

**OPERATIONS MANAGEMENT
(12117012)**

Assignment 01

Student Name

ID number

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QUESTION 01

You are to choose an organization (production or service oriented) located in NZ and write a report containing the following topics:

(a) Critically analyse the organization's process hierarchy in relation to your chosen organization. **(10 marks)**

(b) Create a process hierarchy diagram based on selected individual product service/plan. **(05 marks)**

[Total marks 15 marks]

Company Background

Z Energy is the incorporation of two companies that is Infratil Limited and Guardians of New Zealand Superannuation. Z Energy is a listed company on the stock exchange of Australia and New Zealand and has 10000 shareholders. The company is engaged in fuel business in New Zealand. The company is now having a distribution network with 208 service stations along with bulk storage terminal infrastructure around the country.

Z Energy sells fuel to large commercial buyers as well as retail customers. The clientele of the company includes airlines, shipping companies, mines, vehicle operators, and trucking companies. Apart from fuel the company also sells bitumen to the contractors. The company buys crude oil from overseas, import to New Zealand, and refine it into fuel in the refinery.

A fuel distributor having branded service stations Z Energy is comprised of former assets of Shell New Zealand and Chevron New Zealand. Shell discontinued its fuel business in 2010 by selling it to the Infratil and NZ Super. In 2011 the company was renamed as Z Energy Limited.

(ZEnergy, n.d.)

(a) Critically analyse the organization's process hierarchy in relation to your chosen organisation.

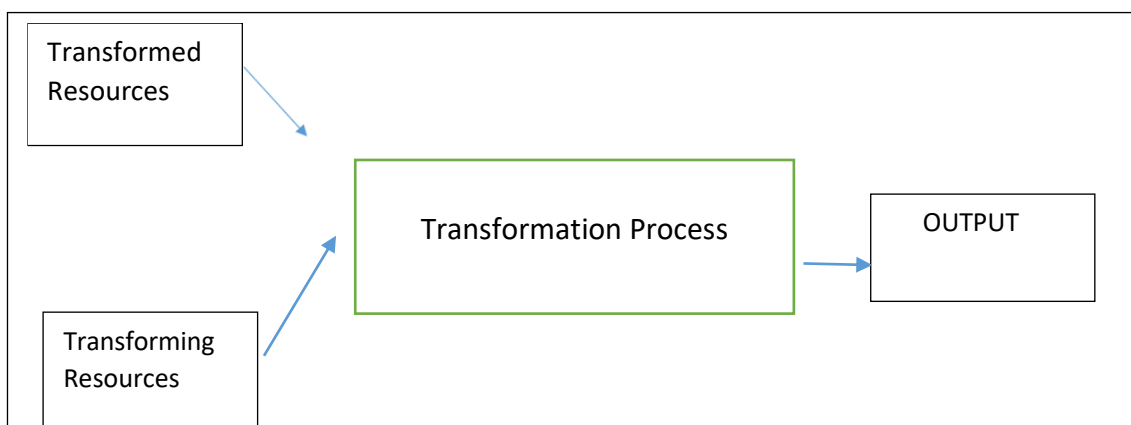
(1) Process Hierarchy

The process hierarchy is based on contractor management system in which Z Energy Limited acquires Permit-to-Work (PTW) before performance. The process flowchart is defined in the following steps:

Step:	
1	Receive work request and plan required work
2	Assess the work risk. Based on the risk PTW documents are completed. PTW documents include Safe Work Method Statement, Permit Certification, and Other Documents. If these documents are permissible, then permit issuer is engaged and PTW

	<p>documentation is uploaded to ISN and then documentation is assessed. After assessment of documentation permit conditions are reviewed and permit is issued and uploaded to ISN.</p> <p>And if these documentations are not permissible, then Contractor Supervisor reviews the documents and accept or reject. If he accepts these documents then Work Clearance Form is obtained, and if he rejects then the deficiencies are completed in PTW documentation.</p>
3	After uploading of permit to ISN, Work Certificate Form is checked and then Permit-to-Work is performed.
4	<p>After above process, daily on-site process is performed</p> <p>Firstly, work clearance form is reviewed then worker ID for work is checked. After that, permit issuance is checked and site hazard brief is provided.</p> <p>Then, work clearance form is signed and work activities are performed.</p>

(2) Input-Output Transformation MODEL



INPUTS (Transformed Resources)

The inputs are used in creating goods and services in the process. The inputs for Z Energy Limited are as follows:

Customers: The customers of the company include airlines, shipping companies, mines, vehicle operators, and trucking companies.

Materials: Material here is crude oil and fuel.

Information: Information that is used in the process.

INPUTS (Transforming Resources)

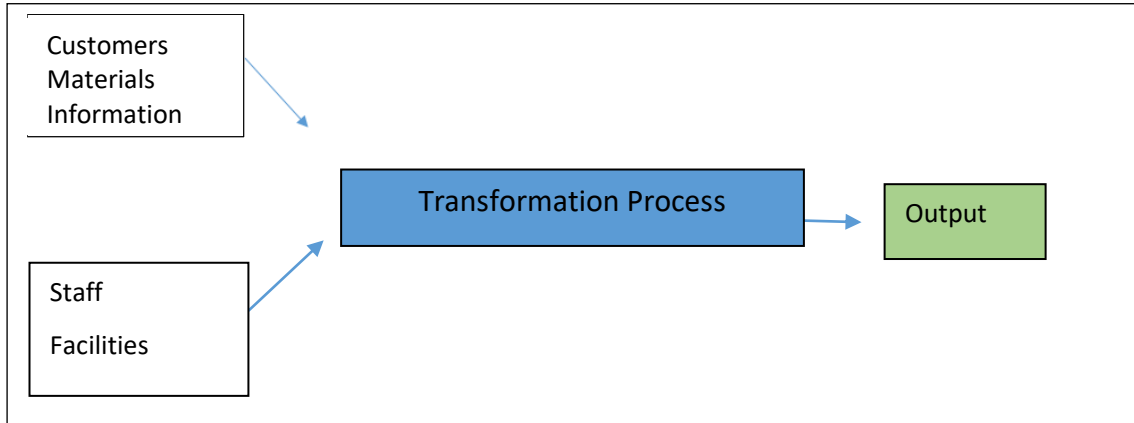
There are 2 types of transforming resources:

Staff: Staff members or employees of the company which are directly involved in the transformation process. The company Z Energy is having sufficient staff for the process.

Facilities: The Company has around 208 service stations with bulk storage terminal infrastructure around the country.

1. INPUT-OUTPUT TRANSFORMATION MODEL of

1. Operational Level



Transformed Resources

Materials /customer/information

Transforming Resources

Staff

Facilities

Output

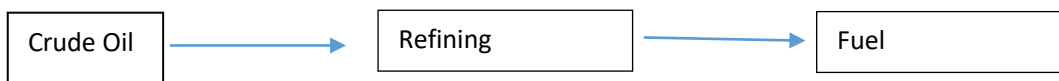
Product/Service or product & service

Transformation process

1. Refining of crude oil

2. Process Level

1.



3. Supplier network Level

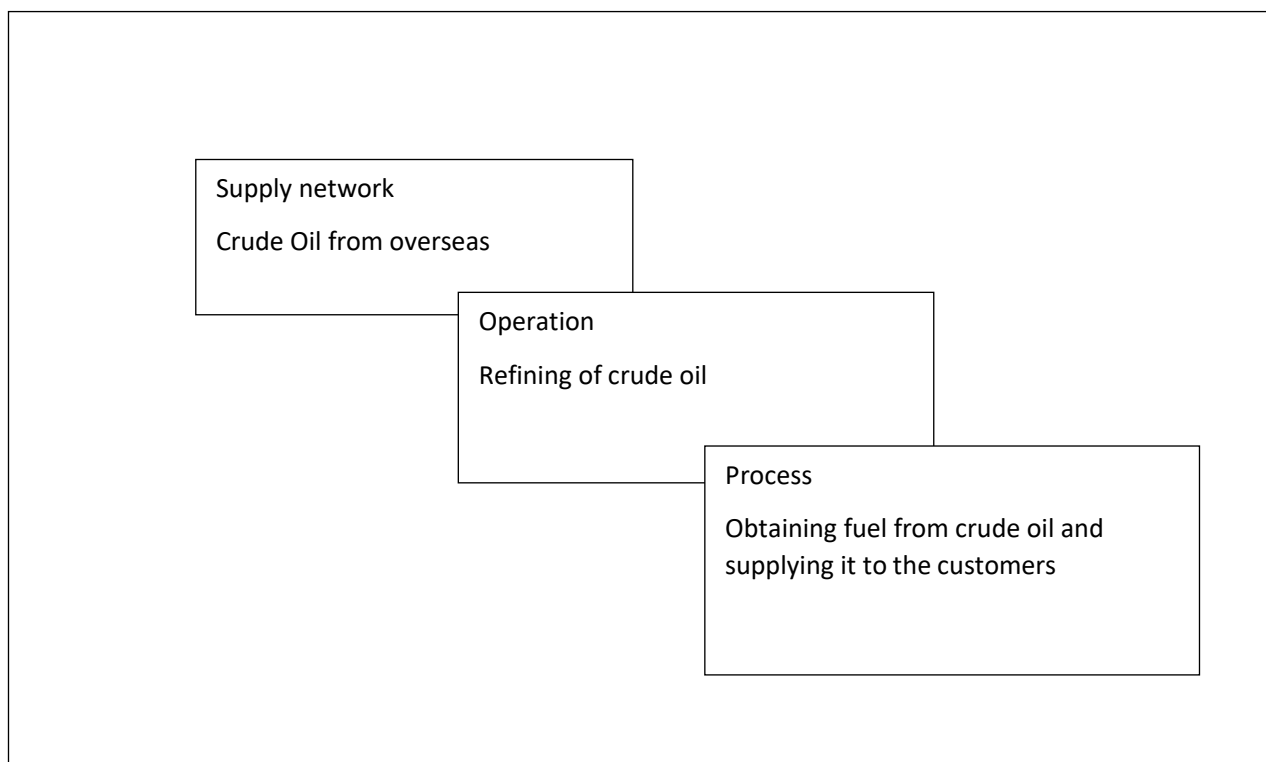
Supplier 1: The major part of crude oil of Z Energy Limited comes from Middle East.

Supplier 2: Other suppliers include from Singapore, Korea, and Japan.

Customer 01: Z Energy Limited sells fuel and bitumen to commercial customers including airlines, shipping companies, mines, vehicle operators, and trucking companies.

Customer 02: The Company also sells fuel to the retail customers through its service stations across the country.

2. Company Hierarchy Process Illustration



QUESTION 02

Critically analyze the organization's current operational performance strategies and how these strategies contribute to achieving the organizational objectives. You **must** describe the contributions in terms of the following levels:

- a) Social and environmental level (03 marks)
- b) Strategic level (06 marks)
- c) Operational level (06 marks)

The main objective of all the organizations is to grow and success. For this purpose organizations set different operational performance strategies and plan the long term direction to ensure survival and growth.

1. Societal Level (CSR)

The success of the organization is a short term activity which is consistent with strategic objective of the organization to contribute in the competitive gain. The main purpose of the operations of the organization is producing goods and supplying services to the customers by utilizing the resources more efficiently.

On the tagline "Z's aim is to bring our purpose to life for our customers, shareholders, and stakeholders. That purpose is simply to solve what matters for a moving world", Z Energy limited contributes to the society and environment by supplying refined fuel the customers.

On the issue of climate change being one of the leading issues the world is facing, Z energy limited contributes 8 percent of total country's carbon emissions. On the other hand agriculture contributes 49 percent of carbon emissions. The company to lower the emissions impact working with others in the industry as a part of solution.

Also, being the part of the community, Z Energy Limited is supporting many projects of the community which ultimately will help people in neighbourhoods around the company's sites. Further, the company also expanded its programme to support the sustainable environments in the vicinity of the sites.

2. Strategic Level

I. Revenue

The financial statements of the company show strong financial results. After the Caltex transaction, in the very first 10 months of the operations, financial performance of the company improved and was as per expectations.

II. Learning

Z Energy Limited is committed to the continuous improvements to add on the value in the organization. For this purpose it has inbuilt system of development of the board in which the company is focused on the collective development of the board members. The program includes structured learning, ensuring external feedback for board members, stakeholders' engagement sessions, and futures strategy.

III. Capital / Risk / Cost

Z Energy Limited is a unique company; it is driven by value based people of the organization and not by the machines only. The Company has extended its operational risk management system which offers an approach to manage the risks of the company.

3. Operational Level

a. Cost

Important

Every company tries to keep the cost as low as possible and the cost is measured by the productivity of the company. "In Z's culture, the front wheel represents the concept of being 'related', which focuses on people. The back wheels that support the direction are 'control' and 'develop'. In the Caltex culture, the front wheel was 'control', which focused on operational effectiveness and cost-efficiency."

b. Speed

Important

Speed plays a vital role in the organizations. It is the speed of deliverance to the customers which increases the value. Internally, it decreases the inventory cost and risk.

c. Quality

Important

To satisfy the customers, it is the quality of the products which helps in satisfying. It is the most important aspect to satisfy the customers. It is the reliability in goods and services which increases the quality. By having quality, costs are reduced and dependability is increased.

d. Dependability

Important

Dependability is created over the time and overrules other factors. When the customer is dependent upon the product or services of a particular organization, he does not see the price, innovation, and speed. The customer

however expects the right quality of the products or services. It gives stability to the organization.

**e. Flexibility
Important**

Flexibility means addictiveness to the change that the company can be able to introduce new and modified products and services as and when required. Also, it helps the company the change the level and time of output and product mix. Flexibility in the organization is important; it pace the reaction to the changes and keeps reliability.

QUESTION 03

Discuss the importance of facility layout decisions with regards to your chosen organization. Illustrate the layout with an appropriate diagram. **(05 marks)**

A. Importance of Facility layout

When the service facility is in nearby area the customer prefer to go to such service facilities. Therefore, facility layout must present hassle free entrance, well structured parking, and walkways. Based on the number of customers and services, the facility layout is designed. The layout should be designed considering the production and operations facilities of the organization. It should encourage an easy working environment.

i. Factory Building

The design of the building should consider the facilities like cafeteria, first aid and emergency rooms, material handling facilities rooms, locker rooms, etc. The factory building should be constructed considering the flexibility, type of products and equipments of the company, growth and expansion of the organization, and employees' facilities and service area.

ii. Lighting

Lighting plays an important role in the organization. Superior visibility at the workplace is a critical factor in the production line thereby helps in reducing defects and prevents wastage.

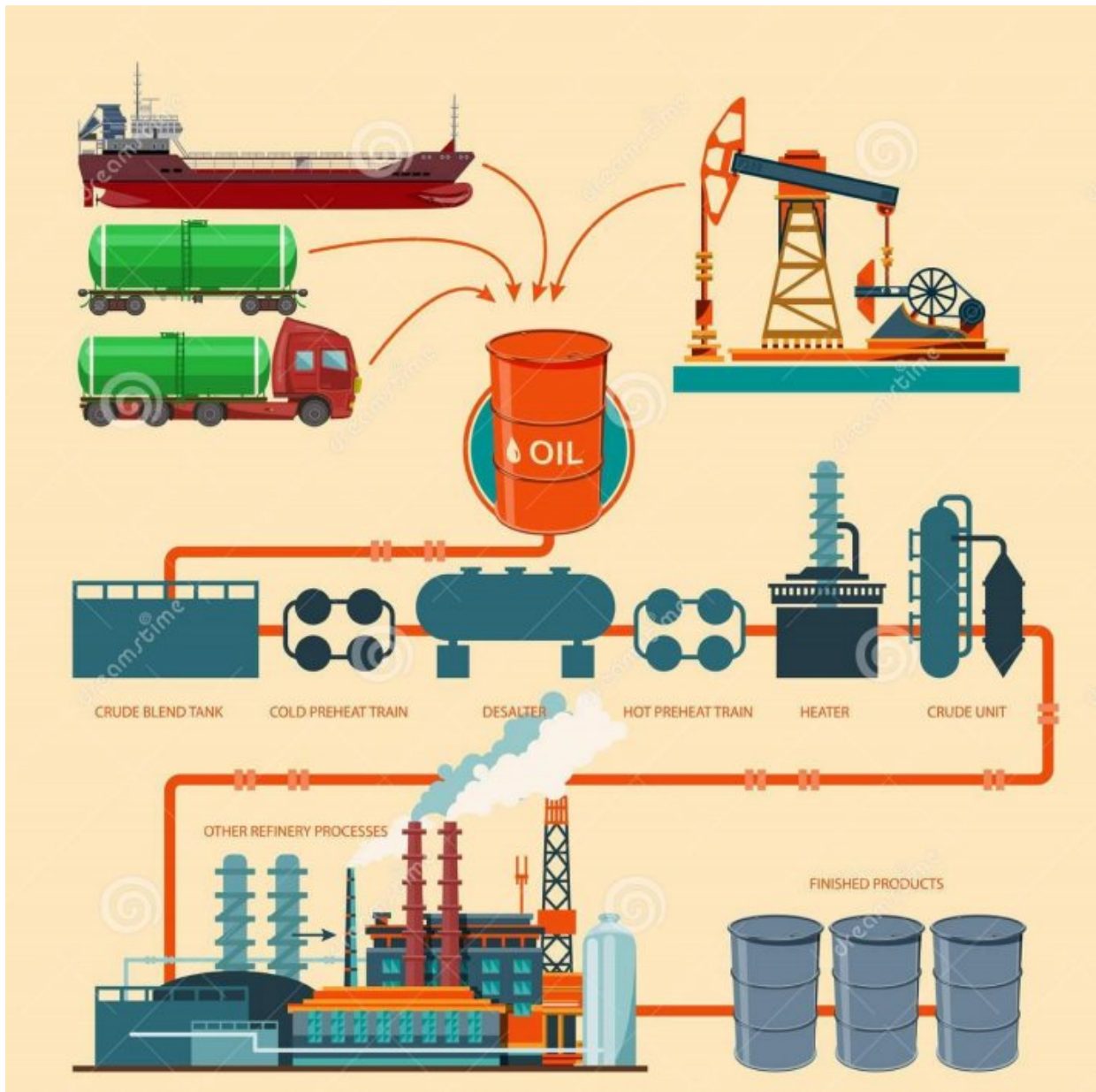
iii. Ventilation

Ventilation balances the air flow at the workplace. Depending upon the number of workers and space ventilation is required. Ventilation helps to diffuse the machine generated heat.

iv. Work-related welfare facilities

Other work related welfare facilities includes rest facilities, feeding facilities, child-care facilities, recreational facilities, and others.

B. Layout for



Question 04

Provide 2 recommendations to improve your company's operation based on the above analysis. **(05 marks)**

Recommendation 1.

Any organization prospers if it has satisfied customers. Accordingly, Z Energy Limited should have a strong system of to communicate with the customers. Customer Relationship Manager should adhere to the organization policy towards customer service. He should access all the requisite information of the customers to do business smoother. Also, past and current customers should be contacted frequently and asked for the feedback.

Recommendation 2

One of the important elements of the organization is the employees. The employees should be considered as a part of team. The company should consider the importance of the role of the employees in the organization. The Z Energy Limited should reassess the relationship with its employees on regular intervals and should keep the employees happy. Further, it should also involve employees to build the morale so that employees feel that they are an important part of the organization.

Bibliography

ZEnergy, n.d. *Who is Z Energy*. [Online] Available at: <http://z.co.nz/about-z/who-is-z-energy/>.