

Case study
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 Intermodal / Multimodal competition level

From this market simulation,

- 1) Identify comparative performance of possible combinations
- 2) Give main features, from the following data, of an assessment of intermodal/multimodal competitive level

Segment	Corridor / Route	Industrial sector	Alternative mode
Seg 1	Antwerp-Bilbao	Chemicals	Short Sea (SS)
Seg 2	Antwerp-Milan	Automotive & Machineries	Rail (R)
Seg 3	Antwerp-Milan	Heavy Metals	Rail (R)
Seg 4	Rotterdam-Basel	Chemicals	Inland Waterways (IW)
Seg 5	Rotterdam-Basel	Fast Moving Consumer Goods	Inland Waterways (IW)
Seg 6	Rotterdam-Vienna	Fast Moving Consumer Goods	Rail (R)
Seg 7	Rotterdam-Vienna	Heavy Metals	Rail (R)
Seg 8	Bilbao-Antwerp	Fast Moving Consumer Goods	Short Sea (SS)
Seg 9	Lyon-Antwerp	Automotive & Machineries	Rail (R)
Seg 10	Milan-Antwerp	Automotive & Machineries	Rail (R)
Seg 11	Basel-Rotterdam	Fast Moving Consumer Goods	Inland Waterways (IW)
Seg 12	Vienna-Rotterdam	Heavy Metals	Rail (R)

Input data screen

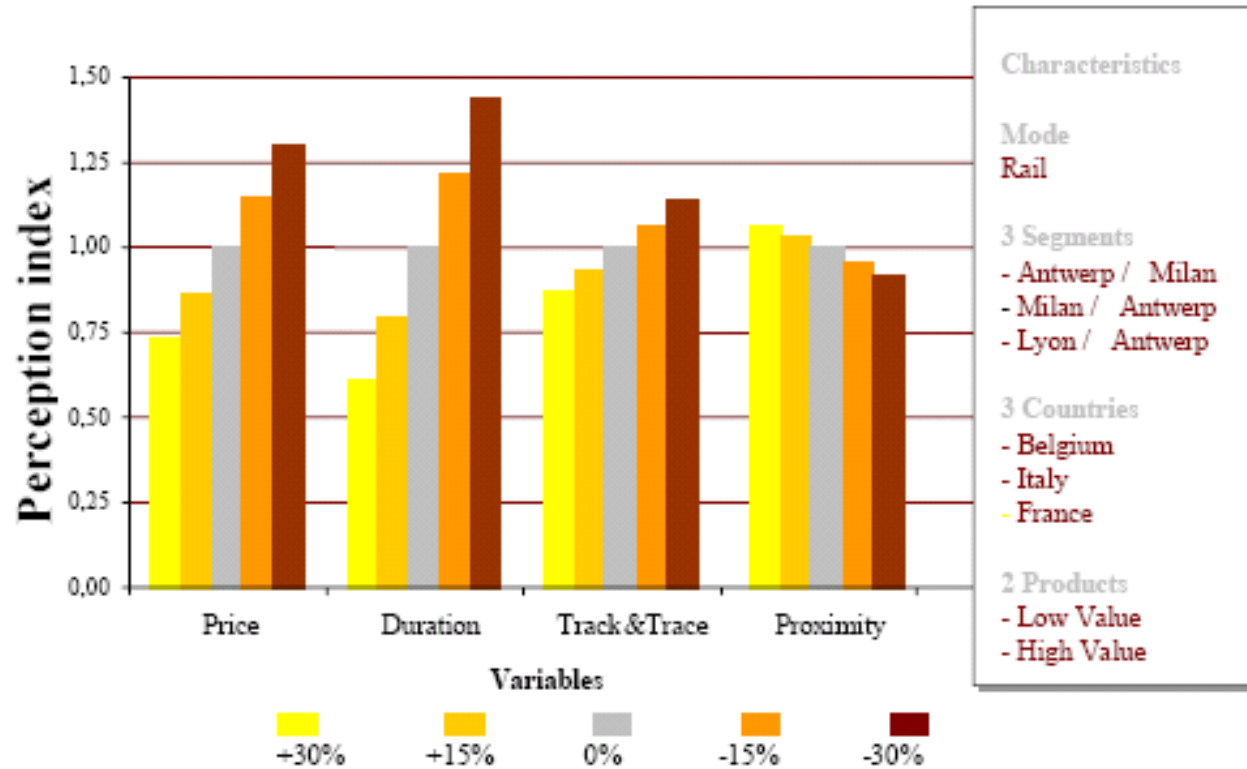
SEGMENTS	Mode	Route	Industrial sector	Intermodal transport current characteristics				
				Price	door-to-door	Information	number of arrival	% of shippers
				EURO / trailer	transfer time (hour)	delay (hours)	per week	close to a terminal
2	Rail	Antwerp-Milano	Automotive	1050	48	18	5	77%
3	Rail	Antwerp-Milano	Heavy Metal	1100	60	18	5	85%
6	Rail	R'dam-Vienna	FMCG	1400	44	18	3	36%
7	Rail	R'dam-Vienna	Heavy Metal	1200	44	18	3	56%
9	Rail	Lyon-Antwerp	Automotive	950	46	18	5	53%
10	Rail	Milano-Antwerp	Automotive	1150	60	18	5	78%
12	Rail	Vienna-R'dam	Heavy Metal	1100	44	18	4	72%
4	Barge	R'dam-Base1	Chemistry	800	108	1	5	48%
5	Barge	R'dam-Base1	FMCG	750	108	1	5	13%
11	Barge	Base1-R'dam	FMCG	850	98	1	5	26%
1	Shortsea	Antwerp-Bilbao	Chemistry	1250	140	24	1	31%
8	Shortsea	Bilbao-Antwerp	FMCG	1250	140	24	1	73%
Segment	Mode	Route	Industrial Sector	Intermodal transport characteristics to be tested				
				Price	Door-to-door	information	number of arrival	% of shippers
				EURO / trailer	Transfer time (hour)	delay (hours)	per week	close to a terminal
2	Rail	Antwerp-Milano	Automotive	945	43	10	3	77%
3	Rail	Antwerp-Milano	Heavy Metal	990	54	10	3	85%
6	Rail	R'dam-Vienna	FMCG	1280	40	10	3	36%
7	Rail	R'dam-Vienna	Heavy Metal	1080	40	10	3	56%
9	Rail	Lyon-Antwerp	Automotive	855	42	10	3	53%
10	Rail	Milano-Antwerp	Automotive	1035	54	10	3	78%
12	Rail	Vienna-R'dam	Heavy Metal	990	40	10	3	72%
4	Barge	R'dam-Base1	Chemistry	720	100	10	3	48%
5	Barge	R'dam-Base1	FMCG	675	100	10	3	13%
11	Barge	Base1-R'dam	FMCG	785	88	10	3	26%
1	Shortsea	Antwerp-Bilbao	Chemistry	1125	128	10	3	31%
8	Shortsea	Bilbao-Antwerp	FMCG	1125	128	10	3	73%

Result screen

Segmentation		Intermodal transport market share						Perception Index		
		Current intermodal			Intermodal supply					
		Supply characteristics			characteristics to be tested					
		All	Low	High	All	Low	High	All	Low	High
		Products	Value	value	Products	value	value	Products	value	value
Per sector	Automotive	38.3%	52.2%	30.2%	55.2%	70.3%	48.5%	1.44	1.35	1.54
	Heavy Metal	48.1%	65.4%	38.2%	68.9%	81.2%	57.0%	1.39	1.24	1.58
	FMCG	40.9%	62.4%	38.7%	58.0%	74.0%	54.2%	1.37	1.18	1.40
	Chemistry	80.8%	83.6%	79.8%	90.7%	93.9%	89.2%	1.12	1.12	1.12
Per Corridor	Antwerp-Milano & Milano-Antwerp	40.3%	50.8%	34.2%	61.0%	70.8%	55.3%	1.51	1.39	1.62
	Lyon-Antwerp	33.8%	51.2%	28.3%	49.1%	67.4%	43.3%	1.45	1.32	1.53
	Rdam-Vienna & Vienna-Rdam	55.4%	70.4%	41.2%	73.9%	94.7%	63.7%	1.33	1.20	1.55
	Rdam-Basel & Basel-Rdam	53.9%	66.1%	52.8%	60.5%	73.7%	59.4%	1.12	1.11	1.12
	Antwerp-Bilbao & Bilbao-Antwerp	74.3%	84.4%	69.1%	89.5%	94.8%	88.7%	1.20	1.12	1.25
Per Country	Belgium	63.4%	71.2%	58.6%	79.3%	85.5%	75.5%	1.25	1.20	1.28
	The Netherlands	55.2%	71.0%	50.5%	66.0%	83.6%	60.7%	1.19	1.18	1.20
	France	33.8%	51.2%	28.3%	49.1%	67.4%	43.3%	1.45	1.32	1.53
	Italy	55.1%	64.8%	40.7%	72.1%	80.2%	60.1%	1.31	1.24	1.48
	Switzerland	53.5%	43.9%	54.4%	58.4%	49.5%	59.3%	1.09	1.13	1.09
	Austria	35.7%	49.3%	31.4%	58.8%	72.2%	54.5%	1.65	1.46	1.74
	Spain	49.0%	77.5%	48.2%	74.9%	92.2%	74.4%	1.53	1.18	1.54

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INTERMODAL PERCEPTION INDEX Variables Impact - Overview



Legend chart

First column +30% , Second column +15%, Third column 0%, 4th column -15%, 5th Column -30%