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LEVEL	PGE 2A	MODE	ONLINE
EXAM TYPE	THEORETICAL PART		
TITLE	EMO54M8AB1 LOGISTICS MANAGEMENT PROJECT		

STUDENT NAME
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Exercise 1 (6 points)

* Please check the correct answers (One or more correct answers are possible)

You can copy/paste this symbol :

Continuous improvement

- is included in the Fordism
- is included in the Taylorism
- is included in the Toyotism

Resources management

- is part of change management
- is part of risk management
- is part of planning

In the iron triangle

- we cannot improve the 'Quality' without impacting the 'Time'
- we cannot improve the 'Quality' without impacting the 'Cost'
- We can improve 'Quality', decrease the 'Time', and decrease the 'Cost' simultaneously

A project covers

- Only the thinking part of a work
- The thinking and the preparation parts of the work without the closing part
- All the work from the thinking to the realization in addition to the closing part

The Technical Flow Chart (TFC) in a project

- Comes before creating the macro-planning in the company
- Comes after creating the macro-planning in the company
- Comes at every step during the running of the planning in the company

In logistics, a project is complex because of

- The uncertainty of weather
- The volume of products flows
- The fluctuation of the demand

Exercise 2 (3 points)

In Figure 2.1, there are mistakes in the relationships between concepts in General Project Management.

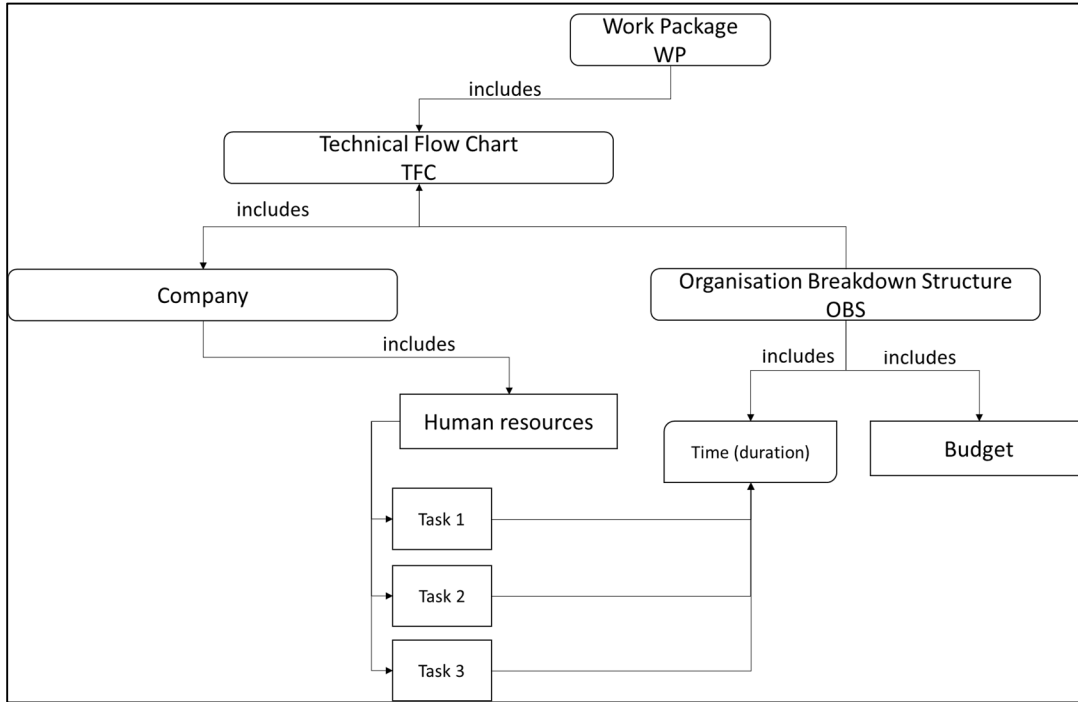


Figure 2.1

Question: In Figure 2.2 propose the correct relationships between all the concepts of Figure 2.1.

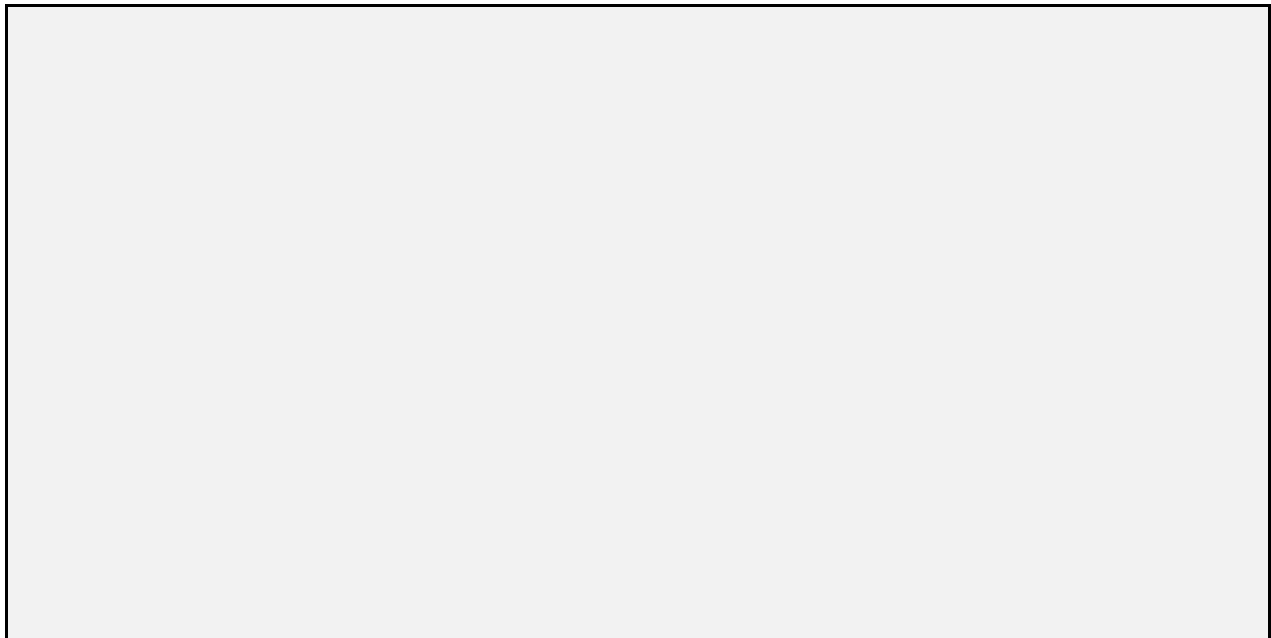


Figure 2.2

Exercise 3 (3 points)

Because of the pandemic COVID-19, the upcoming economic crisis will strongly affect the logistics sector. The Italian company DELVE specialized in Warehouse Management is trying to plan for closing some sites in France and Switzerland. To minimize costs of declining activity, the project manager must study the situation of the 3 sites in the 3 cities and close 2 of the 3 warehouses to keep only 1 warehouse.

In Table 3.1 is the summary of the historical turnover of the 3 sites during the last 10 years. Suppose, the manager bases his decision on this data only.

Sites	Turnover (€)										Average	Standard Deviation
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019		
Lyon (France)	36 741	36 587	38 521	38 114	36 253	35 621	36 464	37 325	37 545	37 425	37 060	887
Le Havre (France)	106 424	864 842	290 286	1 246 904	864 844	386 484	1 884 268	264 622	464 884	202 628	657 619	562 601
Bern (Switzerland)	12 621	27 316	38 394	38 445	38 450	38 495	253 434	353 521	411 044	521 661	173 338	193 405

Table 3.1

* Reminder:

Average: is a measure of the mean value of the data set.

Standard deviation: is a measure to quantify the amount of dispersion of a set of data from the mean

Figures 3.1 illustrates the graphical evolution of table 3.1.

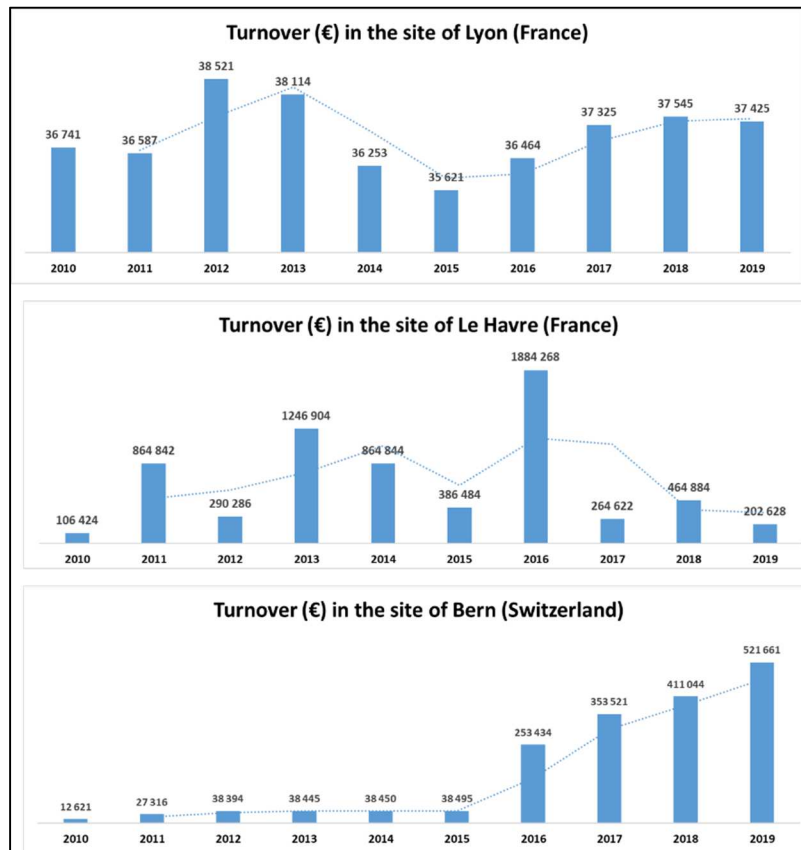


Figure 3.1

Question 1. Provide the decision of the manager with analysis and argumentation in Figure 3.2.

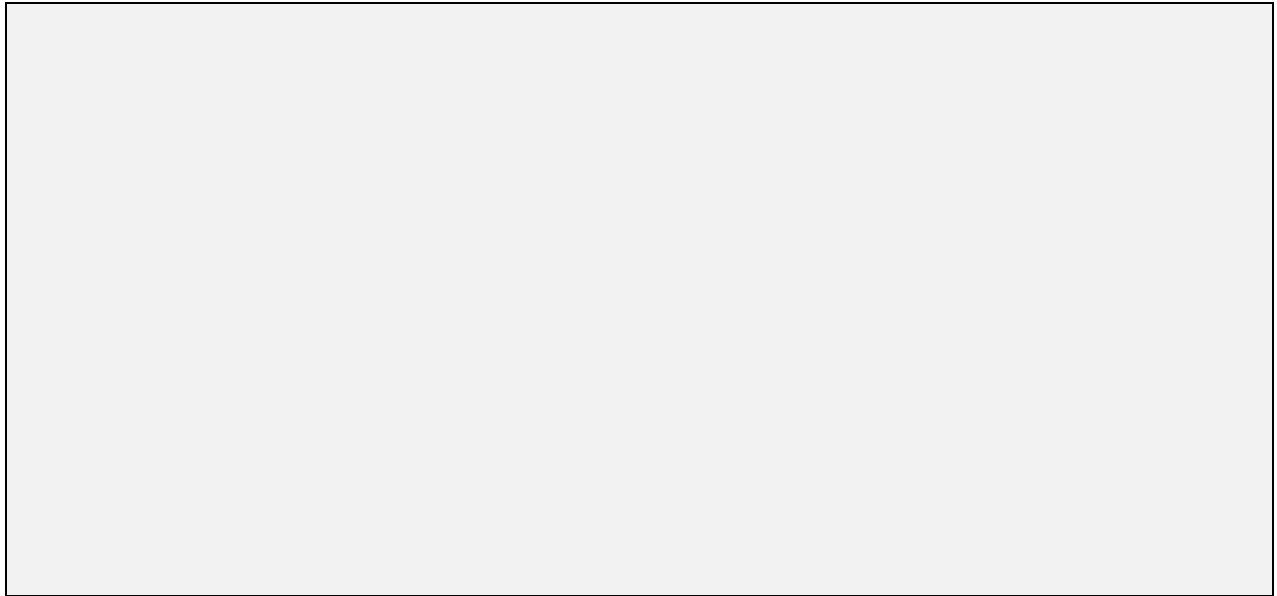


Figure 3.2

Exercise 4 (3 points)

Suppose a project with 10 tasks: {T₁, T₂, T₃, T₄, T₅, T₆, T₇, T₈, T₉, T₁₀} in Table 4.1.

Tasks	Previous task	Duration (days)	Cost (€)	Minimum required resources
T ₁	-	7	432	2
T ₂	T ₁	12	424	1
T ₃	T ₁ , T ₂	5	452	3
T ₄	T ₁ , T ₃	2	232	o (automated task)
T ₅	T ₁ , T ₂ , T ₃	8	753	3
T ₆	T ₂ , T ₃ , T ₄	1	342	o (automated task)
T ₇	-	2	324	2
T ₈	T ₃ , T ₄	7	231	1
T ₉	T ₂ , T ₇	2	231	4
T ₁₀	T ₂ , T ₄ , T ₉	1	411	o (automated task)

Table 4.1

Question 1. In Figure 4.1. propose the CPM chart based on the Table 4.1

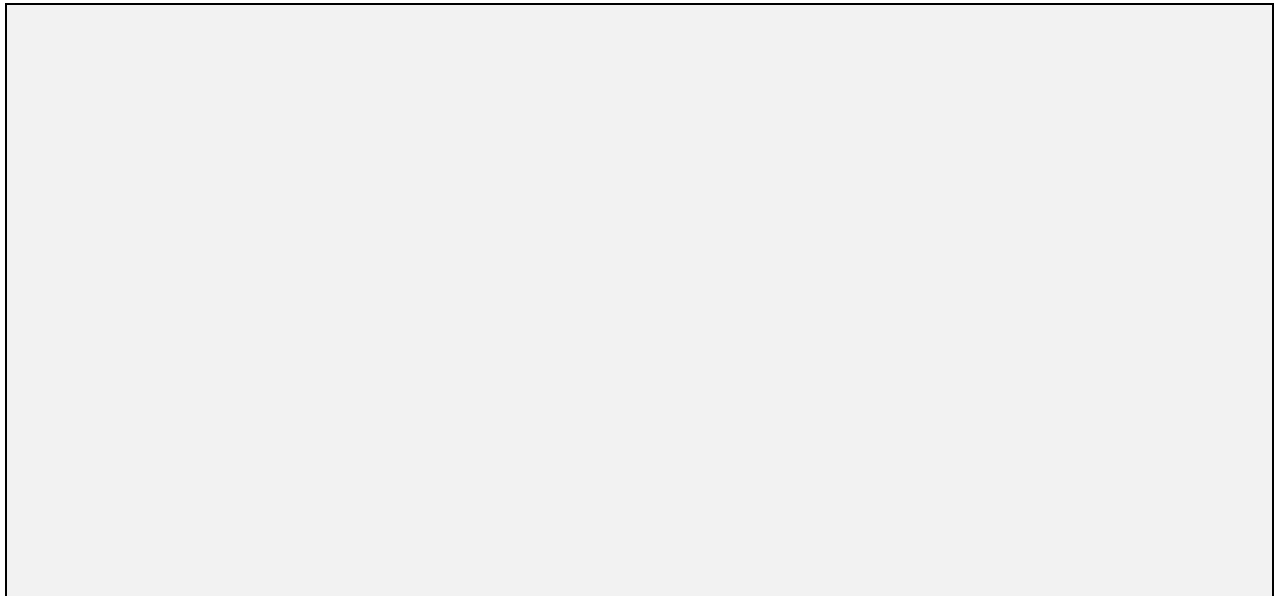


Figure 4.1

Question 2. In Figure 4.2. propose the PERT chart based on the Table 4.1

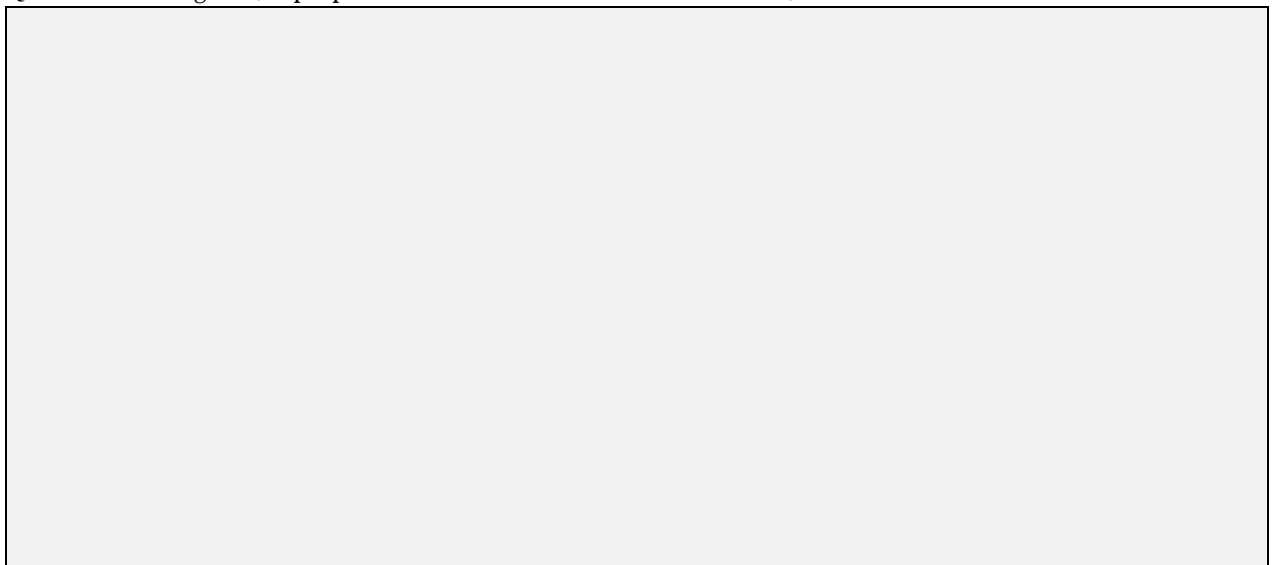


Figure 4.2

Question 3. What is the minimum number of resources for this project? And why?

The minimum number of resources for this project is
Because
.....

Question 4. What is the total budget of this project? And why?

The total budget of this project is

Because

.....

Exercise 5 (5 points)

In a company of logistics DELIVEI, there are 2 services:

- Service 1
- Service 2

DELIVEI launched a new project named EMERAUDE.

In Table 5.1, we illustrate the organizational structures of the services in DELIVEI.

Services	Employee
Service 1	Martin Gael (Manager)
	Cristen Daile
	Sabri Nacer
	Philippe Ndaye
Service 2	Raphael Distri (Manager)
	Emmanuel Dilan
	Florenz Peter

Table 5.1

In Table 5.2, we illustrate the EMERAUDE structure of tasks:

EMERAUDE tasks	Duration (days)	Required Resources	Affected service	Cost
Task 1	2	1	Service 1	560 €
Task 2	3	1	Service 2	176 €
Task 3	7	1	Service 2	452 €
Task 4	8	1	Service 2	321 €
Task 5	3	1	Service 1	653 €
Task 6	12	2	Service 1	213 €
Task 7	7	2	Service 2	674 €
Task 8	5	1	Service 2	976 €
Task 9	11	3	Service 1	535 €
Task 10	8	2	Service 1	341 €

Table 5.2

Question 1. Based on tables Table 5.1 and Table 5.2, propose the WBS in Figure 5.1

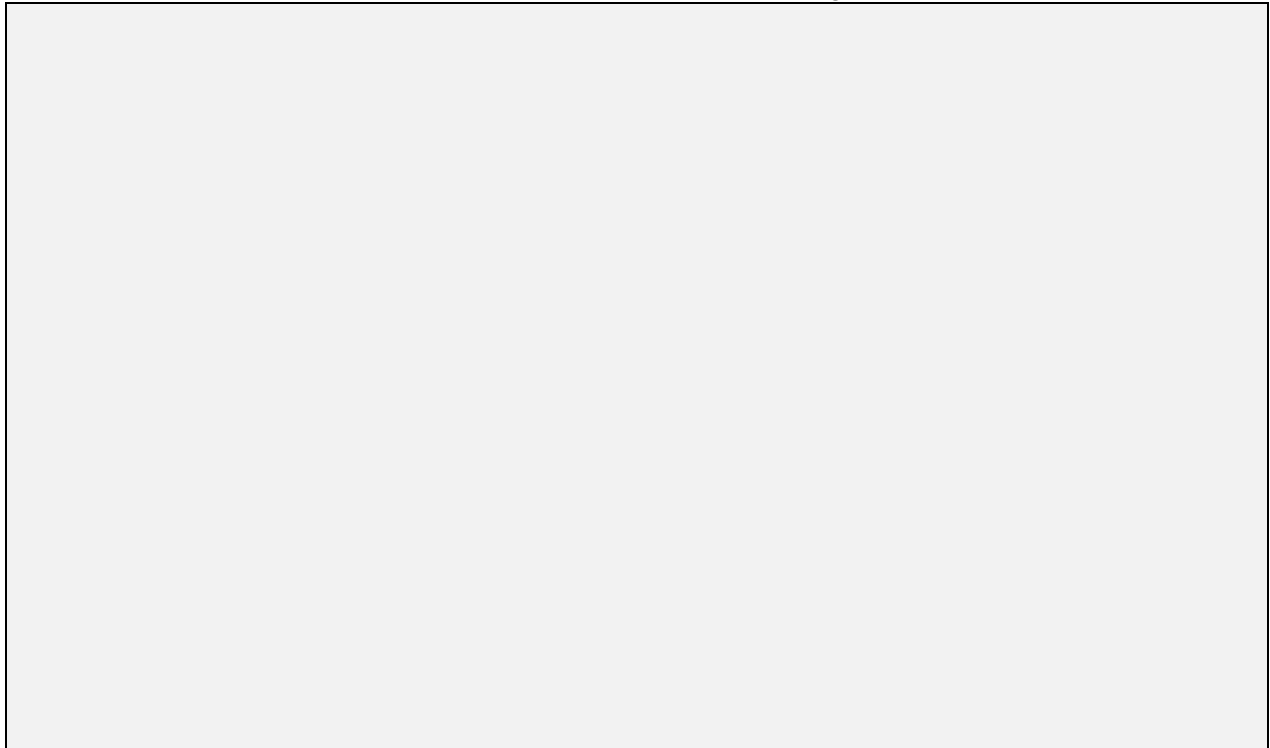


Figure 5.1

Question 2. Based on tables Table 5.1 and Table 5.2, propose the OBS in Figure 5.2

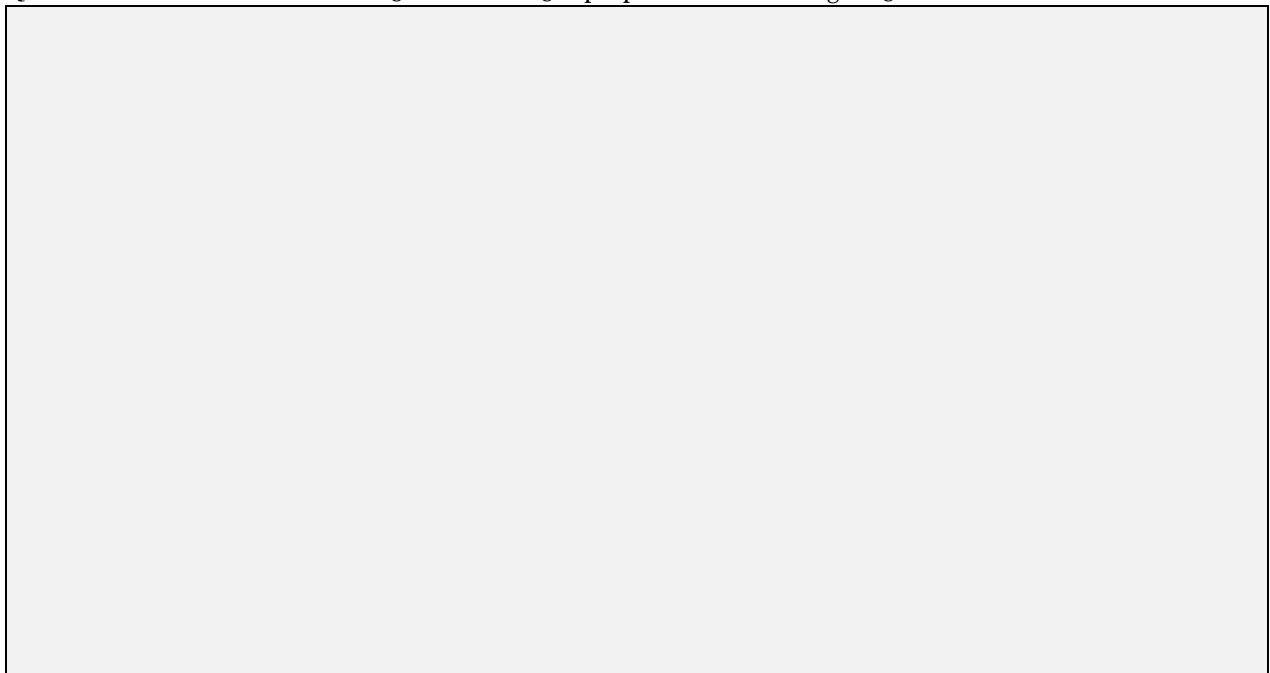


Figure 5.2

Question 3. Based on Table 5.1, Table 5.2, Figure 5.1, and Figure 5.2, propose the WP in Figure 5.3

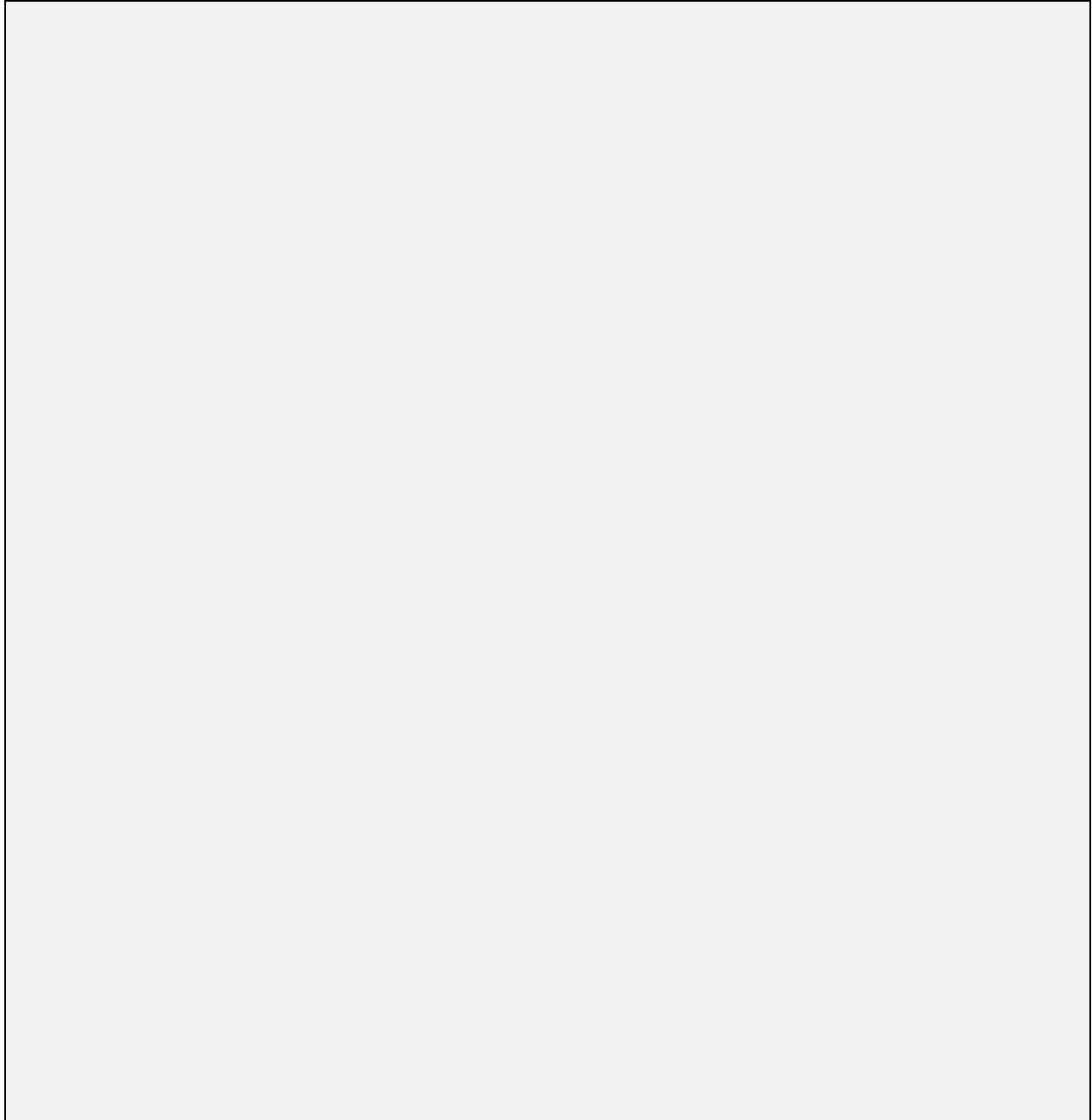


Figure 5.3

End
Good luck