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Balancing Heritage and Innovation: Evaluating Training Requirements, Market Dynamics and Digital Integration in Handicrafts

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The Indian handicraft sector, a vibrant blend of cultural legacy and traditional craftsmanship, confronts the dual task of maintaining its distinct character while maneuvering through the intricacies of a technologically driven landscape. This research delves into the complex interplay between skill enhancement, innovation and the future of traditional crafts, examining how these factors empower artisans and contribute to the sustainability of the industry. The study emphasizes the essential function of skill development initiatives in preparing artisans for today's market, which includes training in financial literacy, marketing strategies and technology integration alongside fundamental crafting techniques. By analysing data from 339 artisans through a mixed-methods framework, the research uncovers a strong positive relationship between training and the quality of craftsmanship. Training in financial feasibility shows a clear connection to heightened revenue generation, thereby economically empowering artisans. There is a notable link between marketing training and an enhanced comprehension of market dynamics and consumer preferences. The study investigates the intricate relationship between technology and tradition. While it acknowledges technologies potential to boost efficiency, enhance design capabilities (such as CAD/CAM) and improve market access (like e-commerce), it also addresses artisans' worries regarding the erosion of traditional craftsmanship. A positive relationship is found between awareness of technology and its application, though careful integration is essential to maintain authenticity. Importantly, the research underscores a significant relationship between perceptions of balancing tradition with technology and concerns regarding the loss of craftsmanship. This study concludes that a comprehensive strategy—

combining strong skill development, encouraging innovation and fostering a nuanced appreciation of the technology-tradition equilibrium—is vital for the industry's future. It advocates for ongoing investment in extensive training programs that cater to artisans' varied requirements, nurturing both traditional skills and the ability to succeed in the contemporary marketplace. Through the empowerment of artisans and the preservation of its invaluable cultural heritage, the handicraft sector can ensure its economic sustainability.
Keywords: Handicraft, Technology, Innovation, Training and Skill Development.

1. Introduction

Moving towards betterment is much needed for an evolving world. Age-old techniques cannot survive in the present sprouting world across. Up-gradation and quality products are desirable to satisfy the consumer. To empower the country's traditional handicrafts, some external boosting is needed. A force that improves and helps to reach the desired goal of the handicraft industry. The required force to improve is training and skill development which is much sought by the artisans.

This is where skill development programs play a vital role in revitalizing the handicraft industry. The training and skill development programs go beyond teaching core crafting skills. They equip the artisans with the infrastructure that they need to navigate the modern marketplace. These programs introduce the artisans to power tools or digital marketing platforms to reach out to the maximum number of customers and increase their efficiency in the manufacturing process (Tripathy, National Skills Network, 2023).

Skill development and training programs for artisans in the handicraft industry act like a bridge to connect the rich heritage of the handicraft industry with modern market realities by providing the necessary skills to adapt to the latest innovation by ensuring the captivating creations of the past to find appreciation in the present and future.

Mr. Krishan Kumar, CEO, of the Handicrafts and Carpet Sector Skill Council (HCSSC) states that “Through skilling and upskilling artisans and weavers with industry-based training programs, our aim is to make the beneficiaries self-reliant by linking them with the industry and providing a platform for showcasing their products at the national and international trade fairs”. (NSN, 2022)

Some of the major skill development programs promoted by the National Handicraft Development Programme (NHDP) for the handicraft industry are (NHDP, 2023):

- Ambedkar Hastshilp Vikas Yojna
- Megha Cluster
- Marketing support and services scheme
- Research and development scheme

The relentless march of technological advancement has irrevocably transformed the landscape

of numerous industries and the venerable domain of traditional handicrafts stands as no exception. While technology undeniably offers a cornucopia of opportunities for innovation and enhances efficiency, it also casts a long shadow, raising profound concerns about the preservation of authenticity and the safeguarding of invaluable cultural heritage. This research paper embarks upon a meticulous exploration of the intricate interplay between technology and traditional crafts, meticulously examining the potential benefits and challenges that arise from their integration. Collaborative craft innovation modernizes and expands craft's applications. DICRC promotes this, fostering product, material and system innovation and using craft to drive other innovations. Digital platforms facilitate interdisciplinary collaboration, enhancing craft's value (Salgiya, 2024).

Technology, with its ever-expanding arsenal of tools and techniques, presents a plethora of opportunities for the revitalization and reinvigoration of the handicraft industry. By embracing the transformative power of digital technologies, artisans can streamline their production processes, achieving unprecedented levels of efficiency while simultaneously unlocking a boundless realm of creative possibilities. Furthermore, technology empowers artisans to transcend geographical limitations and connect with a global audience, expanding their market reach exponentially and fostering a vibrant marketplace for their exquisite creations. However, it is imperative to navigate this technological landscape with utmost care and circumspection, ensuring that the harmonious integration of technology serves to enhance, rather than diminish, the unique qualities and profound cultural significance that define traditional handicrafts.

Technology offers a veritable cornucopia of benefits for the burgeoning handicraft industry. By strategically incorporating digital tools and techniques, artisans can significantly enhance their productivity, refine their design capabilities and access a global marketplace of unprecedented scale. Digital tools (CAD, 3D modelling, CNC) are transforming handicrafts, boosting creativity and streamlining production. They enable precise designs, visualization and rapid prototyping. Benefits include increased efficiency, flexibility for customization and cost-effectiveness. These technologies empower artisans while preserving craftsmanship (Kondam, 2024).

2. REVIEW OF LITERATURE

The author (Tiwari & Sharma, 2020) states that the women artisans' skills in stitching and embroidery have improved after the training was carried out in the same field. Though some of the women artisans didn't complete the training, the rest have shown a good improvement in their knowledge. As and when there is a new trend in the market the skill has to be imbibed by the rural artisans, which in turn increases the contribution of the handicraft industry to the country’s economy.

The handicraft industry not only generates revenue but also establishes employment generation within the country and outside the country. Training and skill development in the handicraft industry are provided to everyone irrespective of whether educated or uneducated. But training is a must and should achieve better heights and contribute towards the glory of the country. The contribution of Jammu and Kashmir is tremendous towards the nation and shows an upward trend over the ages. The author (Sheikh & Tiwari, 2014) further says that

the training and skill enhancement facility that is provided is most favourable for the artisans.

The research paper (Pandey, Human Resource Development for Handicraft Sector: A study of Skill Development Training Programme for Textiles/carpet sector artisans, 2014) Focuses on the critical role of Human Resource Development (HRD) in enhancing the competitiveness of India's vibrant handicraft sector, specifically within the textile and carpet industries. Recognizing the sector's significance in terms of employment generation, cultural preservation and foreign exchange earnings and the study investigates the effectiveness of government-initiated skill development training programs. By analysing the impact of these programs on artisan skillsets, productivity and market competitiveness, this research aims to identify key areas for improvement and provide valuable insights for policymakers, industry stakeholders and training institutions to further strengthen the sector's global standing.

The study (Raharjo, 2021) investigates the impact of training on production efficiency in the decorative ceramics sector, focusing specifically on the use of Glass Fiber Reinforced Concrete (GFRC) as a novel material. By conducting a qualitative study with 20 members of the Indonesian Furniture and Handicraft Industry Association (ASMINDO) in Yogyakarta, the research explores the benefits of training programs that encompass theoretical knowledge, practical skills development (model making, resin moulding, GFRC printing and finishing) and the application of GFRC in the production process. The findings demonstrate that the training effectively enhanced participant skills, enabling them to develop four new pot models aligned with contemporary design trends. This research highlights the potential of GFRC technology to improve production efficiency, boost economic viability and enhance the welfare of MSMEs in the decorative ceramics sector.

The research (Yadav, Sood, Tripathi, Grima, & Yadav, 2023) aimed to understand the factors influencing digital innovation and entrepreneurship among small handicraft businesses during economic downturns. Through interviews with 50 online handicraft business owners, the study found that internal and external factors encouraged the shift to digital platforms. However, challenges such as a lack of digital infrastructure, market concerns and limited knowledge hindered this transition. The findings contribute to understanding digital entrepreneurship and suggest recommendations for policymakers and stakeholders to support handicraft businesses.

The study (Shafi, 2021) investigates consumer acceptance of innovation in handicrafts. It finds that consumers are open to innovation, particularly in areas that preserve traditional features. Authenticity, packaging and quality-related innovations are preferred, while technological innovations are viewed skeptically. Younger, well-educated consumers are more accepting of innovation, while older consumers prefer traditional products. Income level also influences preferences. This study contributes to understanding innovation acceptance in the handicraft industry, a relatively unexplored area.

The consumer perceptions of wooden handicraft items purchased online. It examines the influence of website quality, service perception and product perception on purchase intention, with trust as a mediating factor. Results show that trust positively impacts purchase intention. Website quality, service and product perception determine trust, building consumer confidence in online shopping. Sellers should focus on improving product and service perception, while websites should enhance quality and service perception to increase trust. Trust is essential in

business-to-consumer relationships and sellers must continuously build trust to encourage first and repeat purchases. Providing detailed product information, abundant reviews and smooth transaction processes are crucial for building consumer confidence. (Yadav & Mahara, 2017)

The study (Garg, Gupta, & Joshi, 2021) delves into India's handicrafts and handlooms industry, emphasizing its economic benefits and obstacles. India's rich legacy includes handlooms, which are woven with hands or looms and handicrafts, which are manufactured with hands or simple equipment. The industry contributes significantly from regional clusters and is a major exporter and creator of jobs. Notwithstanding its significance, the industry faces obstacles like ignorance, exploitation, restricted market access and competition from imitations. The report suggests a plan to move from traditional techniques to online marketing, cutting out intermediaries and bringing makers and buyers together. This change may present new prospects for artists and encourage the expansion of the industry.

The Indian carpet industry, particularly in the Bhadohi-Mirzapur cluster, is a significant handicraft sector providing employment and contributing to exports. To enhance competitiveness in the global market, the industry needs to adopt modern technology. The Indian Institute of Carpet Technology is promoting the use of ICT, specifically computer-aided design software, to improve design flexibility, speed up prototype development and increase weaver productivity. This adoption of ICT will help the industry maintain its leading position in handmade carpets, increase exports and create new job opportunities for professionals. Key factors for carpet sales are design and colour and ICT enables rapid design changes to meet customer demands (Pandey, Enhancing Competitiveness of Carpet Industry using ICT platform: Implementation of Computer Software in Carpet Designing & Weaving, 2014).

This study (Dadheech & Sharma, 2024) examines skill gaps for women in India's handicraft sector, a crucial part of cultural preservation, tourism and the economy. Using econometric modelling and machine learning, the research identifies a complex set of required skills, beyond just technical abilities, including personal qualities and adaptability to challenging work environments. This skill-mapping technique can be applied globally to improve job matching for women in developing nations' handicraft industries, linking sustainable development goals and tourism and handicraft production.

3. RESEARCH METHODOLOGY

3.1. Objectives for the study

1. To study the handicraft industry’s requirement for training and skill development and its impact on Finance, Quality of craftsmanship, technology usage, market trends and customer preferences.

2. To analyse the relationship between awareness about technology and implementation of technology.

3. To examine beliefs about balancing tradition and technology and concerns about the loss of traditional craftsmanship.

3.2. Hypothesis for the study

1. There is a positive relationship between the training received and the increase in the quality of craftsmanship.

2. Training in understanding financial feasibility has led to generating more revenue.

3. An association exists between training concerning the market and networks, which has led to an improved understanding of market trends and customer preferences.

4. There is a positive relationship between technology training received and the impact of technology usage.

5. There is a positive correlation between awareness of new technology in the handicraft industry and the implementation of technology in the industry.

6. There is an association between beliefs about balancing tradition and technology and concerns regarding the loss of traditional craftsmanship.

3.3. Methodology

3.3.1. Type of Research

The type of research used in this research paper is Descriptive, Exploratory and Analytical research.

a. Descriptive Research: Describes the requirement of skill development programs in the handicraft industry. The paper describes the role of training and skill development in the handicraft industry and its impact.

b. Exploratory Research: research aimed at exploring the issue concerning skill development programs that is offered and the impact of the training received.

c. Analytical Research: Based on the hypotheses tested we evaluated the variable/facts and figures representing their perspective on training and skill development in the handicraft sector.

3.3.2. Type of data

Qualitative and Quantitative Research: A mixed-methods approach is been employed to combine the strengths of both qualitative and quantitative research. Qualitative research will be used to explore the perceptions, experiences and perspectives of artisans regarding technology adoption and its impact on traditional crafts. Quantitative research is used to collect numerical data and analyse statistical relationships between variables.

3.3.3. Sampling

Purposeful Sampling: A purposive sampling technique will be used to select 339 artisans from various regions of Karnataka. The sample will be stratified to ensure the representation of different types of handicrafts and geographic locations.

3.3.4. Data collection

Questionnaire: A structured questionnaire will be developed to collect primary data from the selected artisans. The questionnaire included both closed-ended and open-ended questions. A

theoretical framework was developed from secondary data consisting of published articles, journals and websites.

3.3.5. Statistical tools:

The primary data collected is analysed using Correlation analysis, Chi-square test, One-sample test and ANOVA.

4. DATA ANALYSIS AND INTERPRETATION

4.1. Representing the impact of training on the quality of craftsmanship

Training significantly improves craftsmanship quality by providing artisans with essential knowledge, skills and techniques. Well-structured programs enhance material understanding, technical proficiency and aesthetic sensibilities, leading to more precise, detailed and refined creations. Training also fosters an appreciation for traditional techniques, encouraging innovation while preserving craft integrity. Ultimately, this results in higher quality, more marketable products that command better prices and enhance the craft's reputation.

Around 2,12,000 skilled individuals from 744 handicraft clusters contribute to a diverse array of over 35,000 products that uphold the rich culture of India. (Tripathy, National Skills Network, 2023)

H0	There is a negative relationship between the training received and the increase in the quality of craftsmanship.	Failed to accept
H1	There is a positive relationship between the training received and the increase in the quality of craftsmanship.	Accept

Table 1: Cross-tabulation of assessment of the training and its impact on artisans

Assessment of the training * Impact and upliftment - Cross-tabulation					
		Impact and upliftment of training program on handicraft artisans			Total
		Neutral	Agree	Strongly Agree	
Assessment of the training program you attended	Disagree	2	0	0	2
	Neutral	16	8	0	24
	Agree	19	270	7	296
	Strongly Agree	0	8	9	17
Total		37	286	16	339

Interpretation:

The Cross-tabulation analysis reveals a strong positive association between participants' assessment of the training program and their perceived impact on their skills and abilities as handicraft artisans. A significant majority of participants who strongly agreed that the training program was effective also perceived a positive impact on their skills. Conversely, those who were less positive about the training program were less likely to report a significant impact on their skills. This finding underscores the critical role of program quality in fostering meaningful skill development and enhancing the effectiveness of training initiatives within the

handicraft sector.

Table 2: Result of Correlation

Correlations			
		Assessment of the training program you attended	Impact and upliftment of training program on handicraft artisans
Assessment of the training program you attended	Pearson Correlation	1	.565
	Sig. (2-tailed)		.000
	N	339	339
Impact and upliftment of training program on handicraft artisans	Pearson Correlation	.565	1
	Sig. (2-tailed)	.000	
	N	339	339

Interpretation:

Correlation is the degree of relationship between the variables represented by the correlation coefficient. The two variables i.e., assessment of the training program that the artisan and the impact and upliftment of the training program attended. From the above table, it is observed the significance level is 0.000 which is < 0.05. Therefore, the Null hypothesis failed to be accepted. That means, "There is a positive relationship between the training received and the increase in the quality of craftsmanship".

Furthermore, there exists a positive moderate relationship (0.565) between the assessment of the training program that the artisan has received and the impact and upliftment of the training program attended.

4.2. Training in financial feasibility and revenue creation

Financial feasibility training empowers artisans to transform their craft into sustainable businesses. These programs provide essential knowledge and skills, including understanding market dynamics, cost analysis, competitive pricing and exploring diverse revenue streams (direct sales, online platforms, collaborations). By fostering financial literacy and business acumen, these programs enhance earning potential, improve livelihoods and contribute to the handicraft industry's growth.

H0	Training in financial feasibility does not lead to more revenue	Failed to accept
H1	Training in financial feasibility does lead to more revenue	Accept

Table 3: Result of a One-sample test

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Assessment of the training program you attended [Financial Feasibility]	339	3.94	.512	.028
Impact and upliftment of training program on handicraft artisans [Revenue Generation]	339	3.94	.567	.031
One-Sample Test				

	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Assessment of the training program you attended [Financial Feasibility]	141.536	338	.000	3.935	3.88	3.99
Impact and upliftment of training program on handicraft [Revenue Generation]	127.882	338	.000	3.941	3.88	4.00

Interpretation:

The statistical analysis reveals a highly positive perception of the training program among participants. With a mean score of 3.94 and a statistically significant t-value ($p < 0.0001$) for both "Assessment of the training program" and "Impact and upliftment of training program on handicraft artisans [Revenue Generation]," the findings strongly suggest that the training program was highly effective. Participants demonstrated a high level of satisfaction with the training itself and strongly perceived it as having a significant positive impact on their ability to generate revenue from their handicraft work. These results underscore the program's success in enhancing both participant satisfaction and their perceived ability to leverage the training for improved business outcomes. The significance level is less than 0.05, which means the null hypothesis failed to accept a 95% significance level. This means that training in financial feasibility does lead to more revenue.

4.3. Training in marketing and its impact on analysing market trends and customer preferences

Training in marketing equips artisans with invaluable skills to effectively analyse market trends and customer preferences within the dynamic handicraft industry. Through these programs, artisans gain a deeper understanding of consumer behaviour, emerging market trends and the competitive landscape. They learn to identify target audiences, understand their needs and tailor their products and marketing strategies accordingly. By acquiring these critical skills, artisans can effectively adapt to evolving market demands, identify new opportunities and position their unique creations to resonate with discerning consumers. This empowers them to make informed decisions regarding product design, pricing and distribution channels, ultimately enhancing their competitiveness and increasing their chances of success in the ever-evolving marketplace.

H0	No association exists between training concerning the market and networks and an improved understanding of market trends and customer preferences.	Failed to accept
H1	An association exists between training concerning the market and networks, which has led to an improved understanding of market trends and customer preferences.	Accept

Table 4: Cross-tabulation of training and its impact on market trends and customer preferences

Cross-tabulation					
		Impact and upliftment of training program [understanding of market trends and customer preferences]			
		Neutral	Agree	Strongly Agree	Total
Assessment of the training	Disagree	2	0	0	2

program [understand the market and its network]	Neutral	16	24	3	43
	Agree	19	219	29	267
	Strongly Agree	5	13	9	27
Total		42	256	41	339

Interpretation:

The Cross-tabulation analysis reveals a strong positive association between participants' assessment of the training program's effectiveness in understanding the market and its network and their perceived impact on understanding market trends and customer preferences. Participants who positively evaluated the program's effectiveness in understanding the market and its network were also more likely to strongly agree or agree that the training program improved their understanding of market trends and customer preferences. This finding suggests that the training program effectively equipped participants with the necessary knowledge and skills to analyse market dynamics, identify customer needs and adapt their craft practices accordingly.

Table 5: Result of Chi-square tests

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	60.057	6	.000
Likelihood Ratio	45.190	6	.000
Linear-by-Linear Association	23.247	1	.000
N of Valid Cases	339		

Interpretation:

Chi-square tests revealed a strong, statistically significant association ($p < 0.0001$) between participants' assessment of the training program's effectiveness in understanding the market and its network and their perceived impact on understanding market trends and customer preferences. The results indicate a clear linear trend: as participants' evaluation of the program's market understanding effectiveness increased, so did their perceived impact on understanding market trends and customer needs. This supports the conclusion that the training effectively equipped participants to analyse market dynamics and adapt their craft practices. With a 95% level of significance, the p-value is 0.000 which is <0.05. therefore, the Null Hypothesis failed to be accepted. This means that an association exists between training concerning the market and networks, which has led to an improved understanding of market trends and customer preferences.

4.3.1. Content, resources and materials provided during the training program and its impact on the handicraft industry.

Relevant training content, resources and materials significantly impact the handicraft industry. Comprehensive programs incorporating diverse learning resources (expert lectures, demonstrations, case studies, publications) empower artisans. Access to quality tools, equipment and materials hones skills and facilitates innovation. Market research, design

resources and trend information enable adaptation to consumer preferences and enhance competitiveness. These resources are pivotal for fostering innovation, improving product quality and boosting the sector's economic viability.

H0	Content, resources and materials provided during the training program have a negative impact on the handicraft industry.	Failed to accept
H1	Content, resources and materials provided during the training program have a positive impact on the handicraft industry.	Accept

Table 6: Result of ANOVA

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Assessment of the training program [content provided in training]	Between Groups	7.424	2	3.712	15.874	.000
	Within Groups	78.565	336	.234		
	Total	85.988	338			
Assessment of the training program [Materials and resources provided during the program helpful]	Between Groups	8.305	2	4.153	17.078	.000
	Within Groups	81.701	336	.243		
	Total	90.006	338			

Interpretation:

ANOVA or One-way ANOVA is used to compare scores of three or more than three groups. ANOVA results showed a statistically significant impact ($p < 0.0001$) of both training content and resource availability on participants' overall training program assessment. This suggests that content quality, variety and teaching methodologies, along with the helpfulness of materials and resources (handouts, case studies, equipment access), significantly influence perceived effectiveness. Optimizing these elements is crucial for maximizing training impact and participant satisfaction. The significance level is less than 0.05, therefore the null hypothesis failed to be accepted. This means, "content" resources and materials provided during the training program have a positive impact on the handicraft industry".

4.4. Technology Adoption in the Handicraft Industry - Awareness and Implementation

The handcraft sector should progressively adopt technology to improve business processes and expand into new markets. Technology can provide advantages like a better design, marketing and supply chain management, but some craftspeople could be reluctant to use new tools because of access issues or cultural hurdles. Technology integration can promote the handicraft industry by preserving traditional crafts and fostering ethical and ecological practices by addressing these issues and offering sufficient support.

The table shows the data collected from 339 artisans about their awareness of new technology in the handicraft industry and their implementation of it in their designing, production, marketing and sales.

Table 7: Cross-tabulation of awareness and implementation of technology

Awareness * Implementation – Cross-tabulation				
		Implementation of technology in handicraft		
		Yes	No	Total
Awareness of new technology in the handicraft industry	Yes	116	183	299
	No	0	40	40
Total		116	223	339

Interpretation:

The contingency table shows a strong association between awareness of new technology and its implementation in the handicraft industry. Of the 339 respondents, 116 (34%) are aware of new technology and have implemented it, while 183 (54%) are aware but have not implemented it. This suggests that awareness is a significant factor driving adoption.

Hypothesis:

H0	There is no correlation between awareness of new technology in the handicraft industry and the implementation of technology in the industry.	Failed to accept
H1	There is a positive correlation between awareness of new technology in the handicraft industry and the implementation of technology in the industry.	Accept

Table 8: Result of correlation

Correlations			
		Awareness of new technology	Implementation of technology
Awareness of new technology	Pearson Correlation	1	.264
	Sig. (2-tailed)		.000
	N	339	339
Implementation of technology	Pearson Correlation	.264	1
	Sig. (2-tailed)	.000	
	N	339	339

Interpretation:

The correlation coefficient of 0.264 indicates a weak positive correlation between awareness of new technology in the handicraft industry and the implementation of technology in the industry. This means that as awareness of the latest technology increases, there is a slight tendency for technology implementation also to increase, but the relationship is not strong.

Overall, the analysis suggests that while there is a positive relationship between awareness of new technology and its implementation in the handicraft industry, the relationship is relatively weak.

4.4.1. Technology and Tradition: A Balancing Act of Technology and Tradition

The data suggests a complex relationship between technological adoption and the preservation of traditional craftsmanship. While a majority of respondents believe it is possible to strike a

balance between the two, there are still significant concerns about the potential loss of traditional skills. These concerns are likely influenced by factors such as the perceived level of technological disruption, the value placed on traditional crafts and the availability of resources and training to support artisans in adapting to new technologies.

Table 9: Cross-tabulation of Technology and Tradition

Technology & Tradition – Cross-tabulation					
		Do you believe it is possible to strike a balance between retaining old craftsmanship and incorporating contemporary technologies?			
		Yes	No	Maybe	Total
Are there any concerns regarding the probable loss of traditional craftsmanship as a result of technological adoption?	Yes	13	37	53	103
	No	3	95	138	236
Total		16	132	191	339

Interpretation:

The contingency table shows that a majority of respondents (191 out of 339, or 56%) believe it is possible to balance traditional craftsmanship with contemporary technology. However, 53 respondents (16%) have concerns about losing traditional skills due to technological adoption. Despite these concerns, 236 respondents (70%) believe technology can be integrated without compromising tradition. This suggests a general optimism about the potential for a harmonious coexistence between old and new methods in the handicraft industry.

Hypothesis:

H0	There is no association between beliefs about balancing tradition and technology and concerns regarding the loss of traditional craftsmanship.	Failed to accept
H1	There is an association between beliefs about balancing tradition and technology and concerns regarding the loss of traditional craftsmanship.	Accept

Table 10: Result of a Chi-square test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20.544[a]	2	.000
Likelihood Ratio	18.692	2	.000
Linear-by-Linear Association	7.009	1	.008
N of Valid Cases	339		

Interpretation:

The chi-square test reveals a significant association between beliefs about balancing tradition and technology and concerns about losing traditional craftsmanship. The calculated Pearson chi-square value of 20.544 with 2 degrees of freedom and a p-value of 0.000 indicates a strong relationship. This suggests that as people become more optimistic about balancing tradition and technology, they are less likely to be concerned about losing traditional skills. However, further analysis is needed to determine the causal relationship between these two variables.

4.5. FINDINGS

1. There is a positive relationship between the training received and the increase in the quality of craftsmanship.

2. Training in financial feasibility does lead to more revenue.

3. An association exists between training concerning the market and networks, which has led to an improved understanding of market trends and customer preferences.

4. Content, resources and materials provided during the training program have a positive impact on the handicraft industry.

5. There is a positive correlation between awareness of new technology and implementing the same in the handicraft industry

6. There are significant concerns about the potential loss of traditional skills due to technology adoption

5. Conclusion

The handicraft industry has witnessed significant growth in its contribution to the Indian economy over the years. This growth trajectory necessitates a continued focus on enhancing the skills and capabilities of artisans through robust training programs. Currently, awareness regarding the importance of training and skill development within the industry remains a crucial area for improvement. Research consistently demonstrates a positive correlation between access to quality training and various aspects of the handicraft industry's success.

Upskilling and reskilling programs are vital to adapt to evolving market demands and incorporate innovative techniques into the manufacturing process. This requires a thorough analysis of the existing infrastructure within the industry, ensuring that artisans have access to modern tools, equipment and a conducive working environment. Furthermore, understanding and responding to evolving consumer preferences is paramount. Artisans must possess the ability to "know the pulse of the customer," which involves analysing market trends, identifying emerging demands and tailoring their creations accordingly.

The complex relationship between technology and traditional handicrafts in Karnataka by analysing the perspectives of artisans and employing quantitative and qualitative research methods, the study identified key factors influencing technology adoption and its impact on the preservation of authenticity. To ensure the future of handcrafted goods remains vibrant and authentic, it is essential to support artisans in effectively adopting technology, promoting sustainable practices and addressing ethical concerns. By fostering a symbiotic relationship between tradition and innovation, the handicraft industry can continue to thrive in the digital age.

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