For instance, Saridakis (2016) emphasized that small-scale artisans embracing digital marketing strategies saw a significant increase in market reach, especially among international consumers. In the context of Yangon's goldsmith industry, establishing a digital presence can promote culturally significant designs to global markets while reducing dependency on local demand.

Branding and customer relationship management are other facets of marketing innovation. Effective branding, incorporating cultural heritage and craftsmanship narratives, helps firms build unique market identities, differentiating them from mass-produced alternatives. Firms combining storytelling with innovative advertising techniques see higher customer loyalty and improved brand equity. Additionally, innovations in pricing strategies, such as offering customizable pricing options or subscription models, further enhance consumer satisfaction and profitability. By adopting marketing innovations, Myanmar's goldsmith industry can position itself as a global player while maintaining its rich cultural identity.

2.2.4 Organizational Innovation

Organizational innovation refers to the implementation of new methods in a company's structure, management practices, or cultural approach to enhance efficiency,

adaptability, and competitiveness. According to Roy (2023), it involves significant changes in how firms organize their resources and operations, enabling them to respond effectively to changing market demands and internal challenges. Organizational innovation often leads to increased collaboration, knowledge sharing, and better decision-making, which are critical for industries navigating dynamic market environments, like the goldsmith industry.

In traditional sectors, such as goldsmithing, organizational innovation has been found to play a vital role in bridging the gap between heritage craft practices and modern business needs. Sareachesis et al. (2016) highlighted how firms that implement new organizational strategies such as cross-functional teams, decentralized decision-making, or innovative training programs achieve higher productivity and enhanced workforce engagement.

These practices foster creativity and a culture of continuous improvement, while adapting to technological advances and market globalization, which are essential for sustaining craftsmanship.

Organizational performance is one of the most important variables in an organization. Management research and organizational performance are undoubtedly the most important indicators of success. According to Robert Kaplan (2003), a professor at Harvard Business School, “Each organization must create and communicate ways to measure its performance. A unique strategy.” Where does continuous performance lie at the heart of any organization? Only through performance can organizations grow and develop. The first condition is the development and implementation of the necessary business excellence.A system for measuring organizational performance. Performance measurement is necessary because it provides an indication of the performance of organizations. To determine whether objectives are being achieved, to evaluate their performance, and to develop Future initiatives to improve their performance. Organizational growth Performance can be measured by operational performance such as Customer Loyalty. Economic performance such as sales growth, operating profit, and return on assets Equivalence.

Firm performance is the result of achieving goals or internal and external objectives. External objectives are achieved (Achrol & Etzel, 2003). Bonn (2000) stated. Performance can be considered a mirror of the company and is measured by external people and values. The success of the company through performance. Good performance

can bring survival, growth, and success. And competitiveness for companies (Wolff & Pett, 2006). The concept of company growth is known.

The "law of proportional effects" emerged in the 1930s (Gibrat, 1931). Trau (1996) pointed out that good performance can improve the profitability of companies. (Sohn et al., 2007) Strong performance is multifaceted and can be indicative of strong performance.

Firm performance can be measured by subjective and objective indicators (Harris, 2001). In addition, the indicators can be divided into financial and non-financial indicators (Bakar & Ahmed, 2010). Frim performance also depends on the industrial structure (Frazier & Howell, 1983). Marcus (1988) explained that firm performance depends on resources. Capabilities that provide competitive advantages. The strategies that a firm implements. Its have a direct impact on firm performance (Collins, 2005). Garrigós-Simón and Palacios Marqués (2004) state that firm performance is usually measured by profit, revenue, growth, shareholder satisfaction, market share, sales volume, productivity, numbers of new products, and competitive position.

Responding to customer needs and changing market conditions has become critical to the success of companies, and the ability of a business to innovate has become a requirement for introducing new products and services. Market-oriented innovations relate to products and services that are sold to the market. Internally-oriented innovations relate to the internal operations of a business and aim to improve productivity and efficiency by establishing or changing best practices. In the Journal of Global Business and Technology, a study by Baker and Sinkula (1999) found that market orientation can lead to strong innovation and increase innovation performance. Market orientation should be included as a driving force of organizational market information processing activities and as a conceptual framework for the innovation process. Responding to market feedback can help companies successfully adapt to an external environment that can be both dynamic and stable. Market orientation is a source of new ideas and inspiration to respond to the environment and promote innovation (Hurley and Hult, 1998, Vyas, 2009).

To respond to changing market needs, a company needs to introduce new products and services with innovative capabilities. Market orientation is characterized by implementing marketing activities that better meet customer needs than competitors (Martin and Grbac, 2003, Erdil, 2013). Although there are some conceptual variations of market orientation, it typically focuses on three components: 1) customer focus, 2)

competitor focus, and 3) inter-functional coordination (Celuch, Kasouf, and Peruvemba, 2002).

All conceptualizations focus on information gathering, information dissemination, and behavioral responses to what is received (Baker and Sinkula, 1999). Kohli and Jaworski (1990) define market orientation as consisting of three components: 1) generating market information about customer needs and external environmental factors, 2) disseminating such information among organizational functions, and 3) developing and implementing strategies to respond to the information. These include continuously collecting and systematically analyzing information about customers and competitors, allocating tasks and coordinating activities, and responding to changing market needs (Martin and Grbac, 2003, Erdil, 2013).There are indicators to identify the level of market orientation. These include the integration of customers into product innovation processes, It includes the ability to explore potential markets, the fit between market needs and the company's resources, product planning from the start, targeting international markets, market experience, understanding customer needs and user situations, competitive analysis, speed and flexibility, market research, market testing, and the use of user feedback to refine an innovation. In addition, companies use innovation to differentiate their products from competitors, doubling their profits (Pavitt, 1991).

Organizational innovation is the implementation of novel organizational procedures in business practices, business operations, or external relationships. Organizational innovation is the process of implementing new organizational practices such as quality management, reengineering, and lean management, such as outsourcing, partnering, and organizational innovation. Organizational innovation is a profound result for business and is the foundation for creating value (Thakur, Hsu, & Fontenot, 2012). It can become both behavior and belief because it simply becomes the same meaning, assumption, belief, and ethics that exist in the minds of employees.

Organizational culture is a desire to understand (Giritli & Acar, 2007), It is important to understand organizational culture because it is fundamental to learn how to do it right (Giritli & Acar, 2007). Most organizational researchers and scholars have found that organizational culture has a significant impact on the top results of an organization and its long-term usefulness.

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Organizational innovation is the process of implementing new organizational practices such as quality management, reengineering, and lean management, such as outsourcing, partnering, and organizational innovation. Organizational innovation is a profound result for the business and is the foundation for creating value.

Organizational innovation is a broad theory or thought that includes many concepts such as strategic, structural, and behavioral areas, There is no consensus on this specific definition (Mothe & Nguyen-Van, 2015). Many studies or researches distinguish between all types of organizational innovation, while some researches distinguish between technological and non-technological innovation, and some researches define the difference between technological and non-technological innovation, but generally organizational innovation is an improvement or change in the practices of an organization and knowledge management within the industry.Those firms which are engaged in creativity or organizational innovation has many objectives behind it such as to enhance the value of the business, to earn more profit, enhance the performance of the organization and minimize the organizational cost. It also strive to enhance the place of work satisfaction and also labor productivity and get the access to non-tradable assets like a non-codified information and lower the cost of the goods.There factors may be reasons of the organizational innovation related with the marketplace, goods, quality and capability to learn the execution of changes in the organization. Find out the organization objectives for the innovation and the value can be understood when the market forces that comply the innovation activities like a huge competition and to gain opportunities for to get access in the new business.

According to Agnieszka & Woldu (2012) organizational innovation can be more distinguished in two aspects such as intra organizational and inter organization, although the intra organizational innovation happened inside the industry like an execution of teamwork, quality, constantly enhancement in the procedure, certification of departments and occupation inside the organization. On other side inter organizational innovation involves latest business formation within the organization limitations such as latest formations of the organization and atmosphere of the organization and material, buyers or competitors.

Kohli and Jaworski (1990) found that the greater an organization's market orientation, the greater its overall performance, and this relationship was moderated by several external factors, such as economic weakness, market intensity, and competitive intensity. An organization's environmental conditions can influence its level of market

orientation. Organizations in more competitive and dynamic environments can be expected to be more market oriented. As a result, the link between market orientation and performance depends on the characteristics of an organization's environment (Jaworski and Kohli, 1993). Jaworski and Kohli (1993) proposed three environmental characteristics: market volatility (the composition of customers and the rate of change in their preferences), competitive intensity, and technological shocks. Organizations that operate with rapidly changing technologies can gain competitive advantage through technological innovation coupled with market orientation.

Organizational innovation also extends to the adoption of digital tools and systems that streamline operations and enhance communication within firms. Studies in related industries show that integrating technologies like enterprise resource planning (ERP) systems improves workflow management and ensures better resource allocation. For Myanmar's goldsmith industry, embracing organizational innovation, such as creating collaborative networks or modernizing management structures, can support scalability, enhance operational efficiency, and enable the preservation of artisanal craftsmanship alongside modernization efforts.

2.3 Firm Performance

Firm performance is a key focus in business research, reflecting how effectively a company utilizes its resources to achieve its strategic objectives and competitive advantage. The literature on firm performance emphasizes various dimensions, including financial outcomes such as profitability, sales growth, and market share, as well as non-financial aspects like innovation, customer satisfaction, and employee engagement. Performance measures can be objective, like return on investment (ROI) or subjective, such as perceived market leadership. Scholars have developed multiple theoretical frameworks to understand the drivers and indicators of performance, often linking it to external environmental factors and internal capabilities.

Firm performance refers to the actual productivity or results of an organization as measured against its planned productivity or targets and objectives. It is defined as the firm’s ability to effectively achieve its goals and objectives with the help of competent management, good governance, and a sustained commitment to achieving business objectives (Mahapatro, 2013). Organizational performance is a measure of how well an organization achieves its goals and objectives. Organizational performance is one of the

most important constructs in management research (Ho, 2008). Most researchers have different definitions of organizational performance, and most researchers have used the term performance to describe both the ability to measure inputs and outputs and the ability to trade off. Organizational performance is the ability of an organization to manage, It is a very broad concept that encompasses operational and competitive excellence and its functions. Apart from financial performance, there are some non-financial performance indicators that have been noted in previous studies to improve understanding of organizational performance, such as market performance and customer satisfaction.

In analyzing firm performance, researchers often contrast two broad perspectives: the resource-based view (RBV) and the dynamic capabilities approach. The RBV positions firms with valuable, rare, inimitable, and non-substitutable resources as being in a better position to achieve superior performance. This model emphasizes how firm-specific resources, such as intellectual capital, technological assets, and management expertise, can serve as competitive advantages. At the same time, It highlights the importance of a firm's ability to adapt and evolve in response to changing environments, and suggests that continuous innovation and flexibility in resource utilization are essential for sustaining long-term performance.

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Most researchers have different definitions of organizational performance, and most researchers have used the term performance to describe the ability to measure inputs and outputs and the ability to make sales. Organizational performance is a very broad concept that encompasses the management, operational, and competitive excellence of an organization and its activities. There are some non-financial performance indicators, such as market performance and customer satisfaction, that are used to improve the understanding of organizational performance (Chen & Quester, 2006).

Another significant theme in the literature concerns the role of organizational structure and strategy in firm performance. Numerous studies demonstrate that firms with aligned, coherent strategic directions and well-organized structures are more likely to succeed. Formalized planning, effective decision-making processes, and clear communication channels facilitate greater operational efficiency and responsiveness to market conditions. Additionally, the firm's organizational culture, leadership style, and strategic alignment are all important factors that influence its ability to execute its strategy and achieve high performance. Across these studies, there is a growing recognition that a combination of external and internal factors ultimately determines a firm's performance trajectory.

2.4 Empirical Studies

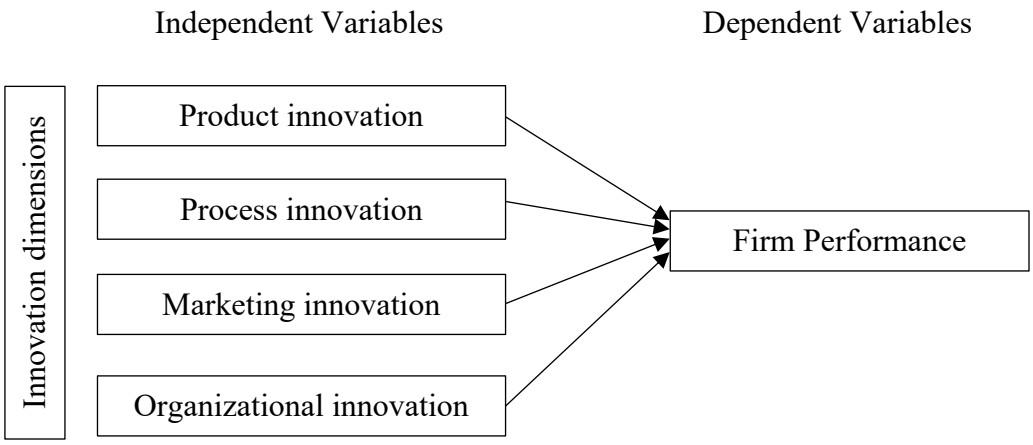
Chen (2017) studied the relationship between innovation and firm performance. Innovation has been generally regarded as a key factor affecting firm performance. Many companies try their best to achieve higher profits through innovation in different ways. However, the literature shows that the impact of innovation on firm performance is different among many innovative firms. This article reviewed the related literature from three aspects: the direct impact of innovation on enterprise performance, the moderating effect of innovation on firm performance, the mediating effects between innovation and firm performance.

Tung (2012) conducted a study of product innovation on firm performance. This study applies the perspective of new product development, brand extension and organizational change to highlight the impact of product innovation on firm performance. The paper relies on earlier research that has been carried out relating to successful product innovation and the sources of innovation. The results of the study indicate that when firms decide to allocate resources to product innovation, they expect to gain leverage in terms of competitiveness and performance. It reveals that continuous product innovation increases the capacity of a firm to serve wide ranging consumer needs thereby upholding their loyalty. The issue of early innovator and follower firms also emerge whereby a short-lived monopolistic operation is established through new product launch. The early innovators earn super profits before competing follower firms imitate their products. Generally, the study leads to the conclusion that product innovation is significant for a firm's performance and survival.

Atalay et al. (2013) examined the relationships between innovation and firm performance. The survey of this study is conducted on top level managers of 113 firms operating in the automotive supplier industry which is one of the most innovative industries in Turkey, as of the year 2011. The obtained data from the questionnaires are analyzed through the SPSS statistical package program. Analysis results demonstrated that technological innovation (product and process innovation) has significant and positive impact on firm performance, but no evidence was found for a significant and positive relationship between non- technological innovation (organizational and marketing innovation) and firm performance.

2.5 Conceptual Framework

Based on the literature review, the following conceptual framework is developed to achieve the research objectives.



Source: Own Compilation (2024)

According to the conceptual framework, innovation dimensions such as product innovation, process innovation, marketing innovation and organizational innovation are independent variables, and firm performance is dependent variable.

CHAPTER III
RESEARCH METHODOLOGY

This research employs quantitative research method. The study conducts a survey of owners from goldsmith enterprises in Yangon to assess the current state of innovation and identify firm performance. This chapter explores the research method to conduct the survey research.

3.1 Research Method

The research methodology for this study is designed to explore how innovations, specifically process innovations, influence the performance of goldsmith firms in Yangon, Myanmar. To achieve this objective, a mixed-methods research design is employed, integrating both quantitative and qualitative approaches to provide a comprehensive understanding of the relationship between innovation and firm performance. This study adopts a mixed-methods approach, combining quantitative and qualitative research methodologies to address the research question from multiple perspectives:

The quantitative component aims to collect numerical data to measure the impact of process innovation on specific aspects of firm performance. This data gathered through structured surveys featuring closed-ended questions. These questions are designed to assess the relationship between innovation practices and key performance indicators such as production costs, product quality, profitability, and operational efficiency. This approach ensures a robust statistical analysis of the effects of process innovation on measurable outcomes.

The qualitative component complements quantitative research by delving deeper into perceptions, adoption processes, and implementation strategies of process innovations in goldsmith firms. Semi-structured interviews are conducted with key industry stakeholders, including goldsmith firm owners, senior managers, and artisans. These interviews provide nuanced insights into the challenges, benefits, and strategic considerations associated with integrating process innovations into traditional workflows. The qualitative data aims to contextualize the statistical findings and explore the human and organizational dimensions of innovation.

By combining these two approaches, the study provides a complete understanding of the topic, delivering both statistical evidence and detailed contextual

insights into the impact of process innovation on firm performance in Yangon's goldsmith industry.

3.2 Sampling Method

The research design for studying the innovation in Myanmar's goldsmith industry will adopt a quantitative approach. This approach allows for a refinement exploration of both numerical data (quantitative) that are crucial for studying goldsmith industry in Yangon. There are about 110 Goldsmith businesses in Yangon. Sample size is 86 businesses by using Raosoft sample size calculator. Simple random sampling method is used to select the sample respondents.

3.3 Data Collection Methods

To ensure the reliability and validity of the findings, the study employs multiple data collection methods. Structured questionnaires distributed to a sample of goldsmith firms. The survey includes standardized questions focusing on the adoption of process innovations and their impact on operational metrics such as cost reduction, production time, and product consistency. The survey data are used to identify trends and correlations between innovation practices and firm performance.

Semi-structured interviews are conducted with selected goldsmith firm owners, managers, and industry experts. These interviews explore how firms perceive and implement process innovations, the barriers they face, and their overall strategies for integrating modern technologies into traditional production methods. Primary and secondary data are used in this research. As primary data, surveys with owners of goldsmiths on innovation dimensions and firm performance. A total of 110 people who are from different roles from goldsmith industry in Yangon were surveyed through questionnaires to assess their perceptions of firm performance of goldsmith industry in Yangon. Secondary data sources, including the internet, thesis, papers, and relevant text books, are employed for conducting this study.

3.4 Data Analysis Method

The data collected is analyzed using a combination of statistical and thematic analysis techniques. Quantitative data are summarized using descriptive statistics, providing an overview of trends and patterns related to process innovation and firm

performance. This analysis will highlight how goldsmith firms in Yangon engage with innovation and identify key areas of impact on their operations. Advanced statistical techniques, such as descriptive statistics and regression analysis, are applied to examine the strength and significance of relationships between process innovation practices and performance indicators like cost efficiency, product quality, and profitability.

Qualitative data from interviews are analyzed thematically to identify recurring themes and insights related to the adoption and implementation of process innovations. This approach will provide a deeper understanding of the contextual factors influencing innovation decisions. By integrating these methods, the study ensures a rigorous and multifaceted analysis of the impact of process innovation on goldsmith firms in Yangon. The findings will serve as a foundation for actionable recommendations aimed at enhancing firm performance through innovation.

3.4.1 Descriptive Statistics

Descriptive statistics play a vital role in recognizing and summarizing the features of a dataset, encompassing responses or observations from a sample or an entire population. Commonly utilized across diverse disciplines, these methods are fundamental for effective data collection and analysis. Together with inferential statistics, they form an indispensable part of research methodologies. Each factor comprises multiple questions, with respondents indicating their level of agreement on a five-point Likert scale. A five-point Likert scale was utilized to establish criteria for assessing variable levels. In the results discussion, variable values were determined based on the levels of agreement indicated by respondents. The data analysis translated the responses into numerical values as follows: strongly disagree = 1, disagree = 2, neutral = 3, agree = 4, and strongly disagree = 5. The mean values of the five-point Likert scale items were interpreted as follows: scores ranging from 1.00 - 1.80 indicated a perception of strongly disagreed, scores from 1.81 to 2.60 suggested disagree, scores from 2.61 to 3.40 indicated neutral, scores from 3.41 to 4.20 signified agree, and scores from 4.21 to 5.00 indicated a perception of strongly agree.

3.4.2 Multiple Regression Analysis

Multiple regression analysis is a statistical approach used to predict the value of a dependent variable based on two or more independent variables. This method estimates the influence of different factors and their perspectives with the innovation. In this study,

multiple regression analysis was applied to investigate the impact of innovations such as product innovation, process innovation, marketing and organizational innovation.

The model estimated in this study is as follows:

$Y_¡ = ß_0 + ß_1X_1 + ß_2X_2 + ß_3X_3 + ß_4X_4 + Ɛ_¡$

Where:

$Y_¡$ = Firm Performance

$ß_0$ = Intercept

$ß_1$, $ß_2$, $ß_3$, $ß_4$ = Process Innovation

X_1 = Product Innovation

X_2 = Process Innovation

X_3 = Marketing Innovation

X_4 = Organization Innovation

$Ɛ_¡$ = Random Error

3.5 Ethical Consideration

The study adheres to ethical principles throughout the sampling process. All participants are informed about the purpose of the study, their role as respondents, and their right to decline participation without any repercussions. Confidentiality and anonymity are maintained to ensure that personal data is protected and used solely for research purposes.

The combination of a robust research design and a carefully implemented sampling strategy ensures the reliability and validity of the study. By utilizing quantitative methods and simple random sampling, the research achieves a comprehensive and unbiased analysis of the impact of innovation on firm performance of goldsmith industry in Yangon provides the foundation for generating actionable insights and practical recommendations.

CHAPTER IV
ANALYSIS ON THE IMPACT OF INNOVATION ON FIRM PERFORMANCE OF GOLDSMITH INDUSTRY IN YANGON

The collected data are analyzed using SPSS to meet the study's objectives. This chapter includes discussions on the general characteristics of the respondents, descriptive statistics, variable reliability, and regression analysis.

4.1 Demographic Profile of the Respondents

The following table presents the demographic details of the respondents at goldsmith industry in Yangon, involving gender, age, role in the firm, years of experience.

4.1.1 Respondents by Gender

The gender distribution of respondents is categorized into two groups: male and female. The following Table presents the respondents' demographics regarding their gender.

No.	Gender	No. of Respondents	Percentage
1.	Male	79	71.8
2.	Female	31	28.2
Total		110	100.0

Table (4.1) Gender of the Respondents

Source: Survey Data (November, 2024)

By viewing the above Table (4.1), most of the respondents are male 71.8 percent, whereas female respondent is 28.2 percent. In the goldsmith industry in Yangon, operates with a workforce predominantly comprised of males who handle the jewellery production, while females are primarily operates mostly in office roles. The male goldsmiths are higher than the female goldsmiths in gender respondents.

4.1.2 Respondents by Marital Status

Marital status of respondents is categorized by two groups: single and married. The following Table shows the result of marital status of the respondents.

No.	Marital Status	No. of Respondents	Percentage
1.	Single	13	11.7
2.	Married	97	88.3
Total		110	100.0

Table (4.2) Marital Status of the Respondents

Source: Survey Data (November, 2024)

By viewing the above Table (4.2), most of the respondents are married 88.3 percent, whereas single respondents are 11.7 percent.

4.1.3 Respondents by Age

The age of respondents is classified by five groups: 18-25 years, 26-35 years, 36-45 years, 46-55 years and 56 years and above. The following table illustrates the result of age of the respondents.

No.	Age (Years)	No. of Respondents	Percentage
1.	18-25	15	13.6
2.	26-35	32	29.1
3.	36-45	33	30.0
4.	46-55	26	23.6
5.	56 and above	4	3.6
Total		110	100.0

Table (4.3) Age of the Respondents

Source: Survey Data (November, 2024)

According to the above illustration, the survey reveals that there are fifteen respondents, representing 13.6% of the total respondents who are aged between 18-25 years, 32 respondents representing 29.1% of the total respondents who are aged between 26 and 35 years old, 33 respondents representing 30% of the total respondents who are aged between 36 and 45 years old and 26 respondents representing 23.6% of the total

respondents who are aged between 46 and 55 years old. Lastly, the age of 56 years and above, there are 4 respondents (3.6% of respondents). Upon analyzing the respondents, it was observed that most goldsmiths in the industry are middle-aged, showing flexibility and strong innovation skills.

4.1.4 Education Level of the Respondents

The table presents the educational background of the respondents, showing the distribution of their highest level of education. The data highlights the diversity in academic qualifications among participants, which may influence their perspectives on innovation and business practices.

Table (4.4) Educational level of the Respondents

No.	Education Level	No. of Respondents	Percentage
1.	High School	50	45.9
2.	Undergraduate Level	26	23.4
3.	Graduate	25	22.5
4.	Postgraduate	9	8.2
Total		110	100.0

Source: Survey Data (November, 2024)

The majority of respondents (69.3%) have an education level below the graduate level (high school or undergraduate). A distinguished portion (30.7%) has attained graduate or postgraduate education, suggesting that a mix of practical and academic expertise is represented in the sample. This distribution may influence the study's findings, as individuals with different education levels may have varying perspectives on innovation, business strategies, and industry practices.

The educational background of respondents indicates a diverse mix of qualifications, with a higher concentration at the high school and undergraduate levels. This distribution provides insights into the respondents' knowledge base and potential approach to innovation adoption and implementation.

4.1.5 Role in the Firm of the Respondents

The positions held by the respondents were categorized into five groups: owner, manager, goldsmith/craftsman, marketing/sales and others. The findings regarding the positions of the respondents are presented in the table and figure below.

Table (4.5) Role in the Firm of the Respondents

No.	Position	No. of Respondents	Percentage
1.	Owner	33	30.0
2.	Manager	12	10.9
3.	Goldsmith/Craftsman	47	42.7
4.	Marketing/Sales	16	14.5
5.	Others	2	1.8
Total		110	100.0

Source: Survey Data (November, 2024)

It is found that 42.7% of the respondents are goldsmith/craftsman which is the largest group, the second largest group is the owner at 30%, the respondent of the sale and marketing it's become the third largest groups with 14.5%, following by the managers at 10.9%, and the others respondents (e.g.-finance, administration, operation and so on) at 1.8% which is the smallest groups of the respondents.

4.1.6 Working Experiences of the Respondents

The table presents the distribution of respondents based on their years of work experience, highlighting the level of professional exposure among the participants. Understanding the work experience of respondents is crucial in assessing their perspectives on innovation, business practices, and decision-making processes.

Table (4.6) Working Experience of the Respondents

No.	Working Experiences (Years)	No. of Respondents	Percentage
1.	Less than 1	3	2.7
2.	1 – 5	21	19.1
3.	6 – 10	36	32.7
4.	11 – 20	29	26.4
5.	Over 20	21	19.1
Total		110	100.0

Source: Survey Data (November, 2024)

The majority of respondents (79.1%) have more than 5 years of work experience, suggesting that most participants bring considerable industry knowledge to the study. The balanced distribution of early-career, mid-career, and highly experienced professionals provides a diverse range of insights into workplace innovation and industry trends. This distribution could affect the study's findings, as individuals with different experience levels may have varying perceptions of innovation, risk-taking, and business strategies.

The work experience distribution reflects a well-rounded sample, with a strong representation of mid-career and experienced professionals. This enhances the reliability of the study in capturing insights into innovation adoption, organizational changes, and industry challenges across different career stages.

4.2 Reliability Analysis of the Variables

The table presents the Cronbach's Alpha values for different variables, assessing the internal consistency and reliability of the measurement scales used in the study. Cronbach's Alpha (α) is a measure of reliability, with values typically interpreted as follows:

Table (4.7) Reliability Analysis of the Variables

Sr. No.	Variables	No. of item	Cronbach Alpha
1	Product Innovation	5	0.877
2	Process Innovation	5	0.873
3	Marketing Innovation	5	0.954
4	Organization Innovation	5	0.737
5	Firm Performance	6	0.913

Source: Survey Data (November, 2024)

Marketing innovation (α = 0.954) shows the highest reliability, indicating a strong internal consistency among the five items measuring marketing innovation. This indicates that the items effectively capture the concept without redundancy. Firm performance (α = 0.913) also demonstrates excellent reliability, confirming that the six items measuring firm performance are highly consistent. Product innovation (α = 0.877) and process innovation (α = 0.873) both show good reliability, indicating that the items

measuring these innovation types are consistent and reliable for analysis. Organizational innovation (α = 0.737), while still acceptable, this is the lowest reliability score in the table. It suggests some variability in responses or a need for refinement in how the items measure organizational innovation.

The high Cronbach's Alpha values indicate that the survey items used to measure different innovation builds and firm performance are generally reliable and internally consistent. Marketing innovation and firm performance have the strongest reliability, while organizational innovation has the lowest but still acceptable reliability.

The reliability analysis confirms that the measurement scales used in the study are statistically reliable and suitable for further analysis. However, minor refinements could be considered for organizational innovation to develop consistency.

4.3 Descriptive Analysis on Dependent and Independent Variables

This research examines firm performance regarding the factors shaping the impact of innovation on firm performance of goldsmith industry in Yangon. Firm performance is assessed using the overall average result of each variable, with mean values and standard deviations measured for each description of innovation dimensions.

4.3.1 Product Innovation

Product innovation, focusing on various aspects of production advancements within the firm. Table 4.8 includes mean values and standard deviations for five key statements related to innovation in production techniques, technology adoption, cost efficiency, product quality, and order completion time.

Table (4.8) Descriptive Statistics of Product Innovation

Sr. No.	Statements	Mean Value	Std. Deviation
1	Our firm frequently updates production techniques to improve efficiency.	4.21	.825
2	We use advanced technologies such as CAD (Computer-Aided Design) or 3D printing for product development.	4.26	.892
3	The adoption of new production methods has reduced waste and material costs.	3.84	.829

4	Production innovation has improved the consistency and quality of our products.	4.21	.730
5	New production innovations have shortened the time needed to complete orders.	4.33	.665
Overall Mean		4.17	

Source: Survey Data (November, 2024)

The highest mean value (4.33) is observed for the statement "New production innovations have shortened the time needed to complete orders," indicating that respondents strongly agree that innovation has enhanced operational efficiency. Similarly, the use of advanced technologies such as CAD and 3D printing received a high mean score of 4.26, suggesting a strong emphasis on technological integration in product development.

Statements related to production efficiency improvements (Mean = 4.21) and quality consistency (Mean = 4.21) also received high ratings, reinforcing the significance of innovation in optimizing processes and product standards. However, the lowest mean value (3.84) is associated with the reduction of waste and material costs, indicating a comparatively lower agreement among respondents regarding cost-saving benefits.

The overall mean value of 4.17 reflects a positive perception of product innovation efforts within the firm. The findings indicate that product innovation plays a crucial role in enhancing production efficiency, quality, and technological advancement. However, there is room for improvement in optimizing cost reductions through innovation. These insights provide valuable input for firms seeking to strengthen their innovative strategies.

4.3.2. Process Innovation

Table 4.9 presents the descriptive statistics for process innovation, highlighting key aspects of technological advancements and efficiency improvements within the firm's manufacturing operations. The mean values and standard deviations provide insights into respondents' perceptions of innovation in production processes.

Table (4.9) Descriptive Statistics of Process Innovation

Sr.	Statements	Mean	Std.

No.		Value	Deviation
1	Our firm regularly improves or upgrades its manufacturing processes.	4.17	.799
2	New technologies have been implemented to streamline production workflows.	4.20	.751
3	Innovations in our processes have significantly reduced production costs.	3.86	1.039
4	The introduction of new techniques has minimized errors and defects in production.	4.13	.705
5	We have adopted automation to enhance production accuracy and speed.	4.16	.684
Overall Mean		4.10	

Source: Survey Data (November, 2024)

According to the specified Table (4.9), the overall mean value of 4.10 indicates a generally positive perception of process innovation within the firm. The low standard deviations in most categories suggest a strong consensus among respondents, except for cost reduction, where opinions vary more widely. The findings suggest that technology adoption and process optimization are key strengths, while further improvements may be needed in achieving consistent cost savings through innovation.

While still positive, the lowest mean score (Mean-3.86) suggests that respondents perceive cost reduction as benefits from innovation to a lesser extent compared to other areas. The results highlight the firm's proactive approach to process innovation, particularly in technology integration, automation, and quality improvement. However, strategies to further enhance cost-efficiency should be explored to maximize the benefits of process innovation.

4.3.3 Marketing Innovation

The Table (4.10) presents the descriptive statistics of marketing innovation, evaluating the extent to which firms adopt innovative marketing strategies. The mean values and standard deviations provide insights into respondents' perceptions of marketing-related innovations, particularly in strategy, branding, digital platforms, and customer engagement.

Table (4.10) Descriptive Statistics of Marketing Innovation

Sr. No.	Statements	Mean Value	Std. Deviation
1	Our firm regularly adopts new marketing strategies to reach potential customers.	4.10	.789
2	We have introduced innovative promotional campaigns to enhance brand awareness.	4.09	.784
3	Social media platforms are an integral part of our marketing strategy.	4.28	.779
4	Online sales channels have been adopted to expand market reach.	4.16	.756
5	We regularly collect and use customer feedback to improve marketing efforts.	4.23	.718
Overall Mean		4.17	

Source: Survey Data (November, 2024)

The overall mean value of 4.17 suggests that respondents perceive marketing innovation in their firms positively. The standard deviation values are relatively low, indicating consistent agreement among respondents. The strong emphasis on digital marketing (social media and online sales) highlights the evolving role of technology in modern marketing strategies. While promotional campaigns are implemented, there may be opportunities for further innovation in branding and engagement strategies.

The findings suggest that firms are actively leveraging digital platforms, customer insights, and new marketing strategies to enhance market reach and brand visibility. To further strengthen marketing innovation, firms could focus on developing even more creative promotional initiatives and enhancing customer engagement techniques.

4.3.4 Organizational Innovation

The Table presents the descriptive statistics of organizational innovation, evaluating how firms implement innovation-driven practices related to work arrangements, employee development, decision-making, and company culture. The mean values and standard deviations provide insights into the level of innovation adoption within organizational structures.

Table (4.11) Descriptive Statistics of Organization Innovation

Sr. No.	Statements	Mean Value	Std. Deviation
1	We have adopted flexible work arrangements to enhance productivity and creativity.	4.03	.669
2	Regular training and development programs are provided to enhance employee skills.	3.90	.765
3	Our firm has implemented systems to encourage and reward employee innovation.	3.84	.872
4	Innovation is a core part of our company's mission and values.	4.11	.770
5	Decision-making processes have become more inclusive, involving input from various levels.	3.46	1.164
Overall Mean		3.87	

Source: Survey Data (November, 2024)

The overall mean value of 3.87 indicates a generally positive perception of organizational innovation, though there is variation in specific areas. The high standard deviation (1.164) in decision-making suggests inconsistent experiences among employees regarding inclusion in the innovation process. Strong emphasis is placed on embedding innovation in company values and fostering flexible work environments, while further enhancements could be made to employee incentives and inclusive decision-making.

The findings suggest that firms are making progress in building innovative organizational cultures, particularly through flexible work policies, training initiatives, and innovation-driven values. However, improving decision-making inclusivity and strengthening innovation reward systems could further enhance organizational innovation.

4.3.5 Firm Performance

The Table presents the descriptive statistics of innovation outcomes, assessing the impact of innovation on financial performance, customer satisfaction, product quality, operational efficiency, employee engagement, and customer retention. The mean values and standard deviations provide insights into the perceived effectiveness of innovation efforts.

Table (4.12) Descriptive Statistics of Firm Performance

Sr. No.	Statements	Mean Value	Std. Deviation
1	Innovation efforts have led to increased overall revenue and profitability.	3.98	.620
2	Customer satisfaction has improved due to innovative products and services.	4.14	.710
3	Innovation has enhanced the quality of our products and services.	4.10	.676
4	Innovation efforts have helped reduce production or operational costs.	3.95	.787
5	Employee productivity and engagement have improved due to organizational innovations.	4.09	.671
6	Customer loyalty and retention have increased because of innovative practices.	4.33	.665
Overall Mean		4.09	

Source: Survey Data (November, 2024)

The overall mean value of 4.09 suggests a positive perception of innovation outcomes, with the strongest impacts observed in customer loyalty, satisfaction, and product quality. The standard deviation values are relatively low, indicating consistent responses among participants. While innovation is recognized for improving customer engagement and product quality, its financial and cost-saving effects appear less pronounced in the short term.

Innovation has also helped in reducing production or operational costs, though this aspect received the lowest mean value, indicating that cost-related benefits might not be as immediately noticeable as other outcomes. The findings highlight the strategic benefits of innovation, particularly in enhancing customer satisfaction, product quality, and employee engagement. However, firms may need to develop long-term strategies to maximize the financial and cost-saving benefits of innovation.

4.4 Multiple Regression Analysis of Innovation and Firm Performance

Exploiting multiple regression analysis, this study assesses the impact of innovation on firm performance of goldsmith industry in Yangon, surrounding dimensions such as product innovation, process innovation, marketing innovation and organizational innovation on firm performance.

4.4.1 Model Summary

The model summary is supposed to indicate the amount of variation in the dependent variable that can be endorsed to the change in the independent variable. In this study, the model summary was applied to discover the amount of variance in firm performance because of changes in product innovation, process innovation, marketing innovation and organizational innovation. The data are shown in Table (4.13).

Table (4.13) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.883[a]	.779	.771	.27593

a. Predictors: (Constant), Organization Innovation, Process Innovation, Marketing Innovation, Product Innovation

Source: Survey Data (November, 2024)

According to the data, the value of R square is 0.779, which indicate the independent variable (as product innovation, process innovation, marketing innovation and organizational innovation) have 36.6% variation on dependent variable (firm performance).

4.4.2 ANOVA Result

The ANOVA Table (4.14) indicates that the F-test for the overall significance of the model is highly significant at the 1 percent level in goldsmith industry in Yangon.

Table (4.14) ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	28.249	4	7.062	92.754	.000[b]
	Residual	7.995	105	.076		
	Total	36.243	109			

a. Dependent Variable: Firm Performance

b. Predictors: (Constant), Organization Innovation, Process Innovation, Marketing Innovation, Product Innovation

The model effectively describes the relationship between the dependent and independent variables for goldsmith industry in Yangon. Therefore, the independent variables (product innovation, process innovation, marketing innovation and organizational innovation) significantly confirm that the independent variables collectively contribute significantly to predicting the dependent variable. The results indicate that the regression model is a strong and statistically significant predictor of the dependent variable. This means that innovation factors (product, process, marketing, and organizational innovation) collectively play a crucial role in influencing the outcome.

4.4.3 Coefficient Result

The regression model analysis indicates that, among the parameters assessed, including efficient and effective innovation dimensions such as product innovation, process innovation, marketing innovation and organizational innovation (independent variable), the concluding set of variables demonstrates a significant correlation with firm performance (dependent variable) at goldsmith industry in Yangon, in the below Table (4.15).

Table (4.15) Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.472	.193		2.448	.016
	Product Innovation	.096	.097	.108	.993	.323
	Process Innovation	.210	.086	.240	2.451	.016
	Marketing Innovation	.192	.067	.234	2.855	.005
	Organization Innovation	.403	.083	.386	4.881	.000

a. Dependent Variable: Firm Performance

Source: Survey Data (November, 2024)

Table 4.15 presents the coefficients revealing the primary outcome of the study, specifically forecasting the dependent variable (firm performance) based on independent variables such as product innovation, process innovation, marketing innovation and organizational innovation. Regression equation is

Firm Performance = 0.472 + 0.210 Process Innovation + 0.192 Marketing Innovation + 0.403 Organization Innovation

According to the multiple regression analysis, organizational innovation has the strongest and most significant effect on the dependent variable. Marketing and process innovations also have significant positive effects. Product innovation, however, is not statistically significant, suggesting it does not strongly influence the dependent variable in this model.

The findings highlight the critical role of organizational, marketing, and process innovations in driving the dependent variable's outcome. While product innovation is

important, its lack of significance in this model suggests that firms should focus more on structural, strategic, and operational innovations to maximize impact.

CHAPTER V
CONCLUSION

This chapter consolidates the key findings, discussions, and conclusions derived from the study, providing a comprehensive synthesis of the research outcomes. Building on these insights, the chapter offers actionable recommendations and strategic suggestions tailored to the goldsmith industry in Yangon, aimed at fostering innovation and enhancing firm performance. Additionally, the chapter identifies limitations encountered during the study and proposes directions for future research. These recommendations are designed to address gaps in the current research and to encourage more in-depth investigations that could yield a more nuanced understanding of the relationship between innovation and firm performance within Yangon's goldsmith industry. By expanding the scope and depth of future studies, researchers can provide more precise analyses and generate comprehensive results that contribute to the sustainable growth and competitiveness of the industry.

5.1 Findings and Discussions

This study examines the impact of innovation on firm performance within Yangon's goldsmith industry. The findings underscore the critical role of various innovation dimensions of product, process, marketing, and organizational innovation in enhancing firm performance. Among these, organizational innovation emerged as the most significant contributor, highlighting the importance of internal structures, employee engagement, and operational practices in driving business success.

In this research, most of the respondents are male and married. In terms of age, majority of the respondents are between 26 and 55 years old. Most of them are high school level. They are working as the craftsman in the goldsmith shops. Their working experience is between 6 and 10 years and they are enough working experiences in goldsmith industry.

According to the descriptive statistics, product innovation and marketing innovation have the maximum overall mean values and organization innovation has the minimum overall mean value. This research has provided valuable insights into the impact of innovation on firm performance within Yangon's goldsmith industry. The findings underscore the critical role of various innovation dimensions of product, process, marketing, and organizational innovation in enhancing firm performance.

According to the multiple regression analysis, process, marketing and organizational innovation have positive and significant impact on organizational performance. However, product innovation is not significant with organizational performance. Process innovation, through the adoption of modern technologies such as CAD and automation, has specifically improved operational efficiency and reduced production errors. Marketing innovation has also played a crucial role, with digital platforms and online sales channels expanding market reach and fostering customer loyalty. Among these, organizational innovation emerged as the most significant contributor, highlighting the importance of internal structures, employee engagement, and operational practices in driving business success.

The statistical analysis further confirmed that organizational innovation had the highest positive influence on firm performance. Innovations in organizational structure, employee development programs, and inclusive decision-making processes have fostered a more adaptive and efficient business environment. In conclusion, the study highlights that a holistic approach to innovation is essential for sustaining competitiveness in the goldsmith industry. Firms could prioritize organizational and process innovations while continuing to leverage marketing and product innovations for growth. Additionally, this research provides a foundation for future studies to explore the long-term effects of these innovations and their impact on different segments of the artisanal sector.

The findings offer practical implications for policymakers, industry associations, and goldsmith firms seeking to modernize their operations while preserving cultural heritage. Emphasizing training, technological adoption, and digital marketing strategies can drive sustained growth. Future research could extend this analysis by incorporating

qualitative insights from industry stakeholders and examining innovation impacts over a longer period.

5.2 Suggestions and Recommendations

Based on the findings of this study, the following recommendations are provided to enhance the performance of goldsmith firms in Yangon through innovation.

Prioritizing organizational innovation, the organizational innovation has the most significant impact on firm performance. Goldsmith firms should focus on improving internal structures, employee training, and inclusive decision-making processes. Investing in leadership development, knowledge-sharing initiatives, and digital management tools can enhance efficiency and adaptability.

Enhancing process innovation, it is adopting advanced manufacturing techniques such as Computer-Aided Design (CAD) and automation will improve production efficiency and reduce errors. Firms should also explore lean manufacturing principles to optimize resource allocation and minimize waste.

Expanding marketing innovation, the digital platforms and online sales channels have shown a positive impact on market expansion and customer engagement. Goldsmith businesses should invest in e-commerce strategies, social media marketing, and digital branding to attract a broader audience and foster customer loyalty.

Balancing product innovation, while product innovation plays a role in quality enhancement, its overall impact on firm performance is relatively lower. However, firms should continue introducing new designs that blend traditional craftsmanship with contemporary market trends. Collaborating with designers and leveraging customer feedback can aid in developing appealing product offerings.

By implementing these recommendations, goldsmith firms in Yangon can enhance their performance, sustain growth, and maintain their cultural heritage while adapting to modern market demands.

5.3 Needs for Further Research

This study only focuses on four factors of firm performance: product innovation, process innovation, marketing innovation and organizational innovation of goldsmith industry in Yangon. This study also emphasizes firm performance and innovations in goldsmiths in Yangon.

Further research could examine how Yangon's goldsmith industry can better integrate into regional and global markets. This could include exploring the role of branding, marketing, and export strategies in expanding market reach and improving competitiveness.

By addressing these research gaps, future studies can provide a more comprehensive understanding of the dynamics between innovation and firm performance in the goldsmith industry. Such insights would not only contribute to academic knowledge but also offer practical guidance for industry stakeholders, policymakers, and practitioners seeking to drive sustainable growth and preserve cultural heritage in a rapidly evolving global economy. Future studies can focus on the impact of sustainable practices, the role of government incentives, and the integration of artificial intelligence in jewelry design and production.

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APPENDIX

QUESTIONNAIRE

IMPACT OF INNOVATION DIMENSIONS ON FIRM PERFORMANCE OF GOLDSMITH INDUSTRY IN YANGON, MYANMAR

Dear Respondent, this questionnaire is designed to gather information as part of the requirements for my Master of Business Administration (MBA) degree at the International Business School of Scandinavia. I kindly request your cooperation in completing all the questions independently. Please be assured that your responses will remain strictly confidential and will be used solely for research purposes. Your identity will be completely anonymous, with no personal details disclosed in the study. Your valuable input is highly appreciated and will contribute significantly to the success of this research. Thank you for your time and participation.

Section (A)

Demographic Information

Please tick (√) the appropriate answer.

1. **Gender:**
   - ☐ Male
   - ☐ Female
2. **Age:**
   - ☐ 18-25
   - ☐ 26-35
   - ☐ 36-45
   - ☐ 46-55
   - ☐ 56 and above
3. **Role in the firm:**
   - ☐ Owner
   - ☐ Manager
   - ☐ Goldsmith/Craftsman
   - ☐ Marketing/Sales

☐ Other (please specify): _____

4. Years of experience in the goldsmith industry:

☐ Less than 1 year

☐ 1-5 years

☐ 6-10 years

☐ 11-20 years

☐ More than 20 years

Section (B)

Innovation

Please indicial the responses that best fit your agreement or disagreement with each statement by ticking (√) only a box from the following interpretations of the scales:

Strongly Disagree - 1

Disagree - 2

Neutral - 3

Agree - 4

Strongly Agree - 5

1. Product Innovation

Sr. No.	Statement	1	2	3	4	5
1	Our firm frequently updates production techniques to improve efficiency.					
2	We use advanced technologies such as CAD (Computer-Aided Design) or 3D printing for product development.					
3	The adoption of new production methods has reduced waste and material costs.					
4	Production innovation has improved the consistency and quality of our products.					
5	New production innovations have shortened the time needed to complete orders.					

2. Process Innovation

Sr. No.	Statement	1	2	3	4	5
1	Our firm regularly improves or upgrades its manufacturing processes.					
2	New technologies have been implemented to streamline production workflows.					
3	Innovations in our processes have significantly reduced production costs.					
4	The introduction of new techniques has minimized errors and defects in production.					
5	We have adopted automation to enhance production accuracy and speed.					

3. Marketing Innovation

Sr. No.	Statement	1	2	3	4	5
1	Our firm regularly adopts new marketing strategies to reach potential customers.					
2	We have introduced innovative promotional campaigns to enhance brand awareness.					
3	Social media platforms are an integral part of our marketing strategy.					
4	Online sales channels have been adopted to expand market reach.					
5	We regularly collect and use customer feedback to improve marketing efforts.					

4. Organizational Innovation

Sr. No.	Statement	1	2	3	4	5

1	We have adopted flexible work arrangements to enhance productivity and creativity.					
2	Regular training and development programs are provided to enhance employee skills.					
3	Our firm has implemented systems to encourage and reward employee innovation.					
4	Innovation is a core part of our company's mission and values.					
5	Decision-making processes have become more inclusive, involving input from various levels.					

Section (C)

Organizational Performance

Please indicial the responses that best fit your agreement or disagreement with each statement by ticking (√) only a box from the following interpretations of the scales:

Strongly Disagree - 1

Disagree - 2

Neutral - 3

Agree - 4

Strongly Agree - 5

Sr. No	Statement	1	2	3	4	5
1	Innovation efforts have led to increased overall revenue and profitability.					
2	Customer satisfaction has improved dud to innovative products and services.					
3	Innovation has enhanced the quality of our products and services.					
4	Innovation efforts have helped reduce production or operational costs.					
5	Employee productivity and engagement have improved					

	due to organizational innovations.					
6	Customer loyalty and retention have increased because of innovative practices.					

Thank You for Your Participation

APPENDIX B

SPSS Output

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.883[a]	.779	.771	.27593

a. Predictors: (Constant), Organization, Process, Marketing, Product

ANOVA

df	Mean Square	F	Sig.
4	7.062	92.754	.000[b]
105	.076		
109			

a. Dependent Variable: Performance

b. Predictors: (Constant), Organization, Process, Marketing, Product

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		

1	(Constant)	.472	.193		2.448	.016
	Product	.096	.097	.108	.993	.323
	Process	.210	.086	.240	2.451	.016
	Marketing	.192	.067	.234	2.855	.005
	Organization	.403	.083	.386	4.881	.000

a. Dependent Variable: Performance