





ADRIAIR Airport Security and Air Taxi Network in the Adriatic







- The main **purpose** of this research is to develop a study for <u>a preliminary</u> assessment of the market potential of an air-taxi service in IPA area.
- The research is aimed at answering some extremely relevant issues related to the market demand estimation:
 - WHAT is an air-taxi service [literature review]
 - WHO are the ideal potential customers [market research]
 - WHAT they are seeking in an air-taxi service [market research]
 - WHICH strategies are more appropriate to match potential customers' expectations [implications]
 - HOW to communicate value to the potential customers [implications]
 - WHICH are the characteristics of the supply side that can be effectively exploited to match customers' expectations [implications]







- The scientific responsible for WP3 is the University of Bologna (ITALY) that has the
 purpose of developing an appropriate methodology and disseminating it to the
 partners.
- The main activities performed are:
 - ▶ Phase 1: Descriptive analysis of the current market situation
 - ▶ Phase 2: Identification of the major competitors and benchmarking
 - ▶ Phase 3: Target identification and creation of a "potential customers" database
 - ▶Phase 4: Identification of the ideal service levels from the customer's perspective
 - ▶ Phase 5: Estimation of the potential demand







EXECUTIVE SUMMARY PERFORMED ACTIVITIES

The summary presents the results of our analysis on air-taxi services among the two borders of the Adriatic Sea.

- 1) We firstly analyze air-taxi service in the economic literature, in order to understand the definition of the service, its possible declinations, the economics and the business model.
- 2) Afterwards we analyze the passengers' flows between the two border of the Adriatic and the flows of goods and services, as a proxy for a potential demand for air-taxi services
- 3) We therefore depict a SWOT analysis, taking into account resources and competences and infrastructure endowment of the different partners
- 4) We finally develop a market research devoted to estimate the market potential, exploring firstly the customer value drivers through a qualitative market analysis and then conducting a survey on the preferences and the intention to buy of customers for different configurations of the service.







▶ LITERATURE REVIEW: MAIN FINDINGS

- DEFINITION: on-demand service, operated in small-medium airports served by commercial airlines with at least 3000 feet of runways, using light jets/planes (3-7 passengers) to cover a maximum distance of 900
 Km
- BUSINESS STRUCTURE: Different types of ownership available, depending on the number flights/ contracts per year by each customer
- ▶ ADVANTAGES: time flexibility, privacy, reliability of the service and availability are the most relevant pros of the service
- ▶ DISADVANTAGES: costs connected to moving empty aircrafts and upgrade in case of unavailability







PASSENGER FLOW ANALYSIS: MAIN FINDINGS

- Potential of Forlì airport during its period of operations, as well as for Rimini airport
- Critical competition between Bologna airport and Forlì and Rimini airports
- ▶ The most relevant passenger flows for the Emilia-Romagna region are:
 - Greece, Albania and Romania for Bologna airport
 - ▶ Russia, Ukraine and Albania for Forlì airport
 - ▶ Russia, Greece and Ukraine for Rimini airport



SWOT Analysis Summary





Action plan

- Presence of High Skilled Human Resources in freight and passengers
- Fully operational and licensed airport with all necessary facilities available
- Lot of free, unused capacity





- Slow Entrepreneurial growth
- Current International economic crisis
 - Strong ethnical incoming traffic
 - The actual situation of the Forlì Airport Governance

- The small size of Airport allows an easier conversion of business into Human and goods transport services by Air Taxi



- The New service of Air Taxi could avoid the loss of employment
- Potential partnership in synergies with related territories business



- Competition by other regional operators as opposed to common efforts (e.g. Bologna Airport and other Regional Hub)
- Regulatory environment not steady and sure
- Possible increasing of traffic of the main roads
- Lack of airport strategy connected to the strategy of territorial marketing
- Persistence of economic crisis







FIELD ANALYSIS: MAIN FINDINGS

- The QUALITATIVE study shows that frequency of direct flights and time flexibility are two related and very important issues for potential customers; many interviewees are concerned with aircrafts safety that should be appropriately communicated and transferred by air-taxi operators. An opportunity for Air Taxi operators could be the implementation of a bundle of ground and on-board services such as wi-fi connection and car rental at destination. A major concern expressed by almost all the interviewee relates with price that is still perceived to be too high.
- The QUANTITATIVE study supports the critical role played by price in shaping individuals' intention to adopt the service. Interestingly, respondents prefer saving money by losing part of the time flexibility. When respondents were asked about their ideal price levels of an air taxi service, their willingness to pay falls far beyond the price levels proposed in the study that were computed basing on the current cost structures of an air taxi operator







The results from our analysis reveal:

- A high potential of commercial and passenger exchanges between the two banks of Adriatic if by observing the actual flows;
- A considerable availability of resources to be dedicated from the partner airports to the development of more efficient structures to support the creation of an air-taxi network, basing on the outcomes of the SWOT analysis;
- The qualitative analysis reveals some interest in the target audience of firms that have to travel across the Adriatic borders for business purposes. A on-demand air-taxi service might fill a gap in the actual offering system that provides very few direct scheduled flights so that business travels are still operated mainly by car. However, some concerns about safety and prices emerge and should be carefully addressed in order to maximize the success probabilities of the service;
- The quantitative analysis identifies a gap between the ideal service profile and the actual service levels, especially regarding the pricing strategies that should be realistically implemented basing on the current status of the air-taxi business models and cost structure. This gap is relevant because it considerably undermines the potential demand by lowering customers' intention to purchase the service. Results from conjoint analysis further reveal that customers might positively accept a reduced flexibility over the time scheduling in front of a price reduction. This trade-off should be carefully considered by air-taxi operators in the definition of their business models.







Implications

As a consequence of the different analysis we suggest a careful consideration of the further steps to be performed.

While undoubtedly there is both an expression of interest of companies and managers (qualitative analysis) and also resources available (SWOT analysis), the quantitative analysis aimed to estimating potential demand shows some critical issues regarding mainly pricing and the definition of the offer profile. Before going to market these issues should be addressed properly.







- The results from our analyses point out several important issues that are relevant both to air-taxi operators, airport managers and policy makers:
 - Air-taxi operators should consider adapting their business models to the need for different pricing schemes exhibited by potential customers by offering the opportunity to share the flight with other customers;
 - This reduction of time flexibility imposes some challenges to air-taxi operators in terms of logistics (e.g. the implementation of a web-based booking platform) and demand segmentation (e.g. customers travelling for business vs. leisure purposes), and also to airport managers that should lay the bases for setting dedicated services for air-taxi passengers (such as Wi-fi connection);
 - Policy makers should in turn consider alternative taxation schemes on final users of air-taxis, that are currently equalized to luxury consumption in certain countries such as Italy, in order to invert the ongoing trend of market exit by many air-taxi operators. Moreover, a common and shared EU policy should help to prevent arbitration opportunistic behaviors that, again, impede the setting of an efficient service matching customer expectation.







Focus on "the" question

IS THERE SUFFICIENT POTENTIAL DEMAND FOR A AIR-TAXI SERVICE?

YES AND NO







YES, because:

between the two borders of the Adriatic Sea. For instance, respondents to the quantitative studies reveal that, on average, the vast majority of their business trips across IPA countries is by ca (78.8%).
☐There is an interesting flow of commerce, mainly in the industries of CA-food, beverage ar tobacco, CH-based metal and metal bearings, excluding machinery and plants, CL-means transport, CB-textile products, clothing, leather and accessories between the two borders of the Adriatic Sea.
□During the SWOT analysis the availability of resources needed to support the service seems be present.
□During the qualitative phase (interviews and focus group) of the market research managers companies in the region and institutions have clearly expressed the need for a better, quicker armore convenient way of transportation.
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would use the service more than 6 times per year (4%).





NO, because:

During the quantitative phase of the interviews customers have clearly expressed a concern regarding the potential high price of the service and a low intention to purchase. Actually, the average minimum (mean = 656 €) and maximum (mean = 1,402 €) prices are far below the lowest
price possible basing on the actual cost structure of air-taxi companies (i.e. 4,000€) □The configuration of the value proposition for the market does not fit perfectly the customer needs emerging from the research. Particularly, service configuration should be focused mainly on price (33.9%), followed by departure time flexibility (20.9%), and Wi-fi included in price
(20.4%). ☐ The awareness of the potential service is very low, according to the market research survey. If

the preferred air-taxi profile offer were actually implemented, respondents would use it maximum 1 time per year (45%), up to 5 times per year (35%), or even never (16%). Only few respondents







WHAT SHOULD MANAGERS AND INSTITUTIONS DO?

- Leverage on existing strengths and infrastructures.
- Increase definitely the awareness of the potential service, through proper marketing and communication activities [other WP]
- Craft the offering to the market accordingly to customer needs expressed in the quantitative survey.
- Act strongly on the cost/price side of the offering, decreasing it towards an acceptable level in the customer's perspective.







- Both direct interviews and the on-line quantitative questionnaire demonstrated that the market places great relevance to the cost of the flight (pricing issue).
- This is evident for the Italian market, while Croatia and Bosnia recorded more volatile results.
- Moreover, the market shows a low potential demand to the service, in terms of both propensity and frequency to use this mean of transport. Considering evidences from personal interviews to both potential buyers and operators, this could be attributable to:
 - Awareness of the high costs compared to the cost of other means of transport
 - Low frequency of top manager business trips, which are more and more replaced by video and telephone conferences
 - Distressed business environment deriving from a negative perception of the current financial and economic situation in the area.
- Indeed, <u>respondents suggested a pricing range that nearly corresponds to that of a business flight of a full services carrier (FSC)</u> rather than that of a private flight, indicating that the service required to connect to IPA Countries is the airline connection (which is weak, especially in the low season) rather than the air-taxi connection.
- The good flexibility on scheduling accepted by respondents is another clear evidence of the fact that <u>a public transport</u> (with frequent connections) <u>could suite market needs</u>.
- Besides pricing, the investigation around other services' attributes showed that <u>ancillary services</u>, such as WI-FI connection and car rental are not key variables and they cannot generate, by themselves, significant additional value and utility.







Current market situation in the area

- A preliminary census of air-taxi operators¹ with hangars and certifications (permits to operate) in the Project Countries has accounted about 35 operators (no data on Albania). The number of those that ended operations in 2013 is unknown, but there is evidence that the current number of operating companies is lower than 35.
- The most relevant feeder market for the area is clearly the industrialized area on Northern Italy that historically generated daily business trips to major delocalization or export Countries (mostly the Balkans, among which almost all IPA Countries)
- This area of Italy, including the regions along the Adriatic Coast, is facing a strong down-turn of production, with domestic sales suffering, while export flows are keeping the pace.
- Travel policies became therefore more pressing and the cost of a business trip is accurately verified and make efficient. For this reason, although being time consuming, the car is very often the alternative to the lack of direct FSC flights.
- Croatia also generates domestic connections between the islands, but with a seasonal trend and serving a leisure market that follows different purchasing paths and service requirements.
- On the contrary, Albania is quite new to this business model.

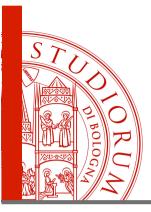






Pricing issues for Italy

- Some relevant considerations must be done to get the clear picture of pricing managerial implications for flights operated to and from Italy:
 - For all connections to and from Italy, including IPA Countries, the regulation n. 201/2011 art. 16, c. 10bis puts an extra tax (called "luxury tax") of 100 Euros per person per way. This tax is doubled (200 Euros) for connections longer than 1.500 km. This means that, for example, since April 2012, an air-taxi flight boarding 4 people from Ravenna to Split and the way back, costs 800 Euros more in tax than it was before. If the flight connected Venice to Athens, this tax would account to 1.600 Euros.
 - Furthermore, an ownership tax was introduced by the same regulations costing the aircraft owning operators 1,5 Euros per (aircraft) kg per each aircraft a year, which also impacted operations pricing
 - As highlighted by the interviews carried out with Italian operators in the area of Emilia Romagna, since from 2011 the private flight
 demand from the Northern-Eastern area of Italy collapsed because of the economic downturn, empty-legs and optimization of
 flights in general became critical, with a negative impact on average price.
- In general, pricing optimization relies on flexibility of demand about scheduling (assembling demand) and fast repositioning of aircraft (network optimization): when demand is low, neither assembling of demand and repositioning can be optimized and this impacts pricing.
- For this reason, pricing cannot be lowered when market fundamentals are feeble, as far as fixed costs of operations are high.







Policy making and incentives

Some major consequences deriving from the analysis of evidences of this research that policy makers should consider are:

- •In the last two years, the number of air-taxi operators has started declining as a consequence of demand decrease.
- •Direct taxation on users (demand) could be either reduced or made proportional to the length of the flight or based on the segments (business vs leisure)
- •In order to assemble demand on the same flight, with the scope of reducing the price per person, new regulation must be adopted in some IPA countries (i.e.: Italian regulation permits the sale of air-taxi services to 1 contractor only for the entire capacity of the aircraft).
- •Regulations must be also clearly addressed and dedicated to this business model. Operators stated that a certain ambiguity exists on legislation used by policy makers (Minor aviation, Airtaxi, General Aviation, Executive Aviation, Business Aviation, Charter, Corporate Jet).
- •If regulations applied by each Country in the area are somehow different, this may cause arbitration and opportunistic behaviors, such as the case of foreign operators that mostly operate in a third Country (market) but benefits from taxation of their domestic Country.
- All considered, the research highlighted some potential in the market observed for a lower budget demand, which could be targeted through a significant reduction of the service price. This could be reached through:
- 1.making it possible to assemble demand (regulations) and
- 2.reducing direct taxation.