

Facility Management Engineering Consulting Plan

By

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1.0. Executive Summary

YTC-Facility Management GmbH will be formed as a consulting company specialized in Facility Management Services. A home office in Cologne, Germany will be established in 2006. Founders are César Mayorga, Yulita Hesmíralda and Tsveti Boycheva with each 5 years of experience.

Initial start up costs amount around € 260000. The founders, César Mayorga, Yulita Hesmíralda and Tsveti Boycheva, provided an initial investment 40 % towards start-up costs.

The company will specialize not only in providing three dimensional modelling and visualization to our clients, but also in CAFM (Computer Added Facility Management). State-of-the-art analysis and design tools will be an integral part of the business plan. Implementation of quality control and insurance programmes will provide a focus for production work.

1.1. Mission

Our mission is to provide clients in North Rhine Westphalia on the first year, the neighbour states and then across Germany in the end with structural engineering services and facilities management for all types of buildings, from concept planning through to completion, with a highly skilled professional team working together, using common sense and practical experience.

1.2. Keys to Success

1. Provide professional quality services on time and on budget.
2. Develop a follow-up strategy to gauge performance with all clients.
3. Implement and maintain a quality control and assurance policy.
4. Managing our internal finances and cash flow to enable growth upward capital.

2.0. Company Summary

YTC-Facility Management GmbH is a new company which provides professional engineering design services for clients which manage, maintain, and plan for residential, commercial, and industrial type buildings. What will set our company apart of the rest is our commitment to providing all of these services in one convenient location and a highly qualified team of specialists. Our focus will be the public sector market in remote communities across Germany.

2.1. Company ownership

YTC-Facility Management GmbH will be created as a limited liability company. The company will be privately owned by Yulita Hesmíralda, Tsvetana Boycheva und César Mayorga. César Mayorga will also be listed as a Director.

2.2. Start-up Summary

Our start-up expenses amount to € 260000 which allows for initial legal expenses, licenses, permits, stationary, specialty software, office equipment, and furniture. The software purchases include an allowance of € 8000 for CAFM® 2006, for National Master Specifications, and for Quickbooks® (accounting package).

The three Members of the Company will contribute around € 10.0000 (40%) towards the overall start-up costs and 60 % from the bank loan.

2.3. Company Locations and facilities

We will establish a home office in Cologne in order to reduce start-up costs. The office space is estimated to be 60 square meters. We will be installing a dedicated fax line as well as a high-speed Internet connection. An interactive website will also be developed which will serve as a marketing tool. The domain name of "http://www.manageall.com" has already been reserved.

3.0 Services

YTC-Facility Management GmbH offers complete structural engineering services and facilities management. We will focus on buildings with the following 'Use and Occupancies':

- Residential.
- Commercial.
- Industrial.

The company is 'project' oriented where each project involves:

- Renovations.
- Rehabilitation.
- Additions.
- New construction.

We offer innovative and economical design services, maintaining state-of-the-art design technology. We meet client needs on projects of all sizes and smaller, special design projects.

3.1 Service Description

Project Consulting: Proposed and billed on a per-project and per-milestone basis, project consulting offers a client company a way to harness our specific qualities and use our expertise to develop and/or implement plans, from conceptual planning to turnover. Proposal costs will be associated with each project.

Forensic Investigations: Proposed and billed on a per-project and per-milestone basis, our investigations will serve the public and private sector markets. We will focus on troubleshooting buildings where damage and or failure has occurred. Our reports will outline the description of the problem, the nature of the mechanism which has caused damage or failure, and a list of options for remedial action including estimated budget costs for implementation.

Project Management: Our project management services include defining client needs, preparing bid documents, tendering, bid analysis, construction review, payment certification, contract administration, and warranty inspections. Projects include new facilities, renovations, repairs, and remodelling.

Dispute Resolution: We draw upon our broad range of construction and contract administration experience to provide dispute resolution services, including arbitration, mediation and expert reports for litigation. This work is supported by forensic engineering services to identify the cause of failures.

Restoration Engineering: We provide condition survey, design, and construction review services for the repair of building structures.

Home Inspections: We will provide prospective homeowners with an assessment of the various systems in a residential home, including foundations, framing, building envelope and efficiency, mechanical systems, electrical systems, and general safety issues. We provide a photographic record along with a thorough written report.

3.2 Competitive Comparison

YTC-Facility Management GmbH offers their clients superior service, accompanied with state-of-the-art analysis and design capabilities. In our company “the life up to the death” of a building will be planned.

We will offer three-dimensional visualization services to reduce the possibility of spatial conflicts with architectural elements and other engineering disciplines. In comparison, our competitors rely mostly on two-dimensional models. More to that in our company “the life up to the death” of a building will be planned.

We will implement a quality assurance and control program for all projects undertaken. This document will serve to focus on the standards which will be achieved and a means of measuring performance.

A systematic manner of sorting and retrieving a library of structural elements and assemblies will be implemented. Slide libraries will be available from a tool bar within AutoCAD for quick access. All project information will be tracked using an integrated database management system. All our business tools *will be year 2006* compliant.

3.3 Sales Literature

A brochure system, which covers a broad spectrum of the target market segment, will be developed during the initial year of operations. This system will be modular in nature and include many 'boiler plate' sections which may be edited to suit specific needs. Brochure inserts will be maintained as individual sheets to facilitate their assembly in any custom situation.

Our website will be developed the first year of operations and include a description of our services, the areas which we plan to serve, contact information, a list of representative projects, and a brief

biography of César Mayorga. An Internet domain name has already been reserved for this purpose
<http://www.manageall.com>

A series of templates will be developed for project proposals. The format for all proposals will include:

- Cover letter.
- Scope of services for each project.
- Fee (if requested).
- Firm's qualifications to provide services (overview).
- Project Team (describes each person's tasks and qualifications).
- Philosophy of design approach.
- Relevant experience.
- Schedule to provide services.

3.4 Fulfilment

We will turn to qualified professionals to supplement computer aided design and drafting (CAD) services, specialty connection designs, and analysis support services which are areas that we can afford to contract out without risking the core values provided to the clients.

We have fostered several alliances with suppliers of structural elements, including glued laminated lumber, pre-engineered dimension lumber trusses, engineered lumber, and steel to facilitate this strategy.

In the second year of operations, we intend to secure a storefront presence in Cologne. At this stage, we will seek qualified German or foreign engineering students to provide them with work experience in a structural engineering office environment.

3.5 Technology

YTC-Facility Management GmbH will maintain complete and comprehensive Windows® based analysis tools for structural design. An integrated computer aided design and drafting tool permits several evaluations to be made on a structure at minimal cost.

YTC-Facility Management GmbH will maintain an Internet website complete with file transfer protocol (ftp) capabilities.

3.6 Future Services

Quality Control and Assurance: Serving the complete needs of the building industry, we will ensure that certified firms and their employees are qualified to perform specific building operations in accordance with the requirements of the **GERman Facility Management Association (GEFMA)** as certified building industry inspector. We are currently in the process of completing a comprehensive home study program offered through the GEFMA for this purpose.

There are several companies presently in the North Rhine Westphalia which require these services in order to maintain their certification with the GEFMA. On-site inspections are required four times per year.

Fabrication and Detailing Drawings: Serving the special needs of steel and concrete construction, as well as all/many other necessary building materials YTC-Facility Management GmbH will be working toward offering these services to contractors in the future.

4.0 Market Analysis Summary

YTC-Facility Management GmbH will focus on traditional **Architect/Engineering (A/E)** contracts. The owner will usually contract the **A/E** to perform planning and design services. These design services include preparation of plans, specifications, and estimates.

Construction services may be limited to occasional field visits and certain contract administration requirements. Typically, these types of projects distribute total design fees amongst the professionals involved in accordance with the following guideline:

- Architecture Design (65%).
- Structural Design (10%).
- Mechanical Design (15%).
- Electrical Design (10%).

Our most important clients will be established **architectural/engineering** companies who require **structural engineering services**.

4.1 Market Segmentation

The market for engineering services may be summarized with the following groups:

Established Architectural and Engineering firms: Typically, the structural portions of any building project involve a Prime Consultant who pre-selects their team members and promotes their strengths in a proposal call to prospective clients. Our strategy is to offer these established firms a viable resource from which to draw upon. We can undertake the entire structural engineering process or provide assistance to their own in-house staff.

Law Firms: We will market our services to the legal community to provide dispute resolution services, including arbitration, mediation and expert reports for litigation. This work is supported by forensic engineering services to identify the cause of failures.

Contractors: We will offer design/build services to contractors for the multitude of potential projects. Contractors occasionally require structural engineers to submit sealed alternatives for equivalents to construction details.

Private Individuals: We will focus attention to them who are renovating or contemplating an addition to their residence. We will also promote home inspections to those parties contemplating the purchase of a home.

The Potential Market Chart and the Market Analysis Table are based on percentages which each of these groups could contribute to the services offered. This manner of describing the potential market is more appropriate for this type of business. As can be seen, the **Established Architectural/Engineering** firms account for 65% of the potential market with the other participants claiming the balance in smaller proportions.

Market Analysis						
Potential Customers	Growth	2004	2005	2006	2007	2008
Architectural/Engineering Firms	0%	65	65	65	65	65
Law Firms	0%	5	5	5	5	5
Contractors	0%	5	5	5	5	5
Private Individuals	0%	25	25	25	25	25
Total	0.00%	100	100	100	100	100

5.0 Strategy and Implementation Summary

YTC-Facility Management GmbH will focus on the North Rhine Westphalia initially at the first year. Then intends to spread the neighbours' states.

5.1 Competitive Edge

YTC-Facility Management GmbH offers the following competitive edge:

- State-of-the-art modelling, design, analysis, and drafting capabilities.
- Quality control and assurance program.
- An Internet website

5.2 Marketing Strategy

The sections which follow describe in more detail our positioning statement, pricing, and promotion strategy.

5.2.1 Positioning Statement

For established engineering and architectural firms in Cologne who require structural engineering sub-consultant services, YTC-Facility Management GmbH offers a competitive and economical option. Projects may be delegated to YTC-Facility Management GmbH directly or arrangements can be made to supplement and assist their own in-house staff.

5.2.2 Pricing Strategy

Most consulting work is billed on an hourly basis to pre-determined levels dictated by project schedule milestones. We have assigned a rate of € 80/hour for basic consulting services and € 40/hour for drafting services. These are conservative values for the consulting market. We have used conservative unit rates to remain more competitive.

5.2.3 Promotion Strategy

We will be using the Internet extensively in our sales promotion. Together with a well targeted direct mail and e-mail campaign, we will make all the major players in the marketplace aware of our presence and also internet website.

We will focus our limited advertising budgets to promote community sponsored events.

5.3 Sales Strategy

Success in a consulting market is focused on client service and typically translates into repeat business. We will avoid the pitfall of buying a project, only to find the scope of work far exceeds remuneration.

When a potential client questions the cost of a project, we explain the benefits and refer to our proposal which clearly outlines the tasks to be performed. If the budget is for less money, then we must offer less service.

Billing rates are not negotiated. One exception to this rule would be for not-for-profit organizations where marketing can be traded for services in kind.

5.3.1 Sales Forecast

The following table and chart summarizes forecasted sales. We expect sales to remain at a constant level after three months of operation. We predict the first two months of operations will be slow. Revenues will be limited while a generic quality management plan is formulated and basic office administration tasks are completed.

Direct unit costs for the first year have been set at 30% of unit revenues, which yields a 70% gross margin. In the third year of operations, we plan to increase gross margin to 80% as a result of providing a more efficient service to our clients.

Our unit rate for basic consulting services has been set at €80/hour. This is a conservative assumption based on published salary guideline levels for engineering professionals.

6. Management

César Mayorga will be responsible for soliciting clients, marketing, promotion, and all daily aspects of running the business. He graduated from University of Applied Sciences Cologne with a Diplom of Engineering degree. He is going to act as Managing Director and the other two shareholders are going to work as Technical Manager and Administrative Manager.

6.1 Management Team Gaps

YTC will require administrative support to ensure clients are billed on a timely basis. We will take care for ensuring the books are kept in order and up to date by ourselves.

Self sufficiency in computer aided drafting capabilities will require Mr Mayorga to become more familiar with AutoCADD 2000 and CAFM as a drafting tool.

7.0 Financial Plan

The financial plan which follows summarizes information regarding the following items:

Office Equipment				Cost per unit	Total cost	depreceation period	Depreciation per year
		Unit of count	quantity				
1	computer	Number	3	2000	6000	5	1200
2	plotter	Number	1	4000	4000	5	800
3	Printer	Number	1	1000	1000	5	200
4	Software	Lumpsum	1	8000	8000	5	1600
5	other office equipment		1	4000	4000	10	400
6	office rent per year		1	14400	14400		0
Total cost					37400		4200

Note Other office equipment include chairs, filing cabinets and desks

Other costs			
1	Professional licence		12000
2	Business licence		1000
3	legal services		1500
4	advertisement costs		5000
Total			19500
Personell Costs	per month	per year	
Director	5000	60000	
Technical Manager	4000	48000	
Administrative Manager	4000	48000	
Total		156000	
Note	The salary is inclusive of everything like income tax, and insurances		

Personell Costs	per month	per year
Director	5000	60000
Technical Manager	4000	48000
Administrative Manager	4000	48000
Total		156000

Note The salary is inclusive of everything like income tax, and insurances

Total Investment costs

Office equipmet	37400
depriciation	4200
other costs	19500
Personel costs	156000
Total	217100
Contingeny 20%	43420
Total Sum of money needed	260520

Investment

Owners	40%	104208
Banks	60%	156312
Total		260520

Each Shareholder

Yulita Hesmiralda		34736
Cesar Mayorga		34736
Tsvetana Boycheva		34736

Financial costs

Interest at 6% per annum

	loan	interest	installment	Sum due to the bank
Year 1	156312	9378.72	15631.2	25009.92
Year 2	140680.8	8440.848	15631.2	24072.048
Year 3	125049.6	7502.976	15631.2	23134.176
Year 4	109418.4	6565.104	15631.2	22196.304
Year 5	93787.2	5627.232	15631.2	21258.432
Year 6	78156	4689.36	15631.2	20320.56
Year 7	62524.8	3751.488	15631.2	19382.688
Year 8	46893.6	2813.616	15631.2	18444.816
Year 9	31262.4	1875.744	15631.2	17506.944
Year 10	15631.2	937.872	15631.2	16569.072
Totals		51582.96	156312	

Price setting

Consulting services per hour	80 €
Number of hours in a day	8
5 days a week throughout the year (52 x5)	260

Total numbers of hours in a year	2080
Total money to be earned at 80€ an hour	166,400 €

Cashflows

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Turnover	166,400 €	166,400 €	166,400 €	166,400 €	166,400 €	166,400 €	166,400 €	166,400 €	166,400 €	166,400 €
total running costs	260520	23700	23700	23700	23700	23700	23700	23700	23700	23700
Financial cost	9378.72	8440.848	7502.976	6565.104	5627.232	4689.36	3751.488	2813.616	1875.744	937.872
Profit before Tax	-103,499 €	134,259 €	135,197 €	136,135 €	137,073 €	138,011 €	138,949 €	139,886 €	140,824 €	141,762 €
Tax 50%	0	15,380.22 €	67,598.51 €	68,067.45 €	68,536.38 €	69,005.32 €	69,474.26 €	69,943.19 €	70,412.13 €	70,881.06 €
Profit after tax	0	118,878.94 €	67,598.51 €	68,067.45 €	68,536.38 €	69,005.32 €	69,474.26 €	69,943.19 €	70,412.13 €	70,881.06 €
cashflow(Net Profit + depreciation)	0	123,078.94 €	71,798.51 €	72,267.45 €	72,736.38 €	73,205.32 €	73,674.26 €	74,143.19 €	74,612.13 €	75,081.06 €
Installment	15631.2	15631.2	15631.2	15631.2	15631.2	15631.2	15631.2	15631.2	15631.2	15631.2
Divident	0	107,447.74 €	56,167.31 €	56,636.25 €	57,105.18 €	57,574.12 €	58,043.06 €	58,511.99 €	58,980.93 €	59,449.86 €

Note: The project is going to make a loss in the first year and as such tax is not going to be paid and in the 2nd year the loss made is the first year is going to be subtracted first before tax is paid

The running cost in the 2nd year onwards decrease because the one time payment investments in the first year are not going to be incurred from the 2nd year onwards.

