

**Pre-feasibility Study** 

# FRAMING SERVICES

October 2022

The figures and financial projections are approximate due to fluctuations in exchange rates, energy costs, and fuel prices etc. Users are advised to focus on understanding essential elements such as production processes and capacities, space, machinery, human resources, and raw material etc. requirements. Project investment, operating costs, andrevenues can change daily. For accurate financial calculations, utilize financial calculators on SMEDA's website and consult financial experts to stay current with market conditions.

Small and Medium Enterprises Development Authority Ministry of Industries and Production Government of Pakistan

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# 1. DISCLAIMER

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# 2. EXECUTIVE SUMMARY

An artwork is a physical object that has an aesthetic and conceptual value. It could be a painting, a sculpture, a photograph, a drawing, a collage, etc. Artworks can be created with a very wide range of techniques and many artists even combine several techniques and mediums in their works. A photograph, for example, may be captured using a film camera, a digital camera or a polaroid camera. A painting may be created in different styles (raw paintings, abstract paintings, illustration paintings or pop-art paintings) and different mediums (acrylic paintings, oil paintings, graffiti paintings or water color paintings).

In larger cities, art galleries, educational institutions, hospitals, luxury hotels, offices and homes constitute a large customer-base for business of framing pictures. Paintings and photographs are displayed for decoration and/or for educational purposes in these places. People like to decorate walls of their homes, offices, etc. with paintings and photos to satisfy their aesthetic taste. Such wall hangings are also used by interior designers for decorating new constructed buildings. People also use such visual arts as gifts.

Picture framing is an art in itself, and choosing the right frame can enhance a piece of artwork, while the wrong one might become a distraction. There are many factors that need to be considered when choosing the right picture frame, such as personal taste, environmental factors (humidity, discoloration, etc.) that may affect artwork in the long run. Frames today are available in thousands of styles and the choices are practically endless. However, it is important to note that the artwork and its frame are always seen together and should therefore be complementary.

Frame suitability to artwork depends on the piece and the kind of material used in the frame. Metal, PVC<sup>1</sup> and wood are the main materials used in frames. In recent times, PVC is used as the most common framing material. Other materials used for artwork frames include white border strip, plywood and mirror.

In the proposed project of "Framing Services" the business buys paintings and photographs, which are framed and then displayed in the business for sale. Along with this, the proposed business also provides services to frame the paintings and photographs of the artworks of other customers, brought to business by them for that purpose.

Suitable locations for the proposed project of "Framing Services" will be in major cities like Karachi, Lahore, Faisalabad, Islamabad, Peshawar, Quetta, Multan, Rawalpindi, Bahawalpur, Hyderabad, Mardan, Sukkur, Sargodha, Sialkot, Gujranwala, Gujrat, etc. These cities have also been proposed due to presence of large populations, availability of required resources, presence of good infrastructure and availability of skilled personnel.



<sup>&</sup>lt;sup>1</sup> Cellular PVC is a wood replacement product made of PVC, a synthetic thermoplastic material made by polymerizing vinyl chloride. It is molded into forms while in a different state than normal PVC, which is what makes it possible to be cut and shaped much like wood.

The business maintains contracts with professional artists, from where it procures and collects the artworks. In addition, random artists also contact such businesses to sell their artworks. These artworks are framed by the business, displayed in the business and sold to the final customers. The maximum collection has been assumed to include 840 paintings and 960 photographs per annum from the regular contacts of business and 600 paintings per annum from random artists. The business also provides framing services to 1,200 paintings and photographs per annum to random customers, coming to the business for that purpose.

At maximum capacity, the business owned paintings is further distributed in five kinds of arts which include 576 calligraphy, 144 landscape, 360 modern art, 144 portrait and 216 wildlife paintings. The photographs sold by the business include four kinds of arts, including 384 quotes, 192 natural scenery, 144 portrait and 240 wildlife photographs.

The proposed "Framing Services" operates in a single shift of 10 hours a day for 300 days a year. Further, it is assumed that the operational capacity for the business is 70% during the first year of its operations. The capacity will increase at the rate of 5% per annum attaining a capacity of maximum of 90% of its total service capacity during the projected period of 5 years.

The first years' service capacity of 70% translates into collection of 588 paintings and 672 photos per annum from the contacts of business and 420 paintings per annum from random artists. Also, the business receives 840 paintings and photos per annum from random customers for framing service.

At initial year capacity, the distribution of business owned paintings between the five kinds of arts include 403 calligraphy, 101 landscape, 252 modern art, 101 portrait and 151 wildlife paintings. The distribution of the business owned photographs between the four kinds of arts include 269 quotes, 134 natural scenery, 101 portrait and 168 wildlife photographs.

The business is set up in a rented building with an area of 1,350 square feet. The proposed business requires a total investment of PKR 4.39 million. This includes capital investment of PKR 2.92 million and working capital of PKR 1.47 million. The project will be established using 100% equity financing. The Net Present Value (NPV) of project is PKR 10.18 million with an Internal Rate of Return (IRR) of 63% and a Payback period of 2.18 years. Further, this project is expected to generate Gross annual revenues of PKR 17.32 million during 1<sup>st</sup> year, Gross Profit (GP) ratio ranging from 43% to 46% and Net Profit (NP) ratio ranging from 11% to 18% during the projection period of ten years. The proposed project will achieve its estimated breakeven point at capacity of 56% (1,880 picture frames) with annual breakeven revenue of PKR 11.38 million.

The proposed project may also be established using leveraged financing. At 50% financing at a cost of KIBOR+3%, the proposed business provides Net Present Value (NPV) of PKR 12.11 million, Internal Rate of Return (IRR) of 62% and Payback period of 2.23 years. Further, this project is expected to generate Net Profit (NP) ratio ranging



from 11% to 18% during the projection period of ten years. The proposed project will achieve its estimated breakeven point at capacity of 58% (1,941 frames) with breakeven revenue of PKR 11.75 million.

The proposed project will provide employment opportunities to 9 people. High return on investment and steady growth of business is expected to the entrepreneur having some prior experience or education in the related field of business. The legal business status of this project is proposed as "Sole Proprietorship" or "Partnership" concern.

# 3. INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with the objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectorial research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need-based capacity building programs of different types in addition to business guidance through help desk services.

National Business Development Program for SMEs (NBDP) is a project of SMEDA, funded through Public Sector Development Program of Government of Pakistan.

The NBDP envisages provision of handholding support / business development services to SMEs to promote business startup, improvement of efficiencies in existing SME value chains to make them globally competitive and provide conducive business environment through evidence-based policy-assistance to the Government of Pakistan. The Project is objectively designed to support SMEDA's capacity of providing an effective handholding to SMEs. The proposed program aimed at facilitating around 314,000 SME beneficiaries over a period of five years.

# 4. PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document/study covers various aspects of project concept development, start-up, and production, marketing, finance and business management.



The purpose of this document is to facilitate potential investors in setting up a "Framing Services" by providing a general understanding of the business with the intention of supporting them in investment decisions.

Apart from carefully studying the whole document one must consider critical aspects provided later on, which form the basis of any investment decision.

# 5. BRIEF DESCRIPTION OF PROJECT & PRODUCTS

Art has been a part of human culture for thousands of years. It serves as a medium of self-expression and a way to communicate the artist's views to other people. Art can also reflect cultural movements of a certain era and cultural norms and beliefs of the time in which they were created. Art can manifest in a variety of mediums, such as paintings, photography, installation,<sup>2</sup> pop-art, plays and architecture.

## <u>Paintings</u>

Paintings are visual artwork where paint or ink is used on a canvas or other mediums to depict an artist's rendering of an actual scene or an abstract image. There are different style/categories of paintings.

In the proposed project, for paintings 3 different sizes of frames have been assumed. These different frames sizes are further classified into two designs of PVC frame strip of 1.5 inch and 3-inch thickness in equal proportion (50:50). Table 1 shows painting frame sizes.

Particular	Length in Inches	Width in Inches
Size 1	16	16
Size 2	24	48
Size 3	36	60

#### Table 1: Painting Frame Sizes

The proposed project will sell framed paintings of calligraphy, landscape, modern art, portrait and wildlife.

# Calligraphy

Calligraphy is a visual art related to writing in innovative designs and styles. It is the design and execution of lettering with a pen, ink brush, or other writing instrument on a medium. Figure 1 shows a framed calligraphy painting.



 $<sup>^{\</sup>rm 2}$  Installation art is an artistic genre of three-dimensional works that are often site-specific and designed to transform the perception of a space

## Figure 1: Calligraphy Painting



#### Landscape

Landscape painting is the depiction of natural scenery in art. Landscape paintings may capture mountains, valleys, bodies of water, fields, forests, and coasts, and may also include man-made structures. Figure 2 shows a framed landscape painting.





#### Modern Art

Modern art includes artistic work produced during the period extending roughly from the 1860s to the 1970s. It denotes the styles and philosophies of the art produced during that era. Figure 3 shows a framed modern art painting.



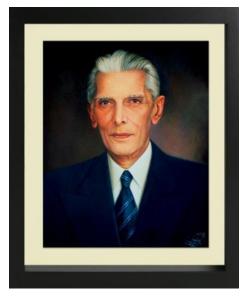
#### Figure 3: Modern Art Painting



#### Portrait

Portrait artworks can be anything from a sculpture to a painting or photography that specifically contains a face. Figure 4 shows a framed portrait painting.

#### Figure 4: Portrait Painting



#### Wildlife

Wildlife art work is a painting of something interesting that happens naturally. Wildlife art is deception of animal portrait paintings. Figure 5 shows a framed wildlife painting.



# Figure 5: Wildlife Painting



The proposed business enters into contracts with professional artists who sell their paintings to the business, In addition, the business also accepts paintings from random artists and art students who are willing to sell them. The business does framing of the procured paintings and displays it in the business, to be sold to the customers. In addition to selling framed paintings, the business also provides framing services to customers. In such case, the customers brings their own paintings and the business fixes those in frames, as per the preferences of the customers.

## Photography

Visual art is an art where an artist uses a keen eye to establish aesthetically pleasing composition in his photographs by using camera. Photography is an art of observation where one tries to find something interesting in an ordinary place.

In the proposed project, for photography, 4 different sizes of frames have been assumed. These different frames sizes are further classified into two designs of PVC frame strip of 1.5 inch and 3-inch thickness in equal proportion (50:50). Table 2 shows photography frame sizes.

Particular	Length in Inches	Width in Inches
Size 1	6	8
Size 2	8	8
Size 3	12	18
Size 4	22	34

Table 2: Photography	<b>Frame Sizes</b>
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There are different types of photography which included fashion, sport, quotes, natural scenery, portrait, editorial, wildlife, etc. In the purposed project, business deals in framing and selling of quote, natural scenery, portrait and wildlife photographs.

#### **Quotes Photographs**

It is a type of photography which involves capturing the written art. In proposed project, business sell framed quotes photographs and also provides service to frame the quotes photographs. Figure 6 shows quote photography.



#### Figure 6: Quote Photograph

#### **Natural Scenery Photographs**

Natural scenery photography involves making artwork with the camera which involves utilizing various elements of nature (such as trees, leaves, sticks, stones, streams, mountains, water, snow, etc.) in a creative way. Figure 7 shows natural scenery photography.



#### Figure 7: Natural Scenery Photograph



## **Portrait Photographs**

Portrait photography is a type of photography aimed at capturing the personality of a person or group of people by using effective lighting, backdrops, and poses. Figure 8 shows a framed portrait photography.



# Figure 8: Portrait Photography

#### Wildlife

Wildlife photography is a type of photography showing various forms of wildlife, usually in their natural habitat. Figure 9 shows a framed wildlife photography.



## Figure 9: Wild Photography

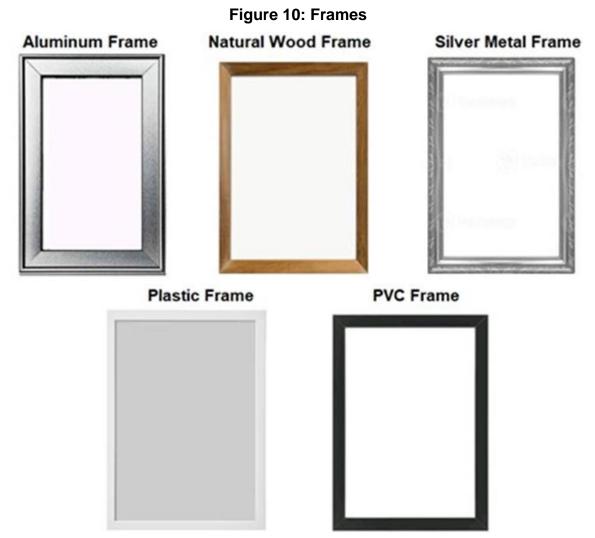
In the proposed project, business enters into contracts with professional photographers who sell their photographs to the business. In addition, the business also accepts photographs from random photographers and students who are willing to sell those. The business does framing of the procured photographs and display those in the business to be sold to the customers. Along with that, the proposed



business also provides framing services to customers to frame their photographs as per their preferences.

#### <u>Frames</u>

A frame is a structure along the perimeter of a picture which is used for the protection, display, and visual appreciation of objects and imagery such as photographs, canvas paintings, drawings and prints, posters, mirrors, etc. Frame suitability to artwork depends on the piece and the kind of materials used in frame. Metal, plastic PVC and wood are the common materials used for making frames. Nowadays, PVC is the most common type of framing material. Other materials used for completion of frame includes white border, plywood and mirror. Figure 10 shows different kinds of frames.



Th proposed business uses PVC frames for photographs and paintings. PVC is a synthetic thermoplastic material made by polymerizing vinyl chloride. It can be molded into different forms while in different states, which makes it possible to cut and shape it much like wood. It provides natural look of wood without all disadvantages that often comes with wood over time (susceptible to water or moisture damage, cracking, and warping out of shape) making it an ideal choice if exposed to harsh climates. In the



proposed project, PVC frame strips of 2 designs including thickness of 1.5 inch and 3 inch are used for making outside boundary of frame according to the size of painting and photos. Figure 11 shows PVC frame strips.



# Figure 11: PVC Frame Strips

# 5.1. Machinery and Equipment

Machinery and equipment required in "Framing Services" is as follows:

## Frame Pinning Machines

Frame Pinning machine is used for pinning the frames. PVC strips of frame are brought together, and a joint is made between two ends of two strips by punching the pins by frame pinning machine, thereby giving a rectangular or square shape to frame. This machine is efficient, light weight, easy to handle and cost effective. It has a modern design and is operated manually by foot with no requirement of electricity or any air source, and is thus environment friendly. It is used for pinning of frames of paintings and photographs. Figure 12 shows frame pinning machine.







### Figure 12: Frame Pinning Machine

#### **Cutting Machine**

Small portable cutting machine is used for cutting of aluminum, plastic and wooden materials. It has capability to cut material at different angles and lengths. In the proposed project, it is used for cutting of PVC frame strips, plywood and white border strip for making frames of different sizes. It has an electricity consumption of 1,800 watts. Figure 13 shows cutting machine.



#### Figure 13: Cutting Machine

#### Electric Nail Gun

Electric nail guns can perform large quantity of work in a short time, without any effort. It enable powerful tacking, suitable for time-consuming work and protect the joints. In this project, it is used for fixing the plywood in the frame. It has an electric consumption of 1,800 watts. Figure 14 shows electric nail gun.



#### Figure 14: Electric Nail Gun



#### Electric Screwdriver

Electric screwdrivers, also known as turn screws, are designed for insertion and tightening of screws. They are made of a head or tip, which engages with a screw; a mechanism to apply torque by rotating the tip; and a way to position and support the screwdriver. In this project, it is used for placing hooks in the frames. It has an electric consumption of 30 watts. Figure 15 shows electric screwdriver.

#### Figure 15: Electric Screwdriver



#### <u>Air Compressor</u>

Air compressors work by forcing atmospheric air under pressure to create potential energy that can be stored in a tank for later use. Just like an open balloon, the pressure builds up when the compressed air is deliberately released, converting the potential energy into usable kinetic energy. Its tank has a capacity of 24 liters. In the proposed project, it is used for operating pinning machine. It has an electric consumption of 750 watts. Figure 16 shows air compressor.





#### Figure 16: Air Compressor

#### 5.2. Consumables Inventory

Consumable inventory required in "Framing Services" is explained as follows:

#### Samad Bond

Samad bond is a chemical that works as an adhesive for sealing and bonding of a wide variety of materials including metal, glass, leather, wood, rubber, and plastic. It forms a tough, flexible and waterproof seal that resists aging and weathering effect on materials. In the purposed business, it will be used for joining the PVC strips (of required length and width) together to give the frame square or rectangular shape.

#### <u>Hook</u>

Hooks are used for hanging pictures on wall. In the purposed project, hooks will be attached to paintings and photographs to hang them in the display area. After sale, the customer can utilize these hooks to hang paintings and photos at the place of his choice. Figure 17 shows a hook.



#### Framing Pins

Frames are typically held together with a combination of wood glue and pins. In the proposed project, steel corner framing pins used for small pinning applications like joining PVC strips to make a picture frame. Figure 18 shows framing pins.



#### Figure 18: Framing Pins



## <u>Nails</u>

In the proposed project, nails of required size (F10, nail length 10mm), (F15, nail length 14mm), (F20, nail length 19mm) (F25, nail length 24mm), (F30, nail length 29mm) are used in electric nail gun for fixing plywood in the frame. Figure 19 shows nails.



## Measurement Tape

A tape measure or measuring tape is a flexible ruler used to measure length or distance. It contains a hook at outer straight end which is used to extend the tape from the case and hold the tape at one end to measure at the other end of the object. In the proposed project, it is used to measure the dimensions of different materials. Figure 20 shows measurement tape.



#### Figure 20: Measurement Tape



Pre-Feasibility Study

Framers Tape is a strong brown self-adhesive paper tape ideal for sealing the back of frames. The tape dries out over time to keep the back of frames clean and tidy. Figure 21 shows framer's tape.

#### Figure 21: Framers Tape



#### Jig-Saw Blade

A jig saw blade of (circular friction of 600 mm, outer diameter of  $250 \times 25.4 \times 1.6 \times 300$ T) is used to ensure accuracy when cutting through various materials such as aluminum, PVC., wood, metal and ceramic. In the proposed project, it is used for cutting of PVC 10 feet strips into strips of the required lengths and white border strip cutting. Figure 22 shows jig saw blade.

#### Figure 22: Jig Saw Blade



#### Hand Saw

A hand saw is a tool with a long or round blade with sharp points, used for cutting materials such as wood. It is operated by hand rather than using electricity or a motor. In the proposed project, it is used for cutting of Plywood. Figure 23 shows hand saw.

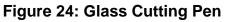
#### Figure 23: Hand Saw





#### **Glass Cutting Pen**

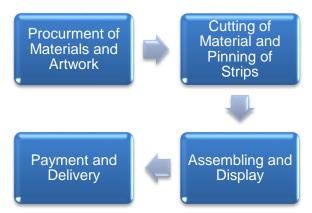
In the proposed project, glass cutting pen is used for cutting the glass in required dimensions. Figure 24 shows glass cutting pen.





#### 5.3. Process Flow for Framing Services

A general process flow of a Framing Services is shown in Figure 25.



#### Figure 25: Process Flow for Framing Services

Brief description of process flow is as follows:

#### Procurement of Materials and Artwork

In this step, the business procures the materials required for making frames and the pieces of artwork. The material includes PVC frame strips, white border strips, plywood, glass and other consumables. PVC frame strips, having length of 10 feet of two different designs (1.5 and 3 inches), and white border strips, having a length of 10 feet with thickness of 2 and 1 inches, are procured. Plywood and glass sheet, having a thickness of 2 mm, are procured in square feet in a shape of rectangle.

These materials are easily available in the local markets of all large cities (Karachi, Lahore, Peshawar, Quetta, Rawalpindi, Faisalabad, Hyderabad, Gujranwala, etc.) from trusted suppliers having a good market repute.



Pieces of artwork (paintings and photographs), are procured from professional artists with whom the business enters into contracts. In addition, the business also procures paintings and photographs from random artists, willing to sell their artwork. Along with this, the business also provides framing services to customers to frame their paintings and photographs.

# Cutting of Materials and Pinning of Strips

After the procurement, the PVC frame strips are cut into desired lengths by cutting machine. PVC frames of different sizes/dimensions which include frame of 16\*16 inch (L\*W), frame of 24\*48 inch (L\*W) and frame of 36\*60 inch (L\*W) for calligraphy, landscape, modern art, portrait and wildlife paintings. Business also makes frames of dimensions of 6\*8 inch (L\*W), 8\*8 inch (L\*W), 12\*18 inch (L\*W) and 22\*34 inch (L\*W) for quotes, natural scenery, portrait and wildlife photographs.

After cutting of strips, the sides of the strips are glued and transferred to the Pinning machine which connects the glued sides of strips to make a frame.

2- and 1-inch white border strips are used for the interior of frame. These white border strips are cut in the desired lengths by cutting machine. White border strips of 2-inch size are used in frame of 14\*14 inch (L\*W), frame of 22\*46 inch (L\*W) and frame of 34\*58 inch (L\*W) for calligraphy, landscape, modern art, portrait and wildlife paintings and in frame of 20\*32 inch (L\*W) for quote, natural scenery, portrait and wildlife photographs. Business also makes 1 inch white border strips frames of dimensions of 5\*7 inch (L\*W), 7\*7 inch (L\*W) and 11\*17 inch (L\*W) for quote, natural scenery, portrait and wildlife photography style for business owned and framing service photos. After cutting of white border strips, the sides of the strips are glued together.

Plywood sheet is cut in the desired shapes by hand saw, including 15.5\*15.5 inch (L\*W), 23.5\*47.5 inch (L\*W) and 35.5\*59.5 inch (L\*W) for calligraphy, landscape, modern art, portrait and wildlife paintings. Business also cuts plywood of dimension of 5.5\*7.5 inch (L\*W), 7.5\*7.5 inch (L\*W), 11.5\*17.5 inch (L\*W) and 21.5\*33.5 inch (L\*W) for quotes, natural scenery, portrait and wildlife photographs. After cutting the white border strip, glue is applied on plywood to fix the frame on it.

Glass sheet is cut in desired shapes by glass cutting pen. Glass of different sizes/dimensions include 15\*15 inch (L\*W), 23\*47 inch (L\*W) and 35\*59 inch (L\*W) for calligraphy, landscape, modern art, portrait and wildlife paintings. Business also cuts glass of dimension of 5\*7 inch (L\*W), 7\*7 inch (L\*W), 11\*17 inch (L\*W) and 21\*33 inch (L\*W) for quotes, natural scenery, portrait and wildlife photographs.

As a result of cutting process, small portions of the PVC frame strip, white border strips, plywood sheets and glass sheets are wasted. This wastage is because each frame has a specific size (i.e., length and width requirements) and only a specific number of frames can be produced from each strip and sheet. The remaining small part of each strip/sheet cannot be used in producing new frames; therefore these small parts/proportions are scrapped as waste.



#### Assembling and Display

After cutting of materials and pinning of strips, assembling process of frame begins with fitting of glass in the frame. The artwork (painting or photograph) is then placed on the plywood. The white border strip frame and artwork is attached with frame using electric nail gun and tape is pasted on the backside of frame to cover the nails. The electric screwdriver is used to insert the hanging hooks on its backside. The complete frame is then displayed in the business for sale.

#### Payment

In this business, there are two kinds of payments, the one is for business owned artwork and the other is for the framing service offered to the customers coming with their own artwork. For business owned artwork, the payment includes the price of the framing services as well as the price of artwork purchased by the business. for the other payment includes only the framing service charges. The payment is done on cash basis.

#### 5.4. Installed and Operational Capacities

The proposed "Framing Services" operates in a single shift of 10 hours a day for 300 days a year. Further, it is assumed that the operational capacity for the business is 70% during the first year of its operations. The capacity is assumed to increase at the rate of 5% per annum attaining a maximum of 90% of its total service capacity during the projected period of 5 years.

At maximum capacity the art collection has been assumed to have 840 paintings and 960 photographs per annum from the regular contacts of business and 600 paintings per annum from random artists. The business also provides framing services to 1,200 paintings and photographs per annum to random customers.

At maximum capacity the business owned paintings are further distributed between five kinds of artworks, which include 576 calligraphy, 144 landscape, 360 modern art, 144 portrait and 216 wildlife paintings. The photographs sold by the business include four kinds of arts, including 384 quotes, 192 natural scenery, 144 portrait and 240 wildlife photographs.

The initial year service capacity of the proposed business is 70% which translates into collection of 588 paintings and 672 photographs per annum from regular contacts of business and 420 paintings per annum from random artists. Also, the business will receive 840 paintings and photos per annum from random customers for framing service.

At initial year capacity the business owned paintings are further divided between five kinds of artworks, which include 403 calligraphy, 101 landscape, 252 modern art, 101 portrait and 151 wildlife paintings. The business owned photographs collection is further divided between four kind of artworks, which include 269 quotes, 134 natural scenery, 101 portrait and 168 wildlife photographs. Table 4 and Table 3 shows



business owned and framing service artwork collection and Table 5 and Table 6 shows business owned artwork distribution.

Artwork	Average Art Collection Per Month	Average Art Collection Per Year @100%	Average Art Collection Per Year @70%
Paintings	100	1,200	840
Photographs	100	1,200	840
Total	200	2,400	1,680

## Table 3: Framing Service Collection of Artwork

#### Table 4: Business Owned Collection of Artwork

Artwork	Average Art Collection Per Month	Average Art Collection Per Year @100%	Average Art Collection Per Year @70%
Paintings			
Contacts	70	840	588
Random Artists	50	600	420
Sub Total	120	1,440	1,008
Photographs			
Contacts	80	960	672
Sub Total	80	960	672
Total	200	2,400	1,680

#### Table 5: Business Owned Artwork Distribution – Paintings

Art	Distribution Ratio (%)	Average Art Collection Per Year @100%	Average Art Collection Per Year @70%
Calligraphy	40%	576	403
Landscape	10%	144	101
Modren Art	25%	360	252



Potrait	10%	144	101
Wild	15%	216	151
Total	100%	1,440	1,008

#### Table 6: Business Owned Artwork Distribution – Photographs

Art	Distribution Ratio (%)	Average Art Collection Per Year @100%	Average Art Collection Per Year @70%
Quotes	40%	384	269
Natural Scenery	20%	192	134
Potrait	15%	144	101
Wild	25%	240	168
Total	100%	960	672

For business owned paintings and photographs, distribution of different types of framed products with respect to different frames sizes are respectively shown in Table 7 and Table 8. Table 9 shows the same information for framing services.

Art	Distribution Ratio (%)	Average Art Collection Per Year @100%	Average Art Collection Per Year @70%
Calligraphy			
16*16	40%	230	161
24*48	35%	202	141
36*60	25%	144	101
	100%	576	403
Landscape			
16*16	40%	58	41

 Table 7: Business Owned Paintings Size Wise Distribution



24*48	35%	50	35
36*60	25%	36	25
	100%	144	101
Modren Art			
16*16	50%	180	126
24*48	30%	108	76
36*60	20%	72	50
	100%	360	252
Potrait			
16*16	40%	58	41
24*48	35%	50	35
36*60	25%	36	25
	100%	144	101
Wildlife			
16*16	40%	86	60
24*48	45%	97	68
36*60	15%	32	22
	100%	215	150
Total		1,439	1,007

# Table 8: Business Owned Photographs Size Wise Distribution

Art	Distribution Ratio (%)	Average Art Collection Per Year @100%	Average Art Collection Per Year @70%
Quotes			
6*8	25%	96	67



8*8	25%	96	67
12*18	25%	96	67
22*34	25%	96	67
	100%	384	268
Natural Scenery			
6*8	25%	48	34
8*8	25%	48	34
12*18	25%	48	34
22*34	25%	48	34
	100%	192	136
Potrait			
6*8	25%	36	25
8*8	25%	36	25
12*18	25%	36	25
22*34	25%	36	25
	100%	144	100
Wildlife			
6*8	25%	60	42
8*8	25%	60	42
12*18	25%	60	42
22*34	25%	60	42
	100%	240	168
Total		960	672



Art	Distribution Ratio (%)	Average Art Collection Per Year @100%	Average Art Collection Per Year @70%
Paintings			
16*16	40%	480	336
24*48	35%	420	294
36*60	25%	300	210
	100%	1,200	840
Photos			
6*8	25%	300	210
8*8	25%	300	210
12*18	25%	300	210
22*34	25%	300	210
	100%	1,200	840
Total		2,400	1,680

Table 9: Framing Services Artwork Size Wise Distribution

For business owned paintings and photographs, distribution of different types of framed products with respect to 1.5 inches and 3 inches design of PVC strips thickness are respectively shown Table 10 and Table 11. Table 12 shows the same information for framing services.

Table 10: Business Owned Paintings De	esign Wise Distribution
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Art	Frame Design (1.5 inch) per Year @100%	Frame Design (1.5 inch) per Year @70%	Frame Design (3 inch) per Year @100%	Frame Design (3 inch) per Year @70%
Calligraphy				
16*16	115	81	115	81



24*48	101	71	101	71
36*60	72	50	72	50
	288	202	288	202
Landscape				
16*16	29	20	29	20
24*48	25	18	25	18
36*60	18	13	18	13
	72	51	72	51
Modren Art				
16*16	90	63	90	63
24*48	54	38	54	38
36*60	36	25	36	25
	180	126	180	126
Potrait				
Tottait				
16*16	29	20	29	20
	29 25	20 18	29 25	20 18
16*16				
16*16 24*48	25	18	25	18
16*16 24*48	25 18	18 13	25 18	18 13
16*16 24*48 36*60	25 18	18 13	25 18	18 13
16*16 24*48 36*60 Wildlife	25 18 <b>72</b>	18 13 <b>51</b>	25 18 <b>72</b>	18 13 <b>51</b>
16*16 24*48 36*60 <b>Wildlife</b> 16*16	25 18 <b>72</b> 43	18 13 <b>51</b> 30	25 18 <b>72</b> 43	18 13 <b>51</b> 30
16*16 24*48 36*60 <b>Wildlife</b> 16*16 24*48	25 18 <b>72</b> 43 49	18 13 <b>51</b> 30 34	25 18 <b>72</b> 43 49	18 13 <b>51</b> 30 34



Art	Frame Design (1.5 inch) per Year @100%	Frame Design (1.5 inch) per Year @70%	Frame Design (3 inch) per Year @100%	Frame Design (3 inch) per Year @70%
Quotes				
6*8	48	34	48	34
8*8	48	34	48	34
12*18	48	34	48	34
22*34	48	34	48	34
	192	136	192	136
Natural Scenery				
6*8	24	17	24	17
8*8	24	17	24	17
12*18	24	17	24	17
22*34	24	17	24	17
	96	68	96	68
Potrait				
6*8	18	13	18	13
8*8	18	13	18	13
12*18	18	13	18	13
22*34	18	13	18	13
	72	52	72	52
Wildlife				
6*8	30	21	30	21
8*8	30	21	30	21

# Table 11: Business Owned Photographs Design Wise Distribution



12*18	30	21	30	21
22*34	30	21	30	21
	120	84	120	84
Total	480	340	480	340

## Table 12: Framing Service Artwork Design Wise Distribution

Art	Frame Design (1.5 inch) per Year @100%	Frame Design (1.5 inch) per Year @70%	Frame Design (3 inch) per Year @100%	Frame Design (3 inch) per Year @70%
Paintings				
16*16	240	168	240	168
24*48	210	147	210	147
36*60	150	105	150	105
	600	420	600	420
Photos				
6*8	150	105	150	105
8*8	150	105	150	105
12*18	150	105	150	105
22*34	150	105	150	105
	600	420	600	420
Total	1,200	840	1,200	840



# 6. CRITICAL FACTORS

Before making the decision to invest in framing services business, one should carefully analyze the associated risk factors. The important considerations in this regard include:

- Right selection of business location
- Selection of trained human resources
- Ability to generate work orders through networking, direct marketing and negotiating long term contracts
- Offering competitive prices and ensuring the delivery of quality services on agreed terms and conditions
- Marketing and promotion through conventional and digital channels

# 7. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

In urban cities, there are number of art galleries, educational institutions, hospitals, hotels, offices and homes which offer a large market for Framing Services business. These places need to display paintings and photographs for decoration or educational purposes. In addition, people like to decorate their homes and walls with paintings and photographs to satisfy their aesthetic taste. Such wall hangings are also used by interior designers for decorating newly constructed buildings. People also use such visual arts as gifts to each other. Therefore, the proposed project of "Framing Services " would ideally be located in major cities of Pakistan like Karachi, Lahore, Faisalabad, Islamabad, Peshawar, Quetta, Multan, Rawalpindi, Bahawalpur, Sargodha, Sialkot, Gujranwala, Gujrat, Hyderabad and other cities of Pakistan. These cities have also been proposed due to presence of large population, availability of required resources, availability of good infrastructure and skilled personnel.

# 8. POTENTIAL TARGET MARKETS/CUSTOMERS

Picture and artwork are used to decorate the walls of bedrooms, kitchens, hallways, offices and restaurants. Landscape, art-print, family portraits and others add beauty to living space. Picture frames are used to display these pictures, enhancing the wall decoration. As the number of commercial and residential buildings are increasing, the demand for picture frame is also witnessing an increase. An increasing trend of framing certificates in homes, offices, educational institutions, stores, clinics, etc. is also acting as an important driving factor for the growth of framing market. Potential customers include members of the public, businesses and organizations. Members of the public might include art collectors looking for a high-quality framing service, those wishing to have their own artwork framed, or others simply looking for cheap ready-made frames for their photographs. Trade customers could include professional photographers, artists, art galleries, museums, hotels and organizations such as



schools, colleges and hospitals. To build demand businesses have to focus on certain factors which include right range, right price and right image.

Global photo frame market size <sup>3</sup>was valued at US\$ 55.37 billion in 2021, and it is expected to reach a value of US\$ 54.05 billion by 2028, at a CAGR of 3.05% over the forecast period (2022 - 2028). The international trade of picture frames of 830630.

With the advent of globalization, consumers can now easily find and use the decorative items, designs and concepts. The need for proposed items is becoming more and more apparent to homeowners, art galleries, educational institutions, hospitals, luxury hotels, offices and interior home designers who frequently look for them to keep their places prettier and more appealing.

# 9. PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of framing services business. Various assumptions relevant to revenue and costs along with the results of the analysis are outlined in this section.

The projected Income Statement, Cash Flow Statement and Balance Sheet are attached as annexures of this document.

All the figures in this financial model have been calculated after carefully considering the relevant assumptions and target market.

## 9.1. Initial Project Cost

Table 13 provides fixed and working capital requirements for establishment of "Framing Services".

Particulars	Cost (PKR)	Reference
Land	-	9.1.1
Building / Infrastructure	650,450	9.1.2
Machinery & equipment	173,000	0
Furniture & fixtures	561,500	9.1.4
Office vehicles	229,500	9.1.5
Office equipment	736,000	9.1.6
Security against building	450,000	9.1.7
Pre-operating costs	122,515	9.1.8
Total Capital Cost - (A)	2,922,965	

 Table 13: Initial Project Cost estimates



<sup>&</sup>lt;sup>3</sup> <u>https://www.openpr.com/news/2729741/global-photo-frame-market-size-was-valued-at-us-55-37-billion</u>

Raw Material Inventory	316,975
Upfront building rent	150,000
Cash	1,000,000
Total	1,466,975
Total Project Cost - (A+B)	4,389,940

#### 9.1.1. Land

The proposed unit will be established on a rented land having an area of 1,350 square feet (6 Marla). Total rental cost has been estimated as PKR 150,000. The breakup of the space requirement is provided in Table 14.

Production Area	Number	Length	Width	Area (Sq. Ft.)
Cash Counter	1	8	10	80
Office Area	1	10	10	100
Display Area	1	20	20	400
Work Business	1	20	20	400
Store Area-Raw Material	1	10	17	170
Store Area-Frames	1	10	10	100
Washrooms	2	5	10	100
Total Area				1,350

### Table 14: Breakup of Space Requirement

### 9.1.2. Building/ Infrastructure

There will be no cost of building construction since the business will be rented, having an area of 1,350 square feet. However, there will be a renovation cost required to make the business usable for the business. Business rent of PKR 150,000 per month has been included in the operating cost as well as it is also included in the capital investment. The proposed project requires electricity load of around 9 KW for which an industrial electricity connection will be required. Table 15 provide details of building renovation cost.



Cost Item	Unit of Measurement	Total Units	Cost/Unit (PKR)	Total Cost (PKR)
Paint Cost	Liter	46	500	22,950
Labour Cost	Sq.Feet	4,590	10	45,900
Tile Cost	Sq.Feet	680	110	74,800
Labour Cost-Tile	Sq.Feet	680	10	6,800
Decoration				500,000
Total				650,450

### Table 15: Building Renovation Cost

### 9.1.3. Machinery and Equipment

Table 16 provides details of machinery and equipment for the proposed project.

Cost Item	Number of Items	Unit Cost (PKR)	Total Cost (PKR)
Cutter Machine	1	35,000	35,000
Pinning Machine	1	80,000	80,000
Electric Nail Gun	1	15,000	15,000
Electric Screwdriver	1	8,000	8,000
Air Compressor (24 Litre Tank)	1	35,000	35,000
Total (PKR)			173,000

#### 9.1.4. Office Equipment

Table 17 shows details of equipment cost required for the business.

 Table 17: Office Equipment Cost Details

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Air Conditioners	3	105,000	315,000
Laptop	1	150,000	150,000
Desktop Computer	1	75,000	75,000
Printer	1	52,000	52,000
Water Dispenser	1	25,000	25,000
Security System (6 Cams , 2 MP)	8	2,500	20,000
DVR	1	14,000	14,000



LED/LCD TV	1	36,000	36,000
WI-FI/ Internet Connection	1	3,500	3,500
Ceiling Fan	4	8,000	32,000
Exhaust Fan	3	4,500	13,500
Total			736,000

### 9.1.5. Furniture and Fixture

Table 18 provides details of furniture and fixtures.

### Table 18: Furniture & Fixtures Cost Details

Cost Item	Number of Items	Unit Cost (PKR)	Total Cost (PKR)
Executive Table	1	60,000	60,000
Executive Chair	1	30,000	30,000
Reception Counter	1	80,000	80,000
Staff Chairs	9	13,500	121,500
Staff Table	2	30,000	60,000
Customer Chairs	10	12,000	120,000
Sofa Set	2	45,000	90,000
Total			561,500

### 9.1.6. Vehicles

Table 19 provides details of the vehicles required along with their cost for the proposed project.

#### Table 19: Office Vehicle Cost Details

Cost Item	Number of Vehicles	Unit Cost (PKR)	Registration Fee Plus Number Plate Charges	Total (PKR)
Motorcycle	2	111,500	6,500	229,500
Total Cost (PKR)	2			229,500



### 9.1.7. Pre-Operating Costs

Table 20 provides details of estimated pre-operating costs.

**Table 20: Pre-Operating Cost Details** 

Costs Item	No.	Unit Cost (per month) (PKR)	Total Cost (PKR)
Cutting PVC, Border, Lasani Wood & Mirror-Skilled Operator	1	35,000	35,000
Salesman	1	25,000	25,000
Security Guard	1	25,000	25,000
Utility expenses			37,515
Total Cost (PKR)			122,515

#### 9.1.8. Security against Building

#### Table 21: Security against Building

Particular	Months	Rent per month (PKR)	Total (PKR)
Security against building	3	150,000	450,000
Total (PKR)			450,000

#### 9.2. Breakeven Analysis

Table 22 shows calculation of break-even analysis.

#### Table 22: Breakeven Analysis

Particulars	Amount First Year (PKR)	Profitability Ratio
Sales (PKR) – A	17,317,300	100%
Variable Cost (PKR) – B	10,774,223	62%
Contribution (PKR) $(A-B) = C$	6,543,077	38%
Fixed Cost (PKR) – D	4,301,074	25%
Contribution Margin	38%	
Breakeven Analysis		
Breakeven Revenue (PKR)		11,383,481
Break-Even (Frames)		1,880



**Breakeven Capacity** 

56%

#### 9.3. Revenue Generation

In proposed project, it is assumed that business will sell 85% of its initial capacity and the 15% will be its closing stock. Table 23 show sales assumptions used in the proposed project. Table 24 shows the total revenue of the business. However Table 25, Table 26, Table 27, Table 28, Table 29, Table 30, Table 31 and Table 32 provides the details of total revenue generated by the business during the first year of its operations.

#### Table 23: Sales Assumption

Particular	Ratio
Art Collection Sold Units	85%
Art Collection Unsold Units	15%

#### Table 24: Total Revenue

Particular	Revenue (PKR)	Reference
Business Owned Paintings - 1.5 Inch Design	5,351,500	Table 25
Business Owned Paintings – 3 Inch Design	6,001,000	Table 26
Business Owned Photographs – 1.5 Inch Design	838,200	Table 27
Business Owned Photographs – 3 Inch Design	945,900	Table 28
Framing Service Paintings – 1.5 Inch Design	1,409,000	Table 29
Framing Service Paintings – 3 Inch Design	1,766,000	Table 30
Framing Service Photographs – 1.5 Inch Design	427,200	Table 31
Framing Service Photographs – 1.5 Inch Design	578,500	Table 32
Total	17,317,300	

#### Table 25: Business Owned Paintings – 1.5 Inch Design

Paintings	Sales Unit	Sale Price Per Unit (PKR)	Revenue (PKR)
Calligraphy			
16*16	69	4,500	310,500
24*48	60	15,000	900,000
36*60	43	28,000	1,204,000
Landscape			



16*16	17	3,500	59,500
24*48	15	17,500	262,500
36*60	11	23,500	258,500
Modren Art			
16*16	54	4,000	216,000
24*48	32	15,000	480,000
36*60	21	20,000	420,000
Potrait			
16*16	17	3,500	59,500
24*48	15	13,500	202,500
36*60	11	19,500	214,500
Wild			
16*16	26	4,000	104,000
24*48	29	15,000	435,000
36*60	9	25,000	225,000
Total Revenue	429		5,351,500

### Table 26: Business Owned Paintings – 3 Inch Design

Paintings	Sales Unit	Sale Price Per Unit (PKR)	Revenue (PKR)
Calligraphy			
16*16	69	5,000	345,000
24*48	60	16,500	990,000
36*60	43	30,000	1,290,000
Landscape			
16*16	17	4,500	76,500
24*48	15	19,000	285,000
36*60	11	25,000	275,000
Modren Art			
16*16	54	5,000	270,000
24*48	32	16,000	512,000
36*60	21	24,000	504,000



Potrait			
16*16	17	4,500	76,500
24*48	15	16,000	240,000
36*60	11	23,000	253,000
Wild			
16*16	26	5,000	130,000
24*48	29	17,000	493,000
36*60	9	29,000	261,000
Total Revenue	429		6,001,000

### Table 27: Business Owned Photographs – 1.5 Inch Design

Photographs	Sales Unit	Sale Price Per Unit (PKR)	Revenue (PKR)
Quotes			
6*8	29	2,000	58,000
8*8	29	2,500	72,500
12*18	29	3,400	98,600
22*34	29	5,000	145,000
Natural Scenery			
6*8	14	1,300	18,200
8*8	14	1,800	25,200
12*18	14	2,500	35,000
22*34	14	4,000	56,000
Potrait			
6*8	11	1,500	16,500
8*8	11	2,000	22,000
12*18	11	2,800	30,800
22*34	11	4,200	46,200
Wild			
6*8	18	1,800	32,400
8*8	18	2,400	43,200
12*18	18	3,200	57,600



22*34	18	4,500	81,000
Total Revenue	288		838,200

# Table 28: Business Owned Photographs – 3 Inch Design

Photographs	Sales Unit	Sale Price Per Unit (PKR)	Revenue (PKR)
Quotes			
6*8	29	2,500	72,500
8*8	29	3,000	87,000
12*18	29	3,800	110,200
22*34	29	5,400	156,600
Natural Scenery			
6*8	14	1,500	21,000
8*8	14	2,200	30,800
12*18	14	3,000	42,000
22*34	14	4,400	61,600
Potrait			
6*8	11	1,800	19,800
8*8	11	2,500	27,500
12*18	11	3,200	35,200
22*34	11	4,500	49,500
Wild			
6*8	18	2,200	39,600
8*8	18	2,700	48,600
12*18	18	3,400	61,200
22*34	18	4,600	82,800
Total Revenue	288		945,900



Paintings	Sales Unit	Sale Price Per Unit (PKR)	Revenue (PKR)
16*16	143	2,000	286,000
24*48	125	4,000	500,000
36*60	89	7,000	623,000
Total	357		1,409,000

### Table 29: Framing Service Paintings – 1.5 Inch Design

## Table 30: Framing Service Paintings – 3 Inch Design

Paintings	Sales Unit	Sale Price Per Unit (PKR)	Revenue (PKR)
16*16	143	3,000	429,000
24*48	125	5,000	625,000
36*60	89	8,000	712,000
Total	357		1,766,000

### Table 31: Framing Service Photographs – 1.5 Inch Design

Photographs	Sales Unit	Sale Price Per Unit (PKR)	Revenue (PKR)
6*8	89	500	44,500
8*8	89	800	71,200
12*18	89	1,200	106,800
22*34	89	2,300	204,700
Total	356		427,200

### Table 32: Framing Service Photographs – 3 Inch Design

Photographs	Sales Unit	Sale Price Per Unit (PKR)	Revenue (PKR)
6*8	89	800	71,200
8*8	89	1,200	106,800
12*18	89	1,700	151,300
22*34	89	2,800	249,200
Total	356		578,500



### 9.4. Variable Cost Estimate

Variable costs of the project have been provided in Table 33.

Table 33:	Variable	Cost	Estimate
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Description of Costs	Amount (PKR)
Frame Cost	4,652,721
Artist Cost	2,954,680
Consumable	100,350
Direct Electricity	253,172
Direct Labor	1,860,000
Machinery Maintenance Cost	17,300
Communications expense (phone, mail, internet, etc.)	288,000
Office vehicles running expense	360,000
Office expenses (stationery, entertainment etc.)	288,000
Total Variable Cost (PKR)	10,774,223



Paintings	Sales Unit	Frame Cost Per Unit (PKR)	Total Cost (PKR)
Calligraphy			
16*16	69	659	45,471
24*48	60	2,700	162,000
36*60	43	4,940	212,420
Landscape			
16*16	17	659	11,203
24*48	15	2,700	40,500
36*60	11	4,940	54,340
Modren Art			
16*16	54	659	35,586
24*48	32	2,700	86,400
36*60	21	4,940	103,740
Potrait			
16*16	17	659	11,203
24*48	15	2,700	40,500
36*60	11	4,940	54,340
Wild			
16*16	26	659	17,134

# Table 34: Frame Cost-Paintings (1.5 inch) - Business Owned

24*48	29	2,700	78,300
36*60	9	4,940	44,460
Total Revenue	429		997,597

### Table 35: Frame Cost-Paintings (3 inch) - Business Owned

Paintings	Sales Unit	Frame Cost Per Unit (PKR)	Total Cost (PKR)
Calligraphy			
16*16	69	729	50,301
24*48	60	2,840	170,400
36*60	43	5,080	218,440
Landscape			
16*16	17	729	12,393
24*48	15	2,840	42,600
36*60	11	5,080	55,880
Modren Art			
16*16	54	729	39,366
24*48	32	2,840	90,880
36*60	21	5,080	106,680
Potrait			
16*16	17	729	12,393

24*48	15	2,840	42,600
36*60	11	5,080	55,880
Wild			
16*16	26	729	18,954
24*48	29	2,840	82,360
36*60	9	5,080	45,720
Total Revenue	429		1,044,847

### Table 36: Frame Cost-Photographs (1.5 inch) - Business Owned

Photographs	Sales Unit	Frame Cost Per Unit (PKR)	Total Cost (PKR)
Quotes			
6*8	29	122	3,524
8*8	29	165	4,771
12*18	29	488	14,152
22*34	29	1,723	49,967
Natural Scenery			
6*8	14	122	1,701
8*8	14	165	2,303
12*18	14	488	6,832
22*34	14	1,723	24,122

Potrait			
6*8	11	122	1,337
8*8	11	165	1,810
12*18	11	488	5,368
22*34	11	1,723	18,953
Wild			
6*8	18	122	2,187
8*8	18	165	2,961
12*18	18	488	8,784
22*34	18	1,723	31,014
Total	288		179,784

### Table 37: Frame Cost-Photographs (3 inch) - Business Owned

Photographs	Sales Unit	Frame Cost Per Unit (PKR)	Total Cost (PKR)
Quotes			
6*8	29	139	4,031
8*8	29	188	5,447
12*18	29	523	15,167
22*34	29	1,793	51,997
Natural Scenery			

6*8	14	139	1,946
8*8	14	188	2,630
12*18	14	523	7,322
22*34	14	1,793	25,102
Potrait			
6*8	11	139	1,529
8*8	11	188	2,066
12*18	11	523	5,753
22*34	11	1,793	19,723
Wild			
6*8	18	139	2,502
8*8	18	188	3,381
12*18	18	523	9,414
22*34	18	1,793	32,274
Total	288		190,284

### Table 38: Frame Cost-Paintings (1.5 inch) – Framing Service

Paintings	Sales Unit	Frame Cost Per Unit (PKR)	Total Cost (PKR)
16*16	143	659	94,237
24*48	125	2,700	337,500

36*60	89	4,940	439,660
Total	357		871,397

### Table 39: Frame Cost-Paintings (3 inch) – Framing Service

Paintings	Sales Unit	Frame Cost Per Unit (PKR)	Total Cost (PKR)
16*16	143	729	104,247
24*48	125	2,840	355,000
36*60	89	5,080	452,120
Total	357		911,367

#### Table 40: Frame Cost-Photographs (1.5 inch) – Framing Service

Photographs	Sales Unit	Frame Cost Per Unit (PKR)	Total Cost (PKR)
6*8	89	122	10,814
8*8	89	165	14,641
12*18	89	488	43,432
22*34	89	1,723	153,347
Total	356		222,233

		(******)	-
Photographs	Sales Unit	Frame Cost Per Unit (PKR)	Total Cost (PKR)
16*16	89	139	12,371
24*48	89	188	16,717
36*60	89	523	46,547
	89	1,793	159,577
Total	356		235,212

### Table 41: Frame Cost-Photographs (3 inch) – Framing Service

#### Table 42: PVC Strip Cost Per Frame – 1.5 Inch Design

Size	Total Length side of a Frame (inch)	Total Width Side of a Frame (inch)	Total inches required for a Frame	Total inches in One 10 ft strip	Number of Frames Formed From One 10 ft Strip	Cost of One 10 Ft Strip (PKR)	Total Cost Per Frame (PKR)
6*8	12	16	28	120	4		38
8*8	16	16	32	120	3		50
12*18	24	36	60	120	2	150	75
16*16	32	32	64	120	1		150
22*34	44	68	112	120	1		150
Size	Total Length side of a	Total Width Side of a	Total inches required for a Frame	Total inches in Two 10 ft strips	Number of Frames Formed	Cost of Two 10 Ft Strip (PKR)	Total Cost Per Frame (PKR)

	Frame (inch)	Frame (inch)			From Two 10 ft Strips		
24*48	48	96	144	240	1		300
36*60	72	120	192	240	1	300	300

### Table 43: PVC Strip Cost Per Frame – 3 Inch Design

Size	Total Length side of a Frame (inch)	Total Width Side of a Frame (inch)	Total inches required for a Frame	Total inches in One 10 ft strip	Number of Frames Formed From One 10 ft Strip	Cost of One 10 Ft Strip (PKR)	Total Cost Per Frame (PKR)
6*8	12	16	28	120	4		55
8*8	16	16	32	120	3		73
12*18	24	36	60	120	2	220	110
16*16	32	32	64	120	1		220
22*34	44	68	112	120	1		220
Size	Total Length side of a Frame (inch)	Total Width Side of a Frame (inch)	Total inches required for a Frame	Total inches in Two 10 ft strips	Number of Frames Formed From Two 10 ft Strips	Cost of Two 10 Ft Strip (PKR)	Total Cost Per Frame (PKR)
24*48	48	96	144	240	1		440
36*60	72	120	192	240	1	440	440

Frame Size (inch)	White Border Size in a Frame (Inch)	Total Length side of a White Border (inch)	Total Width Side of a White Border (inch)	Total Inches required for a White Border	Total inches in One 10 ft strip	Number of Frames Formed From One 10 ft Strip	Cost of One 10 Ft Strip (PKR)	Total Cost Per Frame (PKR)
16*16	14*14	28	28	56	120	2		40
22*34	20*32	40	64	104	120	1	80	80
Frame Size (inch)	White Border Size in a Frame (Inch)	Total Length side of a White Border (inch)	Total Width Side of a White Border (inch)	Total Inches required for a White Border	Total inches in Two 10 ft strips	Number of Frames Formed From Two 10 ft Strips	Cost of Two 10 Ft Strip (PKR)	Total Cost Per Frame (PKR)
24*48	22*46	44	92	136	240	1	400	160
36*60	34*58	68	116	184	240	1	160	160

#### Table 45: White Border Cost Per Frame - 1 Inch

Frame Size (inch)	White Border Size in a Frame (Inch)	Total Length side of a White Border (inch)	Total Width Side of a White Border (inch)	Total Inches required for a White Border	Total inches in One 10 ft strip	Number of Frames Formed From One 10 ft Strip	Cost of One 10 Ft Strip (PKR)	Total Cost Per Frame (PKR)
6*8	5*7	10	14	24	120	5	50	10
8*8	7*7	14	14	28	120	4	50	13

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	11*17	22	34	56	120	2	25
12-18	1111	~~	J-T	50	120	<b>4</b>	20

### Table 46: Plywood Cost Per Frame

Frame Size(Inch)	Plywood Size in a Frame (Inch)	Total Length Side of a Plywood in a Frame(Feet)	Total Width Side of a Plywood in a Frame (Feet)	Total Sq. Ft Required for a Plywood in a Frame	Total Sq. Ft in One Plywood Sheet	Number of Frames Formed From One Plywood Sheet	Cost of One Plywood Sheet (PKR)	Total Cost Per Frame (PKR)
6*8	5.5*7.5	0.46	0.63	0.29		55		35
8*8	7.5*7.5	0.63	0.63	0.39		40	1,920	48
12*18	11.5*17.5	0.96	1.46	1.40		11		175
16*16	15.5*15.5	1.29	1.29	1.67	16	9		213
22*34	21.5*33.5	1.79	2.79	5.00		3		640
24*48	23.5*47.5	1.96	3.96	7.75		2		960
36*60	35.5*59.5	2.96	4.96	14.67		1		1,920

#### Table 47: Glass Cost Per Frame

Frame Size(Inch)	Glass Size in a Frame	Total Length Side of a Glass in a	Total Width Side of a Glass in a Frame (Feet)	Total Sq. Ft Required for a Glass in a Frame	Total Sq. Ft in One Glass Sheet	Number of Frames Formed	Cost of One Glass	Total Cost Per Frame
	(Inch)	Frame(Feet)				From One	Sheet (PKR)	(PKR)



						Glass Sheet		
6*8	5*7	0.42	0.58	0.24		65		39
8*8	7*7	0.58	0.58	0.34		47		54
12*18	11*17	0.92	1.42	1.30		12		213
16*16	15*15	1.25	1.25	1.56	16	10	2,560	256
22*34	21*33	1.75	2.75	4.81		3		853
24*48	23*47	1.92	3.92	7.51		2		1,280
36*60	35*59	2.92	4.92	14.34		1		2,560

### Table 48: Artist Cost for Both Designs – Paintings

Paintings	Sales Unit	Artist Cost Per Frame (PKR)	Total Cost for 1.5 Inches Design (PKR)	Total Cost for 3 Inches Design (PKR)
Calligraphy				
16*16	69	900	62,100	62,100
24*48	60	3,500	210,000	210,000
36*60	43	7,300	313,900	313,900
Landscape				
16*16	17	700	11,900	11,900
24*48	15	4,100	61,500	61,500
36*60	11	6,150	67,650	67,650

Modren Art				
16*16	54	800	43,200	43,200
24*48	32	3,000	96,000	96,000
36*60	21	5,300	111,300	111,300
Potrait				
16*16	17	700	11,900	11,900
24*48	15	3,150	47,250	47,250
36*60	11	5,200	57,200	57,200
Wild				
16*16	26	800	20,800	20,800
24*48	29	3,500	101,500	101,500
36*60	9	6,500	58,500	58,500
Total	429		1,274,700	1,274,700

### Table 49: Artist Cost for Both Designs – Photographs

Photographs	Sales Unit	Artist Cost Per Frame (PKR)	Total Cost for 1.5 Inches Design (PKR)	Total Cost for 3 Inches Design (PKR)
Quotes				
6*8	29	400	11,600	11,600
8*8	29	630	18,270	18,270
12*18	29	900	26,100	26,100

22*34	29	1,300	37,700	37,700
Natural Scenery				
6*8	14	200	2,800	2,800
8*8	14	450	6,300	6,300
12*18	14	700	9,800	9,800
22*34	14	1,000	14,000	14,000
Potrait				
6*8	11	300	3,300	3,300
8*8	11	500	5,500	5,500
12*18	11	650	7,150	7,150
22*34	11	900	9,900	9,900
Wild				
6*8	18	370	6,660	6,660
8*8	18	620	11,160	11,160
12*18	18	800	14,400	14,400
22*34	18	1,000	18,000	18,000
Total	288		202,640	202,640



Cost Item	Unit of Measurement	No.	Unit Cost (PKR)	Total Cost (PKR)
Samad Bond	Liter	15	450	6,750
Hooks	Pack of 13	260	130	33,800
Pins	Pack of 6000	12	1,600	19,200
Таре	Roll	50	125	6,250
Nails	Box of 5,000	1	2,250	2,250
Measurement Tape	Units	4	1,500	6,000
Glass Cleaner	Units	2	400	800
Glass Cutting Pencil	Units	3	2,000	6,000
Saw Blade	Units	5	2,600	13,000
Hand Saw	Units	3	2,100	6,300
Total				100,350

### Table 50: Consumables

#### Table 51: Direct Labor

Personnel	Number of Personnel	Salary per Head (PKR)	Annual Salaries (PKR)
Cutting PVC, Border, Lasani Wood & Mirror-Skilled Operator	1	35,000	420,000
Pinning Machine-Skilled Operator	1	35,000	420,000
Fitting-Skilled Operator	1	35,000	420,000
Salesman	1	25,000	600,000
Total			1,860,000



Description of Costs	Rational
Machinery Maintenance Cost	10% of Cost of Machinery
Commuication expense	20% of Management staff expense
Office vehicles running expense	25% of Management staff expense
Office expenses (stationery, entertainment, etc.)	20% of Management staff expense

### Table 52: Variable Cost Assumption

### 9.5. Fixed Cost Estimate

Table 53 shows the estimated fixed cost of the project.

### Table 53: Fixed Cost Estimate

Description of Costs	Amount (PKR)
Management Staff	1,440,000
Building rental expense	1,800,000
Indirect Electricity	197,007
Promotional expense	519,519
Depreciation expense	320,045
Amortization of pre-operating costs	24,503
Total Fixed Cost	4,301,074

#### Table 54: Management Staff

Personnel	Number of Personnel	Salary per Head (PKR)	Annual Salaries (PKR)
Sales & Marketing Officer	1	40,000	480,000
Store Incharge	1	30,000	360,000
Security Guard	2	25,000	600,000
Total			1,440,000



Description of Costs	Rational
Promotional expense	3% of revenue
Depreciation	
Building & infrastructure	10% of cost
Machinery & equipment	15% of cost
Office equipment, Furniture & Fixture, Office vehicles	15% of cost

### Table 55: Fixed Cost Assumptions

### 9.6. Financial Feasibility Analysis

The financial feasibility analysis provides the information regarding projected Internal Rate of Return (IRR), Net Present Value (NPV) and Payback period of the study, which is shown in Table 56.

Description	Project
IRR	63%
NPV (PKR)	10,179,049
Payback Period (years)	2.18
Projection Years	10
Discount rate used for NPV	25%

#### Table 56: Financial Feasibility Analysis

### 9.7. Financial Feasibility Analysis with 50% Debt

The financial feasibility analysis provides the information regarding projected IRR, NPV and payback period of the study on the basis of Debt: Equity Model (50:50), which is shown in Table 57.

Description		Project

Table 57: Financial Feasibility Analysis with 50% Debt

Description	FIOJECI
IRR	62%
NPV (PKR)	12,113,123
Payback Period (years)	2.23
Projection Years	10



Discount rate used for NPV

22%

### 9.8. Human Resource Requirement

The proposed services shall require the workforce as provided in Table 58.

Table 58: Human Resource

Personnel	Number of Personnel	Salary per Head (PKR)	Annual Salaries (PKR)
Cutting PVC, Border, Lasani Wood & Mirror-Skilled Operator	1	35,000	420,000
Pinning Machine-Skilled Operator	1	35,000	420,000
Fitting-Skilled Operator	1	35,000	420,000
Sales & Marketing Officer	1	40,000	480,000
Store Incharge	1	30,000	360,000
Salesman	2	25,000	600,000
Security Guard	2	25,000	600,000
Total	9		3,300,000



# **10. CONTACT DETAILS**

The contact details of all the major suppliers of machinery and equipment are given in Table 59.

Name of Supplier	Product	Contact	Website/Email
Suzhou Wido Machinery Co. Ltd	Cutter Machine	0086-512- 6288 8913	www.widopt.com
Jiangmen Salon Industrial Co., Ltd.	Pinning Machine	0086-750- 8319168	www.saloncn.cn
Karthik Enterprises	Electric Nail Gun	91- 80483726 51	
Tool Bazar	Electric Screwdriver	0311- 1444 084	www.toolbazaar.pk
JS Enterprises	Air Compressor	0320- 3131111	www.jsent.pk

**Table 59: Contact Details** 



# 11. USEFUL LINKS

### Table 60: Useful Links

Name of Organization	E-mail Address
Small and Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
National Business Development Program (NBDP)	www.nbdp.org.pk
Government of Pakistan	www.pakistan.gov.pk
Government of Punjab	www.punjab.gov.pk
Government of Sindh	sindh.gov.pk/
Government of Balochistan	balochistan.gov.pk/
Government of KPK	<u>kp.gov.pk/</u>
Government of Gilgit Baltistan	gilgitbaltistan.gov.pk/
Government of Azad Jammu & Kashmir	ajk.gov.pk/
Securities and Exchange Commission of Pakistan	www.secp.gov.pk
State Bank of Pakistan	www.sbp.gov.pk
Federal Board of Revenue	www.fbr.gov.pk
Federation of Pakistan Chambers of Commerce and Industry (FPCCI)	www.fpcci.com.pk
Punjab Small Industries Corporation	www.psic.gop.pk
Sindh Small Industries Corporation	www.ssic.gos.pk
Government of Khyber Pakhtunkhwa	www.smallindustrieskp.gov.pk
Government of Balochistan Industries and Commerce	www.balochistan.gov.pk/indus tries-and-commerce
Pakistan National Council of the Arts (PNCA)	www.pnca.org.pk
National Academy of Performing Arts (NAPA)	www.nca.edu.pk
Punjab Council of The Arts	www.pac.gop.pk
Arts Council of Pakistan Karachi	www.artscouncil.org.pk
Artist Association Of Punjab	www.artistsassociationpunjab. com
National Heritage & Culture Division	www.heritage.pakistan.gov.pk



### 12. ANNEXURES

#### 12.1.Income Statement

Calculations										
Income Statement										SMEDA
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Painting (16*16 Size) - Business Owned & Framing Service	2,362,500	2,781,935	3,254,001	3,804,918	4,441,117	4,888,189	5,380,267	5,921,880	6,518,016	7,174,163
Painting (24*48 Size) - Business Owned & Framing Service	5,925,000	7,029,408	8,220,410	9,622,636	11,272,305	12,407,051	13,656,027	15,030,734	16,543,828	18,209,240
Painting (36*60 Size) - Business Owned & Framing Service	6,240,000	7,431,701	8,671,682	10,168,672	11,777,912	12,963,555	14,268,553	15,704,920	17,285,882	19,025,995
Photos (6*8 Size) - Business Owned & Framing Service	393,700	468,774	534,257	636,975	744,687	819,652	902,164	992,982	1,092,942	1,202,964
Photos (8*8 Size) - Business Owned & Framing Service	534,800	636,736	726,880	865,657	1,012,387	1,114,300	1,226,473	1,349,938	1,485,832	1,635,406
Photos (12*18 Size) - Business Owned & Framing Service	728,700	867,435	991,222	1,179,811	1,379,887	1,518,796	1,671,688	1,839,971	2,025,195	2,229,064
Photos (22*34 Size) - Business Owned & Framing Service	1,132,600	1,347,656	1,543,167	1,834,788	2,145,708	2,361,709	2,599,455	2,861,133	3,149,154	3,466,169
Total Revenue	17,317,300	20,563,645	23,941,619	28,113,458	32,774,003	36,073,252	39,704,626	43,701,559	48,100,849	52,943,001
Cost of sales										
Frame Cost	4,652,721	5,523,259	6,439,260	7,560,792	8,808,541	9,695,268	10,671,258	11,745,498	12,927,878	14,229,285
Artist Cost	2,954,680	3,512,403	4,080,972	4,794,397	5,589,790	6,152,495	6,771,846	7,453,545	8,203,869	9,029,725
Consumable	100,350	110,452	121,571	133,809	147,279	162,105	178,424	196,385	216,154	237,914
Direct Electricity	253,172	276,050	300,996	328,196	357,854	390,192	425,453	463,899	505,821	551,530
Direct Labor	1,860,000	2,040,420	2,238,341	2,455,460	2,693,639	2,954,922	3,241,550	3,555,980	3,900,910	4,279,299
Machinery Maintenance Cost	17,300	19,042	20,958	23,068	25,390	27,946	30,760	33,856	37,264	41,016
Total cost of sales	9,838,223	11,481,626	13,202,098	15,295,722	17,622,494	19,382,929	21,319,290	23,449,164	25,791,897	28,368,768
Gross Profit	7,479,077	9,082,019	10,739,521	12,817,736	15,151,509	16,690,323	18,385,336	20,252,394	22,308,952	24,574,233
General administration & selling expenses										
Management Staff	1,440,000	1,579,680	1,732,909	1,901,001	2,085,398	2,287,682	2,509,587	2,753,017	3,020,060	3,313,005
Building rental expense	1,800,000	1,980,000	2,178,000	2,395,800	2,635,380	2,898,918	3,188,810	3,507,691	3,858,460	4,244,306
Indirect Electricity	197,007	214,810	234,222	255,387	278,466	303,630	331,068	360,985	393,606	429,175
Communications expense (phone, mail, internet, etc.)	288,000	315,936	346,582	380,200	417,080	457,536	501,917	550,603	604,012	662,601
Office vehicles running expense	360,000	396,240	436,128	480,032	528,355	581,543	640,085	704,520	775,441	853,503
Office expenses (stationery, entertainment etc.)	288,000	315,936	346,582	380,200	417,080	457,536	501,917	550,603	604,012	662,601
Promotional expense	519,519	616,909	718,249	843,404	983,220	1,082,198	1,191,139	1,311,047	1,443,025	1,588,290
Depreciation expense	320,045	320,045	320,045	320,045	320,045	320,045	235,045	535,619	535,619	535,619
Amortization of pre-operating costs	24,503	24,503	24,503	24,503	24,503	-	-	-	-	-
Subtotal	5,237,074	5,764,059	6,337,219	6,980,572	7,689,526	8,389,088	9,099,568	10,274,086	11,234,236	12,289,101
Operating Income	2,242,003	3,317,960	4,402,302	5,837,164	7,461,982	8,301,235	9,285,768	9,978,308	11,074,716	12,285,132
Gain / (loss) on sale of office equipment	-	-	-	-	-	-	184,000	-	-	
Gain / (loss) on sale of office vehicles	-	-	-	-	-	-	57,375	-	-	
Earnings Before Interest & Taxes	2,242,003	3,317,960	4,402,302	5,837,164	7,461,982	8,301,235	9,570,393	9,978,308	11,074,716	12,285,132
Subtotal	-	-	-	-	-	-	-	-	-	-
Earnings Before Tax	2,242,003	3,317,960	4,402,302	5,837,164	7,461,982	8,301,235	9,570,393	9,978,308	11,074,716	12,285,132
Tax	272,350	533,592	798,018	1,204,291	1,610,496	1,965,340	2,314,358	2,426,535	2,728,047	3,305,540
NET PROFIT/(LOSS) AFTER TAX	1,969,652	2,784,368	3,604,284	4,632,873	5,851,487	6,335,896	7,256,035	7,551,774	8,346,669	8,979,593

#### 12.2.Balance Sheet

Calculations											SMEDA
Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Assets											
Current assets											
Cash & Bank	1,000,000	1,927,907	2,387,277	2,937,501	3,656,833	4,584,584	5,206,579	9,042,704	16,533,153	24,725,640	36,336,113
Accounts receivable	-	577,243	685,455	798,054	937,115	1,092,467	1,202,442	1,323,488	1,456,719	1,603,362	1,764,767
Raw material inventory	316,975	414,386	531,038	686,445	880,489	1,066,684	1,292,253	1,565,522	1,896,578	2,297,642	-
Finished goods inventory		1,500,548	1,706,385	1,992,379	2,288,749	2,585,067	2,843,308	3,127,355	3,439,790	3,783,448	4,161,453
Pre-paid building rent	150,000	165,000	181,500	199,650	219,615	241,577	265,734	292,308	321,538	353,692	-
Total Current Assets	1,466,975	4,585,084	5,491,655	6,614,030	7,982,802	9,570,379	10,810,316	15,351,376	23,647,778	32,763,784	42,262,333
Fixed assets											
Land	_		_	_	_	_	_	_	_	_	-
Building Infrastructure Renovation	650,450	585,405	520,360	455,315	390,270	325,225	260,180	195,135	130.090	65.045	
Machinery & equipment	173.000	147,050	121,100	95,150	69,200	43,250	17,300	327,941	278,750	229,558	180,367
Furniture & fixtures	561,500	477.275	393,050	308.825	224,600	140,375	56,150	1,064,385	904,728	745,070	585,412
Office vehicles	229,500	195.075	160,650	126,225	91,800	57,375	22,950	349.667	297,217	244,767	192,317
Office equipment	736,000	625,600	515,200	404,800	294,400	184,000	73,600	1,395,169	1,185,894	976,619	767,343
Security against building	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000	450,000
Total Fixed Assets	2,800,450	2,480,405	2,160,360	1,840,315	1,520,270	1,200,225	880,180	3,782,297	3,246,678	2,711,059	2,175,439
Intangible assets											
Pre-operation costs	122,515	98,012	73,509	49,006	24,503	-	-	-	-	-	-
Total Intangible Assets	122,515	98,012	73,509	49,006	24,503	-	-	-	-	-	-
TOTAL ASSETS	4,389,940	7,163,501	7,725,524	8,503,351	9,527,575	10,770,604	11,690,496	19,133,673	26,894,456	35,474,842	44,437,772
Liabilities & Shareholders' Equity											
Current liabilities											
Accounts payable		803,909	958,574	1,122,764	1,325,875	1,549,041	1,716,796	1,903,939	2,112,948	2,346,665	2,330,003
Total Current Liabilities	-	803,909	958,574	1,122,764	1,325,875	1,549,041	1,716,796	1,903,939	2,112,948	2,346,665	2,330,003
Other liabilities											
Total Long Term Liabilities	-	-	-	-	-	-	-	-	-	-	-
Shareholders' equity											
Paid-up capital	4,389,940	4,389,940	4,389,940	4,389,940	4,389,940	4,389,940	4,389,940	4,389,940	4,389,940	4,389,940	4,389,940
Retained earnings		1,969,652	2,377,010	2,990,647	3,811,760	4,831,623	5,583,759	12,839,794	20,391,568	28,738,237	37,717,830
Total Equity	4,389,940	6,359,592	6,766,950	7,380,587	8,201,700	9,221,563	9,973,699	17,229,734	24,781,508	33,128,177	42,107,770
TOTAL CAPITAL AND LIABILITIES	4,389,940	7,163,501	7,725,524	8,503,351	9,527,575	10,770,604	11,690,496	19,133,673	26,894,456	35,474,842	44,437,772

#### 12.3.Cash Flow Statement

Calculations											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Operating activities											
Net profit		1,969,652	2,784,368	3,604,284	4,632,873	5,851,487	6,335,896	7,256,035	7,551,774	8,346,669	8,979,593
Add: depreciation expense		320,045	320,045	320,045	320,045	320,045	320,045	235,045	535,619	535,619	535,619
amortization of pre-operating costs		24,503	24,503	24,503	24,503	24,503	-	-	-	-	-
Accounts receivable		(577,243)	(108,212)	(112,599)	(139,061)	(155,351)	(109,975)	(121,046)	(133,231)	(146,643)	(161,405)
Finished goods inventory		(1,500,548)	(205,837)	(285,994)	(296,369)	(296,319)	(258,241)	(284,047)	(312,434)	(343,659)	(378,005)
Raw Material Iventory	(316,975)	(97,410)	(116,653)	(155,407)	(194,045)	(186,195)	(225,569)	(273,269)	(331,056)	(401,064)	2,297,642
Pre-paid building rent	(150,000)	(15,000)	(16,500)	(18,150)	(19,965)	(21,962)	(24,158)	(26,573)	(29,231)	(32,154)	353,692
Accounts payable		803,909	154,666	164,189	203,111	223,166	167,756	187,142	209,009	233,718	(16,663)
Cash provided by operations	(466,975)	927,907	2,836,380	3,540,871	4,531,092	5,759,374	6,205,754	6,973,287	7,490,450	8,192,487	11,610,473
Financing activities											
Issuance of shares	4,389,940	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	4,389,940	-	-	-	-	-	-	-	-	-	-
Investing activities											
Capital expenditure	(2,922,965)	-	-	-	-	-	-	(3,137,162)	-	-	-
Cash (used for) / provided by investing activities	(2,922,965)	-	-	-	-	-	-	(3,137,162)	-	-	-
NET CASH	1,000,000	927,907	2,836,380	3,540,871	4,531,092	5,759,374	6,205,754	3,836,124	7,490,450	8,192,487	11,610,473

# 13. KEY ASSUMPTIONS

#### **13.1.Operating Cost Assumptions**

#### **Table 61: Operating Cost Assumptions**

Description	Ratios
Operating costs growth rate	10.1%
Electricity growth rate	9.0%
Water price growth rate	9.0%
Gas price growth rate	9.0%
Wage growth rate	9.7%
Office equipment price growth rate	9.6%

#### **13.2.Revenue Assumptions**

#### Table 62: Revenue Assumptions

Description	Details
Sale price growth rate	10.1%
Capacity utilization	70%
Capacity utilization growth rate	5%
Maximum capacity	90%

### **13.3.Financial Assumptions**

#### **Table 63: Financial Assumptions**

Description	Details
Project life (Years)	10
Debt: Equity	0:100
Discount Rate	25%

#### **13.4.Debt Related Assumptions**

#### Table 64: Debt Related Assumption

Description of Cost	Details
Project Life (Years)	10
Debt: Equity	50:50



Discount Rate	22%
Debt Grace Period	1 Year
Interest Rate (KIBOR+3%)	19%

### 13.5.Cash Flow Assumptions

### Table 65: Cash Flow Assumptions

Description	Details
Accounts receivable cycle (in days)	10
Accounts payable cycle (in days)	30



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