COVER PAGE AND DECLARATION

	Master of Business Administration (M.B.A.)
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E-SIGNATURE: m.Ibrahim

DATE: 8- July - 2022

Project management
MGT580

Contents

A. Case scenario 1: Aspire International organic food project.

1. Introduction:

Aspire international corporation is a multinational company located in Sweden and operating a business over Europe countries. During the yearly strategic meeting, a decision made to diversify its operation and portfolio and accessing a different market segment to increase the company revenue.

With the increase of healthy culture and practices and the high demand on healthy food, with over than 50 billion of market sales of organic product was consumed in the last year 2021 in Europe alone (M.Shahbandeh, 2022), with expectation in increase by 20% for 2022 due to factors like COVID19, Fat disease. the company decided to invest on business line focusing on organic food market by establishing a hometown food market chain covering all Sweden country and main cities in Europe. unfortunately Aspire have no previous experience on food retailing market with un-relevant awareness of hidden risks laying in such business.

The company decided to initiate a project cycle for the establishment of the organic food market store with subjected budget €2 time duration of 1 years from start to hand over a ready business plan with furnished stores.

2. Project charter

According the PMBOK, the project charter “a document issued by the project initiator or sponsor that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities” (PMI, 2005, 368).

Project name:

hometown organic food stores

Project manager:

Mohammad Alshaikh Hasan

Project manager responsibilities:

Project planning

Project execution

Budget control, and approval

Team assembly and dispatching

Last revision date:

15-Jun-22

Project purpose:

the purpose of this project is the increase the company portfolio and accessing new market segment

Project objectives:

establishing a hometown food market specialized on all organic natural product by Q4 of 2022 in Europe country.

Project scope:

Deliverables, milestones:

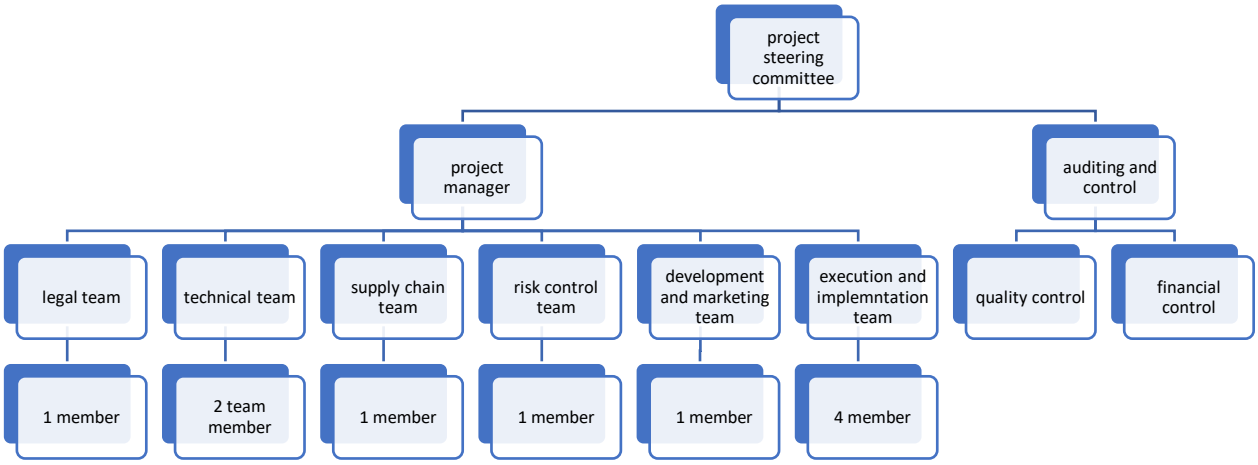
- Stores:
  - Establishing a store chain across Europe main cities
  - Establishing a cold distribution store in Sweden
- Farms:
  - Partnering with organic farmers in Sweden in storage, distribution, sales of organic product.

Out of scope: The project doesn't include investing on farming process.
Expected risks: Supply chain risk, including transportation. Partner farms failure to insure non using of not allowed substances. Financial risk, due to agricultural unstable raw costs. Legal risk, due to failing to comply with local and EU organic regulations. Lack of budget.
Resources: Manpower: a team of 10 persons assigned to lead the operation and implementation of the project plan. Budget: €2 million budgeted plan allocated for the execution of the project.
Stakeholders: Project sponsor: Aspire international corporation Partners: local farmer, local trucks logistic companies

3. Project organization structure and responsibilities

An organization structure prepared reflecting the responsibilities and authorities in between team member to minimize ambiguity the conflicts in decision and reporting (Patah, Leandro, 2004).

Aspire international managed a structure to ensure the minimum lead time and minimizing the communication time wastes in between different teams. An independent auditing team from the project members assigned reporting directly to the steering committee.



A work procedure prepared for each work team in the organizational structure defining the formats, sequence and interdependence between different departments and controls the communication channels.

4. Stakeholder

For the project proper execution and identifying the boundaries and interrelation with other concerned parties, internal and external, a stakeholder identification and analysis carried out. With the plan, it can ensure all concerned personals, entities are informed throughout the project and satisfied with result. (Eskerod, Jepsen, 2013)

4.1. Stakeholder identification:

An internal and external stakeholder identification chart categorized in matrix.

4.1.1. Internal stakeholders

project name:		Aspire multinational organic food stores		
date:			19/6/2022	
name of stakeholder	role	department	role in project	type of communication
Mr. Mohammad	GM	board of director	director	meeting/email
lawyer jamal	lawyer	legal department	legal advisor	meeting/email
lawyer sara	manager	legal department		email
Mr. lourance	technical advisor	marketing	technical advisor	meeting/email
Mr. Abbas	technical advisor	food processing	technical advisor	meeting/email
Ms. Sozan	supply chain	logistic	supply chain manager	meeting/email
Ms. Salma	quality	quality	risk controller	meeting/email
eng. Fayez	business	business development	business planning	meeting/email
Dr. samer	manager	operation	operation manager	meeting/email
eng. Riyad	supervisor	operation	operation supervisor	meeting/email
Mr. faheem	planning	operation	strategic planning	meeting/email
eng. Farah	specialist	operation	organic specialist	meeting/email
Mr. noor	quality assurance	quality	quality auditor	email
Ms. Leen	accounting	financial	financial auditor	email

4.1.2. External stakeholders

project name: Aspire multinational organic food stores					
Date: 19-06-22					
name of stakeholder	How important ? (Low – Med – High)	Current level of support? (Low – Med – High)	What do you want from stakeholders?	Stakeholder power	Stakeholder interest
food and drug administration FDA	high	low	permissions and approvals	high	Low
department of agriculture	high	low	certification	high	Mid
environmental authorities	high	med	approvals	high	Low
trade association	high	high	market analysis	low	high

potential customer	high	med	procure the product	low	High
retailers	high	med	marketing the product	low	Mid
shipping & logistic companies	high	low	transportation and delivering the product	low	Low
farmers	high	med	supplying on time fresh product	low	low

With identifying the internal and external stakeholder, a grouping to subdivide them according to interest and power imposed on the project so proper action to be taken.

5. Project scope:

5.1. Scope statement:

The Aspire organic food project comprising of establishing and protecting the supply chain availability of organic stores located in different geographic locations.

The project covers establishing and furnishing 5 organic food stores in the capital of Sweden, Stockholm, and ensuring a reliable transportation and logistics channels capable of delivering organic food, fresh to all cities over Sweden in within 24 hours.

This project should also cover the farmers and food suppliers to manage proper contractual relation between them and achieve supply stability.

This project doesn't cover the farming and agricultural activity or establishing a farm for the purpose producing or generating the organic food.

5.2. Requirement collection:

To proper build a project plan and create a realistic WBS with accurate budget, a requirement collection process take place with different techniques

- Stakeholder meeting/interview
- Expert judgment
- Project team brain storming

Collected requirement are listed, non-ordered, non-prioritized, on a requirement matrix.

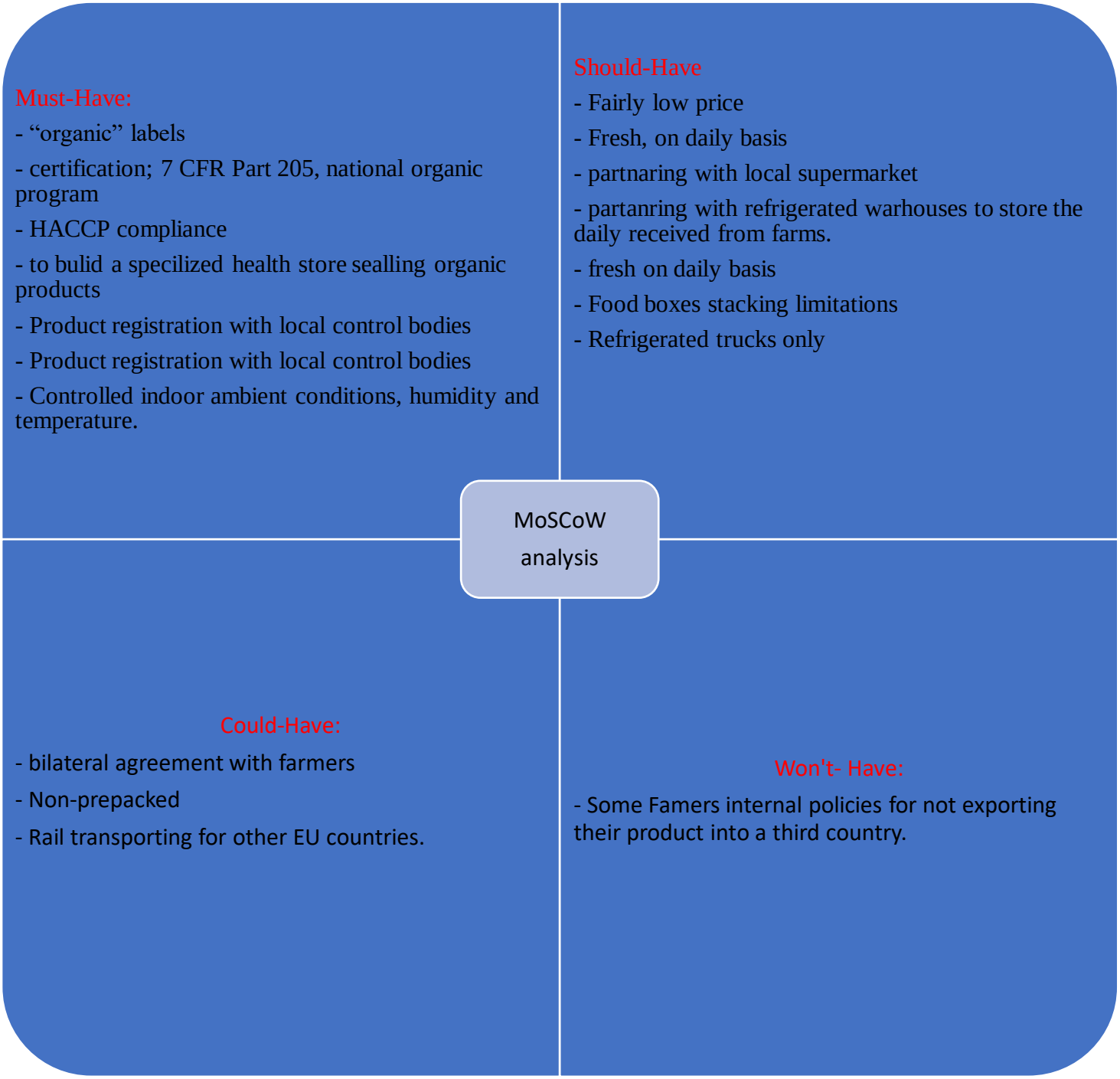
Source	Requirements
FDA	"organic" labels
	Certification "100% organic"
Department of agriculture	1- Organic farm and organic handlers' certification; 7 CFR Part 205, national organic program. 2- HACCP regulations
	Documentation requirement, 7 CFR Part 205.
Environmental authorities (EU council, 2020)	1- Product registration with local control bodies 2- Yearly continual inspection 3- Organic logo
trade association	EU-USA trade bilateral organic trade agreement. To use the agreement to support the export to EU countries and import from US to EU. (US department of agriculture, 2012)
potential customer	1- Fairly low price 2- Fresh, on daily basis 3- Non-prepacked 4- High demand on vegetables
Retailers	1- Supermarket share, many customers prefer to buy their organic food during their daily shopping in the regular supermarket

	2- Specialized food stores, health food stores is an accountable channel and popular among the consumers. (Hanne, Lotte, O'Doherty and Kjaernes, 2004) 3- Controlled indoor ambient conditions, humidity and temperature.
shipping & logistic companies	1- Refrigerated trucks only 2- Food boxes stacking limitations 3- Rail transporting for other EU countries.
farmers	1- Minimum order quantity, which requires a big sized refrigerated warehouse. 2- To have a bilateral agreement 3- Some Famers internal policies for not exporting their product into a third country.

5.3. Requirement prioritization:

Due the limited time and resources, Aspire international decide to deal only with the main requirements which may have a severe impact on the progress of the project, a prioritization technique process for the requirements undertaken and planned to ensure the fulfillments of the critical aspects.

MoSCoW analysis: used to categories the requirements into four groups, "the must, should, could and won't" category. The Aspire decided to ensure the 100% implementation of the must and should- have requirements. The prioritization criteria based on time and skills.



5.4. Requirement traceability matrix RTM

To ensure the project meeting the intended purpose and requirements, RTM used to help in continuously tracking requirement, forward and backward, and helping in designing project WBS.

ID	requirement description	project needs	project objectives	WBS	Test, verification	status	Source
#001	“organic” labels	compliance with local regulations	will qualify for operational permits and accessing market	establishing a licensing department	application with accredited 3rd party for certification	active	governmental requirement
#002	certification; 7 CFR Part 205, national organic program	compliance with EU directives for exporting organic products	will qualify for operation permits	establishing a licensing department	assigned inspector compliance report	active	governmental requirement
#003	HACCP compliance	compliance with microbiological criteria	will qualify for operation permits	establishing a licensing department	assigned inspector compliance report	active	governmental requirement
#004	to build a specialized health store selling organic products	accessible POS (point of sales)	to reach the client for varieties of products	renting stores and prepare them	establishing a prototype store and check clients convenience	active	business requirement
#005	Product registration with local control bodies	licensing the product	operation permits	establishing a licensing department	inspector compliance report	active	governmental requirement
#006	Controlled indoor ambient conditions, humidity and temperature.	climate control for food preservation	product safety and avoid spoilage	establishing a quality department with certified ISO9001	indoor climate and air quality inspection	active	business requirement
#007	Fairly low price	affordability	client affordability	cost review and lean-6 sigma team	market research and comparison, and client convenience	active	client requirement
#008	Fresh, on daily basis	client requirement to purchase of fresh organic food	client satisfaction	establishing a quality department with certified ISO9001	quality inspector and disposal/recycling plan	active	client requirement
#009	partnering with local supermarket	market coverage	fast expansion	bilateral agreement and renting a corner in mega supermarkets for Aspire organic food	prepare a prototype in a major supermarket	active	business requirement
#010	partnering with refrigerated warehouses to store the daily received from farms.	cost saving	cost cut	bilateral agreement and renting on space used principle	contract signing	active	business requirement
#011	Food boxes stacking limitations	food preservation	food safety	design of special shipping and stacking boxes	design a prototype box	active	business requirement
#012	Refrigerated trucks only	food preservation during transportation	food safety	renting a refrigerated trucks	contract signing	active	business requirement

5.5. WBS structure:

To properly plan for schedule and budget and ensuring scope fulfilment, a break down for the project into smaller achievable deliverables will simplify the planning and make it easier for task follow up and progress monitoring. With smaller project component, the cost can be more accurately rounded and calculated and the estimation for every task time frame would be more realistic.

		yellow highlighted = deliverbles			
		#D… = deliverbles code			
specilized health store	design	archetucre design	#D0001		
		design review	#D0002		
		design approval	#D0003		
	construction	land procurement	#D0004		
		building	excavation	#D0005	
			foundation	#D0006	
			exterior	painting	#D0007
				lightining	#D0008
				signs	#D0009
				logo	#D0010
			interior	painting	#D0011
				furniture	#D0012
				lightining	#D0013
				shelfs	#D0014
	inspection	electrical inspection	during construction at predetermind intervals	#D0015	
			at work clouser	#D0016	
		mechanical inspection	during construction at predetermind intervals	#D0017	
			at work clouser	#D0018	
		plumping inspection	during construction at predetermind intervals	#D0019	
			at work clouser	#D0020	
supermarket corners	design	electrical design	shop drawing	#D0021	
			electrical powe daigeram	#D0022	
			electrical control diagram	#D0023	
			CCTV system	#D0024	
		mechanical design	shop drawing	#D0025	
		plumping design	water system	#D0026	
			sewage system	#D0027	
	construction	wood fabrication	shelfs	#D0028	
			wood painting	#D0029	
		wood assembly	#D0030		
		lightining installation	#D0031		
		signs and logo installation	#D0032		
	inspection	safety inspection	electrical safety inspection	#D0033	
			mechanical safety inspection	#D0034	
			IAQ inspection	#D0035	
		hyginic inspection	#D0036		
licience	application	farmers Organic Logo	#D0037		
		7CFR part 205 application	#D0038		
		HACCP application	#D0039		
		local authority product registration	#D0040		
	3rd party inspection	EU organic regluation	#D0041		
		HACCP accredited inspection assigning	#D0042		
		local authority product 3rd party inspection	#D0043		
	certificat	health certification	#D0044		
		safety certification	#D0045		
		organic product certification	#D0046		
		hyginic certification	#D0047		

indoor air quality	design	exhaust design	#D0048	
		fresh air supply design	#D0049	
		filteration design	#D0050	
		humidity control design	#D0051	
		ambient control design	#D0052	
		energy recovery design	#D0053	
	equipments	air hanlding unit AHU	installation	#D0054
			installation safety check	#D0055
		air coold chiller ACCU	installation	#D0056
			instllation safety check	#D0057
		filteration equipment AFU	installation	#D0058
			installation safety check	#D0059
		refrigerated cabienet	#D0060	
		refrigerators	#D0061	
	commissining	AHU commissining	#D0062	
		ACCU commissining	#D0063	
		AFU commissining	#D0064	
	inspection	3rd party indoor air quality IAQ inspection	#D0065	
		air contaminants inspection	#D0066	
cooled room warhouses	requirements	ambient design condition	#D0067	
		recovery system deisgn condition	#D0068	
		ventilation design condition	#D0069	
		redundancy design	#D0070	
	Biding	bid announcement	#D0071	
		bid collection	#D0072	
		bid closing	#D0073	
	bid screening	bid openning	#D0074	
		bid technical comparison	#D0075	
		bid financial comparison	#D0076	
		bid nomination	#D0077	
	contrac signing	contract terms aggrement	#D0078	
		contract payment method agreement	#D0079	
		contract signing	#D0080	
shipping and logistic	bidding	bid announcement	#D0081	
		bid collection	#D0082	
		bid closing	#D0083	
	bid screening	bid openning	#D0084	
		bid technical comparison	#D0085	
		bid financial comparison	#D0086	
		bid nomination	#D0087	
	contract signing	contract terms aggrement	#D0088	
		contract payment method agreement	#D0089	
		contract signing	#D0090	
quality control	HACCP compliance	cold chain for refrigerated food compliance	#D0091	
		incoming goods inspection	#D0092	
		storage goods inspection	#D0093	
		critical control point review	#D0094	
	7CFR part 205 compliance	standard review	#D0095	
		checklist and work instruction preperation	#D0096	
		quality assurance system	#D0097	
		monotiring instruments instulation	#D0098	
	food quality check	receiving quality check	sampling procedure	#D0099
			traceability check	#D0100
			receiving test report	#D0101
			microbiological sample test	#D0102
		storage quality check	# of storage day's check	#D0103
			sampling procedure	#D0104
			microbiological sample test	#D0105
		show room quality check	sampling procedure	#D0106
			microbiological sample test	#D0107
			daily recycling check	#D0108

5.6. Project scheduling and competition time:

The expected project duration is 12 months. Planned start date is January 2023 and ending at December of the same year. The calculation of activities duration based on:

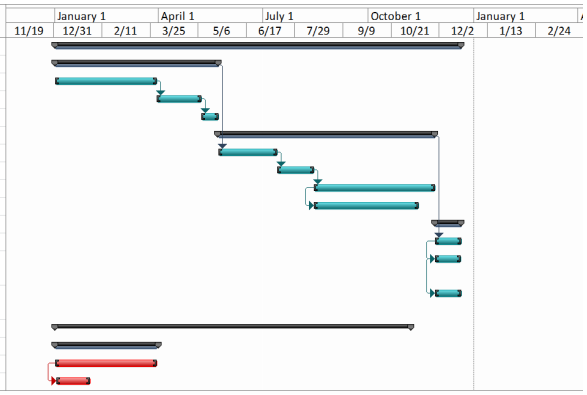
- Assumptions
- Expert judgment
- Previous experience of similar projects

The project has been divided and sub-divided into small manageable deliverables with time boundaries. And sequencing the inter-relation and dependency between different activities, considering the led/lag activities.

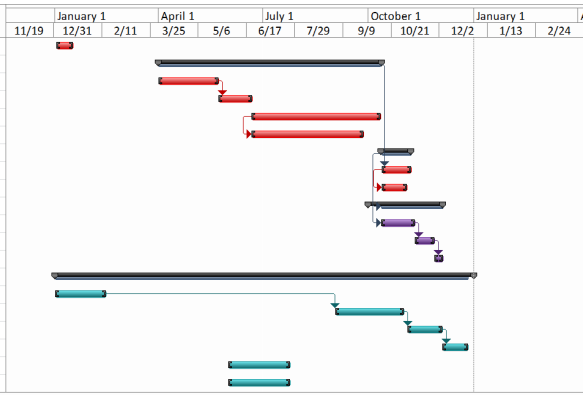
deliverable code:	deliverable duration:	deliverable code:	deliverable duration:
#D0001	42 day	#D0028	60 day
#D0002	14 day	#D0029	24 day
#D0003	3 days	#D0030	25 day
#D0004	30 day	#D0031	20 day
#D0005	10 day's	#D0032	10 day's
#D0006	10 day's	#D0033	10 day's
#D0007	2 day's	#D0034	10 day's
#D0008	5 day's	#D0035	30 day
#D0009	2 day's	#D0036	20 day
#D0010	2 day's	#D0037	120 day
#D0011	5 day's	#D0038	160 day
#D0012	4 day's	#D0039	90 day
#D0013	3 days	#D0040	60 day
#D0014	5 day's	#D0041	30 day
#D0015	4 day's	#D0042	30 day
#D0016	10 day's	#D0043	30 day
#D0017	10 day's	#D0044	45 day
#D0018	10 day's	#D0045	40 day
#D0019	10 day's	#D0046	120 day
#D0020	10 day's	#D0047	100 day
#D0021	20 day	#D0048	30 day
#D0022	35 day	#D0049	30 day
#D0023	20 day	#D0050	30 day
#D0024	25 day	#D0051	50 day
#D0025	30 day	#D0052	50 day
#D0026	15 day	#D0053	20 day
#D0027	15 day	#D0054	20 day

deliverable code:	deliverable duration:		deliverable code:	deliverable duration:
#D0055	5 day's		#D0082	2 day's
#D0056	30 day		#D0083	1 day
#D0057	10 day's		#D0084	1 day
#D0058	15 day		#D0085	10 day's
#D0059	5 day's		#D0086	10 day's
#D0060	20 day		#D0087	5 day's
#D0061	10 day's		#D0088	1 day
#D0062	5 day's		#D0089	1 day
#D0063	10 day's		#D0090	1 day
#D0064	5 day's		#D0091	1 day
#D0065	10 day's		#D0092	1 day
#D0066	10 day's		#D0093	1 day
#D0067	40 day		#D0094	1 day
#D0068	15 day		#D0095	60 day
#D0069	15 day		#D0096	80 day
#D0070	10 day's		#D0097	30 day
#D0071	20 day		#D0098	90 day
#D0072	15 day		#D0099	1 day
#D0073	3 day's		#D0100	1 day
#D0074	5 day's		#D0101	1 day
#D0075	10 day's		#D0102	1 day
#D0076	10 day's		#D0103	1 day
#D0077	3 day's		#D0104	1 day
#D0078	2 day's		#D0105	1 day
#D0079	1 day		#D0106	1 day
#D0080	1 day		#D0107	1 day
#D0081	1 day		#D0108	1 day

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		**specielized health store**	**226 days**	**Sun 1/1/23**	**Wed 12/20/23**	
2		**design**	**90 days**	**Sun 1/1/23**	**Tue 5/23/23**	
3		archetucre design	60 days	Sun 1/1/23	Thu 3/30/23	
4		design review	20 days	Thu 3/30/23	Mon 5/8/23	3
5		design approval	10 days	Mon 5/8/23	Tue 5/23/23	4
6		**construction**	**120.25 days**	**Tue 5/23/23**	**Mon 11/27/23**	
7		buildings excavation	30 days	Tue 5/23/23	Thu 7/13/23	2
8		building foundation	20 days	Thu 7/13/23	Mon 8/14/23	7
9		building exterior	70.13 days	Mon 8/14/23	Mon 11/27/23	8
10		building interior	60 days	Mon 8/14/23	Mon 11/13/23	9SS
11		**inspection**	**15.88 days**	**Tue 11/28/23**	**Wed 12/20/23**	
12		electrical inspection	15.88 days	Tue 11/28/23	Wed 12/20/23	6
13		mechanical inspection	15 days	Tue 11/28/23	Wed 12/20/23	12SS
14		plumping inspection	15.88 days	Tue 11/28/23	Wed 12/20/23	13SS
15		**supermarket corner**	**195.63 days**	**Sun 1/1/23**	**Tue 11/7/23**	
16		**design**	**61.13 days**	**Sun 1/1/23**	**Sat 4/1/23**	
17		electrical design	60 days	Sun 1/1/23	Thu 3/30/23	
18		mechanical design	20 days	Mon 1/2/23	Tue 1/31/23	17SS



ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
19		plumping design	10 days	Mon 1/2/23	Mon 1/16/23	18SS
20		**construction**	**120 days**	**Sat 4/1/23**	**Thu 10/12/23**	
21		wood fabrication	30 days	Sat 4/1/23	Tue 5/23/23	16
22		wood assembly	20 days	Tue 5/23/23	Wed 6/21/23	21
23		lightining installation	70.13 days	Wed 6/21/23	Wed 10/11/23	
24		sign and logo installation	60 days	Wed 6/21/23	Tue 9/26/23	23SS
25		**inspection**	**16.88 days**	**Thu 10/12/23**	**Tue 11/7/23**	
26		safety inspection	16.5 days	Thu 10/12/23	Tue 11/7/23	20
27		hyginic inspection	15 days	Thu 10/12/23	Fri 11/3/23	26SS
28		**licience**	**43.63 days**	**Sun 10/1/23**	**Mon 12/4/23**	**25SS**
29		application	20 days	Thu 10/12/23	Fri 11/10/23	25SS
30		3rd party inspection	10 days	Fri 11/10/23	Mon 11/27/23	29
31		certificate	5 days	Mon 11/27/23	Mon 12/4/23	30
32		**indoor air quality**	**233.25 days**	**Sun 1/1/23**	**Sun 12/31/23**	
33		design	30 days	Sun 1/1/23	Tue 2/14/23	
34		equipment	40 days	Sat 9/2/23	Tue 10/31/23	33
35		commissining	20 days	Sat 11/4/23	Mon 12/4/23	34
36		inspection	15 days	Mon 12/4/23	Tue 12/26/23	35
37		cooled room warhouses	30 days	Thu 6/1/23	Mon 7/24/23	
38		shipping and logistic	30 days	Thu 6/1/23	Mon 7/24/23	



5.7. Budget:

For determining the total project budget, an evaluation for each WBS component used to calculate the overall project cost. The process and technique used for valuing each WBS based on:

- Estimation
- Vender bid cost
- Expert judgment

Combining the budget plan with the project schedule plan, a cash flow planning derived to insure the allocation for fund at the specified time

Task Name	estimated budget	vender bid	expert judgment	Cash flow plan
specialized health store				
design	100000			1/1/2023
architecture design				
design review				
design approval				
construction	700000			23/5/2023
buildings excavation				
building foundation				
building exterior				
building interior				
inspection	50000			28/11/2023
electrical inspection				
mechanical inspection				
plumping inspection				
supermarket corner				

design	60000			1/1/2023
electrical design				
mechanical design				
plumping design				
construction	500000			1/4/2023
wood fabrication				
wood assembly				
lightening installation				
sign and logo installation				
inspection	45000			12/10/2023
safety inspection				
hygienic inspection				
licence			200000	1/10/2023
application				
3rd party inspection				
certificate				
indoor air quality				
design		50000		1/1/2023
equipment		250000		2/9/2023
commissioning			30000	4/11/2023
inspection			20000	4/12/2023
cooled room warehouses		70000		1/6/2023
shipping and logistic			40000	1/6/2023
quality control				
HACCP compliance			15000	1/10/2023
7CFR part 205 compliance			10000	2/10/2023
food quality check			10000	2/10/2023

total budget	2150000

5.7.1. Additional fund request:

According to the project WBS and planned cost of activity, an additional fund request raised to expand the allocated project estimated budget.

total budget	2150000
Allocated budget	2000000
Additional fund requested	150000

5.7.2. Reserved budget

For the ongoing progress of the project and to ensure work continuity with during the unplanned activities. And reserved budget allocated for the project and divided into:

- Contingency reserves:

  According to expert judgment and risk analysis plan, the contingency reserve allocated for the project 500000USD.

- Management reserves:

  According to management feasibility study and financial statement, the management reserve allocated for the project 800000USD.

6. Quality control measure:

To avoid unplanned deficiency in work and minimize the risk of time/ resources loose, a quality system planned to include quality control and quality assurance and implemented with check point. Cost of quality, COQ, refer to "the total costs needed to bring products or services up to standards defined by project management professionals" (Bourne, L. 2012)

The quality system based on tow strategies:

- Prevention cost of quality
- Appraisal cost of quality

Prevention cost of quality	Appraisal cost of quality
Training: - Construction inspection training - HACCP training professional - Organic regulation	Testing: - Electrical system testing - Mechanical system testing - Plumping system testing

Equipment: - Temperature monitoring thermostats - Humidity control devices - IAQ monitoring device	Destructive testing: - Received sample microbiological testing
Documentation: - Air sampling and testing procedure - Goods receiving inspection work instruction - Storage quality work instruction	Inspection: - Organic good EU regulation weekly/monthly inspection - HACCP weekly/monthly inspection

7. risk analysis:

due to many assumptions considered and uncertainties associated, risks will be raised and identified in the project and must be planned.

Aspire international project steering committee agreed to control and respond to the main risk with high impact on the project strategic objectives. The quality team assigned the responsibility to follow and implement the risk procedure.

7.1. risk identification:

for Aspire international, moving into hometown food market with all organic natural food store, is an all-new business segment with no previous experience. They never operated similar operations in before, so they consider a high-risk operation.

The risk control team identified 3 main types:

- cost risks
- schedule risks

- performance risks

risk identification matrix prepared summarizing the risks identified.

risk ID	risk type	risk source	description
ID-C-001	cost	price fluctuation	organic food prices unstable all over the year, which results on prices rapid fluctuation
ID-C-002		cash flow discontinuity	bank funding limitations due to inflations and market monetary system
ID-C-003		high organic worker salaries	organic business require a specialized and trained worker familiar with organic food, to avoid damage and loose.
ID-C-004		organic product defects	due to un-controlled stacking and/or shipping, storage ambient condition
ID-C-005		high certification cost	certification requires 3rd parties involvement, which some of them have high costs
ID-C-006		farmer un-predicted price rise	due to limited organic farmers, lobbing between farmers most likely
ID-S-001	schedule	farmers delivery delays	farmers delivery dates usually with inaccurate and varies by 2 weeks
ID-S-002		specialized store construction delay	construction sub-contractor work delay
ID-S-003		license delays	official licensing authorities delay due to high number of applications
ID-S-004		inspection non-conformities	construction and indoor air quality inspection non-conformance report
ID-S-005		equipment delivery delay	HVAC and refrigeration equipment delay
ID-S-006		commissioning delay	HVAC and refrigeration equipment commissioning problem
ID-S-007		shipping trucks un-availability	summer season face shortages in shipping truck un-availability
ID-P-001	performance	receiving inspection reject	quality check at receiving rejected food
ID-P-002		shipping truck pesticides and fertilizer residual	organic food gets contaminated with pesticides and fertilizer
ID-P-003		storage warehouse temperature control loose	food spoilage due to refrigeration and cold room temperature loose
ID-P-004		HACCP non-compliance	regulation deviation due to non-experienced staff

7.2. Risk evaluation/probability matrix and prioritization

However, all identified risks are considered a vital and proper control and management needed. But Aspire international steering committee advised the project manager to pay attention and consider only the high impact risks to be handled and creating a contingency plan. Other risks will be workaround once happen. A high impact risks identified by probability/impact matrix and exceeding 0.5 impact value.

probability									
0.9	0.09	0.18	0.27	0.36	0.45	0.54	0.63	0.72	0.81
0.8	0.08	0.16	0.24	0.32	0.4	0.48	0.56	0.64	0.72
0.7	0.07	0.14	0.21	0.28	0.35	0.42	0.49	0.56	0.63
0.6	0.06	0.12	0.18	0.24	0.3	0.36	0.42	0.48	0.54
0.5	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45
0.4	0.04	0.08	0.12	0.16	0.2	0.24	0.28	0.32	0.36
0.3	0.03	0.06	0.09	0.12	0.15	0.18	0.21	0.24	0.27
0.2	0.02	0.04	0.06	0.08	0.1	0.12	0.14	0.16	0.18
0.1	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09
impact	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9

1st priority	critical risk need plan	2nd priority	mid impact risk needs workaround plan	Neglect	low impact and no need for action

risk ID	ID-C-001	ID-C-002	ID-C-003	ID-C-004	ID-C-005	ID-C-006		ID-S-001	ID-S-002	ID-S-003	ID-S-004	ID-S-005	ID-S-006	ID-S-007		ID-P-001	ID-P-002	ID-P-003	ID-P-004
probability	0.6	0.2	0.7	0.6	0.7	0.3		0.2	0.6	0.2	0.7	0.4	0.4	0.2		0.3	0.6	0.7	0.6
impact	0.2	0.5	0.8	0.5	0.3	0.4		0.7	0.9	0.8	0.8	0.8	0.7	0.4		0.8	0.9	0.8	0.6
	0.12	0.1	0.56	0.3	0.21	0.12	0	0.14	0.54	0.16	0.56	0.32	0.28	0.08	0	0.24	0.54	0.56	0.36
priority			1st	2nd	2nd				1st		1st	2nd	2nd			2nd	1st	1st	2nd

7.3. Risk response/mitigation

Risk analyses show that, only bellow high probability/impact risk will be tackled and monitored.

risk ID	risk type	risk source	risk response strategy	action
ID-C-003	cost	high organic worker salaries	transfer	subcontract manpower availability
ID-C-004		organic product defects	Workaround	(will be planned once happen)
ID-C-005		high certification cost	Workaround	(will be planned once happen)
ID-S-002	schedule	specialized store construction delay	share	partnering with an expert organic food merchandise
ID-S-004		inspection non-conformities	avoid	implementing early inspection during construction work and before completion
ID-S-005		equipment delivery delay	Workaround	(will be planned once happen)
ID-S-006		commissioning delay	Workaround	(will be planned once happen)
ID-P-001	performance	receiving inspection reject	Workaround	(will be planned once happen)
ID-P-002		shipping truck pesticides and fertilizer residual	avoid	apply hygienic cleaning for trucks before loading the organic products
ID-P-003		storage warehouse temperature control loose	avoid	invest on redundancy equipment system
ID-P-004		HACCP non-compliance	Workaround	(will be planned once happen)

7.4. Risk register & monitoring:

Aspire international management plan for the highly critical risk which can adversely impact the project progress and overall objectives. But also, the project manager kept in mind the

mildly harmful risks in the project follow up and continuously keep evaluating them alongside with the critical ones. And to assure the non-development any of them into a higher-level risk

		current risk								residual risk					
ID	risk	probability	impact	severity	priority	status	owner	control strategy	control action	residual risk	probability	impact	severity	action	follow up plan
ID-C-001	price fluctuation	0.6	0.2	0.12	neglect	neglect	procurment department	no action							
ID-C-002	cash flow discontinuity	0.2	0.5	0.1	neglect	neglect	financial depatment	no action							
ID-C-003	high organic worker salaries	0.7	0.8	0.56	1st	active	administration department	transfer	subcontract manpower availability	higher product price	high	Low	Low	accept	weekly
ID-C-004	organic product defects	0.6	0.5	0.3	2nd	active	quality department	Workaround	(will be planned once happen)						monthly
ID-C-005	high certification cost	0.7	0.3	0.21	2nd	active	quality department	Workaround	(will be planned once happen)						monthly
ID-C-006	farmer un-predicted price rise	0.3	0.4	0.12	neglect	active	procurment department	no action							
ID-S-001	farmers delivery delays	0.2	0.7	0.14	neglect	active	procurment departmetn + supply chain team	no action							

ID-S-002	specialized store construction delay	0.6	0.9	0.54	1st	active	operation manager	share	partnering with an expert organic food merchandise	higher cost	mid	low	low	accept	weekly
ID-S-003	license delays	0.2	0.8	0.16	neglect	active	quality department	no action							
ID-S-004	inspection non-conformities	0.7	0.8	0.56	1st	active	quality department	avoid	implementing early inspection during construction work and before completion	increased number of inspecters and overhead cost	mid	mid	mid	accept	weekly
ID-S-005	equipment delivery delay	0.4	0.8	0.32	2nd	active	procurment+supply chain	Workaround	(will be planned once happen)						monthly
ID-S-006	commissioning delay	0.4	0.7	0.28	2nd	active	maintenance team	Workaround	(will be planned once happen)						monthly
ID-S-007	shipping trucks un-availability	0.2	0.4	0.08	neglect		supply chain team	no action							
ID-P-001	receiving inspection reject	0.3	0.8	0.24	2nd	active	quality+operation	Workaround	(will be planned once happen)						monthly
ID-P-002	shipping truck pesticides and fertilizer residual	0.6	0.9	0.54	1st	active	quality	avoid	apply hygienic cleaning for trucks before loading the organic products	extra logistic cost and time delay	mid	high	high	apply hyginic princible early	weekly
ID-P-003	storage warehouse temperature control loose	0.7	0.8	0.56	1st	active	maintenance	avoid	invest on redundancy equipment system	high cost, high maintenacn e	med	low	low	accept	weekly
ID-P-004	HACCP non-compliance	0.6	0.6	0.36	2nd	active	quality	Workaround	(will be planned once happen)						monthly

B. Case scenario 2: Thailand high-speed railway

B.1. feasibility study:

1.1 Technical feasibility:

The number of populations daily traveling between the capital Bangkok and Chiang Mai around 1.1 million persons (assumption). With more than 60% using public transportation.

The only available current public transportation is buses and slow traditional train, with travel time around 5 to 7 hours. Currently, average person pays around 1,000 – 2,000 Baht, depending on class and services.

Around 800,000 persons traveling round-trip on same day, for those passengers the spent time for their travel around 10-14 hour, which represent more than the half of their workday.

With the new high-speed railway, the time of trip will be reduced to 1 and a half hour. A great advantage over other available public transportations system. The airflight cost is 5 times higher, which makes it not the best available affordable alternative.

A comparison between projected high-speed railway with other available alternatives summarized as bellow:

Transportation	cost	Time	Availability
Traditional train	700-1,000	5 hours	multi station available
Bus	1,400	7 hours	Multi station available
Car	2,000-2,500	4 hours	Available in all city
Airflight	5,000-6,000	1 and half hour	Single domestic airport

High-speed train	1,200	1 and half hour	Multi station available

So technical conclusion, the project is technically APPROVED.

1.2 Financial feasibility:

The projected project cost is 100 billion baht, expected to increase and reach 110 billion baht due to banks inflation interests. The project will be financed 100% by loans from banks with 3% interest rate.

The yearly expected returned income by the project around 100 billion baht, assuming 250,000 passengers,

So, the project considered financially feasible and will return the investment ROI within almost 1 year.

1.3 Market feasibility:

The transportation market in Thailand is a very competitive and challenging. With the availability of very cheap solutions.

But each alternative has its own limitation, cost, and time limitation, which make it very popular for the high-speed railway project to attract a big market segment.

With the STP analysis shows, the new project will position itself on among clients who looking for cheap, fast, available transportation solution which represent around 25% of the market.

1.4 Operational feasibility:

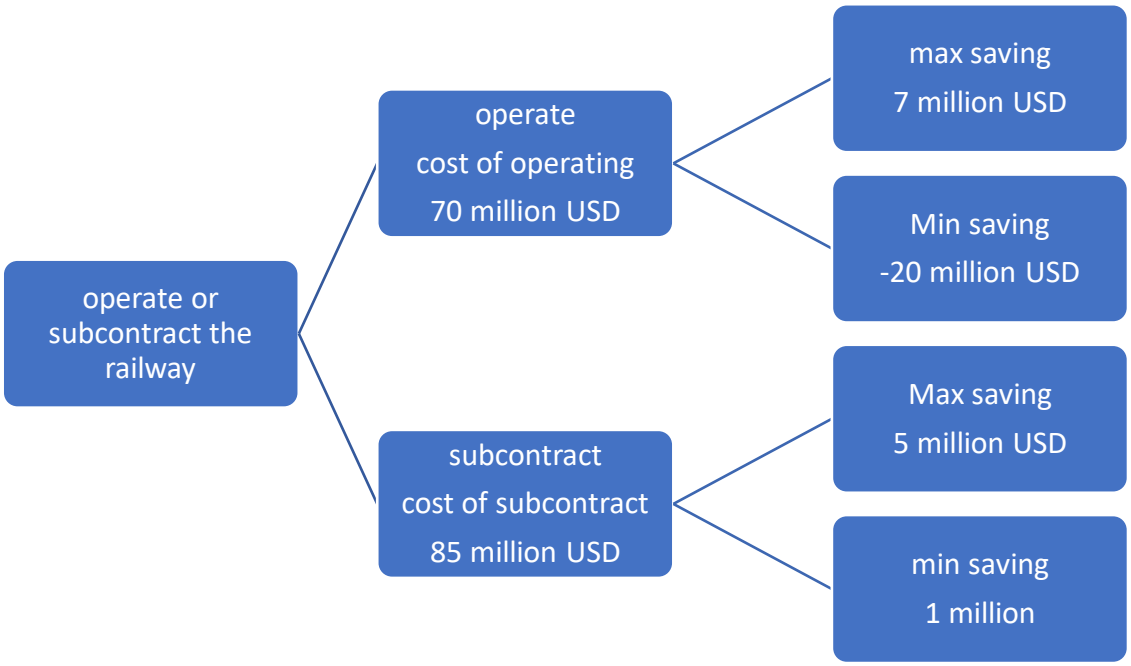
The government of Thailand lacking the experience of building and operating such mega project. The project requires new technology which is not available.

For the government to build the project in best cost-efficient way, to partner with a highly experienced with a history of such projects.

Available solution is

1- to subcontract with a Chinese company to build the railway project and to operate it by local transportation professional
2- Or to subcontract with the Japanese company to build and operate the project.

Considering the cost of operation, training, maintenance, manpower, administrative, quality control costs and performing monetary value data analysis, The Thailand government decided to approve the second option due to lack of experience of running high-speed railway's and.



With the cost/saving data analysis it show that, subcontracting the operation work of the railway to the Japanese company would be more cost efficient and it will lead in saving at least 1 million USD.

B.2. Added earned income

- operating a cargo transportation in the low peak time, expected to increase revenue by 10%
- operating a deducted subscription for students, expected to increase revenue by 5%
- subcontracting with marketing companies to use the railway, station, tickets for advertisement, expected to increase revenue by 10%

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