

# Renderixarte Business Plan

## Plan de Negocios Renderixarte

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### ABSTRACT

Renderixarte seeks to establish itself and position itself as a leading company in the municipality of Sincelejo, the Caribbean region and at the national level in the offer of services related to architecture, such as design, 3D visualization and construction; implemented technologies such as rendering, augmented reality, 3D printing and BIM (Building Information Modeling), thus guaranteeing service consumers the most comprehensive experience in terms of the development of their projects, which will allow a new understanding of the spaces and their relationship with life, good business practices and the proper management of brands. This brand arises from the need evidenced in the markets to provide experiences closer to the consumer about the design and projection of spaces, where the creative process involves a complete experience that culminates in the materialization of the project, the purpose of the designed business plan. It is aimed at creating a proposal that allows design from technological tools that allow interaction between the user and the design idea, for the elaboration of 3D models to satisfy the needs according to the changes that are experienced at the socioeconomic level. cultural and according to the conjunctural axes that mark the trends of current design and architecture.

**Keywords:** Architecture; Augmented Reality; Innovation; Interior Design and Urban Planning.

### RESUMEN

Renderixarte busca constituirse y posicionarse como es una empresa líder en el municipio de Sincelejo, la región Caribe y a nivel nacional en la oferta de servicios relacionados a la arquitectura, como el diseño, visualización 3D y construcción; implementado tecnologías como el render, la realidad aumentada, la impresión 3D y BIM (Building Information Modeling), garantizando de esta forma a los consumidores del servicio la experiencia más integral en cuanto al desarrollo de sus proyectos, lo que permitirá un nuevo entendimiento de los espacios y su relación con la vida, las buenas prácticas comercial y el adecuado manejo de las marcas. Esta marca surge de la necesidad evidenciada en los mercados de brindar experiencias más cercana al consumidor acerca del diseño y proyección de los espacios, en donde el proceso creativo involucra una experiencia completa que culmina en la materialización del proyecto, la finalidad del plan de negocios diseñado está encaminado a crear una propuesta que permita el diseño a partir de herramientas tecnológicas que permitan una interacción entre el usuario y la idea de diseño, para la elaboración de maquetas en 3D para satisfacer las necesidades de acuerdo a los cambios que se experimentan a nivel socioeconómico, cultural y de acuerdo a los ejes coyunturales que marcan las tendencias del diseño y la arquitectura actual.

**Palabras clave:** Arquitectura; Realidad Aumentada; Innovación; Interiorismo y Urbanismo.

## INTRODUCTION

The Renderixarte brand was built on a comprehensive vision of architecture, where clients' ideas and expectations regarding their spaces and project development are captured artistically and digitally.<sup>(1,2,3,4)</sup> To reinvent the architecture concept using alternative means, we offer products and services in architecture, design, 3D visualization, and construction, implementing new technologies such as augmented reality, 3D printing, and BIM. We are considering renting a co-working space similar to a meeting room where multiple activities related to architecture and construction, such as graphic and industrial design, can be carried out.

The territorial scope would be the departments of Sucre, Córdoba Bolívar, and, in the future, the entire national and international territory.<sup>(5,6,7,8,9,10)</sup>

The dean of the Faculty of Creation at the University of Rosario warned that, as a result of the global health emergency caused by COVID-19, which forced economies around the world to come to a standstill, many sectors of the economy would experience definitive changes in the way they remain active in the market.<sup>(11,12,13,14,15)</sup>

One of these sectors has undoubtedly been construction and everything related to it, including architecture, engineering, fieldwork, and the design of outdoor spaces and meeting or entertainment venues, which experienced a decline never seen since the beginning of the 21st century.<sup>(16,17,18,19)</sup> According to economic research by the Bancolombia group, the construction sector was particularly affected during the national quarantine in Colombia. According to GDP figures for Q1 2020, the sector experienced the sharpest decline (-9,4 %).<sup>(20,21,22,23,24,25)</sup> In light of the above information, new ways of practicing professions related to the construction sector must be considered to avoid inactivity.

Construction must incorporate the advances and changes that accompany the progress of society in terms of knowledge of materials and innovation.<sup>(26,27,28,29,30)</sup>

This, in turn, implies changes in the training of architects, orienting it towards multidisciplinary so that they are closer to reality than previous generations and more aware of the range of possibilities offered by their training. Today's market is characterized by its adaptability to technological changes focused on digital architecture.<sup>(31,32,33)</sup>

One of the most common formulas in successful ventures is to offer more than the product or service that customers are looking to purchase, understanding that the most important thing for a new company that wants to stand out is to be able to offer a comprehensive experience that leads consumers to feel satisfied in every way possible. Renderixarte is a proposal that seeks to bring customers closer to understanding architecture and the importance of hiring a professional service for the spaces that will be part of their lives, thus giving this project added value in terms of its purpose of informing and advising while the service is being purchased.

To this end, the team has an area dedicated to managing the technological equipment that will allow it to remain at the forefront of architectural design tools, as well as studying trends and variations, ensuring that the best options on the market in terms of space design and construction are available at all times. Strategic alliances will also be sought with brands that supply the products that enable the designs to be realized, ensuring that the construction and production of 3D models are as similar as possible to the client's initial idea, together with professional advice.<sup>(34,35)</sup> In the field of architecture, unfortunately, there are all kinds of challenges to validate the scope and importance of the profession.

Due to inconsistency, non-compliance, inadequate management of fieldwork, and the lack of updating of some professionals' services, some people refrain from hiring or using professional services in this area. It also happens that individuality sometimes prevents the establishment of a bond of trust between the client and the professional due to the lack of guarantees in providing the service. For this reason, building organizations that diversify the profession and allow for different approaches is a logical response to current social needs.<sup>(36,37)</sup>

## Objective

To develop a business plan for creating an architecture firm in the city of Sincelejo that implements new technologies in the design and visualization of architectural projects.

## METHOD

### Chapter: Technical Study

#### Technical Data Sheet

**Table 1.** Renderixarte technical data sheet

|                                                    |                                       |
|----------------------------------------------------|---------------------------------------|
| Line                                               |                                       |
| Materials it is made of: (list)                    |                                       |
| Mandatory criteria                                 |                                       |
| Composition                                        |                                       |
| Characteristics Chemical                           | Statement:                            |
| Physical Characteristics                           | Statement:                            |
| Functionality (Add technical architecture diagram) | Declaration and Technical Description |
| Uses and applications                              | Statement:                            |
| Ease of use                                        | Statement:                            |

|                                       |                       |
|---------------------------------------|-----------------------|
| When applying to the product          |                       |
| Ergonomics                            | Statement:            |
| Adaptation                            | Technical Description |
| Base materials or components          |                       |
| Source: CECAR Entrepreneurship Centre |                       |

## Needs and requirements

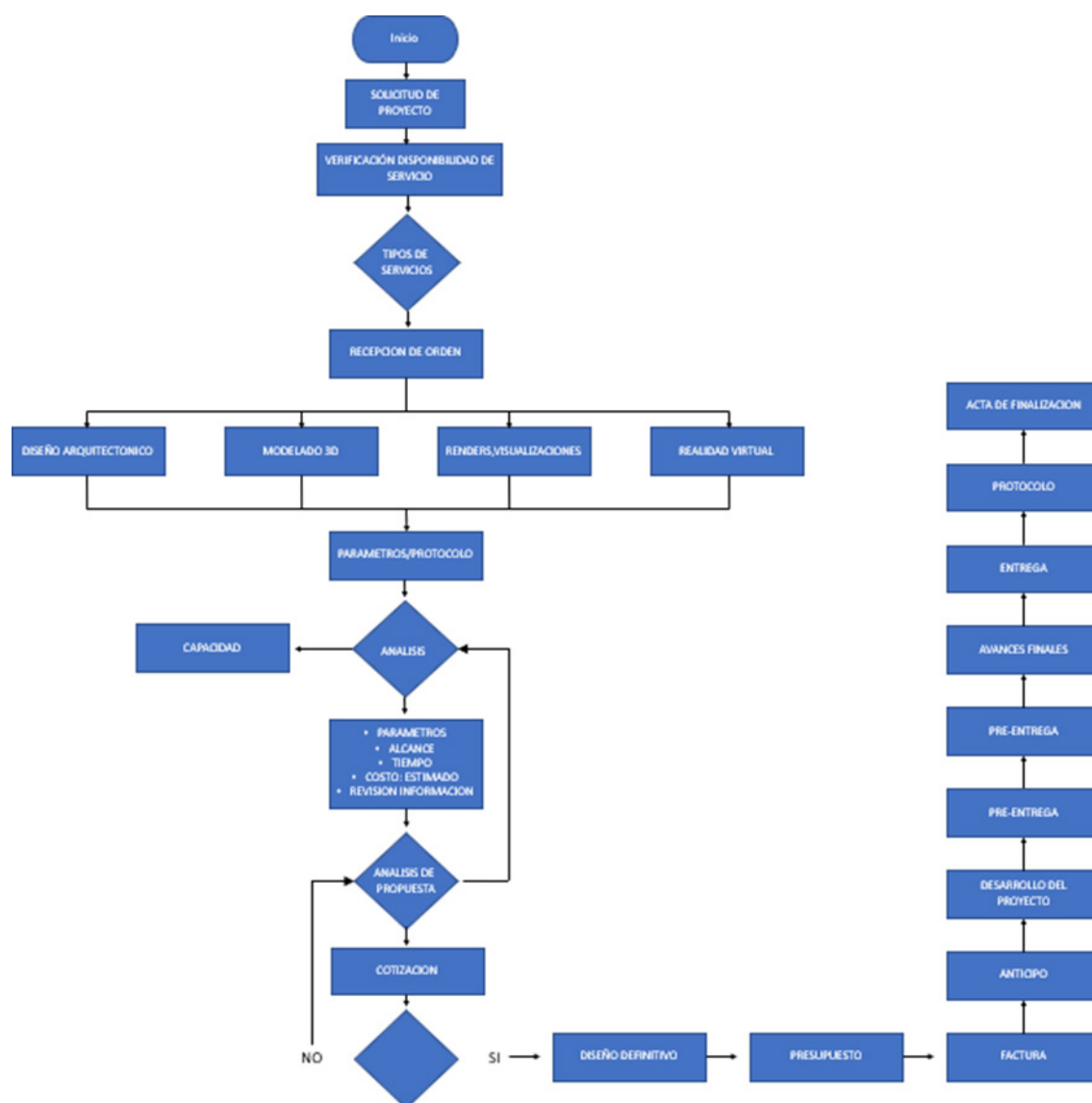
### Full Costing

| Table 2. Full cost table in Renderixarte |              |               |               |               |               |      |                |
|------------------------------------------|--------------|---------------|---------------|---------------|---------------|------|----------------|
| Concept                                  |              | Render        | Video tour    | Planimetry    | Modelling     |      | Totales        |
| Normal activity units                    | N            | 200           | 150           | 270           | 200           | 0    | 820,00         |
| Fixed costs for normal activity          | CN           | 0             | 0             | 0             | 0             | 0    | 0,00           |
| Fixed costs for normal activity          |              |               |               |               |               |      |                |
| Fixed unit costs                         | CFU=CN/N     | 0,00          | 0,00          | 0,00          | 0,00          | 0,00 |                |
|                                          | V            | 16 000 000,00 | 18 000 000,00 | 54 000 000,00 | 20 000 000,00 | 0,00 | 108 000 000,00 |
| Sales                                    | U            | 200,00        | 150,00        | 270,00        | 200,00        | 0,00 | 820,00         |
| Actual units produced                    | P=V/U        | 80 000,00     | 120 000,00    | 200 000,00    | 100 000,00    | 0,00 |                |
| Variable costs of sales                  |              |               |               |               |               |      |                |
| Goods                                    |              | 0,00          | 0,00          | 0,00          | 0,00          | 0,00 |                |
| Raw materials                            |              | 0,00          | 0,00          | 0,00          | 0,00          | 0,00 |                |
| Other supplies                           |              | 0,00          | 0,00          | 0,00          | 0,00          | 0,00 |                |
| Variable personnel expenses              |              | 0,00          | 0,00          | 0,00          | 0,00          | 0,00 |                |
| Indirect costs                           |              | 6 000 000,00  | 7 500 000,00  | 8 100 000,00  | 4 000 000,00  | 0,00 |                |
| Total variable costs                     | CV           | 6 000 000,00  | 7 500 000,00  | 8 100 000,00  | 4 000 000,00  | 0,00 | 25 600 000,00  |
| Unit variable cost                       | CVU=CV/U     | 30 000,00     | 50 000,00     | 30 000,00     | 20 000,00     | 0,00 |                |
| Total cost price                         | PC=CFU+CVU   | 30 000,00     | 50 000,00     | 30 000,00     | 20 000,00     | 0,00 |                |
| Gross profit margin                      | M=V-CV       | 10 000 000,00 | 10 500 000,00 | 45 900 000,00 | 16 000 000,00 | 0,00 | 82 400 000,00  |
| Unit profit margin                       | MU=M/U       | 50 000,00     | 70 000,00     | 170 000,00    | 80 000,00     | 0,00 |                |
| Fixed activity costs                     | CF=CFU x U   | 0,00          | 0,00          | 0,00          | 0,00          | 0,00 | 0,00           |
| Profit from activity                     | B=M-CF       | 10 000 000,00 | 10 500 000,00 | 45 900 000,00 | 16 000 000,00 | 0,00 | 66 400 000,00  |
| Loss from underactivity                  | SUB=CN-CF    | 0,00          | 0,00          | 0,00          | 0,00          | 0,00 | 0,00           |
| Profit from overactivity                 | SUP=CN-CF    | 0,00          | 0,00          | 0,00          | 0,00          | 0,00 | 0,00           |
| Net result                               | RN=B-SUB+SUP | 10 000 000,00 | 10 500 000,00 | 45 900 000,00 | 16 000 000,00 | 0,00 | 66 400 000,00  |

The table above shows all the costs or expenses that the Renderixarte brand will incur when using and operating the final service, resulting in a total variable cost of \$25 600 000.

## Process flowcharts

Create flowcharts in accordance with each line established in the business plan.



Source: CECAR Entrepreneurship Centre

Figure 1. Renderixarte flowchart

## Production Plan

Establish the production plan and explain the outline in detail.

Table 3. Renderixarte production plan

| Product    | Q produced and sold | Time spent on production * | % participation | Weighted time | Weighted total | Total cost per product | Unit cost per product |
|------------|---------------------|----------------------------|-----------------|---------------|----------------|------------------------|-----------------------|
| RENDER     | 200                 | 60                         | 0,24            | 0,25          | 0,49           | 6 000 000,00           | 30 000,00             |
| VIDEO TOUR | 150                 | 120                        | 0,18            | 0,50          | 0,68           | 7 500 000,00           | 50 000,00             |
| PLANIMETRY | 270                 | 60                         | 0,33            | 0,25          | 0,58           | 8 100 000,00           | 30 000,00             |
|            | 200                 | 0                          | 0,24            | 0,00          | 0,24           | 4 000 000,00           | 20 000,00             |
|            | 0                   | 0                          | 0,00            | 0,00          | 0,00           | -                      | -                     |
| TOTAL      | 820                 | 240                        | 1,00            | 1,00          | 2,00           | 25 600 000,00          |                       |

The information recorded in the sales forecast was used to carry out the production plan. This was done on a one-year basis, which indicates that the necessary income will begin to be generated from month 3 onwards since the first two months will be spent designing and adapting the company to the market. It is important to note that prices may vary depending on customer requirements and preferences.

## Plant design and/or technical architecture

The working plant is distributed in 6m x 10m premises located in Barrio Los Libertadores in Sincelejo. These include two car

parks for customers, a waiting room, a meeting room for meetings and socializing with virtual reality implementation for small, medium, and large-scale projects, a kitchenette, and a bathroom for general use. Considering what is proposed in our business plan, these spaces are necessary for developing our project.



**Figure 2.** Architectural floor plan

## Infrastructure and Logistics

**Table 4.** Renderixarte infrastructure

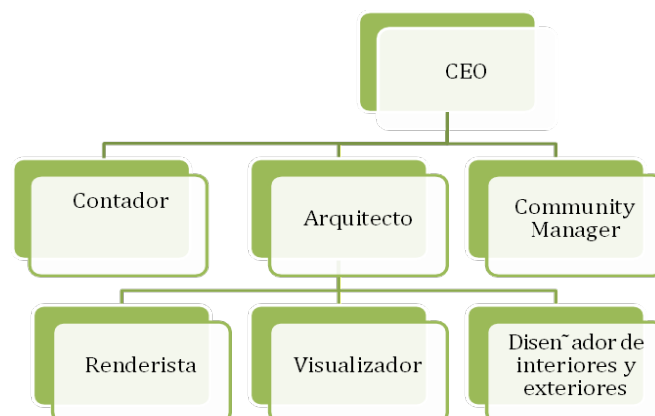
| Equipos                |          |             |              |
|------------------------|----------|-------------|--------------|
| Description            | Quantity | Unit Value  | Total Value  |
| Computers              | 3        | \$5 000 000 | \$15 000 000 |
| Tools                  |          |             |              |
| Description            | Quantity | Unit Value  | Total Value  |
| Autocad                |          |             | \$6 639 920  |
| Sketchup               |          |             | \$1 118 499  |
| Enscape                |          |             | \$3 048 003  |
| photoshop              |          |             | \$3 551 889  |
| Furniture and Fixtures |          |             |              |
| Description            | Quantity | Unit Value  | Total Value  |
| Chair                  | 3        | \$200 000   | \$600 000    |
| Table                  | 2        | \$200 000   | \$400 000    |
| Adjustments            |          |             |              |
| Description            | Quantity | Unit Value  | Total Value  |

Source: CECAR Entrepreneurship Centre

## RESULTS

### Administration

#### Organisational Structure



Source: CECAR Entrepreneurship Centre

**Figure 3.** Renderixarte organisational structure

## Definition of job duties

**Table 5.** Job functions at Renderixarte

| Job matrix                     |                                                                                                                       |              |                                                                                                                                                                          |                                             |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Position                       | Functions                                                                                                             | Line manager | Training                                                                                                                                                                 | Experience                                  |
| Ceo                            | Person responsible for accurately defining the mission, vision, and purpose of said service.                          | Ceo          | Professional in Architecture or related fields.                                                                                                                          | 3 years of experience in similar positions. |
| Architect                      | Personnel responsible for designing, planning and managing the work.                                                  | Ceo          | Professional in Architecture.                                                                                                                                            | 2 years of experience in the sector.        |
| Renderer                       | Personnel responsible for interpreting plans in order to then create a 3D model of the architectural project.         | Ceo          | Professional in Architecture with previous knowledge of rendering.                                                                                                       | 2 years of experience in similar positions. |
| Community Manager              | Staff responsible for building, expanding, and managing online communities                                            | Ceo          | Professional with previous knowledge of strategic planning.                                                                                                              | 1 year of work experience in the field.     |
| Digitizer                      | Staff responsible for receiving, verifying, capturing and digitising documents from different services in the system. | Ceo          | Website creator, online stores, digital process management solution provider, electronic invoicing implementation, social media management, and virtual office services. | 1 year of work experience.                  |
| Display                        | Staff responsible for monitoring the functions put into operation                                                     | Ceo          |                                                                                                                                                                          | 1 year of experience in similar positions   |
| Interior and Exterior Designer | Staff responsible for making the best visual and physical use of space, a process known as land use planning.         |              | Creative and practical artistic skills, knowledge of colour and form, ability to communicate and visualise ideas clearly and accurately through drawings.                | 2 years of experience in similar positions. |

Source: CECAR Entrepreneurship Centre

## Payroll expenses

The monthly payroll expenses will be standardised at \$1 407 417,11 for each architect, resulting in a total of \$4 222 251,32.

| CARGO      | SALARIO BASE | Tipo de contratación | FACTOR SALARIAL |            |           |            |            |                |               |            |           |           |            | TOTAL        |
|------------|--------------|----------------------|-----------------|------------|-----------|------------|------------|----------------|---------------|------------|-----------|-----------|------------|--------------|
|            |              |                      | SALUD           | PENSION    | ARP       | VACACIONES | CESANTIAS  | INT. CESANTIAS | PRIMA DE SERV | TRANSPORTE | SENA      | ICBF      | CAJA COMP  |              |
|            |              |                      | 0.00            | 0.1028     | 0.01      | 0.0595     | 0.0933     | 0.01           | 0.0933        | 0.1238     | 0.02      | 0.03      | 0.04       | 0.6484       |
| Arquitecto | 853.808,00   | -                    | 68.304,64       | 96.053,40  | 8.538,08  | 47.386,34  | 71.122,21  | 8.538,08       | 71.122,21     | 105.701,43 | 17.076,16 | 25.614,24 | 34.152,32  | 1.407.417,11 |
| Arquitecto | 853.808,00   | -                    | 68.304,64       | 96.053,40  | 8.538,08  | 47.386,34  | 71.122,21  | 8.538,08       | 71.122,21     | 105.701,43 | 17.076,16 | 25.614,24 | 34.152,32  | 1.407.417,11 |
| Arquitecto | 853.808,00   | -                    | 68.304,64       | 96.053,40  | 8.538,08  | 47.386,34  | 71.122,21  | 8.538,08       | 71.122,21     | 105.701,43 | 17.076,16 | 25.614,24 | 34.152,32  | 1.407.417,11 |
| TOTAL      | 2.561.424,00 |                      | 204.913,92      | 288.160,20 | 25.614,24 | 142.189,02 | 213.366,62 | 25.614,24      | 213.366,62    | 317.104,29 | 51.228,48 | 76.842,72 | 102.458,96 | 4.222.251,32 |

Source: CECAR Entrepreneurship Centre

**Figure 4.** Renderixarte's expenses and payroll

## Chapter: Financial Analysis

### Maintenance Expenses

**Table 6.** Maintenance costs for Renderixarte

| Description            | Value (\$) |
|------------------------|------------|
| Leases                 | 270 000    |
| Public Services        | 0          |
| Office supplies        | 50 000     |
| Telephone and Internet | 115 000    |
| Insurance              | 0          |
| TOTAL PER MONTH        | 435 000    |
| TOTAL ANUAL            | 4 350 000  |

Source: CIEM simulator

Maintenance costs shall include the services necessary to keep the items used in perfect condition, thus incurring a total monthly cost of \$435 000 and a total annual cost of \$4 350 000.

| Table 7. Maintenance expenses      |            |
|------------------------------------|------------|
| Description                        | Value (\$) |
| Land use                           | 80 000     |
| Technical concept for firefighters | 0          |
| Deed and notary fees               | 100 000    |
| Book registration                  | 98 000     |
| Health registration                | 0          |
| TOTAL                              | 278 000    |
| Source: CIEM simulator             |            |

External maintenance expenses show that an annual payment of \$278 000 will be incurred.

### Working capital

| CAPITAL DE TRABAJO                 |                  |         |
|------------------------------------|------------------|---------|
|                                    | Monto (\$)       |         |
| Costos                             | \$ 2.560.000,00  | 1 MESES |
| Gastos Marketing y Administrativos | \$ 24.520.800,00 | 4 MESES |
| Legales                            | \$ 278.000,00    | TODO    |
| Infraestructura                    | \$ 31.281.422,00 | TODO    |
| Capital de socios                  | \$ 500.000,00    |         |
| Capital de trabajo                 | \$ 58.640.222,00 |         |

Source: CIEM simulator

**Figure 5.** Working capital Renderixarte

According to the simulator, it can be said that Renderizarte as a service provider requires an initial investment of \$58 640 222 to start operations.

### Balance sheets and projected income statements

| Table 8. Balance sheet and income statement |            |            |            |             |             |             |
|---------------------------------------------|------------|------------|------------|-------------|-------------|-------------|
|                                             | Año 0      | Año 1      | Año 2      | Año 3       | Año 4       | Año 5       |
| Balance sheet                               |            |            |            |             |             |             |
| Assets                                      |            |            |            |             |             |             |
| Cash                                        |            |            |            |             |             |             |
| Bank                                        | 27 858 800 | 53 838 800 | 76 803 560 | 102 995 546 | 132 748 485 | 166 426 149 |
| Accounts receivable                         | -          |            |            |             |             |             |
| Provision for accounts receivable           | -          |            |            |             |             |             |
| Inventories Raw materials and supplies      | -          |            |            |             |             |             |
| Inventories of work in progress             | -          |            |            |             |             |             |
| Inventories of finished goods               | -          |            |            |             |             |             |
| Advances and other accounts receivable      | -          |            |            |             |             |             |
| Prepaid expenses                            | -          | 0          | 0          | 0           | 0           | 0           |
| Accumulated amortization                    | -          | -200 000   | -400 000   | -600 000    | -800 000    | -1 000 000  |
| Total current assets:                       | 27 858 800 | 53 638 800 | 76 403 560 | 102 395 546 | 131 948 485 | 165 426 149 |
| Property, plant, and equipment              |            |            |            |             |             |             |
|                                             | 14 000 000 | 15 000 000 | 15 000 000 | 15 000 000  | 15 000 000  | 15 000 000  |
| Equipment                                   | 10 806 422 | 2 300 000  | 2 300 000  | 2 300 000   | 2 300 000   | 2 300 000   |
| Tools                                       | 6 475 000  | 7 500 000  | 7 500 000  | 7 500 000   | 7 500 000   | 7 500 000   |
| Furniture and Fixtures                      | -          | -3 000 000 | -6 000 000 | -9 000 000  | -12 000 000 | -15 000 000 |

|                                                    |             |            |            |             |             |             |
|----------------------------------------------------|-------------|------------|------------|-------------|-------------|-------------|
| Accumulated Depreciation of Equipment              | -           | -460 000   | -920 000   | -1 380 000  | -1 840 000  | -2 300 000  |
| Accumulated Depreciation of Tools                  | -           | -1 500 000 | -3 000 000 | -4 500 000  | -6 000 000  | -7 500 000  |
| Accumulated Depreciation of Furniture and Fixtures | 31 281 422  | 19 840 000 | 14 880 000 | 9 920 000   | 4 960 000   | -           |
| Total Fixed Assets:                                | 59 140 222  | 73 478 800 | 91 283 560 | 112 315 546 | 136 908 485 | 165 426 149 |
| <b>TOTAL ASSETS</b>                                |             |            |            |             |             |             |
| Liabilities                                        | -           |            |            |             |             |             |
| Accounts Payable Suppliers                         | -           | 7 287 000  | 8 782 116  | 10 434 936  | 12 259 756  | 14 272 097  |
| Taxes Payable                                      | -           |            |            |             |             |             |
| Sundry Creditors                                   | 52 249 000  | 52 249 000 | 52 249 000 | 52 249 000  | 52 249 000  | 52 249 000  |
|                                                    | -           |            |            |             |             |             |
| Financial Obligations                              | -           |            |            |             |             |             |
| Other Long-Term Liabilities                        | 52 249 000  | 59 536 000 | 61 031 116 | 62 683 936  | 64 508 756  | 66 521 097  |
| Obligations                                        |             |            |            |             |             |             |
| <b>TOTAL LIABILITIES</b>                           | 1 000 000   | 1 000 000  | 1 000 000  | 1 000 000   | 1 000 000   | 1 000 000   |
| Equity                                             | -           | 0          | 0          | 0           | 0           | 0           |
| Share Capital                                      |             | 0          | 13 533 000 | 29 842 644  | 49 221 810  | 71 989 929  |
|                                                    | -           |            |            |             |             |             |
| Accumulated Legal Reserve                          | -           | 13 533 000 | 16 309 644 | 19 379 166  | 22 768 118  | 26 505 323  |
|                                                    | -           | 0          | 0          | 0           | 0           | 0           |
| Retained Earnings                                  | 1 000 000   | 14 533 000 | 30 842 644 | 50 221 810  | 72 989 929  | 99 495 252  |
|                                                    |             |            |            |             |             |             |
| Profit for the Year                                | 53 249 000  | 74 069 000 | 91 873 760 | 112 905 746 | 137 498 685 | 166 016 349 |
| Revaluation of Equity                              | 59 140 222  | 73 478 800 | 91 283 560 | 112 315 546 | 136 908 485 | 165 426 149 |
|                                                    | - 5 891 222 | 590 200    | 590 200    | 590 200     | 590 200     | 590 200     |
| Source: ICES simulator                             |             |            |            |             |             |             |

### Income statement

| Table 9. Income statement    |             |             |             |             |             |
|------------------------------|-------------|-------------|-------------|-------------|-------------|
| Concepts                     | Year 1      | Year 2      | Year 3      | Year 4      | Year 5      |
|                              | 108 000 000 | 116 812 800 | 126 344 724 | 136 654 454 | 147 805 457 |
| Sales                        | 0           | 0           | 0           | 0           | 0           |
| Returns and sales discounts  | 0           | 0           | 0           | 0           | 0           |
| Raw materials, labour        | 25 600 000  | 27 688 960  | 29 948 379  | 32 392 167  | 35 035 368  |
| Indirect manufacturing costs | 82 400 000  | 89 123 840  | 96 396 345  | 104 262 287 | 112 770 090 |
| Gross profit                 | 3 500 000   | 3 640 000   | 3 785 600   | 3 937 024   | 4 094 505   |
| Sales expenses               | 58 080 000  | 60 392 080  | 62 796 643  | 65 297 389  | 67 898 164  |
| Administrative expenses      | 20 820 000  | 25 091 760  | 29 814 102  | 35 027 874  | 40 777 420  |
| Operating profit             | 0           |             |             |             |             |
| Other income                 | 20 820 000  | 25 091 760  | 29 814 102  | 35 027 874  | 40 777 420  |
| Profit before tax            | 7 287 000   | 8 782 116   | 10 434 936  | 12 259 756  | 14 272 097  |
| Taxes (35 %)                 | 13 533 000  | 16 309 644  | 19 379 166  | 22 768 118  | 26 505 323  |
| Source: CIEM simulator       |             |             |             |             |             |

Among the financial indicators is the income statement, which shows a profit over five years, starting in year 1 with a profit of \$13 533 000 and ending in year 5 with a profit of \$26 505 323.



*Cash flow*

| <b>Table 10. Cash flow</b> |               |               |               |               |               |               |
|----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| <b>Cash flow</b>           | <b>Year 0</b> | <b>Year 1</b> | <b>Year 2</b> | <b>Year 3</b> | <b>Year 4</b> | <b>Year 5</b> |
| Operating Cash Flow        | 0             | 20 820 000    | 25 091 760    | 29 814 102    | 35 027 874    | 40 777 420    |
| Operating profit           | 0             | -4 960 000    | -4 960 000    | -4 960 000    | -4 960 000    | -4 960 000    |
| Depreciation               | 0             | -200 000      | -200 000      | -200 000      | -200 000      | -200 000      |
| Amortisation of expenses   | 0             | 0             | -7 287 000    | -8 782 116    | -10 434 936   | -12 259 756   |
| Tax                        | 0             | 25 980 000    | 2 964 760     | 26 191 986    | 29 752 938    | 33 677 664    |
| Net operating cash flow    | 14 000 000    | 0             | 0             | 0             | 0             | 0             |
| Equipment                  | 10 806 422    | 0             | 0             | 0             | 0             | 0             |
| Tools                      | 0             | 0             | 0             | 0             | 0             | 0             |
| Adjustments                | 0             | 0             | 0             | 0             | 0             | 0             |
| Provisions                 | 6 475 000     | 0             | 0             | 0             | 0             | 0             |
| Furniture and fixtures     | 31 281 422    | 0             | 0             | 0             | 0             | 0             |
| Cash Flow Financing        |               |               |               |               |               |               |
| Capital expenditure        | 58 640 222    | 0             | 0             | 0             | 0             | 0             |
| Capital                    | 500 000       | 0             | 0             | 0             | 0             | 0             |
| Net Cash Flow Financing    | 59 140 222    | 0             | 0             | 0             | 0             | 0             |
| Net Period                 | 27 858 800    | 25 980 000    | 22 964 760    | 26 191 986    | 29 752 938    | 33 677 664    |
| Previous balance           | 0             | 27 858 800    | 53 838 800    | 76 803 560    | 102 995 546   | 132 748 485   |
| Balance next               | 27 858 800    | 53 838 800    | 76 803 560    | 102 995 546   | 132 748 485   | 166 426 149   |
| Source: CIEM simulator     |               |               |               |               |               |               |

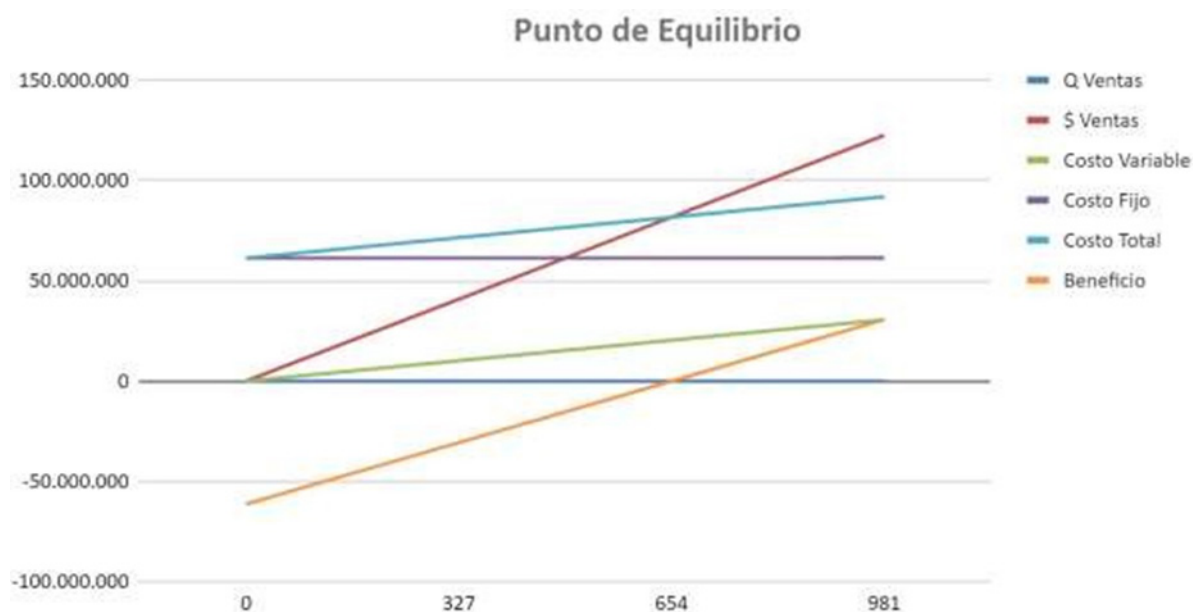
*Financial Indicators*

| <b>Table 11. Net cash flow</b> |                       |
|--------------------------------|-----------------------|
| <b>Periods</b>                 | <b>Net cash flows</b> |
| 0                              | -59 140 222           |
| 1                              | 25 980 000            |
| 2                              | 22 964 760            |
| 3                              | 26 191 986            |
| 4                              | 29 752 938            |
| 5                              | 33 677 664            |
| Van                            | 25 377 963,72         |
| Tir                            | 35 %                  |
| Source: CIEM simulator         |                       |

*Break-even point*

| <b>Table 12. Break-even point</b> |            |
|-----------------------------------|------------|
| <b>Enter Data</b>                 |            |
| Sale price                        | 125 000,0  |
| Unit Cost                         | 31 219,5   |
| Fixed Expenses                    | 61 302 000 |
| Break-even point                  | 654        |
| \$ Sales Balance                  | 81 709 428 |
| Source: CIEM simulator            |            |

| Table 13. Profits                                    |             |             |            |             |
|------------------------------------------------------|-------------|-------------|------------|-------------|
| Data for the graph                                   |             | LOST        | PE         | UTILITY     |
| Q Sales                                              | 0           | 327         | 654        | 981         |
| \$ Sales                                             | 0           | 40 854 714  | 81 709 428 | 122 564 142 |
| Variable Cost                                        | 0           | 10 203 714  | 20 407 428 | 30 611 142  |
| Fixed Cost                                           | 61 302 000  | 61 302 000  | 61 302 000 | 61 302 000  |
| Total Cost                                           | 61 302 000  | 71 505 714  | 81 709 428 | 91 913 142  |
| Benefit                                              | -61 302 000 | -30 651 000 | 0          | 30 651 000  |
| To break even, you must sell 653,675 units per month |             |             |            |             |
| Source: CIEM simulator                               |             |             |            |             |



Source: CECAR Entrepreneurship Centre

Figure 6. Break-even point

For the 'Renderixarte business plan to break even, it must sell a total of 654 services, equivalent to a value of \$81 709. This means that from this point onwards, the Renderixarte business plan would start to generate profits progressively and could reach the point of expanding the business, either by hiring more employees and expanding the company or by opening new branches, thus creating a highly effective business plan for investors, owners, and employees. Thus generating a highly effective business plan for investors, owners, and workers.

## CONCLUSIONS

The aim is to enhance communication through various digital media such as WhatsApp Business, Facebook, Instagram, and the website, promoting and generating valuable content that links the company and its customers, thereby creating a digital community. In addition, the implementation of virtual reality will bring users closer to the feeling of the spaces and the future reality before it materializes, bearing in mind that, in the designs, the materials to be used will be environmentally friendly, and the creation process will have a lower impact on the ecosystem. Through training, we are constantly developing and improving our digital channels, strengthening our marketing and digital commerce, thanks to initiatives such as 'Vende en Línea' (Sell Online), a program run by the Ministry of Information and Communication Technologies designed to help entrepreneurs and merchants bring their businesses into the digital ecosystem, in which we are participating.

Through our productivity and innovation strategy (EPI), we seek to promote local, national, and international entrepreneurship, achieve greater business competitiveness, and participate in calls for proposals and entrepreneurship fairs that allow us to continue promoting the brand.

Projection of better spatial quality for projects, which will allow for a new understanding of the environment through digital architecture, achieving greater appreciation and a realistic approximation of the space prior to its materialization through 3D and 4D visualizations, offering clients the opportunity to create and set the scene for their environment, generating greater ownership and value in the design proposals. Thanks to rendering, we offer clients the possibility of better understanding the designs and proposals, as not everyone understands a 2D architectural plan. In addition to the proposals, we attach a 360° rendering, which allows clients to see their proposals in real-time at the project site.

We offer bioclimatic proposals in our designs, implementing better use of climatic variables such as rainwater collection and sunlight. This favors the proposed designs, allowing our clients to reduce electricity and water costs. The ultimate goal of ecological design is to create projects that reduce energy, water, and construction material costs.

Buildings designed to maximize light and solar radiation and a sound air ventilation system offer certain advantages or disadvantages, depending on the design. Sound insulation reduces heat loss in winter and heat gain in summer, considerably reducing the energy demand for air conditioning.

The financial viability of the business plan suggests a very significant liquidity projection, indicating a good level of solvency with which to cover short-term obligations. The payback period is 2 to 3 years, demonstrating the commercial and economic viability of the project. Considering the dynamism of the market and the added value of the services offered, the partners or shareholders have an attractive opportunity for capital accumulation and profits. In terms of investment, there is less rigidity in the percentages to be invested in capital, which makes the investment more accessible to future shareholders. Additionally, opportunities for access to bank loans will open up, which could leverage the company's growth projects. Through legalization, we can access calls for proposals with which we can obtain the capital and resources necessary for the financing and development of the proposal.

## FINANCING

None.

## CONFLICT OF INTEREST

Authors declare that there is no conflict of interest.

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