**"Feasibility Study for Market Potential for an Adjustable Standing Desk Converter in Calapan City"**

A Feasibility Study

Presented to

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**Chapter I**

**INTRODUCTION**

In the contemporary workplace landscape, characterized by rapid technological advancements and evolving work practices, there is a growing recognition of the significance of ergonomics and health considerations (Adams et al., 2021). Of particular importance is the mitigation of health risks associated with prolonged sitting, which has led to an increased interest in alternative work solutions.

With this objective in mind, the aim of this feasibility study is to assess the market potential for an innovative solution: the adjustable standing desk converter. This transformative device, designed to easily convert any traditional desk into a standing workstation, is intended to promote better posture and reduce the health risks associated with prolonged sitting (Grant & Dall, 2023).

Calapan City, situated in Oriental Mindoro, Philippines, serves as the focal point of this study. As an urban hub with a diverse population and a burgeoning business environment, Calapan City provides an ideal setting for evaluating the feasibility of introducing adjustable standing desk converters to the local market. By conducting a comprehensive analysis of market dynamics, including demographic trends, workplace culture, economic conditions, and consumer preferences, insights into the feasibility and viability of this product introduction will be gained (Santos & Reyes, 2022).

The adjustable standing desk converter epitomizes versatility and practicality, addressing the dynamic needs of modern professionals seeking a balance between productivity and well-being. By providing users with the flexibility to seamlessly transition between sitting and standing positions, this innovative device aims to promote optimal posture and alleviate the strain associated with prolonged sitting, thereby enhancing overall comfort and productivity in the workplace (Lee et al., 2021).

Through rigorous market research and analysis, encompassing various factors influencing market dynamics, this study aims to shed light on the feasibility and viability of introducing adjustable standing desk converters in Calapan City. Understanding the unique challenges and opportunities inherent in the local market will allow for the development of informed strategies for successful market penetration and adoption.

Ultimately, the overarching goal of this feasibility study is to facilitate the adoption of ergonomic solutions like the adjustable standing desk converter, thereby fostering a healthier and more productive work environment in Calapan City. By promoting better posture and reducing the health risks associated with prolonged sitting, a contribution to the enhancement of the quality of work life and overall well-being of professionals in the region is aimed for. Collaborative efforts and strategic initiatives will pave the way for a future where workplace health and productivity are seamlessly integrated.

**Chapter II**

**MARKET STUDY**

**2.1 Name and Description of the Product**

The Adjustable Standing Desk Converter is an innovative solution designed to transform traditional desks into dynamic standing workstations. Engineered to prioritize user comfort and productivity, this innovative product seamlessly adjusts between seated and standing positions, offering users the flexibility to customize their workspace ergonomics. Crafted from premium materials and featuring an intuitive height-adjustment mechanism, the Adjustable Standing Desk Converter ensures stability and durability for prolonged use. Perfect for professionals seeking to optimize their work environment and promote healthier habits, this versatile converter empowers individuals to enhance their productivity while prioritizing their well-being.

**2.2 Uses of the Product**

The Adjustable Standing Desk Converter offers a multitude of uses, catering to diverse work requirements and preferences. It serves as a versatile workstation solution, accommodating various tasks and activities with ease. Users can seamlessly transition between seated and standing positions, allowing for optimal comfort and productivity throughout the workday. Whether utilized for focused individual work, collaborative projects, or virtual meetings, the Adjustable Standing Desk Converter adapts to meet the demands of modern work environments. Additionally, it provides ergonomic support for tasks such as writing, typing, drawing, and reading, promoting proper posture and reducing the risk of musculoskeletal strain. With its flexibility and functionality, the Adjustable Standing Desk Converter is a valuable asset for professionals in various industries, offering a customizable workspace solution fit to individual needs.

**2.3 User of the Product**

The target users of the Adjustable Standing Desk Converter encompass a broad spectrum of individuals seeking to enhance their workspace ergonomics and productivity. This product is ideal for professionals across various industries, including corporate offices, home-based businesses, educational institutions, and healthcare facilities. It caters to individuals who spend prolonged hours working at desks, including office workers, educators, students, remote workers, and freelancers. Additionally, the Adjustable Standing Desk Converter is well-suited for individuals with ergonomic concerns, such as those experiencing discomfort or strain due to prolonged sitting. Furthermore, organizations aiming to promote employee health and well-being may also benefit from implementing the Adjustable Standing Desk Converter as part of their workplace ergonomics initiatives. Overall, the Adjustable Standing Desk Converter offers a versatile and adaptable workspace solution tailored to meet the needs of diverse users striving for comfort, productivity, and overall well-being.

**2.4 Demand & supply analysis**

Demand analysis for the Adjustable Standing Desk Converter would encompass various factors influencing consumer preferences and market dynamics. This analysis would involve studying the growing trend towards ergonomic workspaces and the increasing awareness of the health benefits associated with standing desks. Factors such as the rise in remote work arrangements, concerns about sedentary lifestyles, and the emphasis on employee well-being in corporate settings contribute to the demand for ergonomic office furniture like standing desk converters. Additionally, demographic factors such as the age, profession, and lifestyle choices of target users would be considered to understand their specific needs and preferences.

Supply analysis for the Adjustable Standing Desk Converter would involve evaluating the current and potential production capacity of manufacturers, as well as the availability of raw materials and components required for production. Assessing the manufacturing processes and technologies utilized in producing standing desk converters would provide insights into scalability and efficiency. Furthermore, the analysis would examine the competitive landscape, considering the presence of established manufacturers, emerging startups, and potential market entrants. Regulatory considerations, including product safety standards and certifications, would also be evaluated to ensure compliance with industry regulations and consumer expectations. Overall, a comprehensive demand and supply analysis would inform strategic decision-making and market positioning for the Adjustable Standing Desk Converter.

**2.5 Marketing Program**

**2.5.1 Target Market**

The target market encompasses a diverse range of professionals and organizations seeking to optimize their workspace ergonomics and foster healthier work practices. This group includes individuals employed across various industries, such as corporate offices, educational institutions, healthcare facilities, and home-based businesses. Segmentation within the target market is based on factors such as occupation, age demographics, lifestyle preferences, and ergonomic requirements. By identifying and prioritizing these segments, made marketing strategies can be developed to effectively reach and engage potential customers. Through targeted messaging and promotional efforts, demand for the Adjustable Standing Desk Converter can be stimulated within the identified market segments, driving adoption, and facilitating the integration of ergonomic solutions into diverse workplace environments.

**2.5.2 Pricing**

The pricing strategy for the Adjustable Standing Desk Converter will be carefully formulated to align with business objectives and ensure profitability. Pricing decisions will be based on a thorough analysis of production costs, market demand, and competitive pricing dynamics. By considering expenses such as material costs, manufacturing overheads, distribution expenses, and desired profit margins, a competitive yet sustainable pricing structure will be established. Additionally, pricing may be segmented to accommodate different customer segments and market conditions, allowing for flexibility and responsiveness to changing demands. Regular review and adjustment of pricing strategies will be conducted to remain competitive in the market while maximizing profitability and sustaining business growth.

**Table 1. Product Pricing**

|  |  |
| --- | --- |
| **Product** | **Price** |
| Adjustable Standing Desk Converter – Black | 3500.00 |
| Adjustable Standing Desk Converter – Black and White | 3500.00 |

**2.5.3 Channel Distribution**

The distribution strategy for the Adjustable Standing Desk Converter will focus on providing convenient access to the product for customers in Oriental Mindoro. Given that the production facility is located in Parang, Calapan City, Oriental Mindoro, distribution channels will primarily involve direct delivery to clients who have ordered the product. This approach ensures efficient and timely delivery while minimizing logistical complexities.

In addition to direct delivery, the business will leverage social media platforms and flyers to raise awareness and promote the Adjustable Standing Desk Converter to potential customers in Oriental Mindoro. Social media platforms such as Facebook, and Instagram, LinkedIn will serve as effective channels for showcasing product features, engaging with customers, and facilitating sales inquiries. Flyers distributed in strategic locations within Oriental Mindoro will complement digital marketing efforts, providing offline visibility and reaching a wider audience.

By utilizing a combination of direct delivery, social media marketing, and offline advertising, the distribution strategy aims to maximize product reach and accessibility, enabling customers in Oriental Mindoro who have ordered the product to conveniently acquire the Adjustable Standing Desk Converter and experience its benefits firsthand.

**2.5.4 Marketing strategies/promotion**

In the field of marketing, a commitment to providing innovative, healthy, and nutritious workspace solutions is upheld. Emphasis is placed on ensuring customer satisfaction through the quality of the products offered. The Adjustable Standing Desk Converter, offering a premium solution for optimizing workspace environments in Calapan City, Oriental Mindoro, is introduced.

To effectively promote the product, a multifaceted marketing approach is employed, aimed at raising awareness and driving demand among the target audience. Various advertising channels such as social media platforms (e.g., Facebook, Instagram), targeted email campaigns, online advertisements, and promotional events are utilized. Additionally, offline marketing efforts such as distributing flyers and collaborating with local businesses and organizations are undertaken to enhance brand visibility within the community.

**2.5.5 Competition**

This section evaluates the competitive landscape of the market, particularly in Oriental Mindoro. Presently, there is minimal competition in this area as the specific type of product offered by the Adjustable Standing Desk Converter is not yet widely available. However, it is anticipated that there may be an influx of competitors in the near future as the demand for ergonomic workspace solutions continues to grow. Potential competitors may include manufacturers or distributors of similar ergonomic office furniture, as well as technology companies offering alternative workspace solutions. Additionally, individuals or businesses with expertise in information technology may also enter the market with similar offerings. As such, ongoing monitoring of the competitive landscape and strategic differentiation will be essential to maintain a competitive edge and capture market share effectively.

**2.5.6 Packaging**

This section showcases the packaging of the Adjustable Standing Desk Converter, featuring sleek and modern designs in black and black and white color variations. The packaging is designed to complement various office aesthetics and preferences, ensuring versatility and appeal to a wide range of customers.

**Figure 1. Packaging**

A black desk with a black stand

Description automatically generatedA black stand for a computer

Description automatically generated with medium confidence

Adjustable Standing Desk Converter - Black

Adjustable Standing Desk Converter – Black and White

**2.6 Terms of Sale**

The following agreements outline the terms between the buyer and seller concerning the sale of Adjustable Standing Desk Converters. It is imperative that these terms are thoroughly understood before initiating any transaction to ensure that the rights and obligations of both parties are clearly defined and protected in the event of any issues that may arise.

**2.6.1 Payment Agreement**

Upon placing an order for the Adjustable Standing Desk Converter, the buyer is required to make full payment for the product. Payment options may include bank transfer, check, cash, or online payment platforms, specifically limited to G-Cash or Maya. Once payment is successfully processed, the supplier will proceed with the preparation and delivery of the product.

. **2.6.2 Delivery Instructions**

Clear instructions regarding the delivery date, time, and location must be provided at the time of purchase. The company's designated transport vehicle will be responsible for delivering the goods, and any loss of products or issues during transit will be the sole responsibility of the supplier. Delivery charges are inclusive and have been accounted for in the payment agreement of orders.

**2.7 Inspection Period**

The inspection period allows buyers to thoroughly inspect the received products and reject any nonconforming items. This inspection period is limited to 2-3 days following the receipt of goods by the buyer.

**2.8 Returns**

Buyers are permitted to return products only if they do not meet the quality standards outlined in the product description. In such cases, the supplier will replace the defective products with new and satisfactory ones, and the buyer will not incur any additional charges for delivery.

**2.9 Cancelation and Refunds**

Cancellation and refunds of orders are not permitted. Once the buyer completes the purchase process, it cannot be cancelled, and no refunds will be provided. This policy is established due to the nature of the supplier's business, which pertains to office furniture and equipment, specifically the Adjustable Standing Desk Converter.

**Chapter III**

**TECHNICAL STUDY**

**3.1 The Product**

Sturdy materials like premium steel or aluminum are used in the construction of the Adjustable Standing Desk Converter to ensure stability and lifespan. Strong MDF (medium-density fiberboard) or tempered glass are common materials for desktop surfaces. These materials offer a stable surface for keyboards, monitors, and other necessary office equipment. Additionally, for increased comfort during extended usage, certain versions have ergonomic padding or cushioning. The converter is a dependable and long-lasting option for converting regular desks into ergonomic workstations since these materials are carefully chosen to resist normal wear and tear while retaining the converter's functionality and appearance.

**3.2 Manufacturing process**

Here's a simplified manufacturing process for an Adjustable Standing Desk Converter:

* Material Selection: Procure high-quality steel or aluminum for the frame, and choose a suitable material for the desktop surface, such as MDF or tempered glass. Ensure all materials meet quality standards and specifications.
* Frame Fabrication: Cut the steel or aluminum tubes to the required lengths using precision cutting equipment. Use bending machines to shape the tubes according to the desired design for the frame components, such as legs, support bars, and height adjustment mechanisms. Weld the frame components together to create the sturdy structure of the converter.
* Desktop Preparation: Cut the desktop material (MDF or tempered glass) to the desired dimensions using precision cutting tools. Apply any necessary finishes or treatments to the desktop surface, such as painting or laminating, to enhance durability and aesthetics.
* Assembly: Attach the frame components to the underside of the desktop surface using screws or bolts, ensuring a secure and stable connection. Install the height adjustment mechanism, such as gas springs or electric actuators, according to the design specifications. Test the functionality of the height adjustment mechanism to ensure smooth operation and proper alignment.
* Quality Control: Conduct thorough inspections at various stages of the manufacturing process to check for defects, inconsistencies, or structural weaknesses. Test each completed unit for stability, height adjustment functionality, and overall performance to ensure it meets quality standards.
* Packaging and Shipping: Package each Adjustable Standing Desk Converter securely to prevent damage during transit, using protective materials such as foam padding or cardboard inserts. Label the packages accurately and prepare them for shipping to distribution centers or directly to customers.
* Documentation and Compliance: Maintain detailed records of the manufacturing process, including materials used, production techniques, and quality control measures. Ensure compliance with relevant industry standards, regulations, and safety requirements throughout the manufacturing process.

**Time and Motion Study for Manufacturing an Adjustable Standing Desk Converter**

**3.3 Time and Motion Study**

This study involves observing and recording the time taken to complete each specific step of the manufacturing process for an Adjustable Standing Desk Converter.

Step 1: Material Selection

- Time taken to research and select high-quality steel or aluminum for the frame: 30 minutes

- Time taken to choose suitable desktop material (MDF or tempered glass): 30 minutes

Step 2: Frame Fabrication

- Time taken to cut steel or aluminum tubes to required lengths: 1 hour

- Time taken to shape tubes using bending machines: 2 hours

- Time taken to weld frame components together: 1 hour

Step 3: Desktop Preparation

- Time taken to cut desktop material (MDF or tempered glass) to desired dimensions: 1 hour

- Time taken to apply finishes or treatments (painting, laminating): 1 hour

Step 4: Assembly

- Time taken to attach frame components to desktop surface: 30 minutes

- Time taken to install height adjustment mechanism: 1 hour

- Time taken to test functionality and alignment: 30 minutes

Step 5: Quality Control

- Time taken to inspect frame and desktop for defects: 30 minutes

- Time taken to test stability and height adjustment functionality: 1 hour

Step 6: Packaging and Shipping

- Time taken to package each unit securely: 30 minutes

- Time taken to label packages accurately: 30 minutes

Step 7: Documentation and Compliance

- Ongoing time for maintaining detailed records and ensuring compliance with standards: Throughout the process

Overall, this time and motion study shows that manufacturing one Adjustable Standing Desk Converter takes approximately 11 hours to complete. By breaking down each step into specific tasks and measuring the time taken for each, manufacturers can identify areas for improvement and optimize the production process.

**3.4 Plant Size & Production Schedule**

Based on the provided time and motion study for manufacturing the Adjustable Standing Desk Converter and considering a plant size of 5000 square feet with 20 employees, we can estimate the production capacity and schedule. With an 8-hour workday and 20 employees working simultaneously, we have 160 available work hours per day. Given that it takes approximately 11 hours to manufacture one unit, the maximum daily production capacity is around 14 units. Therefore, the estimated monthly production output could be approximately 14 units/day multiplied by 30 days totals to 420 units per month.

To effectively manage production, a schedule must be devised, ensuring each step of the manufacturing process is optimized for efficiency. Operations may be made more efficient and productive by implementing techniques like cross-training staff members and batch processing. Maintaining productivity and addressing bottlenecks will need constant observation and modification. The manufacturing process may be adjusted to fulfill demand while upholding quality standards by utilizing the data from the time and motion analysis in conjunction with effective resource allocation.

**3.5 Machinery and equipment**

This refers to the machinery and equipment required to carry out the production of Adjustable Standing Desk Converter.

**Cutting Machine**: A tube cutter is a device that cuts steel or aluminum tubes into the desired lengths. Equipment for cutting material to the required dimensions, such as MDF or tempered glass, is known as material cutting equipment.   
  
**Shaping Tools:** A tube bending machine shapes steel or aluminum tubes in accordance with design specifications.

**Welding Tools:** Welding machines are necessary to firmly attach the components of the frame.   
 **Painting Equipment:** Equipment and tools for finishing a desktop material with paint or laminate.

**Laminating Machine:** Should lamination be selected as the final procedure.

**Assembly Equipment:** Tools and fixtures for assembling frame components to the desktop surface.

**Installation Tools:** Equipment for installing the height adjustment mechanism onto the desk.

**Testing Equipment:** Alignment Testing Tools: Equipment for ensuring the proper alignment of frame components and desktop.

**Packaging Equipment:** Packaging Machinery: Equipment for securely packaging each unit before shipping.

**Labeling Machine:** Machinery for accurately labeling packages with product information and shipping details.

3.5 Machinery & Equipment