



VALUE-CHAIN ANALYSIS OF BEADED WOVEN CLOTHES, APPARELS AND ACCESSORIES

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Abstract: *It has been observed that the beads added to the designed, durability, and marketability of the product such as scarf, woven dress, bags, blazer, wallet, bracelet, and necktie. This study focused on the value chain analysis of Kalinga Woven Fabric products which are known in their novelty with unique designs, colors, and fabric forming and representing much the culture and heritage of the people. This study identified the gaps between existing products and customer's preference and ascertained ways and came up with designs for product innovation; created designs for new demands that enhanced the quality and marketability and added value of the commodities. Product development and design and innovation are the strategy that added value to the final commodities. The products were developed in such a ways that it desirable and had created a greater business opportunity to the distributors and producers. The demands of the said product had even brought tourist attractions during the City Fiesta, thus, bringing the place of Kalinga a home of heritage and culture.*

Keywords: *Value Chain, Beaded, Kalinga clothings, Apparels Administration*

BACKGROUND

Marketability of products is important to regard when considering a business success. Especially, that today's business number is increasing and it is becoming difficult for the producers to compete in order to satisfy the demands of customers. This paper focused on the evaluation of value chain analysis of beaded woven materials in Kalinga . It presents the design of beaded apparels and woven clothes so as to put more value in the material and the quality of the product.

A value chain refers to the activities such as design, production, marketing and distribution— businesses go through to bring a product or service from conception to delivery. For manufacturers and business companies, the value chain starts with the raw materials used to make their products, and consists of everything that is added to it before



it is sold to consumers. This process of actually organizing all of these activities so they can be properly analyzed is called value chain management. The goal of value chain management is to ensure that those in charge of each stage of the value chain are communicating with one another, to help make sure the product is getting into the hands of customers as seamlessly and as quickly as possible (www.mindtools.com › Strategy Tools).

The wearing of beaded apparels is now becoming the fashion of today because women, especially the Cordilleran believes that the wearing of these materials with beads represents their culture consciousness. This practice is also an introduction to the new arts and designs which are symbols of quality apparels that can last long even hundreds of years provided it is not stolen and burn. The added beads to the designs are also a symbol of ethnic identity depending on the designs, color and texture. It means that the kind of beads will also cater to the needs of the buyers as to ethnic origin. This study, therefore, believes that the result will help the readers and researchers as well business of this project be informed of this unique feature of the product (beaded woven products).

REVIEW OF LITERATURE

Women's wear has been an evolving segment in the South Asian Region Culture region , Barrientos, Stephanie; Gary Gereffi; and Arianna Rossi (2011). The study revealed that, while going hand in hand with the changes in society, culture, and the entrance of women in professional workplaces, the traditional approach to women's wear in the region has started to change. With exposure to western society, the Internet, and television, and the ability to travel more widely, women across the South Asian Region Culture region have begun looking for more options and have access to more options, compared to the past. The culture and dressing sense across the South Asian Region Culture region for women have a lot of similarity. This makes it even more interesting to identify potential trading opportunities. The key challenges with exporting to the West have been in the understanding of product requirements, added to the quality and cultural aspects and acceptance levels. Within the South Asian Region Culture region, SAARC , due to the very similar nature of sizing, design sense, fabric appreciation, and traditional skill sets, it should be theoretically easier to trade with each other. However, this is not reflected by reality.

According to Barrientos, Stephanie; Gary Gereffi; and Arianna Rossi (2011 ,in fact, intra-regional trade within the South Asian Region Culture region in women's wear has remained



very low. There are a number of reasons for this. Women were more accustomed to buying fabric that was easily available and getting the fabric stitched by tailors who would create customised dresses and outfits for each client. With traditional society changing and with the movement of many women from rural to urban areas, the need for quick and easy access to well-designed clothes became more and more important. The phenomenon of retail and organised buying across the SAARC region is very new; the majority of mainstream retail stores has only been launched in the 1990s, with an increased growth over the mid 2000s. Trends starting in India, being at the centre of SAARC with a large mix of cultures, are followed by several SAARC countries. A big influence is the 'Bollywood' or Indian film industry which, through its showcasing of fashion and fabric, has a large impact on the dressing sense of women (men and children also) across this region. With more and more films showcasing modern western wear for women, the demand for western (modern) clothing has also seen an increase within this region. This gives rise to two separate value chains for women's wear clothing in SAARC

1. Traditional clothing
2. Ready Made Garments women's wear clothing

Changes in trade policy and market access conditions have been accompanied by new dynamics in the apparel market. Supply chains have undergone profound reconfiguration to meet new market demands for "fast fashion", marked by rapid shipments, higher quality requirements and low retail inventories. The reconfiguration towards new styles and models has put a premium on shorter delivery cycles, improvements in factory skills and supply chain management, including fabric production, material sourcing and finishing process. On a global scale, buyers and intermediaries worldwide have turned increasingly towards larger suppliers that can source materials, coordinate logistics, induce creative development and operate in locations that allow for shorter delivery cycles (Staritz, 2012). Rapid and reliable transport networks and minimum customs clearance times have become as critical as labour and materials costs. OECD analysis (e.g. OECD 2012; Moisé and Le Bris 2013) shows that poor infrastructure and inefficient border procedures are major contributors to high costs that impede trade, and therefore an appropriate target for aid for trade. The result has been supply chain consolidation. Major buyers have shifted away from sourcing a multitude of small firms, from the old-style cut, make and trim sewing facilities, to forging relationships



with a smaller number of strategic suppliers, managing production across multiple factories and international locations, sharing financial liability, providing greater value-added services and in the end, making a larger share of profits in the textiles and apparel trade (Forstater, 2010). The proliferation of international production and distribution networks spanning across borders is presenting developing countries with both new economic development opportunities and challenges. Participation in these production and distribution networks is an important way to attract investment, increase technological capability, build industrial capacity, and foster economic growth. These international networks also serve as significant sources of employment, and exert a variety of impacts upon local labour markets. The industry typically serves as the springboard for export-oriented industrialization for capital-constrained developing countries, primarily because of its labour intensive production practices. As such, the industry, particularly the apparel sector, is contributing to generating much needed employment.

A report on the study conducted on the "Value Chains In Textiles And Apparel" by Takahiro Fukunishi, et al. (2013) in the OECD, identify the top 15 apparel exporting countries to the US and EU. In 1970, Hong Kong, the Republic of Korea, the Philippines, Mexico, Israel, and Singapore, were among the top 15 countries for garment exports to the United States. Japan, which joined the Organization for Economic Co-operation and Development (OECD) in 1964, headed the list of apparel producers in 1970. In 1980 China, Dominican Republic and Sri Lanka joined the top 15 exporting countries from the developing world, while India, Indonesia, Malaysia, Thailand and Bangladesh were added in 1990.

In Asia, particularly China, has enjoyed a dominant position in shoes, apparel and household textiles manufacturing for several years, the makers of these items located in developed nations such as the U.S. and Canada have suffered a long period of decline. Competition from manufacturing based in very low-cost nations in Africa, as well as Vietnam, Indonesia, Sri Lanka, Mauritius, Malaysia, Cambodia, Bangladesh, Pakistan, the Philippines and elsewhere is intense, and a large portion of apparel manufacturing formerly done in China is moving to these areas at a rapid pace (<https://www.plunkettresearch.com/industries/apparel-textiles-clothing-market-research>).

Kalinga people are fun of wearing woven clothes, especially during cultural celebration, fiesta, and other social gathering. It was noted that the clothes with beads appear to have



greater impact on the customer preference for wearing apparels. Many apparels are displayed ,but the beads of the woven materials are preferred than the non-beaded materials. At this point , this paper was bent to look at the value chain analysis of the so-called beaded woven apparels.

Based from the different concepts of value chain analysis revealed by the previous researchers and writers, this paper was conceptualized to present the value chain analysis prcess of beaded woven apparels produced in Tabuk,Kalinga.

DEFINITION OF TERMS

Apparels. These refer to beaded necktie, bowtie, scarf, shawl and topper and others.

Beaded apparels. These refer to woven native fabrics accentuated with bead such as pyramid, centipede, double pyramid, flowers and lives.

Internal cost analysis. This refers to the determination of the sources of profitability and the relative cost positions of internal value-creating processes.

Value chain analysis. This refers to value chain approach which helps organization assess competitive advantage through internal cost analysis, internal differentiation, analysis, and vertical linkage analysis.

Value chain management. This refers to the process of organizing all the needed activities so that these can be analyzed accordingly.

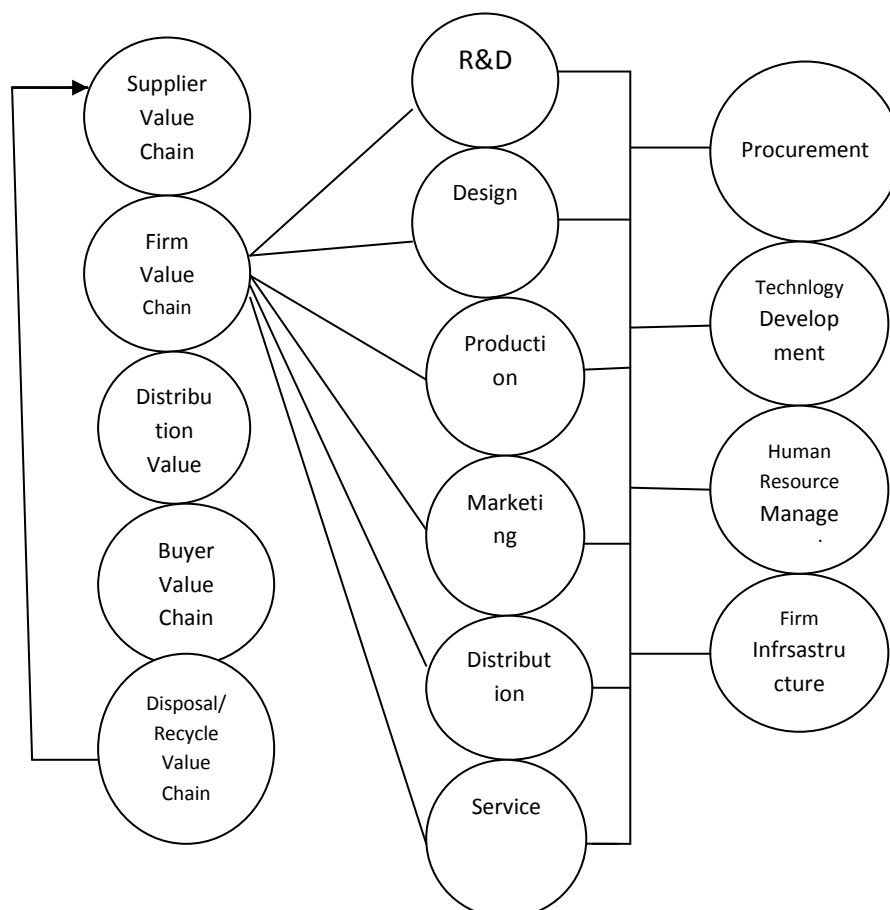
CONCEPTUAL FRAMEWORK

The idea of a value chain was first suggested by Michael Porter (1985) to depict how customer value accumulates along a chain of activities that lead to an end product or service. Porter describes the value chain as the internal processes or activities a company perform “to design, produce, market, deliver and support its product.” He further states that “a firm’s value chain and the way it performs individual activities are a reflection of its history, its strategy, its approach to implementing its strategy, and the underlying economics of the activities themselves.” Porter describes two major categories of business activities: primary activities and support activities. The Primary activities are directly involved in transforming inputs into outputs and in delivery and after-sales support. These are generally also the line activities of the organization. They include: ● inbound logistics—material handling and warehousing; ● operations—transforming inputs into the final product; ● outbound logistics—order processing and distribution; ● marketing and sales—



communication, pricing and channel management; and • service—installation, repair and parts

John Shank and V. Govindarajan (1993) described the value chain in broader terms than does Porter. They state that “the value chain for any firm is the value-creating activities all the way from basic raw material sources from component suppliers through to the ultimate end-use product delivered into the final consumer’s hands.” This description views the firm as part of an overall chain of value-creating processes. According to Shank and Govindarajan, the industry value chain starts with the value-creating processes of suppliers, who provide the basic raw materials and components. It continues with the value-creating processes of different classes of buyers or end-use consumers, and culminates in the disposal and recycling of materials. The industry value chain and the value chain activities within the firm are compared in Exhibit 1.



Exhibitit 1

Most corporations define their mission as one of creating products or services. For these organizations, the products or services generated are more important than any single step



within their value chain. In contrast, other companies are acutely aware of the strategic importance of individual activities within their value chain. They thrive by concentrating on the particular activities that allow them to capture maximum value for their customers and themselves. These firms use the value chain approach to better understand which segments, distribution channels, price points, product differentiation, selling propositions and value chain configurations will yield them the greatest competitive advantage. The way that the value chain approach helps organizations assess competitive advantage is through the following types of analysis:

- internal cost analysis—to determine the sources of profitability and the relative cost positions of internal value-creating processes;
- internal differentiation analysis—to understand the sources of differentiation (including the cost) within internal value-creating processes; and
- vertical linkage analysis—to understand the relationships and associated costs among external suppliers and customers in order to maximize the value delivered to customers and to minimize cost.

These types of analysis are not mutually exclusive. Rather, firms begin by focusing on their internal operations and gradually widen their focus to consider their competitive position within their industry. The value chain approach for assessing competitive advantage is an integral part of the strategic planning process. Like strategic planning, value chain analysis is a continuous process of gathering, evaluating and communicating information for business decision making. By stimulating strategic thinking, the analysis helps managers envision the company's future and implement decisions to gain competitive advantage. Internal Cost Analysis Organizations use the value chain approach to identify sources of profitability and to understand the cost of their internal processes or activities. The principal steps of internal cost analysis are:

- identify the firm's value-creating processes;
- determine the portion of the total cost of the product or service attributable to each value creating process;
- identify the cost drivers for each process;
- identify the links between processes; and



- evaluate the opportunities for achieving relative cost advantage. Identify the firm's value-creating processes.

IDENTIFY THE FIRM'S VALUE-CREATING PROCESSES

To identify its value-creating processes, a firm must de-emphasize its functional structure. Most large businesses still organize themselves as cost, revenue, profit and investment centres. These and other organizational sub-units, such as departments, functions, divisions or separate companies, that are frequently used for control purposes are not very useful for identifying value creating processes. Adopting a process perspective requires a horizontal view of the organization, beginning with product inputs and ending with outputs and customers.

Processes are structured and measured sets of activities designed to produce a specified output for a particular customer or market. Emphasizing process means focusing not on what work is done ,but on how work is done within the organization. While an organization's hierarchical structure typically lays out responsibilities and reporting relationships, its process structure shows how the organization delivers customer value. While it is not possible to measure or improve the hierarchical structure in any absolute sense, processes lend themselves to such measures as cost, time, output quality and customer satisfaction. Because processes normally cut across functional areas, defining process boundaries is not always a straightforward task. People associated with a particular business process may view it in different ways. For example, the new product development process could start with marketing surveys or with delivery of product requirements from marketing to development engineering. The process could end with the release of product specifications or with shipment of the first order. Process boundaries should be defined independently of the way in which activities are organized. Selecting the appropriate activity category may be anything but straightforward. The key is to classify value activities according to their true contribution to the firm's competitive advantage.

INTERNAL COST ANALYSIS

The next step of internal cost analysis is to trace or assign costs and assets to each value-creating process identified. Although firms maintain internal reports and cost accounting information, this information may not align with their processes. Companies might have to reclassify their data or conduct cost studies to assign costs and assets to each process.



Rather than conduct a detailed cost study, an organization might use rough estimates to assign costs to their value-creating processes. A full-cost approach provides the best estimate of life-cycle costs for evaluating the strategic cost advantage of a firm's value-creating process. Without adopting this approach, a firm risks sacrificing product development costs to short-term profits

For estimating the full cost of each value-creating activity, the full utilization of the capacity of the activity or its practical capacity is normally used. Facility managers and equipment vendors are useful sources of capacity estimates. If estimates of full capacity vary widely, a firm could perform the analysis with the resulting costs to assess the sensitivity of the analysis to the different capacity measures. When costs vary dramatically, companies should seek more information for a more realistic long-term estimate of capacity.

FACTOR OR COST DETERMINANTS FOR EACH VALUE CREATING PROCESS

The next step of the internal cost analysis is to identify the factor or cost determinants for each value creating process. By understanding what factors drive costs, a firm can assign priorities among its cost improvement initiatives. In order to determine its relative cost advantage, a firm should also know the cost factors of its competitors.² While management accounting systems may contain the total cost of each value-creating process, they may not reveal the causes or factors for the significant individual costs. Using single output or volume measures (e.g., units, labor hours, sales dollars) to assign costs is often misleading. Multiple cost drivers usually provide more useful information. Exhibit 3 illustrates examples of structural and executional cost drivers. Structural cost drivers consist of organizational factors that determine the economic structure driving the cost of a firm's products. These cost drivers reflect a firm's long-term decisions, which position the firm in its industry and marketplace. Structural cost drivers may change. These cost drivers are determined by management policy, style and culture. How well a firm executes its use of human and physical resources will determine its level of success or failure. For example, worker empowerment and flattened organizations are helping many firms in their continuous improvement efforts. Few structural and executional cost drivers can be operationalized under existing management accounting systems in the cost analysis of the value chain. However, these cost drivers do offer an important reminder of the strategic decisions that firms need to make, or at least acknowledge, in designing their value-generating systems.



Increasingly, companies are using activity-based costing to understand the resources/costs consumed by the activities and processes used in delivering their products and services.

While individual value activities are considered separate and discrete, they are not necessarily independent. Most activities within a value chain are interdependent. Firms must not overlook value chain linkages among interdependent activities that may impact their total cost. For example, cost improvement programs in one value chain process may lower or increase costs and/or revenues in other processes. Transfers of goods and services from one value chain process to another increases cost. Eliminating these transfers reduces the costs of purchasing, invoicing and other recordkeeping functions. Tandem Computers eliminated its costs of purchase orders, invoicing and other functions by jointly developing a detailed bar code process with its suppliers. As sources of competitive advantage, these relationships or linkages among activities can be as important as the activities themselves. Such linkages may also offer sustainable competitive advantage, because their subtle, complex nature makes them difficult for competitors to imitate.

EVALUATE THE OPPORTUNITIES FOR ACHIEVING RELATIVE COST ADVANTAGE

Evaluate the opportunities for achieving relative cost advantage. In many organizations, cost reductions are made across the board (e.g., “eliminate 10 per cent from every department”). Because these firms do not reduce their costs strategically, this effort usually fails. More often than not, across-the board cost reduction misconstrues the underlying problem. The point is not to become more efficient at insignificant activities, but to better meet customer demands. Using the value chain approach, a company goes beyond simple across-the-board cuts and attempts to lower cost and improve efficiency within each value-creating process. For instance, a company might negotiate lower costs of process inputs such as wages or purchases, or evaluate make-or-buy options. Reducing process input costs often means negotiating lower wages (as with Chrysler and the U.S. airlines during the mid-1980s) or moving production to countries with cheaper labor costs. Suppliers might be willing to drop their prices if the company negotiates long-term contracts, an approach used by Levi-Strauss in contracting with its textile suppliers. Companies also use buyer-seller partnerships to gain advantages in cost, quality, time, flexibility, delivery and technology.



INTERNAL DIFFERENTIATION ANALYSIS

The value chain approach is also used by organizations to identify opportunities for creating and sustaining superior differentiation. In this situation, the primary focus is on the customer's perceived value of the products and services. As with the internal cost analysis, internal differentiation analysis requires firms to first identify their value-creating processes and primary cost drivers. They are then ready to perform a differentiation analysis using the following guidelines:

- identify the customers' value-creating processes;
- evaluate differentiation strategies for enhancing customer value; and
- determine the best sustainable differentiation strategies.

STEPS IN VALUE CHAIN ANALYSIS

There several steps in value chain analysis as cited in notes found at <http://www.tutor2u.net/business/reference/value-chain-analysis>. According to the article, Value chain analysis can be broken down into a three sequential steps: (1) Break down a market/organisation into its key activities under each of the major headings in the model;(2) Assess the potential for adding value via cost advantage or differentiation, or identify current activities where a business appears to be at a competitive disadvantage; (3) Determine strategies built around focusing on activities where competitive advantage can be sustained.

LINKING VALUE CHAIN ANALYSIS FOR COMPETITIVE ADVANTAGE

What activities a business undertakes is directly linked to achieving competitive advantage. For example, a business which wishes to outperform its competitors through **differentiating** itself through higher quality will have to perform its value chain activities better than the opposition. By contrast, a strategy based on seeking **cost leadership** will require a reduction in the costs associated with the value chain activities, or a reduction in the total amount of resources used.

Primary value chain activities include: Inbound logistics, Operations, Outbound logistics, Marketing and Sales, and Service. While secondary value chain activities include: Procurement, Human Resource Management, Technology Development and Infrastructure.



OBJECTIVES OF THE STUDY

This study sought to showcase the different aspects of the beaded woven materials based on the following specific objectives:

1. To create and document the different art designs of woven apparels through beading;
2. To determine the added value of the innovated commodities-beaded woven apparels.

METHODOLOGY

Locale of the Study

The study was conducted in the province of Kalinga . The province is composed of seven (7) municipalities and one (1) city. Majority of the loom weavers and beaders are based in Poblacion Lubuagan . They also served as suppliers of the woven Kalinga fabrics to entrepreneurs engaged in ethnic boutiques/ shops situated in the City Centers.

Research Design

The researchers have employed the descriptive type of research method as it dealt on the value chain analysis of woven fabrics, apparels and accessories. This method gave a clear picture on the newly created art designs, quality and marketability and at the same time preserving the novelty of the products. Likewise, determine the added value of the innovated commodities –beaded woven apparels.

Respondents

The respondents of this study are the loom weavers,beaders, and entrepreneurs engaged ethnic boutique business, and dress makers(tailors).

Instrumentation

The study employed the focus group discussion (FGD) wherein the researcher served as the moderator to allow all concerned respondents shared their views and experiences on loom weaving and beadery business.

Data Gathering

Since the research required qualitative analysis, the researcher gathered first-hand information and data needed during the focus group discussions with the loom weavers ,beaders and entrepreneurs engaged in ethnic boutique business. The focus group discussions were conducted during the seminar sponsored by the Department of Trade and



Industry , Kalinga Provincial Office wherein the researcher was one of the resource speakers.

Data Analysis

The study is a qualitative research which required an in-depth analysis on the needs and preferences of the market relative to ethnic woven fabric clothings,apparels and accessories. It also traced the movement of products from the raw materials,product development, enhancement and production processes , and innovation(beading,designs, and quality) up its marketing stage.

RESULTS AND DISCUSSIONS

1.Beading and designing of the Woven Apparels











Table 2. Diagram Showing the Process of Value Analysis

Researchers Activities	Inbound Logistics	Operations	Outbound logistics	Marketing	Services
Human Resources Management	a. Preparation and approval of training proposals by the researchers b. Collaboration with LGU, DTI, Local Entrepreneurs for the training	a. Selection of local beadery/ entrepreneur for trainings on beadery / designs	a. Trainings of local beadery/ entrepreneur for beadwork/designs-quality standards	a. Training local beadery/ entrepreneurs on customers' service	a. Training of local beadery/ entrepreneurs on beadery customer' service and marketing
Procurement of Products for Innovation	a. Transportation Services b. Coordination with local entrepreneurs, loom weavers, dressmakers and tailors	a. Transportation Services b. Coordination with local entrepreneurs, loom weavers, dressmakers and tailors	a. Transportation Services b. Coordination with local entrepreneurs, loom weavers, dressmakers and tailors	a. Transportation Services b. Coordination with local entrepreneurs, loom weavers, dressmakers and tailors	a. Transportation Services
Innovation Activities	Inbound handling of products, materials and supplies a. Sourcing of products, materials and supplies b. Pick-up/delivery of products, materials and supplies c. Innovation of products, materials and supplies	Beadery/design/ sewing activities ➤ Selection of appropriate designs and sizes of beads ➤ Monitoring of beadery, design and sewing activities ➤ Quality control/inspection ➤ Packaging	a. Inspection of finished products ➤ Delivery to local entrepreneurs/buyers ➤ Recording/documentation/accounting processes	Advertising ➤ Promotional activities ➤ Pricing ➤ Sales • Attending trade fairs • E-marketing	a. Feedback mechanism b. Marketing adjustments and decision making



The table summarized the value chain analysis process of the beaded apparels which was validated through group discussions. The result of the interviews was presented in the table and it shows that the producers of beaded apparels are conducting value chain analysis process.

Table 2. Value Chain Analysis – Inbound Logistics

Findings	Concerns	Recommendations
<ul style="list-style-type: none"> Human Resources Development The local beaders/entrepreneurs need more time to master beadery and designing. Limited time for the workshops due to their time constraint. 	<ul style="list-style-type: none"> Beadery and designing are laborious that need ample time and dedication. 	<ul style="list-style-type: none"> Local beaders entrepreneurs must develop their entrepreneurial skills in beadery and designing.
<ul style="list-style-type: none"> Procurement of products Some products and woven fabrics are substandard quality and with exorbitant prices. 	<ul style="list-style-type: none"> Not ensured of the quality of products and woven fabrics. 	<ul style="list-style-type: none"> Upgrade the quality of products and woven fabrics.
<ul style="list-style-type: none"> Innovation activities Expressed the need of full time beaders and sewers. Spacious room for trainings, work` area and showcase room is needed 	<ul style="list-style-type: none"> Lack of fulltime beaders and sewers Limited and no permanent working space 	<ul style="list-style-type: none"> Hiring full time beaders and sewers Provisions of spacious and permanent room for working area and at the same time display room.

Table 3. Value Chain Analysis – Operations

Findings	Concerns	Recommendations
<ul style="list-style-type: none"> ➤ Human Resource Development <ul style="list-style-type: none"> Trained local beaders/entrepreneurs for beadery activities cannot cope-up with the demands. 	<ul style="list-style-type: none"> Inability to hire full time beaders and sewers. 	<ul style="list-style-type: none"> The business must be registered and secure the necessary legal documents/requirement for its full operation.
<ul style="list-style-type: none"> ➤ Innovation Activities <ul style="list-style-type: none"> Beadery Beading of products are delayed since no full time beaders Sewing Sewing of loom fabric products are delayed due to the bulk sewing contracts by the sewers (dressmakers/tailors) 	<ul style="list-style-type: none"> Inability to deliver the products to the clients on time. 	<ul style="list-style-type: none"> Hire full time beaders and sewers to meet the demands of customers/clients.



Table 4. Value Chain Analysis – Outbound Logistics

Findings	Concerns	Recommendations
<p>A. Human resource Development</p> <ul style="list-style-type: none"> Trained local beaders/entrepreneurs on beadery need to improve the quality of their outputs. 	<ul style="list-style-type: none"> Full time beaders and sewers are needed 	<ul style="list-style-type: none"> Hire full time beaders and sewers
<p>B. Innovation activities</p> <ul style="list-style-type: none"> Beadery Beadery of products is delayed due to the limited local beaders/entrepreneurs. Sewing Sewing of woven fabric products are delayed due to limited full time sewers. 	<ul style="list-style-type: none"> Inability to deliver the products to the clients on time Improvement of the quality of products is needed 	<ul style="list-style-type: none"> Delivery of products to the clients on time Products produced must be of standard quality
<p>C. Procurement</p> <ul style="list-style-type: none"> Using cargo buses to transport materials and suppliers from Manila to Tabuk City is costly. 	<ul style="list-style-type: none"> Additional expense of transport added to product costing 	<ul style="list-style-type: none"> Procurement of supplies and materials should be done by bulks to minimize the cost of purchases.

Table 5. Value Chain Analysis – Marketing

Findings	Concerns	Recommendations
<p>A. Human resource Development</p> <ul style="list-style-type: none"> The researchers linked with the BIBAK Multi-purpose cooperative under its consumer's store for the marketing of products. The researchers are cooperators of the said cooperative. 	<ul style="list-style-type: none"> Formal registration of the business is needed 	<ul style="list-style-type: none"> The researchers must secure the necessary legal documents/requirements for its formal registration under the name of Entrepreneurs and BDS providers Association
<p>B. Innovation activities</p> <ul style="list-style-type: none"> Product promotions and continuous product development/ innovation currently undertaken by the researchers need to be strengthened. 	<ul style="list-style-type: none"> Formal registration of the business is need. Preparation of applications for patent is needed. 	<ul style="list-style-type: none"> Application for patent of products should be prepared and submitted to IPO



Table 6. Value Chain Analysis – Added Value

Products	PRICES				
	Purchase Cost	Added Cost		Total Cost	Suggested Retail Price
		Beads/Materials	Labor		
➤ Apparels and Accessories					
• Zippered Necktie	350.00	80.00	135.00	565.00	735.00
• Choker (beaded)	200.00	500.00	1,060.00	1,760.00	2,300.00
• Beaded Shoulder Bag	850.00	100.00	405.00	1,355.00	1,762.00
• Necklace (Original)	1,500.00		135.00	1,635.00	2,125.00
• Necklace (Ordinary)	150.00	80.00	135.00	365.00	475.00
• Coin Purse	100.00	40.00	135.00	275.00	358.00
• Cellphone Case	350.00	80.00	135.00	565.00	735.00
• Ballpen Case		200.00	135.00	335.00	435.00
• Beaded Hat	350.00	80.00	135.00	565.00	735.00
• Beaded Tapis Belt	150.00	100.00	135.00	385.00	500.00
• Earrings (1set)		100.00	135.00	235.00	300.00
➤ Woven Fabric Clothings					
• Coat (Blazer)	1,500.00	80.00	1,060.00	2,640.00	3,435.00
• Beaded Blouse	600.00	100.00	270.00	970.00	1,260.00
• Vest (Chaleco)	1,000.00	200.00	1,060.00	2,260.00	2,900.00
• Beaded Tapis	1,000.00	200.00	1,060.00	2,260.00	2,900.00
• Beaded Gown	1,000.00	200.00	1,060.00	2,260.00	2,900.00
• Beaded Pant	1,000.00	80.00	135.00	1,215.00	1,579.00
• Beaded Dress	1,500.00	80.00	135.00	1,700.00	2,300.00
• Beaded Topper Blouse	650.00	80.00	135.00	865.00	1,125.00
Total	12,250.00	2,380.00	7,595.00	22,210.00	28,859.00
Average Cost	720.59	132.22	399.74	1,168.95	1,518.89
Average % increase		18%	55%	162%	
Rate of increase				48.12%	

The added value of the beads and materials are added cost of the sales price as shown in column B. The cost of the beaded items has an average rate of 51.88% over the total sales. This means that there is an average of 48.12 % increase in the value of the beaded apparels.

CONCLUSIONS

Based from the findings of this study, there is a significant mark-up on the acquisition cost of the innovated commodities with an average increase rate of 48.12%. The innovated commodities registered a significant marketability or greater demand from the customers.



RECOMMENDATIONS

The above conclusions of this study led to the following recommendations as follows:

1. The beadery technology and designs should be transferred to the local entrepreneurs and loom weavers to improve the quality and marketability of their products;
2. Trainings and workshop on beadery in coordination with the LGU, DTI and TESDA be afforded to the local entrepreneurs, loom weavers.

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