





# **COVER PAGE AND DECLARATION**

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#### Introduction

Aspire is looking forward to expand the buisness with profitable project that can strengthen the company image and enlarge the market share after the end of COVID-19 pandemic.

Best thing to do for selecting the proper project is to analyse the market according to the new situation, we will start our nalysis using PESTEL analysis for Sweden where the project is planned to be founded.

PESTEL analysis for Sweden, according to Joe David, 2021

**Political:** Sweden is a constitutional monarchy, member of the European Union and the WTO, well known with neutral foreign policies during peace and war times. Politically stable and very good for business operations.

**Economical:** Sweden is one of the richest countries in the world in terms of GDP per capita; the GDP was expected to reach \$575.00 billion by the end of 2022.

**Social:** people enjoy good quality of life, and good health care system. They celebrate food, coffee and appreciate healthy and active life style.

According to the public health agency of Sweden, 2020: all adults should be physically active for a minimum of 150 minutes per week of at least moderate intensity in total.

**Technology:** Sweden is known as the birthplace of many technological start-ups that reached more than \$1 billion in value; those start-ups are called unicorns in the new business language.

**Environment:** Sweden is rich in both Cultural and natural places, museums, national parks, winter sports, green spaces, and more. Sweden is considered one of the most sustainable countries in the world where environmental and health awareness is strong among people.

**Legal:** The Swedish judiciary and law enforcement are not influenced by politics. The system support equality and encourages foreign investment.

#### Project selection

According to analysis and Aspire wish for expansion post COVID-19 pandemic, we decided to choose a project that goes with the increasing awareness of health and fitness, which can include flexibility, and diversity of income.

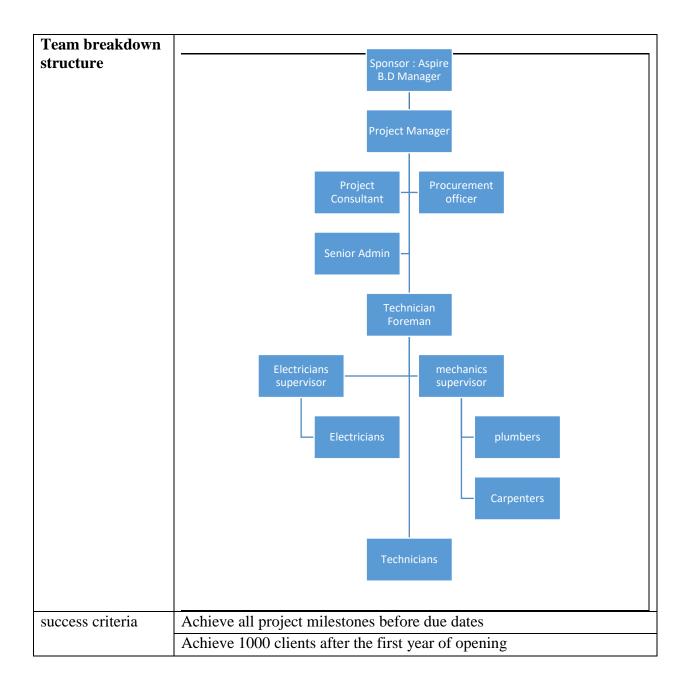
The project is a fitness and health center that has membership management mobile application, healthy food and beverage corner and Wellness market.

The Center allows the members to use the facility remotely through online coaching and fitness classes and through online shopping of healthy meals and supplements.

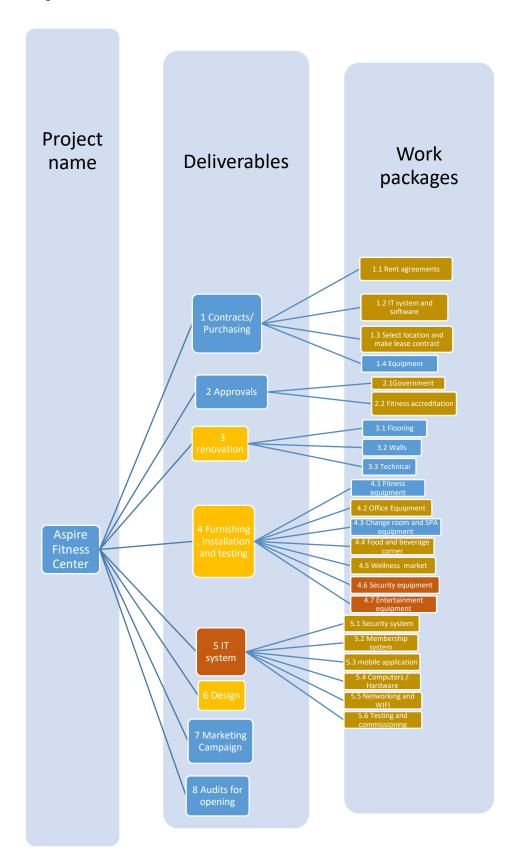
The Food and beverage corner and the wellness market will be for rent to provide steady income to the fitness center. All online sales from both places will be exclusively managed by the center mobile application to provide another source of income to the center.

## Project charter

Project name	Aspire fitness Center
Project objective	renovate a 600 to 1000 m² one level property in the middle of Stockholm
	to create a modern fitness club and wellness center including fitness
	space, SPA, Healthy food and beverage corner and a wellness market
Business objective	Expand the buisness of Aspire corporation into fitness and health
	industry
Budget	€ 2,000,000.00
Project start date	10-May-23
Project End date	30-Jan-24
Planned project life	264 Days
time	
Milestone1	Completion of Agreements and resources planning
milestone2	Completion of renovation
Milestone3	Completion of Installations and services covered by contracts
Milestone4	Completion of Audits response
Milestone5	Project completion and opening date
Risks	1-High rent in stockholm
(I-1 M C-11)	2-Delay of government approvals
(John M. Sadler)	3-Cyber secuirity breach
	4-Emergency losses due to accidents
	5-Possible injuries during the project and operation
Project manager	Ahmed Mostafa Kamel
Project sponsor	Aspire Buisness Development manager



# Project Work breakdown structure



# WBS and activities list

# Aspire Fitness center

- 1 Contracts/ Purchasing
  - 1.1 Rent agreements
  - 1.2 IT system and software
  - 1.3 Select location and make lease contract
  - 1.4 Equipment
    - 1.4.1 Security equipment
    - 1.4.2 Fitness equipment
    - 1.4.3 Office equipment
    - 1.4.4 SPA equipment
    - 1.4.5 Sound system and TV system
    - 1.4.6 Renovation materials

# 2 Approvals

- 2.1 Government
- 2.2 Fitness accreditation

#### 3 renovation

- 3.1 Flooring
  - 3.1.1 Tiles
  - 3.1.2 Gym Anti-slip floor
  - 3.1.3 Office floor
- 3.2 Walls
  - 3.2.1 Glass /Mirrors
  - 3.2.2 Paint
  - 3.2.3 Tiles
- 3.3 Technical
  - 3.3.1 Electrical and Air conditioning
  - 3.3.2 Mechanical

- 4 Furnishing, installation and testing
  - 4.1 Fitness equipment
    - 4.1.1 Electrical machines
    - 4.1.2 non-electrical machines
  - 4.2 Office Equipment
  - 4.3 Change room and SPA equipment
    - 4.3.1 Rest rooms and showers
    - 4.3.2 Lockers
    - 4.3.3 Sauna /steam room/ Jacuzzi
  - 4.4 Food and beverage corner
  - 4.5 Wellness market
  - 4.6 Security equipment
    - 4.6.1 Electronic gates
    - 4.6.2 security cameras
    - 4.6.3 Sliding doors
  - 4.7 Entertainment equipment
    - 4.7.1 Sound system
    - 4.7.2 Televisions network
- 5 IT system
  - 5.1 Security system
  - 5.2 Membership system
  - 5.3 mobile application
  - 5.4 Computers / Hardware
  - 5.5 Networking and WIFI
  - 5.6 Testing and commissioning
- 6 Design
- 7 Marketing Campaign
- 8 Audits for opening

# Project schedule , resources and budget planning

Activities list	Activity	Responsible	HR	Start date	End date	Duration (days)	Cost of HR	Cost of Material/service	Total cost of activity
						•			
	Select location + Agreement		PM ,consultant ,and				€	€	€
1.3	for rent	Project team	Procurement officer	10/05/2023	25/05/2023	15	-	30,000.00	30,000.00
		Design					€	€	€
6	Design	company		25/05/2023	24/06/2023	30	-	20,000.00	20,000.00
7	Start marketing campaign	Marketing company		10/06/2023	08/09/2023	90	€ -	€ 150,000.00	€ 150,000.00
1.2	Agreements for purchase IT system and software	Project team	PM ,consultant ,and Procurement officer	10/06/2023	10/07/2023	30	€	€ 10,000.00	€ 10,000.00
1.1	Agreement to give the food and beverage corner for rent	Project team + marketing company	PM, consultant, and Marketing officer	10/06/2023	25/07/2023	45	€ -	€ 10,000.00	€ 10,000.00
1.1	Agreement to give the Wellness market corner for rent	Project team + marketing company	PM, consultant, and Marketing officer	10/06/2023	25/07/2023	45	€ -	€ 10,000.00	€ 10,000.00
5.3	Start development of Fitness club mobile application	IT company		10/07/2023	08/10/2023	90	€ -	€ 10,000.00	€ 10,000.00
2.1	Start process of Government approvals ( for the design)	Project team	Senior Admin	24/06/2023	24/07/2023	30	€ 5,000.00	€ 8,000.00	€ 13,000.00
2.2	Start process of Fitness center accreditation ( for the design)	Project team	Senior Admin	24/06/2023	24/07/2023	30	€ 5,000.00	€ 8,000.00	€ 13,000.00
1.4.6	Agreements for purchase renovation materials and equipment	Project team	PM ,consultant , Procurement officer and technician foreman	24/07/2023	08/08/2023	15	€ -	€ 200,000.00	€ 200,000.00
1.4.1	Agreements for purchase/install Security equipment	Project team	PM ,consultant ,and Procurement officer	24/07/2023	08/08/2023	15	€ -	€ 10,000.00	€ 10,000.00
1.4.3	Agreements for purchase Office equipment	Project team	PM ,consultant ,and Procurement officer	24/07/2023	08/08/2023	15	€ -	€ 30,000.00	€ 30,000.00

1.4.2	Agreements for purchase/install fitness equipment	Project team	PM ,consultant ,and Procurement officer	24/07/2023	08/08/2023	15	€	€ 150,000.00	€ 150,000.00
1.4.4	Agreements for purchase/install SPA equipment	Project team	PM ,consultant ,and Procurement officer	24/07/2023	08/08/2023	15	€ -	€ 100,000.00	€ 100,000.00
1.4.5	Agreements for purchase/install Sound system and TVs	Project team	PM ,consultant ,and Procurement officer	24/07/2023	08/08/2023	15	€	€ 30,000.00	€ 30,000.00
Milestone1	Completion of Agreements and resources planning	Project team		10/05/2023	08/08/2023	90		20,000,00	€ 786,000.00
	Electrical installations inside the walls and floors, lighting, and air		4 Electricians + 1 Electrical				€		€
3.3.1	Mechanical installations inside the walls and floors	Project team  Project team	2 plumbers + 1 mechanical supervisor	08/08/2023	07/09/2023	30	24,000.00 € 16,000.00	€ -	€ 16,000.00
3.1.1	Install the floor tiles in areas according to design	Project team	3 technicians in tiles installations	01/09/2023	21/09/2023	20	€ 16,000.00	€ -	€ 16,000.00
3.1.2	Install the floor anti-slip layer for fitness		3 technicians in anti-slip floor installation	01/09/2023	16/09/2023		€ 12,000.00	€ -	€ 12,000.00
3.1.3	Install HDF floor for offices	Project team  Project team	2 technicians in HDF installations	01/09/2023		15	€ 10,000.00		€ 10,000.00
3.2.3	Install wall tiles in lockers change rooms Install	Project team	3 technicians in tiles installations	21/09/2023	11/10/2023	20	€ 16,000.00	€ -	€ 16,000.00
4.3.1	equipment for restrooms and showers	Project team	2 plumbers	11/10/2023	21/10/2023	10	€ 10,000.00	€ -	€ 10,000.00
4.3.2	Install lockers  Install Glass and mirror walls in fitness	Project team	2 general technicians 4 technicians in glass	21/09/2023	26/09/2023	5	€ 2,000.00	€ -	€ 2,000.00
3.2.1	Finish and paint/poster walls as per design	Project team  Project team	installations  3 painters	16/09/2023	16/10/2023	30	20,000.00 € 24,000.00	€ -	€ 24,000.00

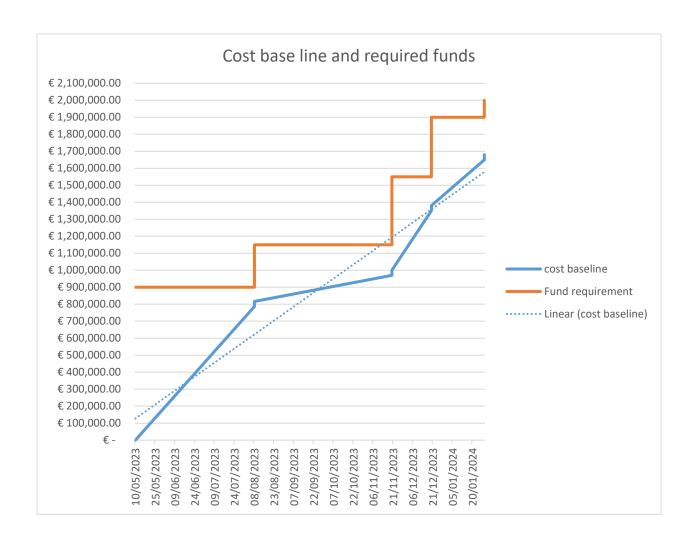
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	Install office								
4.2	equipment and	<b>D</b> • • • •	2 carpenters + 1 IT	16/10/2022	21/10/2022	_	€		€
4.2	computers	Project team	technician	16/10/2023	21/10/2023	5	4,000.00	€ -	4,000.00
	Install of IT	Security	~					€	€
5.1	security system	company	Contactor team	21/10/2023	05/11/2023	15		10,000.00	10,000.00
	Install security								
	cameras system and link								
	it with IT	Security	~					€	€
4.6.2	security system	company	Contactor team	05/11/2023	15/11/2023	10		10,000.00	10,000.00
	Install								
	Entrance		2 technicians in glass				€		€
4.6.3	sliding doors	Project team	installations + 1 Electrician	15/11/2023	20/11/2023	5	5,000.00	€ -	5,000.00
	Completion of								€
milestone2	renovation	Project team		08/08/2023	20/11/2023	104			154,000.00
	Install food and beverage								
	corner		Tenant pays insurance and				€	€	€
4.4	equipment	tenant	rent	20/11/2023	20/12/2023	30	-	(10,000.00)	(10,000.00)
	Install Wellness								
	market								
4.5	equipment and decoration	tenant	Tenant pays insurance and rent	20/11/2023	20/12/2023	30	€ -	€ (10,000.00)	€ (10,000.00)
4.3	decoration	SPA	Tent	20/11/2023	20/12/2023	30	_	(10,000.00)	(10,000.00)
422	Install SPA	equipment	C	20/11/2022	20/12/2022	20	€	€	€
4.3.3	equipment Install non-	company	Contactor team	20/11/2023	20/12/2023	30	-	100,000.00	100,000.00
	electrical	Fitness							
	fitness	equipment	~				€	€	€
4.1.1	equipment	company	Contactor team	20/11/2023	05/12/2023	15	-	100,000.00	100,000.00
	Install electrical	Fitness							
	fitness	equipment	_				€	€	€
4.1.2	equipment	company	Contactor team	20/11/2023	05/12/2023	15	-	100,000.00	100,000.00
	Install								
	Electronic gates and link								
	it with IT	Security	_				€	€	€
4.6.1	security system Install	company	Contactor team	20/11/2023	30/11/2023	10	-	10,000.00	10,000.00
	Networking								
<i></i>	and WIFI	IT ac	Contactor to	20/11/2022	20/11/2022	10	€	€	€
5.5	system  Install sound	IT company	Contactor team	20/11/2023	30/11/2023	10	-	10,000.00	10,000.00
	system and link	Entertainment							
471	it with IT	system	Contactor toon-	20/11/2022	10/12/2022	10	€	€ 15,000,00	€ 15,000,00
4.7.1	system	company	Contactor team	30/11/2023	10/12/2023	10	-	15,000.00	15,000.00
	Install televisions and								
	TV network	Entertainment							
4.7.0	and link it with	system		20/11/2022	05/10/2022	ءِ ۔	€	€	€
4.7.2	IT system	company	Contactor team	30/11/2023	05/12/2023	5	-	15,000.00	15,000.00
	Install and test membership								
	software						€	€	€
5.2	system	IT company	Contactor team	30/11/2023	05/12/2023	5	-	10,000.00	10,000.00

	Link all IT								
	systems to the mobile application and perform test						C	€	€
5.6	and commissioning	IT company	Contactor team	30/11/2023	10/12/2023	10	€ -	€ 10,000.00	€ 10,000.00
Milestone3	completion of Installations and services covered by contracts	Project team		20/11/2023	20/12/2023	30			€ 350,000.00
8	Government audits for the fitness center	Government auditors	Government auditors	20/12/2023	25/12/2023	5		€ 10,000.00	€ 10,000.00
8	Accreditation audit for the fitness center	Accreditation body auditors	Accreditation body auditors	25/12/2023	30/12/2023	5		€ 10,000.00	€ 10,000.00
8	Fixing audit points	Project team	As required ( funded from contingency reserve)	30/12/2023	29/01/2024	30		€ 250,000.00	€ 250,000.00
Milestone4	Completion of Audits response	Project team		20/12/2023	29/01/2024	40			€ 270,000.00
	Project manager Package during the project	Fixed Project team		10/05/2023	29/01/2024		€ 60,000.00	€ -	€ 60,000.00
	Fitness consultant package during the project	Fixed Project team		10/05/2023	29/01/2024		€ 40,000.00	€ -	€ 40,000.00
	Procurement officer package during the project	Fixed Project team		10/05/2023	29/01/2024		€ 10,000.00	€ -	€ 10,000.00
	Technician Foreman package during the project	Fixed Project team		10/05/2023	29/01/2024		€ 10,000.00		€ 10,000.00
	Fixed Employees Cost during the project	Fixed Project team		10/05/2023	29/01/2024				€ 120,000.00
Milestone5	Project completion	Project team		10/05/2023	29/01/2024	264			€ 1,680,000.00

# **Project Budget**

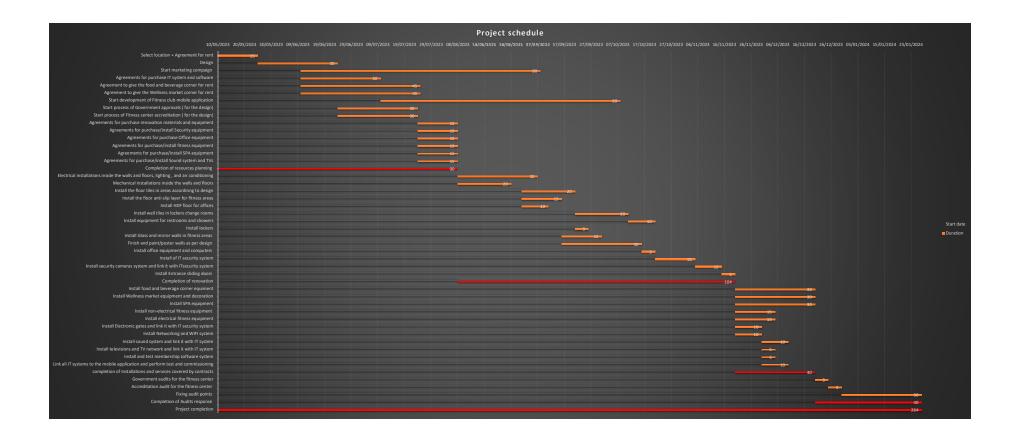
According to the activities cost analysis no additional funds will be needed to complete the project, the project cost base line and required funds will be planned as the following:

Deliverables	Start date	Cost	Accumulative cost	Cash flow In	Total Cash In			
		€	€	€	€			
Start project	10/05/2023	-	-	850,000.00	900,000.00			
Completion of								
Agreements and		€	€	€	€			
resources planning	08/08/2023	786,000.00	786,000.00	250,000.00	900,000.00			
Packages of		G (N + 2)						
project fixed		€ (Note2)	€		€			
employees Part1	08/08/2023	30,000.00	816,000.00	_	1,150,000.00			
Completion of		€	€	€	€			
renovation	20/11/2023	154,000.00	970,000.00	400,000.00	1,150,000.00			
Packages of		€	€		€			
project fixed employees Part2	20/11/2023	30,000.00	1,000,000.00		1,550,000.00			
	20/11/2023	30,000.00	1,000,000.00		1,330,000.00			
completion of								
Installations and		€	€	€	€			
services covered by contracts	20/12/2023	350,000.00	1,350,000.00	350,000.00	1,550,000.00			
Packages of	20/12/2023	330,000.00	1,330,000.00	330,000.00	1,550,000.00			
project fixed		€	€		€			
employees Part3	20/12/2023	30,000.00	1,380,000.00		1,900,000.00			
Completion of		€	€	€ (Note1)	€			
Audits response	29/01/2024	270,000.00	1,650,000.00	100,000.00	1,900,000.00			
Packages of								
project fixed		€	€		€			
employees Part4	29/01/2024	30,000.00	1,680,000.00		2,000,000.00			
		€						
Note 1: 100,000.0			saved for management reserve					
	€ Fixed €			Fixed encolors as a paragraph distributed in America accepts				
			Fixed employees packages distributed in 4 parts over the					
Note 2: 120,000.00			project life time  Total project cost is 1,700,000 € , but we expect 20,000 €					
					•			
37		6 20 000 00	I HOM the F&B corn	er and Wellness market	rent during the			
Note3:		€ 20,000.00		project				
		€						
Note4:		320,000.00	Are the total Plan	ned savings from the as	ssigned budget			
110164.		320,000.00	7 are the total Hall	Are the total Planned savings from the assigned budget				



#### **Gantt chart:**

Illustrate the start and finish dates of each project activity, as well as their interdependencies.



## **Projected competition times**

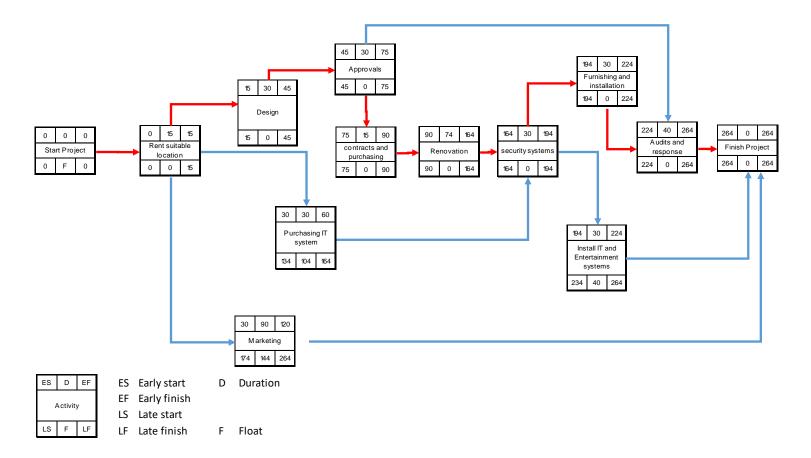


Illustration of the Project Critical Path using the precedence diagramming method (PDM), taking into consideration only the main deliverables for simplification.

- There are only three non-critical floating activities that we can delay their start, move
  resources to other activities, and accelerate the project, example: reduce the renovation
  time by 10 days by increasing number of workers.
- Security systems installation is in the critical path to minimize the potential of theft and for investigation in case of accidents, however it can be moved to the IT and entertainment system path out of critical path to save 30 Days of the project life, while the cost of hiring security guards will be a slight impact to the budget.

- In the plan, there is **30** days to fix audit points, which is very pessimistic as the approvals preparations starts at day 45 of the project life and audits starts at day 224, which gives the project team plenty of time to cover all requirements before audits.
- As Example of applying PERT method using the above assumptions:
  - o The most pessimistic project life time is **264 days** (**P**)
  - o The most optimistic is to save 70 days of the project life to be only **194 days (O)**
  - The most likely is that security preparations before installation of expensive equipment will take time (5 days), and fixing the audit points may take 15 days, and most likely the project life time will be 224 days (M)
  - O Estimate project life time = (O+ 4M+P)/6 = 211 Days

## Risk analysis

Risk	probability	Impact	Severity	response strategies	response action
Possible injuries during the project and operation	3	4	12	Avoid/ Transfer	High quality equipment and materials are used, and detailed safety instructions are provided to all workers and members to avoid the risk, However Injuries during the project and in the membership contracts are covered by insurance to mitigate the impact on the fitness center
Delay of government approvals	3	4	12	Avoid/ Mitigate	Approval process started very early to avoid the risk, and giving one month to fix approval audits issues and contingency reserve is prepared to fund the repairs and mitigate the impact
tenant of rental area delays in finishing his part	3	3	9	Avoid/ Accept	Agreement process started very early with tenants to avoid this risk, but if event happened a Contingency plan to get a 3rd party supplier to do the service using the insurance paid by the original tenant

High rent in stockholm	3	3	9	Mitigate	offering spaces inside the fitness center for rent reduce the impact of high lease cost
Emergency losses due to accidents	3	3	9	Avoid/ Mitigate	All work is done according to standard operating procedures and health and safety standards, and a daily safety meeting is held to assess the work risks and discuss risk controls, however accidents can happen and it is mandatory to cover the fitness center with insurance against accidents and losses
Cyber secuirity breach	2	4	8		
Receiving defective equipment from the supplier	2	3	6		
theft of materials or equipment during the project and operation	2	3	6		
delay in starting the marketing campaign	2	1	2		
delay in starting the mobile application development	2	1	2		
Level	1	2	2	<u> </u>	
probability	1 Unlikely	2 Moderate	3 Likely	4 certain	
Impact	Minor	Moderate	Major Major	Catastrophic	

# **Quality control measures**

Quality control (QC) is a set of inspection procedures to ensure that a product or a service is done according to defined quality requirements and specifications.

Quality Assurance (QA) is the confirmation that Standards and procedures are followed while manufacturing a product or developing and delivering a service. (Adam Hayes ,2023)

WBS	Quality requirement	measures
	Rent agreements	F&b corner and wellness market tenants pays rent starting
	generates income during	from day 194 of the project, their brands are carefully
1.1	the project life time and	chosen to attract more members , measuring the increase
	add value to the fitness	in membership requested after announcing the opening of
	center	the F&b corner and wellness market .
3.1.2		perform Anti-slip resistance test and comply with European
3.1.2	Anti-Slip resistance floor	standard
		Perform a quality acceptance inspection ,Perform Indoor
3.3.1		Air Quality(IAQ) tests and confirm they are according to
3.3.1		standards and CO2 levels are in acceptable range, maintain
	HVAC system air quality	regular filter changing schedule
		Inspect the light distribution covers all corners and spots,
3.3.1		using warm and bright lights to keep people active, while
	Effective lighting	avoiding irritation and direct light to users' eyes.
		Perform a quality acceptance inspection ,Verify that the
		equipment are tested and certified by an independent third
4.1		party , verify that the supplier provide at least two years
		free maintenance and spare parts as part of the agreement
	Durable fitness equipment	as well warranty and technical support.
		Perform a quality acceptance inspection using checklist and
4.3.3		including function test of all equipment and at least two
4.5.5		years free maintenance and spare parts as part of the
	SPA equipment	agreement as well warranty and technical support.
		Perform a quality acceptance inspection ,Verify the
		cameras are covering all areas , verify that the cameras
		equipped with high resolution night vision, verify the
4.6.1		recording device have enough memory for one complete
		month continuous recording , verify that a battery backup
		system can run the cameras for 12 continuous hours in
	Camera system	case of power off.
		Perform a quality acceptance inspection ,Verify that the
4.6.2		gates needs two access methods (finger print with pin
	Electronic gates	code/or membership card)

4.7.1	Sound system	Perform a quality acceptance inspection, verify that the speakers are well distributed to avoid echo and noise and the supplier used a qualified acoustician as consultant during installation and his recommendations are part of the agreement.
5	IT system	Perform a quality acceptance inspection, verify that the system is protected from cyber breach, verify that the members' data and fitness center data are encrypted and protected from hacking.

# QUALITY ACCEPTANCE INSPECTION CHECKLIST

Below is an example of the Quality Acceptance Inspection Checklist that will be used by the QA Inspector.

#### QUALITY ACCEPTANCE INSPECTION CHECKLIST

(Subject to modifications when required due to change in requirements)

PURCHASE ORDER (PO) #:	ITE	EM DESCRIPTION:	
VENDOR NAME:		LOCATION:	

	Yes	No	N/A
Is product operational?	100		,
Is product free of damage and material/manufacturing defects?			
Does product match the specifications requested in the IFB?			
Is product required to have a Safety Standards Label/Marking?			
If yes, does product meet this requirement?  Agency:  Model/ID #:			
Is the vendor responsible for installation per IFB?			
If yes, was installation completed to department's satisfaction?			
Have all manuals, instructions, setup media, security codes, and warranty documentation been received?			
If required, has software backup media (DVD, flash drive, online download) been provided?			
If required, has Vendor training been completed or scheduled?			

Any nonconformances found during the inspection shall be repaired by the Vendor, at their cost, prior to passing inspection.

Figure retrieved from Quality Acceptance Inspection Basics

## Bangkok to Chiang Mai High-Speed Railway (HSR)

To have the project cost effective, so its revenue exceeds the cost and generate profit. In the same time, to make the train ticket price stay economic for the normal people, we need to collect enough data to discover other possible incomes for the project and evaluate its viability.

#### **Data collection**

#### Bangkok

Capital of Thailand, population 10.5 Million,

## Chiang Mai

Touristic city in northern Thailand, population 128000.

Chiang Mai recorded 100 billion baht in revenue from 10.8 million visitors in 2019, of which 70% were Thais and 30% foreigners.

### Transportation methods

Distance between the two cities 687 KM

Flight: 1h: 15 min, average ticket from 1100 to 2400 Baht

Bus: 9h to 10h, average ticket 630 to 1000 Baht

Existing railway: 14 h, ticket between 260 to 850 Baht

Proposed High-speed railway: 3h30 min to 4h 30 min depending on the speed (250 to 300

Km/h), ticket 1200 Baht



Picture retrieved from (National News Bureau Of Thailand)

The project is divided into two phases, with the first running from Bangkok to Phitsanulok for over 380km, which then continuing to Chiang Mai for a further distance of 288km.

Department of Rail Transport (DRT) Director-General Pichet Kunadhamraks stated that the high-speed rail project is a significant initiative that could provide economic benefits to Thailand, strengthen bilateral relations, and pave the way for more successful projects in the future.

A study conducted by Japanese agencies suggested the first phase of the project would offer an economic return some 17.3% higher than its original target. (Bangkok post, Mar 2023)

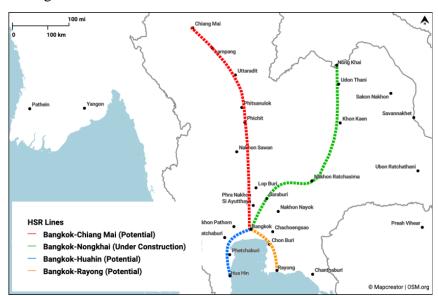
#### Conclusion:

As it is a national project we cannot use the conventional Financial Internal Rate of Return (FIRR) for measuring the financial performance of the proposed investment instead we can use the EIRR, measuring the economic additional benefits expected from the proposed investment.

The EIRR measures the increased economic activity generated from an investment by quantifying the financial and the non-financial benefits from an investment.

## Economic benefits

- Increase smooth inter-city migration between Bangkok and Chiang Mai
- Regional development of the cities along the railway line
- Reduction in travel time and costs, making it easier for people to move around the country
- Create new job opportunities and improve living standards for the people in the region.
- Increase tourism, which will create more jobs as well as generate revenue for the local economy.
- Value Increase of the lands around the High-speed railway.
- The vision of transforming Thailand to a regional rail hub linking the country with regional neighbors.



- Depending on the design, a high-speed railway can carry up to 400,000 passengers per day.
- HSR systems consume less energy per passenger-km than road and air transport.

<u>Decision:</u> According to above analysis, I believe that the economic value of Bangkok-Chiang Mai High Speed Railway is much more than the revenue coming from the passengers' tickets.

However, the ticket price suggested is very competitive compared to other methods of transportations.

The transportation capacity exceeds any other type that make it ideal for traveling between bug cities and to link the railway to other neighbor countries in the future plans.

I recommend that Thailand should build the High-speed railway taking into consideration the following suggestions to generate more income:

- Cooperation between the Railway operator and the national air carrier to provide fares and tickets where the trip will be partially flight and partially with high speed railway
- Benefit from high accessibility levels of the central stations of HSR and use them as commercial hubs for shopping and site seeing including shopping malls, restaurants, activity centers, and business centers. Invite private sector to invest in the stations.
- Use the trains and train stations as medium of marketing and advertising
- Cooperate with telecommunication companies to open branches inside the stations
- Inboard paid services such as meals and shopping
- Cooperate with online Travel websites and applications to include the train ticket as part
  of suggested packages for holidays or travels booking.
- Introduce VIP and business classes with higher ticket price and more benefits
- Make frequent passenger loyalty program for frequent users of the railway
- Make special offers and packages for corporations and businesses that have high number of employees using the trains frequently
- Cargo transportation of valuable goods, medicines and sensitive equipment.

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