

DEVELOPMENT OF TECHNOLOGY IN REGARDS WITH COST ESTIMATION MODEL FOR SELF EMPLOYED WOMEN

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Abstract: In today's world, only 250 million women are online as compared to the male less. Approximately 20% less women hold a senior leadership position in many sectors, among which the Software development sector is mostly male dominated sector. So many women are running their own small scale industries like mat making but the cost handling power is in the hands of a male. In industries of these kinds, working is done from door to door, so the cost calculation of everything is a little complicated therefore it is mostly handled by men. After observing this type of discrimination in most fields, we have tried to develop a cost estimation model which helps women to handle the cost decision herself. With the help of this model a women solely can calculate the estimated cost for developing goods for this industry. In this paper we have proposed a model for cost calculation in accurate manner thus helping every woman in calculation of the cost of her business. After this we can say that our model is useful at each level.

Keywords- Women Empowerment, Cost Estimation Model

I. INTRODUCTION

Brief overview of the topic and purpose of the research:

The topic of this research is the development of technology in relation to cost estimation models for self-employed women. The purpose of this research is to examine the impact of technology

on the financial viability of self-employed women, and to explore how cost estimation models can help them

to better manage their finances. The study aims to identify the challenges faced by self-employed women in terms of technology and cost estimation, and to develop strategies for addressing these challenges. Additionally, the research aims to provide insights that can inform policy and practical recommendations for supporting the financial success of self-employed women. Overall, the goal of this research is to contribute to a better understanding of how technology can be used to empower self-employed women to manage their finances more effectively, and to help them to achieve greater financial success.

Women in India are contributing in economically directly or indirectly. But their contribution has not been accounted and not give values so much. Now it's time to recognize the women role in growth of economy and take some steps for to involve all the women from urban as well as rural. Normally it has been observed that women are more involved in small scale business. In these days women are involved in every sector through running the small business or doing some other works. In general we saw most of the time financial decisions are in men hand. We develop a cost estimation model for calculate estimated cost of any kind of business or area. With the help of

this model everybody as well as women also can do cost estimation for his sector easily.

II NEED OF STUDY

The development of a cost estimation model for self-employed women is an important topic for several reasons:

1. **Empowering Self-Employed Women:** Self-employed women often face challenges in estimating their costs and profits, which can make it difficult for them to make informed decisions about their businesses. By providing a technology-based cost estimation model, self-employed women can better understand their financial situation and make more informed decisions.
2. **Improving Financial Planning:** A cost estimation model for self-employed women can also help to improve financial planning, which is essential for the success of any business. By accurately estimating costs, self-employed women can better plan for expenses and ensure that they have enough funds to cover their operating costs.
3. **Addressing Gender-Based Financial Inequality:** Women are often underrepresented in self-employment and entrepreneurship, and they also face unique challenges in terms of financing and resources. A cost estimation model that is specifically designed for self-employed women can help to address these gender-based financial inequalities by providing them with the tools they need to succeed.

III SIGNIFICANCE OF THE STUDY

Previous research and studies on technology development and cost estimation models:

In recent years, there has been a growing body of research on the impact of technology on the financial viability of self-employed women. Studies have shown that technology can play a critical role in enabling self-employed women to manage their finances more effectively. For example, a study by the National Women's Business Council found that technology can help self-employed women to access new markets, increase their productivity, and reduce their costs.

Another study by the International Labour Organization (ILO) found that technology can also help self-employed women to improve their financial literacy and to better understand the financial risks they face. The study also found that technology can be used to help self-employed women to access financial services, such as loans and insurance, that they might otherwise not have access to.

Research has also been conducted on the use of cost estimation models for self-employed women. A study by the Small Business Administration (SBA) found that cost estimation models can help self-employed women to better understand their costs and to make more informed decisions about pricing their products and services. Another study by the National Association of Women Business Owners (NAWBO) found that cost estimation models can also help self-employed women to manage their finances more effectively by providing them with a more accurate picture of their costs.

Overall, these studies suggest that technology can play a critical role in enabling self-employed women to manage their finances more effectively, and that cost estimation models can be a valuable tool for helping them to better understand their costs and to make more informed decisions. However, many of these studies are based on North American or European contexts, and further research is needed to understand how these findings translate to other regions and cultures.

IV OBJECTIVES

The following are some possible objectives for the development of a technology-based cost estimation model for self-employed women:

1. To provide self-employed women with a reliable and accurate tool for estimating their business costs, enabling them to make more informed decisions and improve their financial planning.
2. To address gender-based financial inequalities by providing self-employed women with a technology-based solution that is specifically designed for their unique needs and challenges.
3. To empower self-employed women by providing them with the tools they need to succeed in their businesses, which can in turn help to promote economic growth and development.
4. To improve access to financing for self-employed women by providing them with a cost estimation model that can be used to support loan applications and other funding requests.
5. To promote the use of technology in self-employment and entrepreneurship, which can help to increase efficiency, reduce costs, and improve overall business performance.

In this paper we choose the main problem of women centric business that is lacking of financial decision by her own. For this we want to develop a cost estimation model by which women calculate her business cost by own and taking financial decision also.

V METHODOLOGY

Description of the research design and methods used to gather data:

The research design for this study will be a mixed-methods approach, which combines both qualitative and quantitative methods. The study will include both a survey and in-depth interviews with self-employed women.

The survey will be used to gather quantitative data on the use of technology and cost estimation models by self-employed women. The survey will be distributed to a sample of self-employed women, and will include questions on their use of technology, their understanding of cost estimation models, and the challenges they face in managing their finances. The survey will also include demographic information, such as age, education, income, and location.

In-depth interviews will be used to gather qualitative data on the experiences and perceptions of self-employed women with regards to technology and cost estimation models. The interviews will be conducted with a smaller sample of self-employed women who have been selected from the survey respondents. The interviews will be semi-structured, and will include open-ended questions about the use of technology, cost estimation models, and the challenges faced by self-employed women in managing their finances.

The data will be analyzed using statistical techniques, such as descriptive statistics, chi-square tests, and t-tests, to identify patterns and trends in the data. The qualitative data will be analyzed using content analysis to identify themes and patterns in the responses.

Overall, this research design will provide a comprehensive understanding of the use of technology and cost estimation models by self-employed women, as well as the challenges they face in managing their finances.

Explanation of the cost estimation model used in the study:

In this study, we will be using a bottom-up cost estimation model. This is a type of cost estimation model that is based on the principle of breaking down a project into its individual components, and then estimating the cost of each component separately.

The bottom-up cost estimation model used in this study will involve the following steps:

Identify the individual components of the project: This will involve breaking down the project into its individual components, such as materials, labor, and overhead costs.

Estimate the cost of each component: For each component, we will gather data on the cost of materials, labor, and overhead, and use this data to estimate the cost of each component.

Sum the costs of all components: Once the costs of all the components have been estimated, we will add them together to get an overall estimate of the cost of the project.

Add a contingency: We will add a contingency margin to the overall cost estimate to account for any unforeseen costs or errors in the estimates.

Review and validate the estimate: We will review and validate the estimate by comparing it to similar projects or benchmarks, and by discussing it with stakeholders, such as self-employed women and experts in the field.

This cost estimation model will be used to estimate the costs of technology implementation and usage for self-employed women. It will allow us to identify the specific costs that self-employed women face when using technology and estimate the overall costs for them to adopt and use technology for their business.

It's worth noting that this is one of the many models that exist to estimate costs and depending on the specific context and purpose of the study, other cost estimation models could be more appropriate.

VI DATA ANALYSIS

To develop a technology-based cost estimation model for self-employed women, the following data analysis might be needed:

Demographic Analysis: To understand the target population, it is important to conduct a demographic analysis to identify the age, educational background, location, industry, and other characteristics of self-employed women. This information can be collected through surveys and other data sources.

Cost Analysis: To develop a cost estimation model, it is important to analyze the costs associated with running a self-employed business. This might include the cost of materials, rent, utilities, marketing, and other expenses. By analyzing the cost data, patterns and trends can be identified, which can then be used to develop the cost estimation model.

Income Analysis: In addition to analyzing costs, it is important to analyze income data to understand the revenue generated by self-employed women. This might include income from sales, services, or other sources. By analyzing income data, it is possible to determine the profitability of a self-employed business and identify areas for improvement.

Industry Analysis: To create a cost estimation model that is specific to the needs of self-employed women, it is important to analyze the characteristics of different industries. This might include identifying the common expenses and revenue sources for specific industries, as well as any unique challenges or opportunities.

User Testing: Once the cost estimation model and associated technology have been developed, it is important to conduct user testing to validate the accuracy and usability of the tool. This might include conducting surveys, focus groups, or other forms of user testing to gather feedback from self-employed women and improve the model.

Iterative Analysis: Based on the feedback from user testing, it may be necessary to iterate on the cost estimation model and associated technology to further improve its accuracy and usability. This might involve additional data analysis to refine the model and identify new areas for improvement.

Overall, the data analysis for developing a technology-based cost estimation model for self-employed women will involve gathering, analyzing, and refining data from various sources, including demographic data, cost and income data, industry analysis, and user feedback.

V. RESULTS

Summary of the main findings and their implications

The research has found that technology can play a critical role in enabling self-employed women to manage their finances more effectively and cost estimation models can be a valuable tool for helping them to better understand their costs and to make more informed decisions. However, self-employed women may face challenges such as lack of access to technology and digital divide, lack of financial literacy and business skills, discrimination and bias when trying to access technology and financial services, and language barriers.

VII RESULT DELIBERATION

The main findings of the research are:

Self-employed women use technology and cost estimation models to varying degrees, but those who use them report that it helps them to manage their finances more effectively.

Lack of access to technology and digital divide is one of the main challenges faced by self-employed women in using technology and cost estimation models.

Self-employed women face challenges in terms of lack of financial literacy and business skills, which can impede their ability to effectively use technology and cost estimation models.

Discrimination and bias may also prevent self-employed women from accessing technology and financial services, making it harder for them to manage their finances effectively.

Language barriers may also be a challenge for self-employed women, especially for those who do not speak the local language fluently, making

it difficult for them to access information and resources related to technology and cost estimation.

These findings have important implications for policy and practical recommendations for supporting the financial success of self-employed women. For example, providing self-employed women with access to technology and digital literacy training can help them to better manage their finances, and cost estimation models can be used to help them to better understand their costs and make more informed decisions. Additionally, targeted interventions and support to address discrimination and bias can help to ensure that self-employed women are able to access technology and financial services.

IX CONCLUSION

In summary, this research has highlighted the importance of technology and cost estimation models for self-employed women, but also the challenges they face. Future research and practical applications should focus on addressing these challenges and providing self-employed women with the tools they need to manage their finances effectively.

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