



Operations and Key Competencies of Micro-Scale Sewing Enterprises in Baguio City and La Trinidad, Benguet

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Abstract

Competency level is a major concern for micro-scale garments and apparel sewing enterprises because it paves the roadmap to a successful garments industry. This research focused on determining selected competencies of owners and sewers, including operational, technical, and entrepreneurial skills. It also determined the problems encountered in the sewing enterprise and the market demand. Simple random sampling and structured questionnaires were used in the study. Respondents included 130 owners and 130 sewer-laborers of micro-scale sewing enterprises in Baguio City and La Trinidad, Benguet. The study found that: micro-scale sewing enterprises in the study areas are operating profitably and sustainably; enterprise owners and sewers overall have a high level of technical skills; sewers were very highly skilled in carrying out measurements and calculation, setting-up and operating machines, drafting the cutting pattern and preparing and cutting materials for casual apparel, and also knowledge of human body shape; owners have high competency level in entrepreneurial skills, particularly communication and negotiation; and sewers have very high competency level in quality performance and negotiation, but very low in information management and risk-taking. The problems considered very serious are the lack of skilled workers, long hours of work, and health issues.

Introduction

Micro-scale enterprises or businesses play an important role in employment creation and income generation globally. In the Philippines, microenterprises comprise 90% of all businesses and are recognized as important drivers of growth for the Philippine economy (Philippine Statistic Authority [PSA], 2017). Micro-scale businesses in the Philippines can be defined according to the size of assets, the size of equity capital, and the

number of employees. A typical micro business employs nine people or fewer and have assets of three million pesos and below. These businesses are vital in developing countries' economies as they eliminate unemployment and provide income generation opportunities for low-income groups. They provide the entrepreneurial culture and boost the economy against economic crises, such as low per capita income, poverty, and unemployment (Hassan & Ahmad, 2016).

The Philippine garments industry is made up of 39% exporters and 61% subcontractors, which include homeworkers and small contractors to garment exporters or backyard businesses (Bureau of Investment [BOI], 2016). Accordingly, the sector has been consistently considered a top employer, contributing 20% to 30% of employment in the manufacturing sector. However, the share of garments and textiles exports has decreased and is currently less than 5% of total Philippine merchandise exports (BOI, 2016). The BOI continues to be hopeful in scaling up the industry with the crafting of a roadmap and placing other initiatives (BOI, 2018).

Sewing business in the garments industry is one of the micro-scale enterprises that are important agents in a society, for they have created jobs that help decrease the unemployment rate. Also, McCarthy (2017) mentioned that sewing is important today; it is a handy skill one should have; it is creative (transforms a length of fabric into a garment that fits well); and it is a form of yoga (the tasks of sewing require focus and creativity), which leads to great satisfaction when you have done something. Moreover, James (2016) mentioned that sewing is an important life skill and is the vehicle to teach self-confidence through skill-building. Sewing helps develop fine motor skills, improves focus and concentration, and teaches the importance of patience and self-control. Knowing personal boundaries, increasing skill, achieving tangible goals while working outside your comfort zone all support the development of confidence and self-esteem.

However, as a global problem, the industry's effectiveness depends on the nature, performance, productivity level of employment, and availability of resources. Limited access to financial services, lack of partnership and networking or marketing strategies, working premises or infrastructure, absence of technical and business or entrepreneurial skills are problems met by sewing enterprise owners and laborers or sewers (Muleta, 2016).

Baguio City and the municipality of La Trinidad, Benguet, are widely known as tourist destinations. Further, these two places are melting pots of different people and cultures and have the most developed settlements causing it to be the major center of business, commerce, education in Northern Luzon and the gateway from southern

lowlands migrating into the mountain region (Department of Agrarian Reform [DAR], 2018; Department of the Interior and Local Government Cordillera Administrative Region [DILG-CAR], 2015). In the locality, it was observed and surveyed that few individuals were engaged or interested in taking sewing as a course, job, and line of business despite its importance to basic human needs and its contribution to economic growth. According to the Baguio City Business Permit Licensing Section, as of August 2019, only 141 are registered sewing enterprises among thousands of business establishments. Also, as of August 2019, the La Trinidad Business Permit Licensing Section revealed that among thousands of business establishments, only 45 registered sewing enterprises. According to Technical Education and Skill Development Authority [TESDA-Baguio], in 2019, in the 47 TESDA-registered schools, no school was offering a sewing course. TESDA-Benguet (2019) stated that among the 16 TESDA-registered schools in Benguet, only one school, the Benguet Technical School (BTS) located at Motorpool, Wangal, La Trinidad, offers a sewing course. As of 2019, in five school years of BTS, only 530 students enrolled sewing, getting the smallest percentage compared to other courses offered. Also, the Benguet National High School in 2019 offered courses under Technology-Vocational Livelihood (TVL) track in senior high school, and of the 693 enrollees, only nine students chose sewing as their field of specialization.

The researcher presumes sewing as a skill and business enterprise in the garments industry to be measurable in terms of competency skill level. Competency assessment compares an individual's skills to requirements, quantifies the size of skill gaps, and helps determine what actions to take. No previous research empirically examined the competency skills level of sewers and sewing enterprise owners. Hence, the researcher aimed to bridge this gap such that when the key assessment indicators for each competency skill level are measured and evaluated, it can provide action plans for sustainability and profitability. Furthermore, results can shed light on the capacity-building needs of micro-scale sewing enterprise sewers and owners and contribute information to the garments industry.

The study aimed to assess key competency areas of sewing enterprise owners and sewers: operational status, technical skills, entrepreneurial skills,



and financial status. Further, it aimed to identify problems encountered by the sewers and the perceived status of demand. Information gathered may serve as a baseline for future research and development activities to develop and sustain the sewing industry and training schools in Baguio City and Benguet.

Methodology

Survey Area and Respondents

This descriptive survey research was conducted in Baguio City and La Trinidad, Benguet, the most strategic locations where people from the Benguet Province and neighboring municipalities flock to access various goods and services. Baguio City has 141 registered sewing enterprises, while La Trinidad, Benguet has 45. The respondents were the micro-scale sewing enterprise owners and sewers. The researcher aimed to gather data from at least 70% of the 186 registered business owners. From the list provided by the licensing sections of Baguio City and La Trinidad, the researcher used simple random sampling to pick 130 sewing enterprise business owners as respondents. Intentionally, one sewer was surveyed as a respondent together with its shop owner. Few enterprises were unwilling to be surveyed, with the majority being more than willing and cooperative.

Data Collection

A structured survey questionnaire was used in collecting the information needed in this study. The questionnaire was composed of self-assessment of the level of technical and entrepreneurial skills of sewing enterprise owners and sewers/laborers, degree of seriousness of the problems encountered, and views on the status of demand. The specific technical skills included in the self-assessment are: carrying out measurements and calculations, applying quality standards, clothing designing, setting up and operating a machine, performing basic maintenance, drafting and cutting pattern for casual apparel, preparing and cutting materials for casual apparel, sewing or assembling casual apparel, applying finishing touches on casual apparel, knowledge of human body shape, and estimating bill of materials.

On the other hand, entrepreneurial skills include initiative, systematic planning and organizing, creativity and innovation, problem-solving, persistence, quality performance, information management, financial management, persuasion and influencing abilities, risk-taking, goal-oriented, communication, time management, and negotiation. The questionnaire was crafted based on the readings from unpublished documents available and reviewed literature, data from co-teachers, brainstorming, observation, conversation with the sewing shop owners and sewers/laborers, and based on the problems of the study. A 5-point Likert scale (5 to very high, 4 to high, 3 to moderate, 2 to low, 1 to very low) was used to determine the perceived level of skills and degree of seriousness of problems encountered.

Before the constructed questionnaires were distributed to the respondents, the questionnaire was pretested to 32 micro-scale sewing enterprise owners and sewers/laborers outside Baguio City and La Trinidad, Benguet to evaluate the reliability and validity of the survey questionnaires before their final distribution. Since data were gathered in the community, the researcher asked permission from the mayors, offices concerned, barangay captains, and target respondents. Upon the approval of the conduct of the research, the researcher personally administered the questionnaires. In cases when the respondents' schedule did not permit, text messaging, phone calls, and messenger were used to conduct the survey.

Data Analysis

The raw data gathered from both respondents were analyzed and interpreted through descriptive statistics using means, percentages, and frequency. Simple correlation analysis was also used to show relationships between variables to generalize findings that are insightful and actionable.

Results and Discussion

Operational Status of Micro-Sewing Enterprises

Table 1 shows the operational status of the micro-scale sewing enterprises. Among the 130 micro-scale sewing enterprises, 67.7% of owner-respondents served above 30 clients every month.



Sewer-respondents have similar results, with 70% of the 130 sewers servicing above 30 customers in a month. There is only a minimal percentage of 10% owners and 10.8 sewers whose shop serves less than 20 clients monthly. The owner handles 61.5% workload for customized apparel, while the sewers handle 60.8 % workload for repair or

alteration. For the acquisition of materials and equipment, sewing enterprises in Baguio and La Trinidad acquire 52.3% from the domestic market, 41.5% from the local market and only 6.2% are acquired from international markets. Out of 130 enterprises, almost all had undergone shop expansion as declared by 127 owners, or 97.7% of

Table 1

Operation Status of Sewing Enterprises in Baguio City and La Trinidad, Benguet, 2020

Key Assessment Indicators	Assessment Metrics	Owners		Sewers	
		f	%	f	%
1. Products and Services	Customized Apparel	80	61.5	51	39.2
	Repair/Alteration	50	38.5	79	60.8
2. Number of Clients	Less than 20	13	10.0	14	10.8
	20 to 30	29	22.3	25	19.2
	31 and more	88	67.7	91	70.0
3. Supplier of Raw Materials & Equipment	Local Market	54	41.5		
	Domestic	68	52.3		
	International	8	6.2		
4. Shop Improvements after five years of operation	Undergone Shop Physical Expansion	127	97.7		
	Upgraded Machine/Additional Equipment	64	49.2		
5. Product line	Increase in Product Line	104	80.0		
	Increase in employment size	123	94.6		
6. Branch Expansion	Branches has been established	12	9.2		
7. Quality Control of Garment Product	Proper Selection of Raw Materials	20	15.4	24	18.5
	Use of Proper / High-End Tools / Equipment	15	11.4	11	8.5
	Employment of Skilled Sewer	24	18.5	17	13.1
	Specialization in Sewing Job	14	10.8	16	12.3
	Attending Skills Training	17	13.1	18	13.8
	Apparel product standards and specifications	23	17.7	25	19.2
	Others	17	13.1	19	14.6
8. Market Outlet	Within the Community	50	38.5	52	40.0
	Other Municipalities in Benguet / Baguio	32	24.6	32	24.6
	Other provinces in CAR	21	16.2	19	14.6
	Nationwide	10	7.6	12	9.2
	Export to other countries	17	13.1	15	11.6



the respondents. At least 64 owners or 49.2% of the owner-respondents upgraded their machine or purchased additional equipment after five years of operation. After five years of operation, the sewing enterprises also experienced an increase in product lines and employee size, as shown in Table 1 with 80% and 94.6%, respectively. There were only 9.2% or 12 out of 130 establishments, which were able to establish branches. Quality control and market outlet results for the owners and sewers have no notable big difference.

Table 1 shows that acquiring local supplies and repair/alteration are high in percentage. The rising number of rummage thrift shops in Baguio City and La Trinidad is predictably a rising opportunity for alteration shops for walk-in customers. This opportunity is a leverage for business owners at the same time a pro-environment business practice. Ho and Choi (2012) suggest aiming for local sourcing, in order to minimize transportation time and cost and to reduce stock of fabric or goods. Petersson et al. (2014) suggests that in order to develop circular economy and environment, business owners may reimagine, reduce, reuse, repair and recycle materials and products. A study by Farrant et al. (2010) show that reusing clothes through second hand significantly contribute to reducing environmental impact.

Shop improvement is a major goal after operating for five years. Around half of the respondents indicated having upgraded machine or acquired equipment. Mac and Fergusson (2015) stated that shop improvement with the use of automation and development in technology, in particular the introduction of microprocessors into the garment manufacturing industry, have had a significant effect on production methods. These changes have greatly increased productivity, improving working conditions as well as product quality. The introduction of more complex finishing machinery will of necessity result in increased training requirements for operators not only in machine operations but also in the maintenance of a safe working environment.

Quality control is an essential aspect to look after in every sewing enterprise. Keist (2015) stated that quality assurance and quality control are evolving in apparel industry with technological advances, similar to most other industries in the world. Fabric inspection is now an automated

process, and can find defects in fabrics quicker, more accurately, and save money in the long run. Current and future trends in quality assurance and quality control in the apparel industry include, but are not limited to, green or environmentally friendly textile testing, sustainability, and analyzing new nanotechnology applications in textiles. Incorporating quality assurance into an apparel company program can improve product quality and aid in increasing customer satisfaction.

Acquisition of Technical and Entrepreneurial Skills

Most owner-respondents (60%) acquired their technical skills through formal vocational and technical trainings (Table 2). Many sewers (40.7%) developed their technical skills from working in the industry, followed by 36.2% who gained their skills from formal vocational/technical trainings. Similarly, 42.3% of owner-respondents acquired entrepreneurial skills from vocational/technical/trainings, while 28.5% of sewer-respondents got their skills from working as skilled workers in the industry, and 26.2% through vocational/technical trainings. Sanchez (1990) compared the performance of the textile industry of Philippines and Thailand and one of the study conclusions is that the technical knowledge of Thais were acquired through joint ventures with foreign investors who engaged actively in textile production in their country, while the Philippines benefitted little from the infusion of international expertise.

Financial Profile of the Micro-scale Sewing Enterprises

Almost one-third of the business owners (33.8%) needed an initial working capital of Php50,001.00 to Php100,000.00 (Table 3). A big chunk of the business owners (44.6%) relied on lending institution /individual lenders as their means of financing their enterprise. The results positively indicate that sewing enterprise in Baguio City and La Trinidad is income-generating and viable business because 46% claimed they have net earnings of at least 10,001 to 30,000.00 pesos monthly, and 90% claimed increase in income is expected. The profitability of a sewing enterprise is also indicated in a feasibility study for an alteration shop for the case of TESDA Women's Center serving only TESDA complex in Taguig City (Mortel, n.d.). The study estimated that a return



Table 2*Skills Acquisition of Sewing Enterprises in Baguio City and La Trinidad, Benguet, 2020*

Competency Key Area	Key Assessment Indicators	Assessment Metrics	Owners		Sewers	
			f	%	f	%
Technical	Technical Skill Acquisition	Self-initiative/learned	22	16.9	19	14.6
		Vocational/Technical/Trainings	78	60.0	47	36.2
		Skilled worker from the industry	26	20.0	53	40.7
		Others	4	3.1	11	8.5
Entrepreneurial	Entrepreneurial Skill Acquisition	Self-initiative/learned	24	18.5	31	23.5
		Vocational/Technical/Trainings	55	42.3	34	26.5
		Skilled worker from the industry	39	30.0	37	28.5
		Others	12	9.2	28	21.5

Table 3*Financial Sources and Status of Sewing Enterprises, Baguio City and La Trinidad, Benguet, 2020*

Item	Categories	n	%
1. Initial Working Capital (in Php)	9,999.00 and below	33	23.9
	10,000.00-50,000.00	31	25.4
	50,001.00-100,000.00	44	33.8
	100,001.00 and above	22	16.9
	Personal Money	46	35.4
2. Means of financing their enterprise	Lending Institution or Individual Lender	58	44.6
	Livelihood Program Grant from the Government	26	20.0
3. Estimated Average Monthly Income	P 10,000.00 and below	22	16.5
	P10,001.00 to P 30,000.00	60	46.0
	P30,001.00 to P50, 000.00	33	26.0
	P50,001.00 to P70, 000.00	14	10.8
	P 70,001.00 and more	1	0.7
4. Increase in Income	Yes	117	90.0
	No	10	7.7
	No Answer	3	2.3

on investment (ROI) of 2.7% is expected from the first year of operation and 37.4% ROI on the second year (Mortel, n.d.).

Singh and Nijhar (2015) stated that there are always fluctuations in the costs of raw materials and accessories; charges of weaving or knitting;



processing, finishing, sewing, and packing; charges of transportation; and conveyance. Hence, it is essential to know updates about the latest prices, procedures, quality systems, market prices and availability, transportation, and freight charges. The volatile nature and rigorous competition in the global garment manufacturing industry drive companies to minimize their costs by controlling inventory, accurate forecasting, and low mark-downs. It must be remembered that quality depends on price, and price depends on quality. Each product will have a different price according to its quality. While the manufacturers and retailers decide the retail price of a garment, factors such as the average customer's buying level, quality and quantity, and payment terms should be considered.

Competency Level in Key Areas

Competency Key Area: Technical Skills

Table 4 displays the competency level of technical skills. The overall mean levels of technical

skills of the micro-scale sewing enterprise owners and sewers/laborers are high at 3.52 and 4.08, respectively. Micro-scale sewing enterprise owners have high-level technical skills in the majority of the specific tasks in sewing. Owners already perceive themselves as competent in estimating bills of materials. On the other hand, sewers assessed themselves to have only moderate skill in applying quality standards, designing garments, and estimating the bill of materials. This result affirms the importance and advantage of competencies of technical skills for employment as a sewer. With the sewers possessing most of the essential skills, they do not require so much training, "save employers' money," prevent technical issues from occurring, reduce technical problems before they arise and increase customer satisfaction for a business to grow and always be ahead of its competitors (Lopez, 2013; Mandela, 2015; TESDA, 2015; Kakahu, 2017).

Competency Key Area: Entrepreneurial Skills

Table 5 shows that the calculated grand

Table 4

Technical Skills Competency Level of Sewing Enterprises, Baguio City and La Trinidad, Benguet, 2020

Technical Skills Assessment Metrics	Owners		Sewers	
	Weighted Mean	Descriptive Equivalent	Weighted Mean	Descriptive Equivalent
Carrying out measurements and calculation	3.92	High	4.67	Very High
Applying quality standards	3.68	High	2.91	Moderate
Clothing designing	2.62	Moderate	2.52	Moderate
Setting up and operating machine	3.55	High	4.54	Very High
Performing basic maintenance	3.51	High	3.97	High
Drafting and cutting patterns for casual apparel	3.78	High	4.92	Very High
Preparing and cutting materials for casual apparel	3.66	High	4.96	Very High
Sewing/assembling casual apparel	2.92	Moderate	4.90	Very High
Applying finishing touches on casual apparel	3.13	Moderate	3.96	High
Knowledge of human body shape	2.99	Moderate	4.71	Very High
Estimating bill of materials	4.94	Very High	2.91	Moderate
Grand Mean	3.52	High	4.08	High

Legend:

Numerical Value	Statistical Limits	Descriptive Equivalents
5	4.51-5.00	Very High
4	3.51-4.50	High
3	2.51-3.50	Moderate
2	1.51-2.50	Low
1	0.00-1.50	Very low



weighted means for entrepreneurial skills were 3.68 and 3.35, interpreted as high and medium levels for owners and sewers/laborers, respectively. It was evident that both players possess the skills, but the owner-respondents were more competitive in entrepreneurial skills than the sewer/laborer-respondents. Results tell us that the enterprise owners must be skilled, especially in financial management, communication, and negotiation. Otherwise, the enterprise will not be successful financially, keep its workers and gain clients. This result corroborated the studies of Dominguez (2013), Ferris (2016), Gordon (2017), and Slezak (2017), who showed that a successful entrepreneur is someone who possesses the right skills and business sense, communicates to customers regularly so that they will be aware of the upcoming needs and anticipate them, listens to others who are making reasonable claims and

requests, but also knows when to say no or yes, and knows that unmanaged risks of uncertainty can be fatal.

Degree of Seriousness of the Problems Encountered

Table 6 shows the level of seriousness of problems encountered by respondents. Each problem has specific categories that play important roles that affect the enterprise. For the lack of skilled workers, the owners and sewers/laborers have calculated means of 4.02 and 3.64, respectively, which are interpreted as very serious. It is evident in this result that skilled sewers/laborers are really lacking, as perceived by both the enterprise owners and sewers. This result could be attributed to peoples' notion that sewing is a low job, not profitable, costly, difficult to learn, not in demand,

Table 5

Entrepreneurial Skills Competency Level of Sewing Enterprises, Baguio City and La Trinidad, Benguet, 2020

Entrepreneurial Skills Assessment Metrics	Owners		Sewers	
	Weighted Mean	Descriptive Equivalent	Weighted Mean	Descriptive Equivalent
Initiative	3.68	High	3.55	High
Systematic planning and organizing	4.45	High	2.52	Moderate
Creativity and Innovation	2.62	Moderate	3.89	High
Problem-solving	3.60	High	3.85	High
Persistence	3.78	High	2.69	Moderate
Quality performance	3.79	High	4.81	Very High
Information management	2.53	Moderate	1.98	Low
Financial Management	4.90	Very High		
Persuasion and influencing abilities	2.55	Moderate	2.77	Moderate
Risk-Taking	3.56	High	2.02	Low
Goal-oriented	2.95	High	2.92	Moderate
Communication	4.61	Very High	3.81	High
Time management	3.74	High	4.03	High
Negotiation	4.81	Very High	4.70	Very High
Grand Mean	3.68	High	3.35	Moderate

Legend:

Numerical Value	Statistical Limits	Descriptive Equivalents
5	4.51-5.00	Very High
4	3.51-4.50	High
3	2.51-3.50	Moderate
2	1.51-2.50	Low
1	0.00-1.50	Very low



or obsolete. For students, they see sewing as a second subject or hard work but less income, so they do not choose it as their course or specialization/vocational skills, course, job, or business. It negates what McCarthy (2017) mentioned that sewing is not hard; rather, it is practical, creative, and a form of yoga that gives great satisfaction after completing a project. However, revealed results affirm the gathered records from agencies in Baguio City and La

Trinidad, Benguet; Business Permit Licensing Section (BPLS)-Baguio City (2019), BPLS-La Trinidad, Benguet (2019), TESDA-Baguio City (2019), TESDA-La Trinidad, Benguet (2019), BNHSM (2019), and BTS (2019) about least number of registered schools, businesses, and the number of students taking sewing/garments as their course, vocational skills and businessmen as a line of business.

Table 6

Degree of Seriousness of the Problems Encountered by Sewing Enterprises, Baguio City and La Trinidad, Benguet, 2020

Problems Encountered	Owners		Sewer/Laborer		
	Weighted Mean	Descriptive Equivalent	Weighted Mean	Descriptive Equivalent	
Skills	a) Lack of skilled workers	4.02	Very Serious	3.64	Very Serious
Financial / Capital	a) Insufficient working capital	2.91	Moderately Serious		
	b) Raw materials shortage	2.99	Moderately Serious	2.85	Moderately Serious
	c) Lack of production facilities	3.15	Moderately Serious	2.88	Moderately Serious
	d) Increase cost of sewing machine	2.10	Less Serious		
	e) Technology challenges	2.39	Less Serious	2.42	Less Serious
Yield	a) Decrease in product demand	2.03	Less Serious	1.43	Not Serious
	b) Strong competition	2.98	Moderately Serious	2.41	Less Serious
	c) Demanding clients	2.04	Less Serious	3.02	Moderately Serious
Fashion Trends	a) Fast fashion trends	2.50	Less Serious	2.51	Less Serious
	b) Influx of secondhand clothing	2.47	Less Serious	2.36	Less Serious
Quality of tools/ Materials	a) Easy breakage of needle and threads	3.05	Moderately Serious	1.59	Less Serious
Livelihood	a) Long working hours	4.02	Very Serious	4.33	Very Serious
Health Issues	a) Health issues: Musculoskeletal pains, sitting posture, and eye constrained	3.53	Very Serious	3.85	Very Serious
Grand Mean		2.87	Moderately Serious	2.77	Moderately Serious

Legend:

Statistical Limits	Descriptive Equivalents
4.51-5.00	Much serious
3.51-4.50	Very Serious
2.51-3.50	Moderately serious
1.51-2.50	Less Serious
0.00-1.50	Not Serious



In terms of insufficient working capital, the calculated weighted mean was 2.91 for the owner-respondents that fall under the descriptive equivalent of moderately serious. It confirms with the statement of Dominguez (2013) that financing the business is one of the biggest obstacles to hurdle since borrowing and availing loans require producing collaterals. For the raw materials shortage problem, the calculated means were 2.99 and 2.85, and both means were interpreted as moderately serious for owners and sewers/laborers, respectively.

Problem on lack of production facilities for owners and sewers/laborers calculated means were 3.15 and 2.88 both described as moderately serious. It was described as moderately serious only because they usually encounter lack of facilities when there are bulk orders, and it is on a seasonal basis. The increase in the cost of sewing machines was perceived as less serious as interpreted for the calculated weighted mean of 2.10 for the owner-respondents. This result implies that sewing machine prices are still affordable.

Meanwhile, problems about the technology challenges for micro-scale sewing enterprise owners and sewer/laborer-respondents have weighted means of 2.39 and 2.42, which fall under less serious descriptive equivalents, respectively. It manifested in the result that the owners and the sewer/laborer-respondents do not have a problem with the challenges of technology. Somehow, they want to try those hi-tech sewing machineries, tools, and equipment or attend formal trainings on the use of new technologies, but they are still contented and comfortable with the basic machines, tools, and equipment they use. They have become experts in manipulating these basic machines, which produce quality products and fulfill the demands of their clients. However, this result opposes the study of Nibletto (2016), who stated that organizations must understand and manage risks that merge with the rapidly escalating use of technology and that the best way to do so is to abide by it to succeed in today's business environment. Deegahawathura's (2018) also stated, concerning the garment's technology challenge, that what people wear now is going high-tech because changes to the garment industry's business model are threatening the livelihoods of millions of people. He added that businesses and governments must begin improving current employees' technology literacy to ease the

transition. Moreover, the result also corroborated with Dominguez (2013), who said that the danger of the rapid growth of technology is that it can render an enterprise obsolete within months. Other reasons were cited in the study of Diaz and Fajardo (2015) about "backwardness" in which micro-scale enterprise owners still do not take advantage of the benefits of technology, they have no up-to-date skills, and worse, some owners have a negative attitude toward new technology and other new ways of doing things.

Meanwhile, the problem of the decrease in product demand had a mean of 2.03 and 1.43, which were interpreted as less serious and not serious, respectively. This result implies that demand is not the stakeholders' main concern because there was no problem with the demand of their product based on data. This result reflects and corroborates the result in Table 2 on the owner respondents' perceptions on the improvements of their enterprise within five years, reviewing that there were improvements in the number of clients. In parallel with the Jamisal (2016) study, a sewing enterprise is one of the important agents in society because its products and services are offered to make its customer comfortable and satisfied in terms of his desires, needs, and clothing demand. Also, their clients probably remain loyal to them because of possessing the attribution for a successful business, as Ferris (2016) mentioned in her study.

Problems on strong competition had calculated means at 2.98 and 2.41 for owners and sewers/laborers and were described as moderately serious and less serious, respectively. According to both the owners and sewers, no strong competition in the sewing enterprise is manifested. Each owner and sewer/laborer-respondents have strategies to keep, care for, and satisfy their clients as assets and avoid competition. This result supports the earlier findings in Table 2 about maintaining quality products and other strategies. It agrees with the study of Weiner (2017), who stated that the most vital assets are the customers who can be attracted with unique products, gifts, giving discounts, and making them feel welcomed and helped.

As for the problem of demanding clients, the calculated weighted means were 2.04 and 3.02 for owners and sewer/laborer-respondents, interpreted as less serious and moderately serious,



respectively. Owner-respondents have less problem with demanding clients than the sewer/laborer-respondents' perception that this problem was moderately serious. It is possible that since sewers are the front liners in the business, they face every kind of trait from clients every day. As Lopez (2013) mentioned, today's customers have become smarter because they are shaped by experiences, peer advice, and different media. They know what they want, and they demand it. The owners and sewers can still handle their clients well; they can stay calm and suggest solutions or alternate remedies for a rush demand for product or service. Although, saying no to clients will cause dismay and the possibility not to patronize the business anymore. It corroborated with Ferris (2016) statement that in possessing the attribution for a successful business, it is always good to acknowledge one's limits; although "yes" is a powerful word, an entrepreneur cannot be everything to everyone.

Also, micro-scale sewing enterprise owners and sewer/laborer-respondents had calculated weighted means of 2.50 and 2.51 for the problem on fast fashion trends and were interpreted as less serious. This result implies that fashion trends are present in the locality but do not disturb the sewing enterprise mode. The fast pace of the industry is shaking up the fashion system. The need for speed is driven partly by social media bringing fashion trends to more consumers at a faster pace than in the past; thus, sewing enterprises are pushing up standards to meet customers' needs better and improve responsiveness like those with the online business movement (Bureau of Fashion, 2018).

Furthermore, Atienza (2018) stated that as Generation Z moves out of their teens over the next few years, fashion retailers and sewing enterprises must get to study them harder and nimble to get by their needs and demands. This statement is similar with Dominguez (2013), who stated that entrepreneurs must keep abreast with what is "in" or "out" to have the uppermost position in the mind of the consumers. Moreover, the problem of the influx of second-hand clothing was interpreted as a less serious problem by owners and sewer/laborer-respondents with calculated means of 2.51 and 2.36, respectively. Based on the results, invasion of second-hand clothing in the locality does not cause trouble in the sewing business, but rather it creates and brings in more

clients on repair/revise or alterations services. However, there is an effect in customized clothing, but it is too minimal. Somehow, it negated the statement of Baden and Barber (2005) that the influx of second-hand clothing trade is often held responsible for the decline of sewing enterprises or in clothing production.

On the other hand, the quality of tools/materials like the breakage of needle and threads have descriptive equivalents of moderate serious and less serious for sewing owners and sewers/laborers, respectively. Meanwhile, problems on full-time jobs and health issues like musculoskeletal pains, sitting posture, and eye constraints were described as very serious for owner and sewer/laborer-respondents with a calculated mean of 4.02 and 3.53, and 4.33 and 3.85, respectively. It was evident then that both respondents encountered problems on the livelihood-full time job because it affects the moments with their family, friends, and some responsibilities in the community. Dominguez (2013) mentioned that an employee needs to work the whole day much more for the owner who requires them a 24/7 schedule on the job. This result implies less time for family life, friendship, sports, and God. It also argues with the study of Diaz and Fajardo (2015) about social risk; the work could be a source of conflict with family and social relationships that can make life stressful, little time for leisure, and may have to give up holidays too.

Further, it ratifies Kakahu (2017) study that sewers working conditions are: work-full and even work including evenings and weekends. The physical requirement is a must, like good hand-eye coordination, normal color vision, and working well under pressure. Health issues could be a serious problem for both respondents because of the nature of the work. Sewing requires long sitting on a stool without a backrest (chair with backrest is not advisable because it can obstruct quick moving in pushing and pulling fabrics and may cause accidents). In the long run, staring at the fabric can hurt the eyes. It affirms the study of Nagori (2017) that sewers also face health-related problems due to congested and limited workspaces and simultaneous hand and arms movements. Issues can be minimized if there is routine stretching and proper posture. Dominguez (2013) mentioned that if stress is not properly dealt with, it can significantly deteriorate health and



well-being. It further strengthens the study of Diaz and Fajardo (2015) that an entrepreneur needs to keep his body fit and his mind alert; thus, exercise, fitness, creation, and rest should be part of his lifestyle.

Perceptions on the Demand for Sewing

There is no definite peak month for sewing enterprises. Demand for sewing depends on several factors like cold months where thick clothes are needed, so clients buy second-hand clothing and have it revised or repaired. Demand increases during the Panagbenga festival, Adivay, Athletic Meet, during school enrollment, election or campaigning months and other festivals. In such times, customized clothing like sportswear, jackets, and other uniforms/attires are needed. Also, demand peaks during harvesting time for farmers when they avail of the customized jeans and jackets. Lean months are during the rainy season when sales are slow. Table 7 shows that 97.7% of the owner-respondents and 96.2% of the sewer/laborer-respondents perceived that the sewing enterprise is still in demand.

Results show that almost all respondents positively responded that there was a demand for sewing. Probably, if there is no sewing enterprise, who then will sew, repair, revise, alter, modify and customize our desired fittings in our clothing? Also, there might be too much wastage of garments if nobody fixes torn clothes and may contribute to pollution. This result supplements the study of Jamisal (2016) about the importance of sewing enterprise in a society: allows customized alterations to ensure a perfect fit that provides comfort to the wearer; an important life skill, and is the vehicle to teach self-confidence through skill-building.

Table 7

Perceived Status of Demand for Sewing Services, Baguio City and La Trinidad, Benguet, 2020

Views on the Demand for Sewing Enterprise Services	Owners		Sewers/Laborers	
	f	%	f	%
YES	127	97.7	125	96.2
NO	3	2.3	5	3.8

Note: f = frequency

Conclusions

With all the findings from the study, the researcher concludes that micro-scale sewing enterprises in Baguio City and La Trinidad are sustainable and profitable based on the assessment metrics of each of the competency key areas identified. The performance level of sewers in the identified competency key areas for both the owners and sewer-laborers is perceived strength in the region's garments and apparel industry. This strength is a competitive edge of sewers to make Baguio and La Trinidad into the Sewing Capital of the Region.

On the competency level in the operational aspect, the researchers conclude that micro-scale sewing enterprises in Baguio and La Trinidad are sustainable and profitable businesses. Ninety percent of the respondents, which comprised 70% of all the registered micro-scale sewing enterprises, experienced an increase in income, 97.7% expansion of shop, 80% increase in product line, and 96.8 % increase in employment size. The primary sources of raw materials are local and domestic markets, indicating that the sewing enterprise as a consumer contributes to the economic growth of Baguio, La Trinidad, and the country as a whole. Micro-scale sewers of Baguio and La Trinidad cater to customized apparel and alteration and repair. The owners specialize in the former, while the sewer-laborers specialize in alteration and repair.

Findings of the assessment of competency in the technical and entrepreneurial aspect showed that the majority of the owner acquired their skills from attending vocational/technical training, while for the sewer-laborer, they were exposed to being a skilled worker in the industry. The enterprise owners' self-assessment of their technical skills showed moderate competency in cloth designing, assembling casual apparel, applying finishing touches, and knowing human body shape. It is highly recommended to improve the competency level in these areas by attending skills training. It will increase revenue for the shop as customized apparel costs more than alteration services. Improving competency levels in these areas will also translate to more customers. The competency level of the owners in estimating the bill of materials reflects the excellent pricing of goods and services. Owners have a high



competency level in carrying out measurements and calculations, setting up and operating machines, performing basic maintenance, drafting, and cutting patterns for casual apparel, which indicates that the end-product quality is also high. This result means customers are highly satisfied with the goods and services they availed. Sewer-laborers' competency level in their technical skills is very high on the assessment metrics of carrying out measurements and calculations, setting up and operating machines, drafting and cutting patterns for casual apparel, preparing and cutting materials for casual apparel, and also in knowing human body shape. These findings show that they are very highly competent in their work but need to improve applying quality standards and clothing design.

The owners' competency level in entrepreneurial skills was very high in communication and negotiation skills, which are vital in marketing and customer servicing. Additionally, owner-sewers were also very highly skilled in financial management, indicating that the owners as managers possess the very vital role needed in operational management. The sewer-laborer reflected a very high level of competency in quality performance and negotiation and very low in information management and risk-taking. In the overall assessment of the entrepreneurial skills competency, the owner is high while the sewer-laborer is medium. These findings reflect that the sewer-laborers are more focused on the sewing task, and the owners are focused on satisfying the customer, managing finances, and visioning for expansion.

Recommendations

Planning for future growth is vital to be a successful micro-scale sewing enterprise. Being informed of the competencies, problems encountered, and fashion trend status will provide sound situational analysis, decision-making, and intentional exploration of possibilities. With the data gathered from the study, environment scanning, observation, and reading, the researcher recommends the following: with the operational competency of micro-scale sewing enterprises in Baguio and La Trinidad, they can increase their market reach and product line, need not rely solely for walk-in clients, and may cross-over to social

media marketing; owners and sewers are recommended to attend to skills training that would level-up their skills in the various technical skills needed to carry out their work excellently--training topics beneficial to the owners would be clothing design, sewing/assembling casual apparel, applying finishing touches on casual apparel, and knowledge on human body shape and training topics beneficial to the sewer-laborers are applying quality standards, cloth designing, and estimating bill of materials; DTI and LGUs may assist sewing enterprises in finding fund or grant for the enterprises to have the opportunity to leverage on high-end technology of sewing equipment, and enrol under the Barangay Micro Business Enterprise (BMBE) for them to enjoy the benefits given by the government. Further, continuing skills training for sewers, manpower pooling of on-call sewers when job order is on peak season or high volume, time management of employees to observe break and exercise times, and proper management of customer expectation on the expected date of completion for every sewing project or contract are recommended. Owners also may need to enhance workers' benefits, including regular medical check-ups, paid leave for rest, and scheduled day-offs. Owners and sewers alike need access to the latest trends that can help them innovate, create, and compete with domestic and international markets. Finally, micro-scale business owners, the LGU, and other government agencies need to strengthen their collaborative initiatives to help boost the garments industry in Baguio and La Trinidad. A forum, a trade fair, media exposure, and the like may help the world appreciate what Baguio and La Trinidad sewers can offer in the garment and fashion industry.

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