International Logistics

Modes of Transportation

Workshop 4

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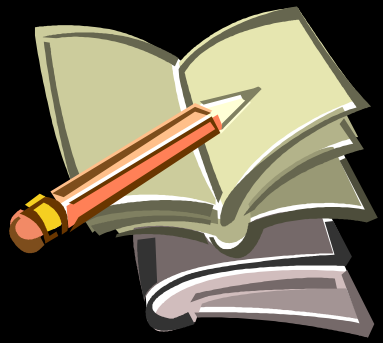
Project



The international transportation systems:

How to select the best mode of transportation?

Project

TASK:

Firm Y (production plant) is located in Gdansk (Poland). They plan to establish a new market for their products in Great Britain.

The Firm manufactures mobile phones for elderly customers with special functions and communications capabilities (myphone1050 simply).

The management of the company has decided to open one big warehouse in a greater London municipal area. so they plan to sell 100 000 phones annually (20 / standard 20 ft containers).

By implementing a comparison in-pair approach, evaluate the best mean of transportation for transporting phone mobile products from Gdansk (Poland) to London (Great Britain).

The best mode of transportation?

Modes of transportation:

1	road
2	rail
3	air
4	water - sea
5	water - inland

Combine?

The best mode of transportation?

- comparison in pair approach

KLPI (COST): What is less expensive?

	1	2	3	4	5	Points
1		1				1
2	0					0
3						0
4						0
5						0
						1

1	road
2	rail
3	air
4	water - sea
5	water - inland

The best mode of transportation?

- comparison in pair approach

KLPI (COST): What is less expensive?

	1	2	3	4	5	Points
1		1	1	1	1	4
2	0		1	1	1	3
3	0	0		1	1	2
4	0	0	0		1	1
5	0	0	0	0		0
						10

1	road
2	rail
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5	water - inland

The best mode of transportation?

- comparison in pair approach

Geography

The best mode of transportation?

- Key Logistics Performance Indicators (KLPI)

KLPI: SCORE:	6 (max)	5	4	3	2	1 (min)
Term - duration	A	R	C	RL	WS	WL
Delivery Time - On time	A	R	C	RL	WS	WL
Costs	RL	WS	WL	C	R	A
Route flexibility	R	C	A	RL	WS	WL
Risk of delay	R	A	C	WS	RL	WL
Polution	WL	RL	WS	C	A	R
Inventory costs	A	R	C	RL	WS	WL

A– Air plane **R** – Road / truck **RL** – Railway

CT– Combine transport (road&railway) **WS** – Water Sea **WL** – Water inland

The best mode of transportation?

- Key Logistics Performance Indicators (KLPI)

KLPI: MODE:	A	R	RL	WS	WL	R&RL
Term – duration [h]	3	12	40	150	200	60
Delivery - On time [%]	80%	95%	70%	50%	40%	60%
Costs [EUR/container]	1000	300	200	100	100	500
Route flexibility [%]	80%	99%	10%	20%	5%	50%
Risk of delay [h]	1	2	8	24	30	16
Polution[1-5 points]	3	5	2	2	1	3
Inventory costs [EUR/item]	1	2	3	4	4	3

A– Air plane **R** – Road / truck **RL** – Railway

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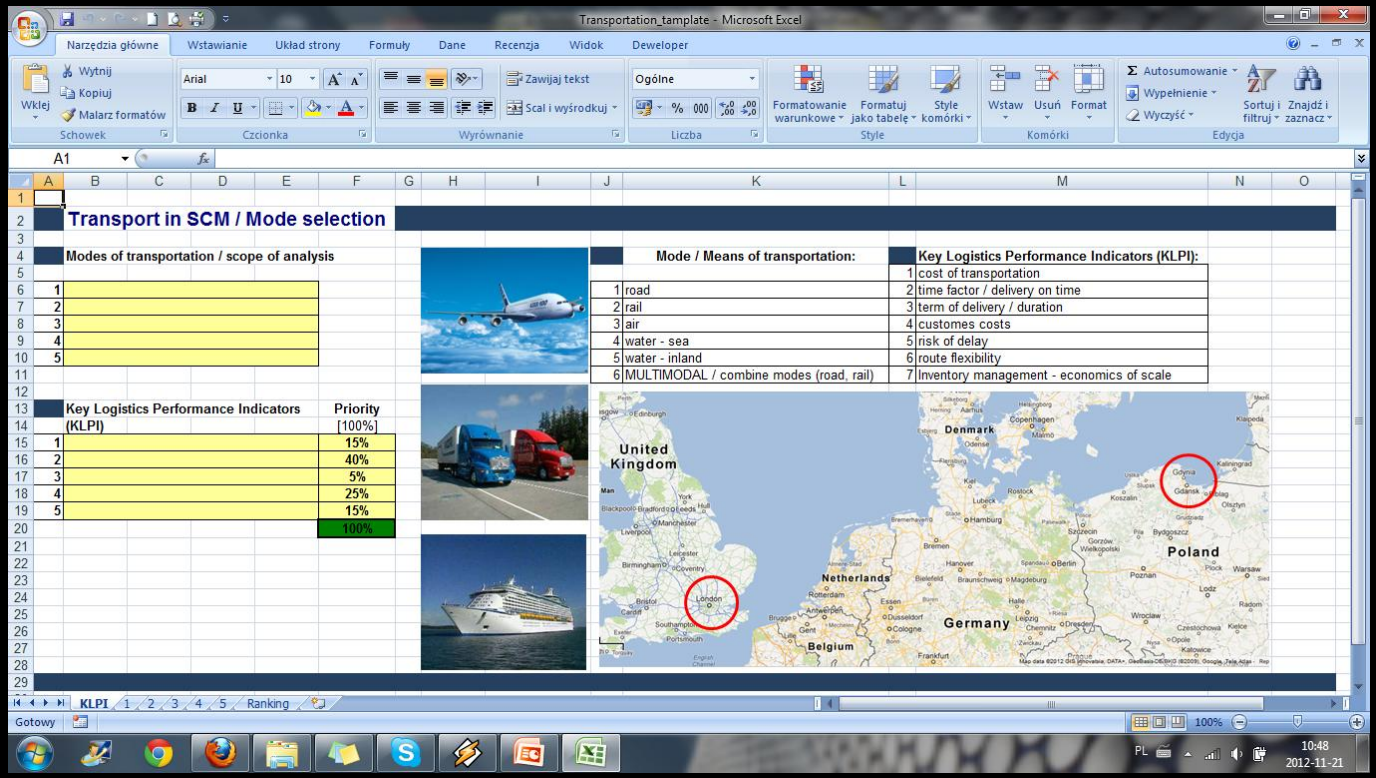
The best mode of transportation?

- Key Logistics Performance Indicators (KLPI)

Tool: Excel



Questions?

- dr Marian Krupa