

What makes an airport attractive for e-Commerce logistics providers

Air Transport Colloquium 2018

Outline

1. Introduction
2. E-Commerce Market
3. Cross-border e-Commerce Strategy Factors
4. AHP-method
5. Summary of Findings
6. Conclusions

Challenges and Opportunities

Airlines Cargo division's budget 2019 =

Average yield

X

Quantity

LT yield will approach average variable cost of freighter operations

Expected to be below 1 USD/kg in 2023

2 – 5% growth via perishables & e-Commerce; rest is almost zero sum game

e-Commerce growth, the not-to-be-missed opportunity IATA Cargo Strategy, 2018

2016-20: Cross-Border e-Commerce growth by 22%/year eMarketer

“The airfreight world is slowly changing from B2B to B2B2C”
Sultan, Emirates

“With e-Commerce traditional import and export processes change...the links in the chain become fewer and fewer... With a higher degree of integration in the supply chain, the logistics market is getting smaller and smaller!” Wang, KWE

Cross border shipping for e-commerce

Powered by BRITISH AIRWAYS temando NEOPOST ProShip

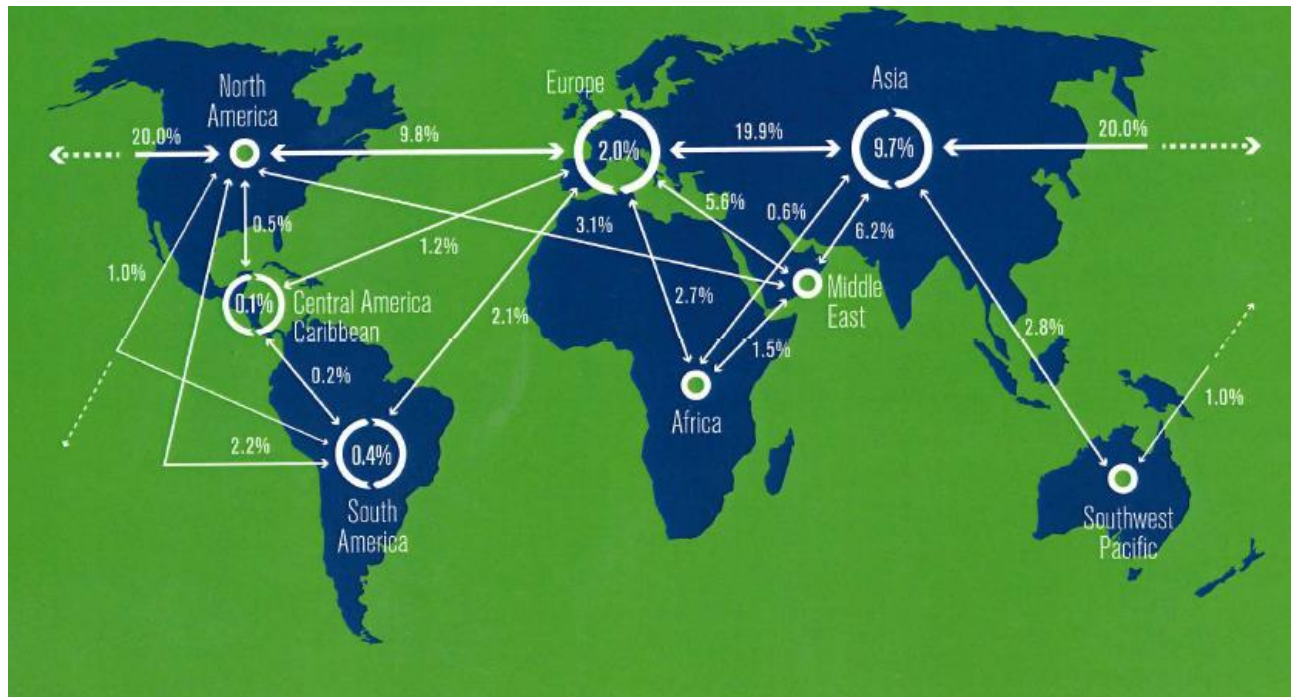
Zenda removes the challenges of shipping

Cross-border shipping was never built with simplicity – until now. Zenda fills the void between express and postal delivery, with a single upfront cost and end-to-end tracking from your fulfillment center to your customer's door.



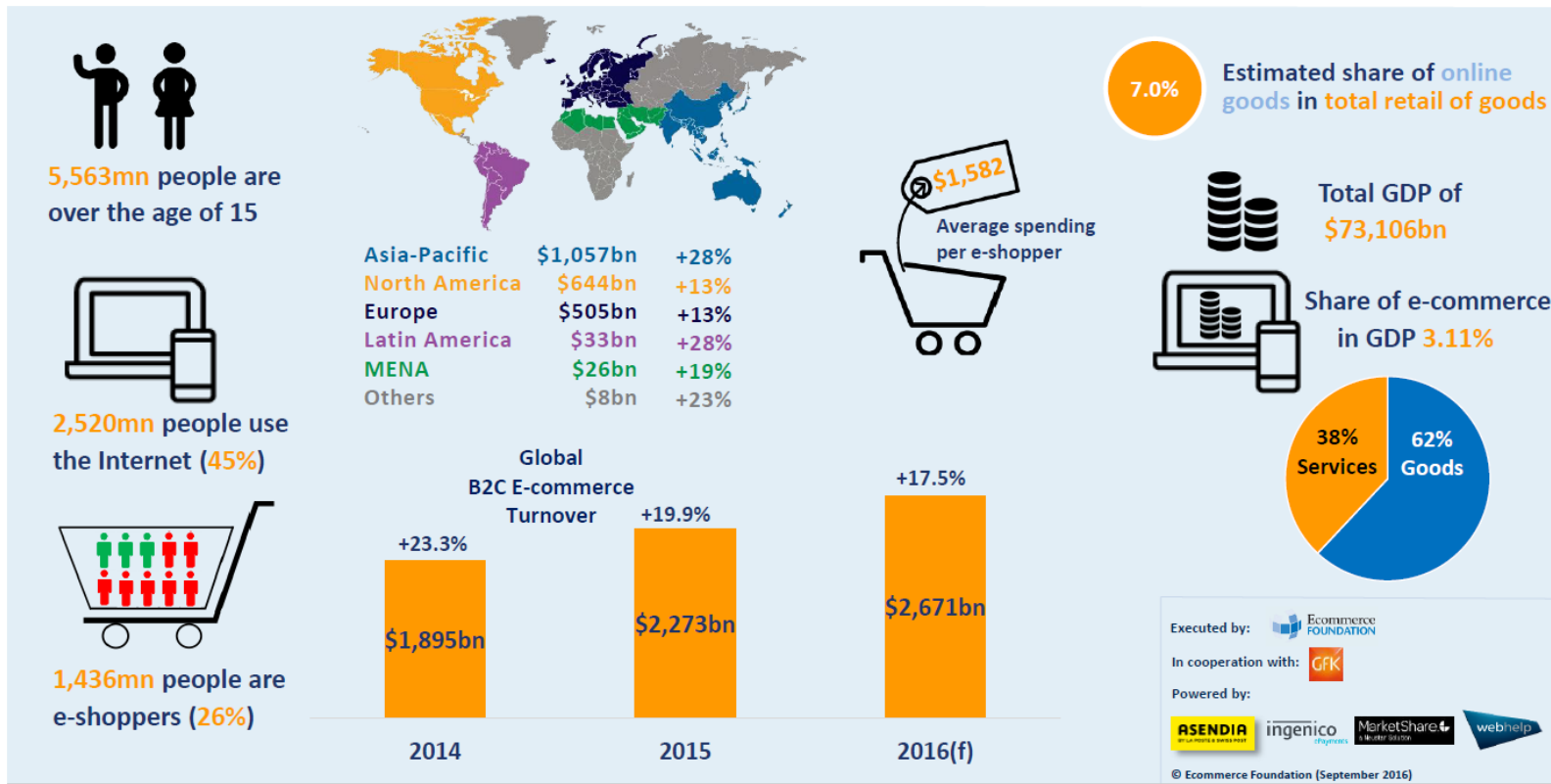
Trade lanes and routes are maturing

1. Maturing air cargo lanes USA → Europe
2. Opportunities in Asia Pacific
3. Key = to add higher value to the service offerings
→ Role of airports to add value in the chain is increasing!



The parcels and express market continues to grow fast

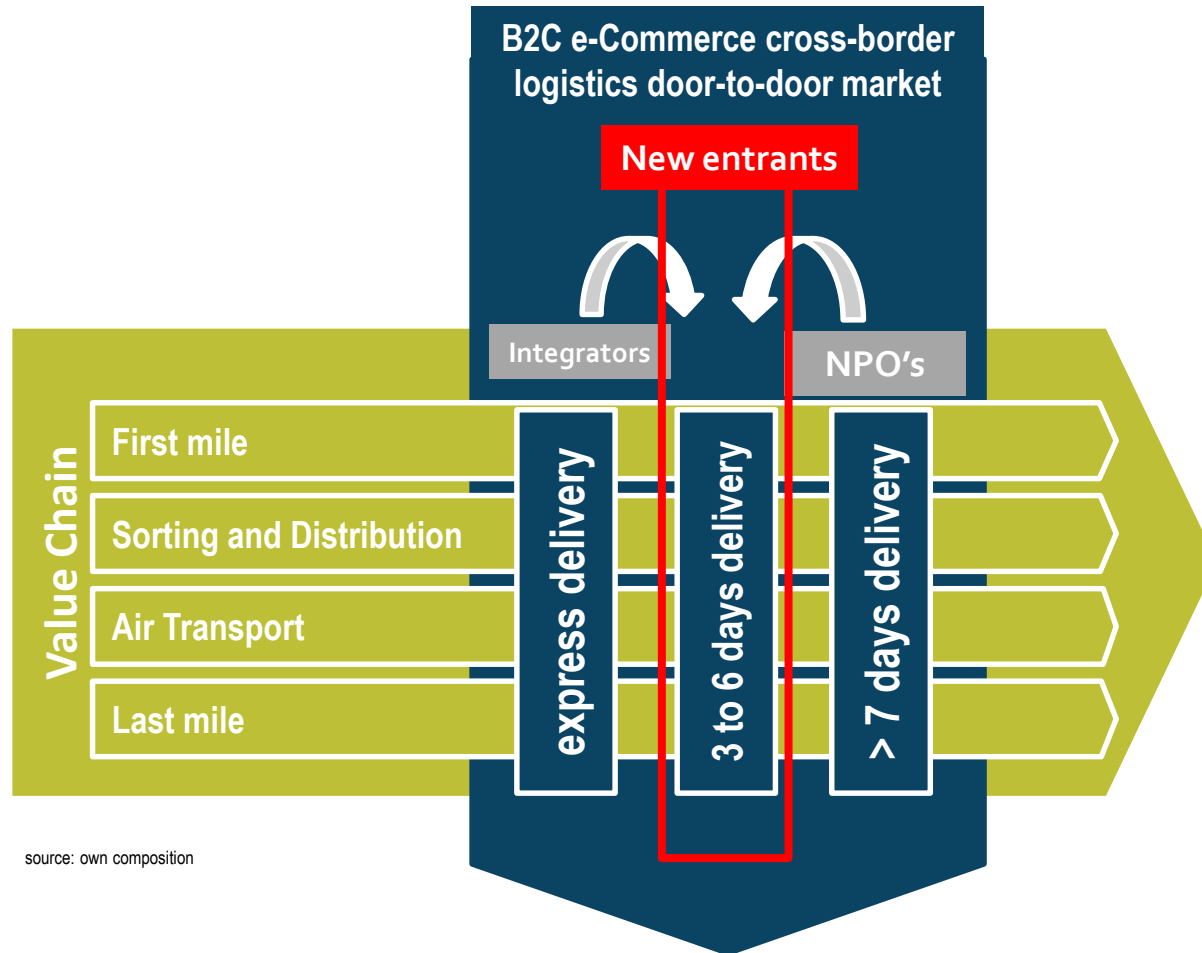
2015 Global Key B2C e-Commerce Data of Goods and Services



source: Ecommerce Foundation

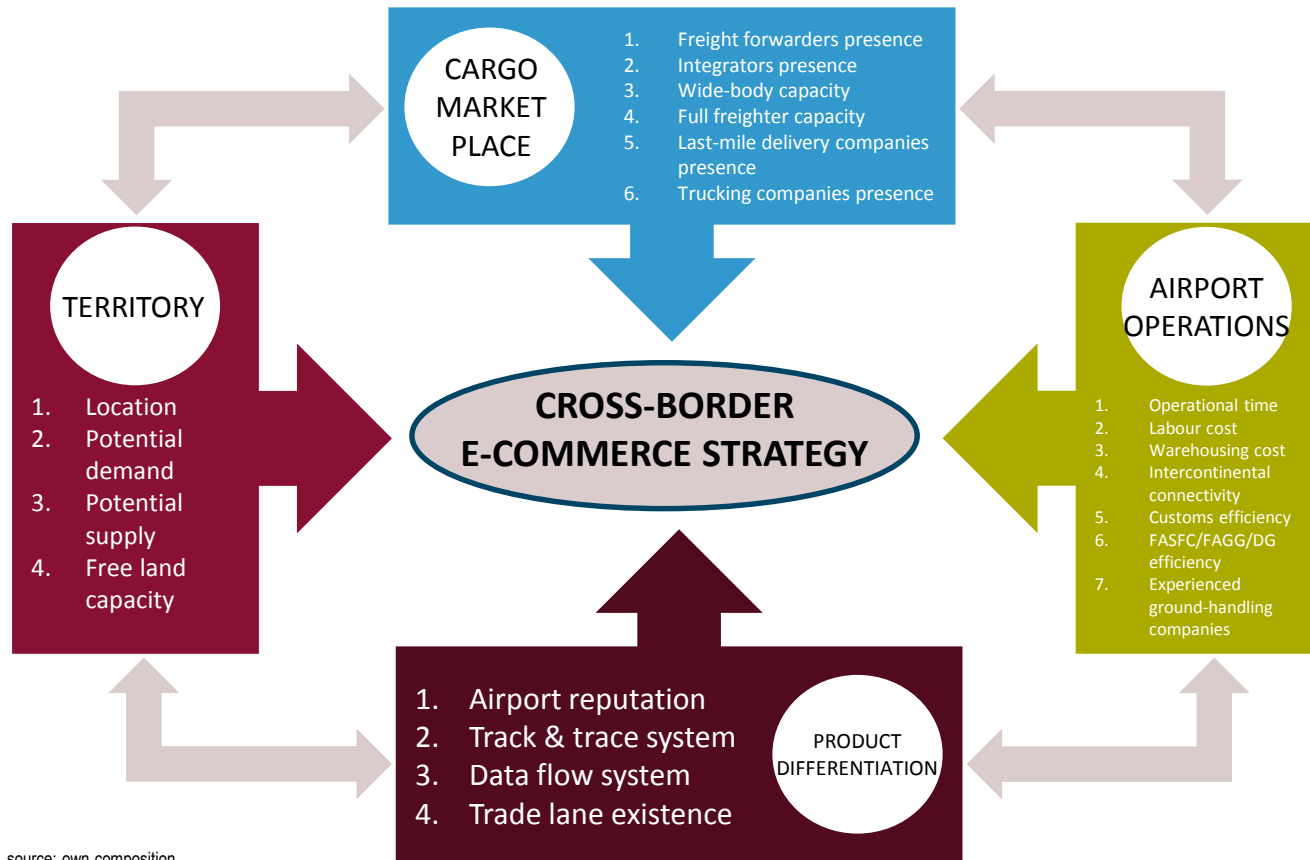


Current delivery chain business models are fading



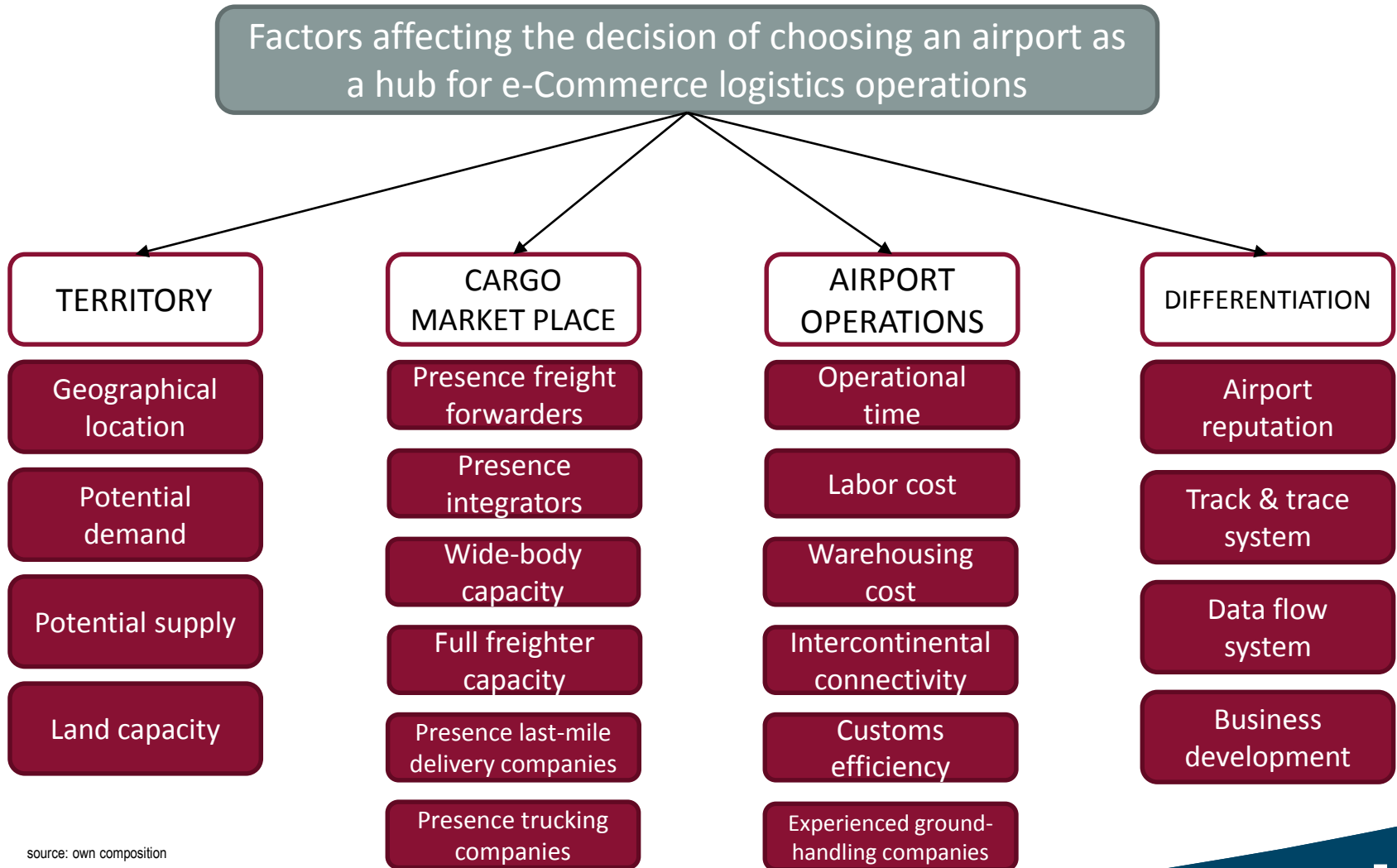
source: own composition

Cross-border e-Commerce Strategy Factors



→ Validated by industry: interviews Belgian & Chinese e-commerce players

Analytic Hierarchy Process (AHP)



source: own composition

Analytic Hierarchy Process (AHP)

The Fundamental Scale for Pairwise Comparisons		
Intensity of Importance	Definition	Explanation
1	Equal importance	Two elements contribute equally to the objective
3	Moderate importance	Experience and judgment moderately favor one element over another
5	Strong importance	Experience and judgment strongly favor one element over another
7	Very strong importance	One element is favored very strongly over another; its dominance is demonstrated in practice
9	Extreme importance	The evidence favoring one element over another is of the highest possible order of affirmation
Intensities of 2, 4, 6, and 8 can be used to express intermediate values. Intensities of 1.1, 1.2, 1.3, etc. can be used for elements that are very close in importance.		

Analytic Hierarchy Process (AHP)

What is more important for a company to establish at an airport to do e-Commerce operations...

The location of the airport



or

The existence of a cargo market place



Importance

Equal



Moderate



Strong



Very strong



Extreme



Analytic Hierarchy Process (AHP)

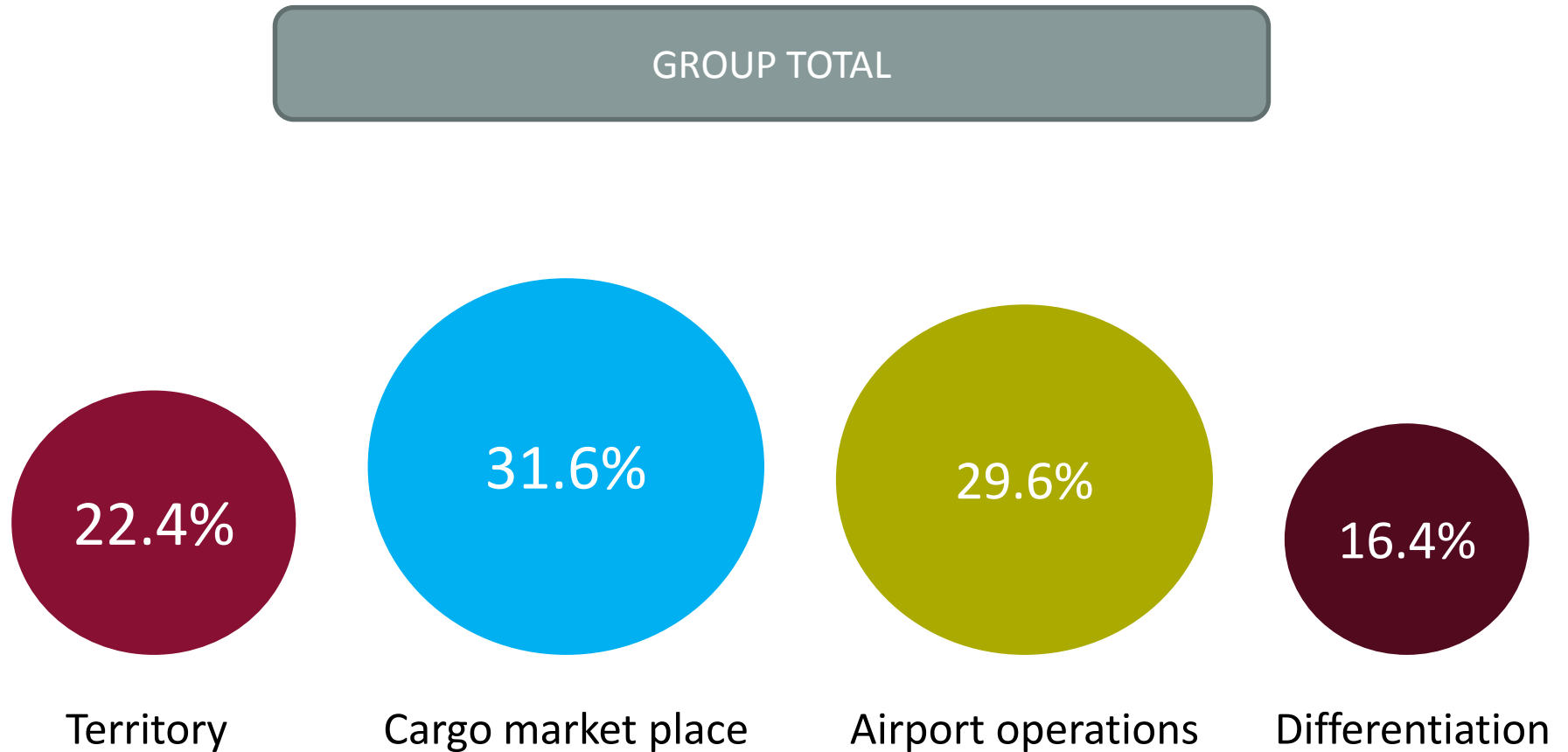
$$\mathbf{A} = (a_{ij}) = \begin{bmatrix} 1 & w_1/w_2 & \dots & w_1/w_n \\ w_2/w_1 & 1 & \dots & w_2/w_n \\ \vdots & \vdots & \dots & \vdots \\ w_n/w_1 & w_n/w_2 & \dots & 1 \end{bmatrix}$$

$$[W, \lambda] = \text{eig}(A)$$

$$\text{Consistency Index} = \frac{\lambda_{\max} - n}{n - 1}$$

$$\text{Consistency Ratio} = \frac{\text{Consistency Index}}{\text{Random Index}} < 10\%$$

Summary of findings



source: own composition

Summary of findings

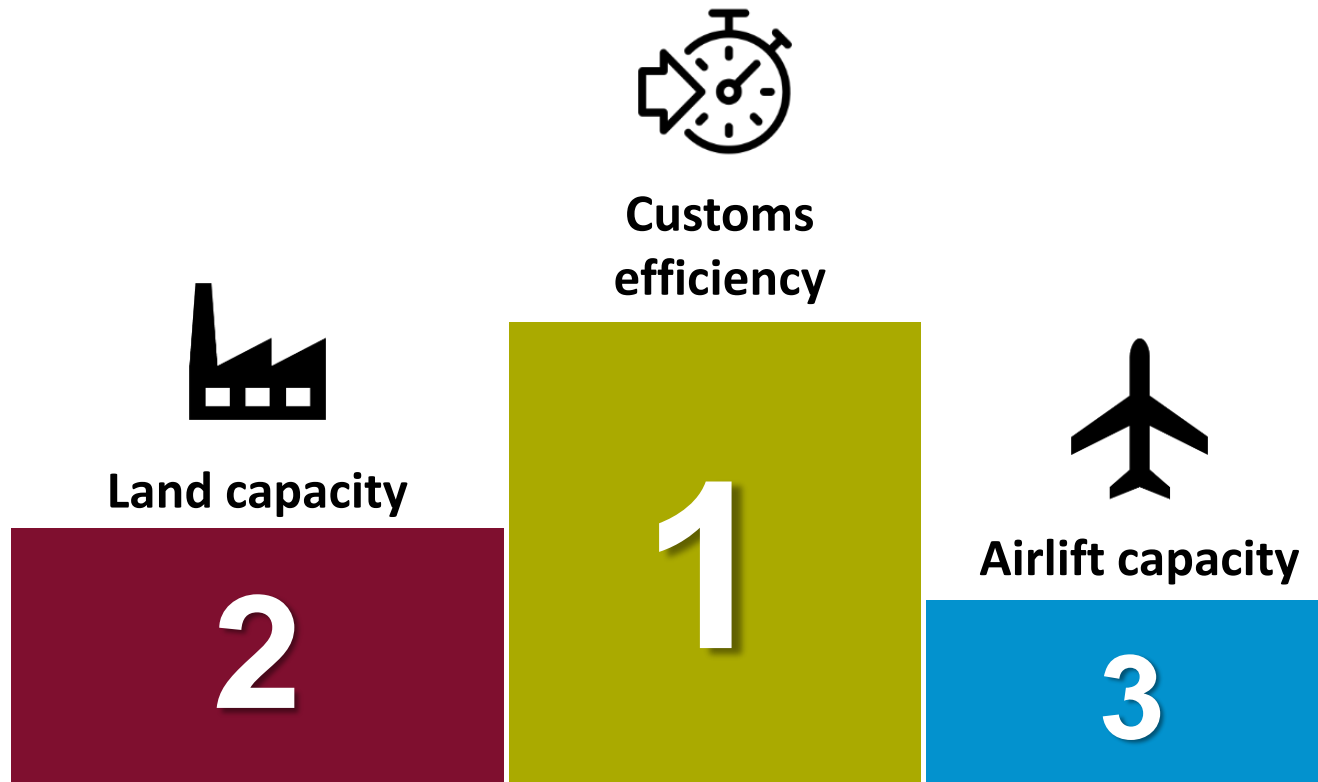


source: own composition



Summary of findings

1. Efficient & fast custom pre-clearance
2. Expansion landside
3. Expansion airside: full freighter + bellyspace



source: own composition

Conclusions

1. E-Commerce = main growth driver for air cargo → Cross border e-Commerce is expected to grow >30% per year
2. Study identified a number of key factors contributing to the success of an airport for e-Commerce:
 1. Customs pre-clearance capabilities
 2. Land or warehouse capacity
 3. Intercontinental airlift capacity
 4. E-Commerce branding

Thank you for your attention!

Questions?



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