



## LEVERAGING SOCIAL CAPITAL ON PUBLIC SOCIAL SOFTWARE PLATFORMS FOR ECONOMIC NEED SATISFACTION IN THE AIRPORT INDUSTRY

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**Abstract.** Network ties that cross organizational boundaries, i.e. bridging social capital, have been acknowledged by scholars of various disciplines as a major source of competitive advantage. With the advent of public Social Software Platforms (SSP), such as Facebook, organizations are provided with the opportunity to extend beyond organizational boundaries and include the customer in the value creation process. However, as Porter (2006, p. 225) noted, “the mere presence of firms, suppliers, and institutions in a location creates the potential for economic value, but it does not necessarily ensure the realization of that potential”. The aim of the research paper is to explore, if airport organizations are able to increase their economic need satisfaction when interacting with passengers on SSP. The paper adopts a strategy map approach to deduce cause-effect relationships between engaging with passengers on SSP and economic need satisfaction of airport organizations. Expert interviews with Corporate Communication Managers of six out of eight major German airports (annual passenger volume > 5 Mio.) provide initial insights into the current degree of economic need satisfaction by contrasting the SSP Facebook with traditional communication channels of the airports. The paper describes to what extent SSP contribute to economic need satisfaction with respect to ‘customer insights’, ‘operational efficiency’, ‘innovative strength’, ‘customer advocacy’ and ‘customer satisfaction’. The results show that while airport managers already experience some increase in economic need satisfactions, they are not yet able to tap into the full potential of SSP.

**Key words:** *airport industry, economic needs, public social software platforms, social capital*

**JEL code:** O33

### 1. Introduction

While traditionally airports used to be considered as infrastructure providers serving macro-economic purposes, increased air traffic liberalization and airport privatization have forced airports to become more commercially focused. Airports increasingly compete for passengers, who often have a choice between two or more airports. Despite a growing awareness of the need for passenger-orientation to both sustain independent development and reward shareholders, airports still suffer from a lack of genuine customer insights. The passenger relationship and data is not owned by airports, but airlines and tour operators.

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## New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

Complexity is added by the fact that some airport services, such as shopping outlets or restaurants, are not provided directly by airports to the passenger, but through concessionaires or tenants. With a growing adoption of public Social Software Platforms (SSP) by customers, such as the online social network Facebook, airport organizations eventually are able to virtually connect with their passengers and enter into a dialogue for mutual benefit. SSP are web-based services that allow users to set up a profile within a bounded system (Boyd and Ellison, 2007), connect to other users, groups or organizations and share information updates or rich media (photos, videos etc.) with their network of connections based on privacy settings (Tenge, 2013). Network ties that cross organizational boundaries, i.e. *bridging social capital*, have been acknowledged by scholars of various disciplines as a major source of competitive advantage. The concept of social capital is gaining momentum in organization studies. It has been proven useful in explaining “an actors’ relative success in a number of arenas of central concern to organizational researchers” (Adler and Kwon, 2002): for example achieving financial benefits (Burt, 1995), facilitating information exchange and collaboration (Wasko and Faraj, 2005) and fostering innovative ideas (Granovetter, 1973). Lin (1999, p. 30) defines social capital as “investments in social relations with expected return”. Put in other words, investing time in maintaining network connections is beneficial, as often the support of others is needed with regard to need satisfaction and goal attainment. The overall notion of an organizational social capital theory is that relationship networks and other aspects “unrelated to money can help organizations succeed economically” (Cohen and Prusak, 2001, p. 10). Intangible assets come to the fore (cf. Johnson, 1999; Kaplan and Norton, 2004a). The production and transaction oriented focus of industrialization has shifted to employees, customers and other organizational stakeholders and the underlying networks that govern the relationship between those actors (Atkinson, 2006). Though the network-/relationship-approach is not a new field of business research, it currently encounters a renaissance due to the emergence of SSP. SSP extend organizations beyond corporate boundaries and enable them to re-establish network connections with their customers. SSP embrace customer participation, while drawing on the ideological and technological foundations of *Web 2.0*. One of the underlying principles of Web 2.0 is the definition of the “Web as a platform” (O’Reilly, 2007, p. 19), for facilitated idea sharing and joint value creation in a democratic manner (Kaplan and Haenlein, 2010). Content that is created by organizations and their customers on SSP is publicly visible and persistent (McAfee, 2006).

The purpose of the paper is to explore, if airports are able to generate a return on their investment in a social relationship with their passengers on the SSP Facebook. Facebook is the globally most adopted SSP counting more than 1 billion active users (Facebook, 2012). Already 72.1% of German computer users who account for 75.6% of the German population maintain a Facebook account (vor dem Esche and Hennig-Thurau, 2013). The paper reports on initial results from expert interviews with German airport organizations focusing on their ability to increase their economic need satisfaction when interacting with passengers on SSP. As Porter noted “the mere presence of firms suppliers and institutions in a location creates the potential for economic value, but it does not necessarily ensure realization of that potential” (Porter, 2006, p. 225). The author adopts a Balanced Scorecard / strategy map approach (cf. Kaplan and Norton, 2004b; Kaplan and Norton, 2004c) to propose cause-effect-relationships between interacting with passengers on SSP and economic need satisfaction of airport organizations. Economic needs include the needs for ‘customer insights’, ‘operational process efficiency’, ‘innovative strength’, ‘customer advocacy’ and ‘customer satisfaction’. As economic needs are theoretical constructs, they needed to be operationalized by indicators. Indicators were deduced based on the developed generic airport strategy map in the form of attitudinal questions. A semi-structured questionnaire was constructed including both open ended-questions and likert-scale ratings. The likert-scale ratings indicate to what extent the respondents agree that Facebook increases the economic need satisfaction of airports as compared to traditional communication channels, such as e-mail, call-center or website. The questionnaire was distributed to six out of the eight major German airports (annual passenger volume > 5 Mio.). The airports Berlin (Tegel/Schönefeld) and Cologne-Bonn were excluded from the study. The existing airports in Berlin will



## New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

close down due to the planned opening of the new airport Berlin Brandenburg International. Cologne-Bonn focuses predominantly on the low-cost traffic segment and is therefore only to a limited extent comparable to the other airports in the sample, which have a rather balanced traffic segmentation. The airports included in the sample have started to use Facebook 1.5 to 3 years ago and accounted for an average number of Facebook 'page likes' of 27.928. The number of Facebook 'page likes' is equal to the number of individuals who connected to an airport on Facebook and chose to receive information updates of the airport in their own Facebook profile. The questionnaire was pre-tested by six social software experts holding management positions in five different German companies in the tourism, media and online industry. The experts were asked to assess the questionnaire in terms of logical consistency, ease of understanding, and contextual relevance. The comments collected from these experts led to several minor modifications of the wording. Based on the questionnaire for each airport face-to-face interviews with the Corporate Communications Managers responsible for social software activities were conducted in the time period from November 2012 to January 2013. The interviews were recorded and transcribed. The results were submitted to quantitative analysis (aggregation of Likert-scale items to variables, analysis of distribution of variables) and qualitative analysis (text analysis, item identification based on frequency of occurrence). As SSP are a relatively recent and fast changing phenomenon and little knowledge currently exists regarding the adoption of SSP of organizations, it was necessary to integrate quantitative with qualitative analysis to be able to draw meaningful conclusions.

### **2. The Balanced Scorecard / Strategy Map as Framework for Proposing Cause-Effect Relationships between Leveraging Bridging Social Capital on SSP and Economic Need Satisfaction of Airports**

To propose cause-effect-relationships between interacting with passengers on SSP and economic need satisfaction of airport organizations the author adopts a Balanced Scorecard (BSC)/ strategy map approach. For each perspective of the BSC / strategy map (financial, customer, process, learning and growth) the author discusses the relationship between bridging social capital, i.e. network connections with customers, and organizational performance of airport organizations.

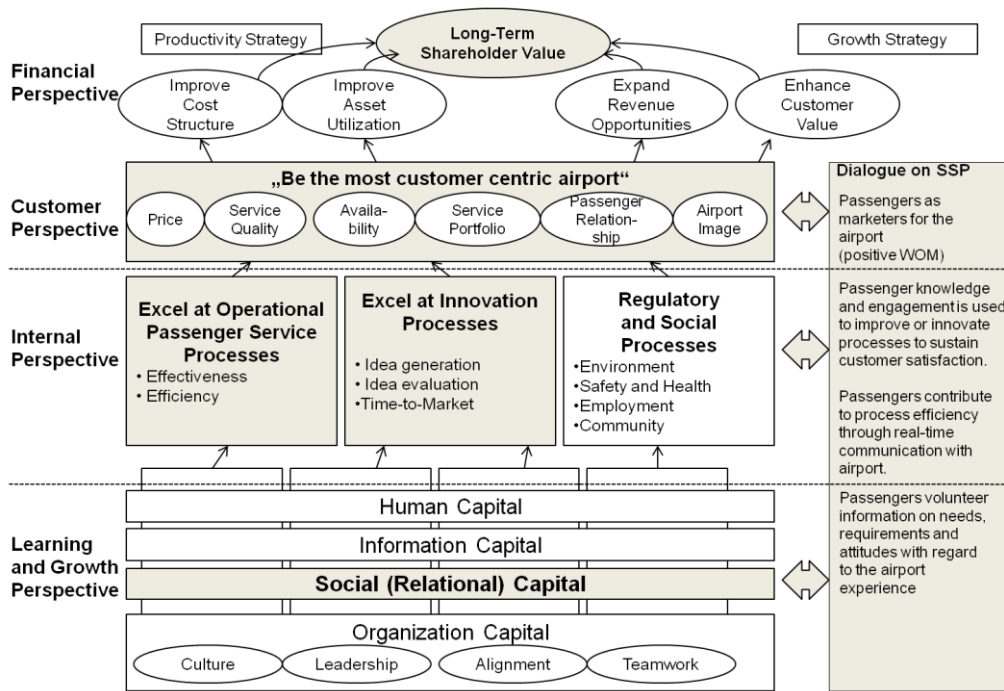
Performance measurement, in particular the concept of the BSC, has gained considerable momentum in both managerial and academic contest. Notion of the BSC is that it is not sufficient to rely exclusively on financial indicators and goals to achieve organizational performance (Kaplan and Norton, 1992). Focusing only on lagging financial outcome indicators might promote organizational behavior that is targeted at maximizing short-term performance, while sacrificing sustainable future growth. The BSC places the emphasis on the enablers of performance (Mooraj *et al.*, 1999). The BSC organizes strategic objectives and measures in four different perspectives. The *financial perspective* focuses on the view of the shareholders and is concerned with the lagging financial indicators such as profitability, growth and shareholder value. The *customer perspective* defines the customer value proposition. Focus is on creating customer satisfaction through an attractive value proposition and by this increase customer loyalty and advocacy. The *process perspective* focuses on the internal processes the organizations needs to excel at to deliver the customer value proposition. Hence, organizations need to concentrate on processes that have the greatest impact on customer satisfaction and retention. The *learning and growth perspective* describes how the intangible assets of an organization (for example human capital or information capital) are integrated and aligned with strategy to create value. Learning and growth measures are lead indicators for internal process, customer and financial performance. While the early BSC concept does not consider cause-effect-relationships (Malmi, 2001), it was later evolved to include cause-effect relationships between the four perspectives (Kaplan and Norton, 2001). In this respect strategy maps are a "natural extension to balanced scorecards" (Neely *et al.*, 2003, p. 130). Strategy maps can be used by



# New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

organizations for review and clarification of strategy, communication of strategy, for prioritization and alignment of strategic initiatives and to focus the organization on long-term goals and mutual understanding (Mooraj *et al.*, 1999, 490; Kaplan and Norton, 1996b). A strategy map is a visual representation of a corporate strategy and therefore must not be considered as “a strait jacket” (Kaplan and Norton, 1996a, p. 34). Each industry/organization needs to develop their own BSC / strategy map depending on the selected strategy. With the advent of SSP, such as Facebook, organizations have started to extend their learning and growth perspective, process perspective and customer perspective beyond organizational boundaries (Tenge, 2012). They are able to benefit from using SSP as part of their information capital to leverage social capital, (network connections to customers) in order to enrich their human capital (tacit knowledge of employees) to improve value creation in the process, customer and financial dimension of the BSC / strategy map. Figure 1 shows how airport organizations can profit from leveraging social capital by means of utilizing SSP for including the passenger in the value creation process to achieve organizational performance.



Source: (Tenge, 2012)

Fig. 1. Generic Airport Strategy Map Based on (Kaplan and Norton, 2004c) with Social Capital Dimension

The generic airport strategy map is targeted at airport organizations that pursue a growth strategy to achieve long-term shareholder value and reflects the current strategy of all airports in the sample. As for the *internal (process) perspective* of the strategy map, this involves a clear focus on the operational passenger service processes (need for operational efficiency) as well as on continuous innovation processes (need for innovative strength). In order to excel at the process and financial perspective, rich customer knowledge is required in the *learning and growth perspective* of the strategy map (need for



# New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

customer insights). Based on passenger feedback some potential improvements or service innovations might be evaluated as being ineffective, as they have no impact on overall customer satisfaction (need for customer satisfaction). Customer satisfaction can be seen as a driver of profitability, as it is an antecedent of customer loyalty (Storbacka *et al.*, 1994). Satisfied customers are also likely to become advocates for the airport (need for customer advocacy). Hence, the *customer perspective* of the strategy map focuses on customer satisfaction and customer advocacy. The total degree of economic need satisfaction of airports on SSP is dependent on the satisfaction of the underlying economic needs in each perspective of the airport strategy map. The economic needs and their respective operationalization in the research study are briefly discussed before reporting on the results of the expert interviews.

## Need for Customer Insights – Learning and Growth Perspective

Through dialogue with passengers on SSP airports gain insights into passenger needs, requirements and attitudes with regard to the airport experience. Learning about gaps between the service quality expectations of passengers in contrast to their perception of the way the service is performed is a precondition for airport managers to carefully determine necessary investments in airport service quality. The theoretical construct 'need for customer insights' is operationalized by the following attitudinal questions:

1. On Facebook, we gain deeper insights into customer needs, requirements and attitudes;
2. Facebook helps us to better determine where the customers' perceived service quality differs from the expected service quality;
3. On Facebook we are able to better detect priority areas for service quality investment spendings with influence on customer satisfaction (root-cause detection).

## Need for Operational Efficiency – Process Perspective

Increased smart phone ownership is providing passengers with ubiquitous access to SSP. They access their social network 'on-the-go' and exchange real-time information. In this respect, they also expect a faster response time of organizations (IBM, 2011). Especially for business travellers and frequent leisure travellers smart phones have become a crucial element of their everyday lives. This development offers the opportunity for airport organizations to increase their operational efficiency with regard to ease and speed of information dissemination (e.g. in times of crisis or air traffic disruptions) and passenger communications (e.g. passenger service, complaint management). The theoretical construct 'need for process efficiency' is operationalized by the following attitudinal questions:

1. Facebook speeds up information dissemination;
2. Facebook accounts for a reduced response time to passenger inquiries/questions;
3. Facebook facilitates management of passengers service quality expectations;
4. Facebook facilitates complaint handling.

## Need for Innovative Strength – Process Perspective

Organizations that maintain network connections that cross organizational boundaries (weak ties that span a structural hole) are more innovative as compared to their competitors, as external network connections provide information sometimes not available within the organization itself (Granovetter, 1973). Innovative airport services of today may quickly become the minimum expectations of tomorrow. It is therefore important for airports to timely notice shifting customer expectations to keep passengers satisfied and to keep up with competing airports. To sustain stable revenues for themselves and their



# New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

business partners (airlines, shopping outlets, restaurants etc.) maintaining a dialogue with passengers is beneficial for evaluation of new service ideas or introduction of new services to the passengers. The theoretical construct ‘need for innovative strength’ is operationalized by the following attitudinal questions:

1. Since using Facebook, we are able to notice shifts in customer expectations more timely;
2. On Facebook we get instant customer feedback on new service ideas;
3. Facebook facilitates the introduction of new services to the passengers.

## **Need for Customer Satisfaction – Customer Perspective**

Tailoring the airport service quality to passenger needs in the process perspective is a precondition to achieve passenger satisfaction in the customer perspective. Airports conduct passenger satisfaction surveys on a regular basis, for example surveys administrated by the Airport Council International for all participating airports.

The theoretical construct ‘need for customer satisfaction’ is operationalized by assessing, if airports experienced an improvement of their customer satisfaction scores.

1. Since using Facebook our passenger satisfaction scores improved

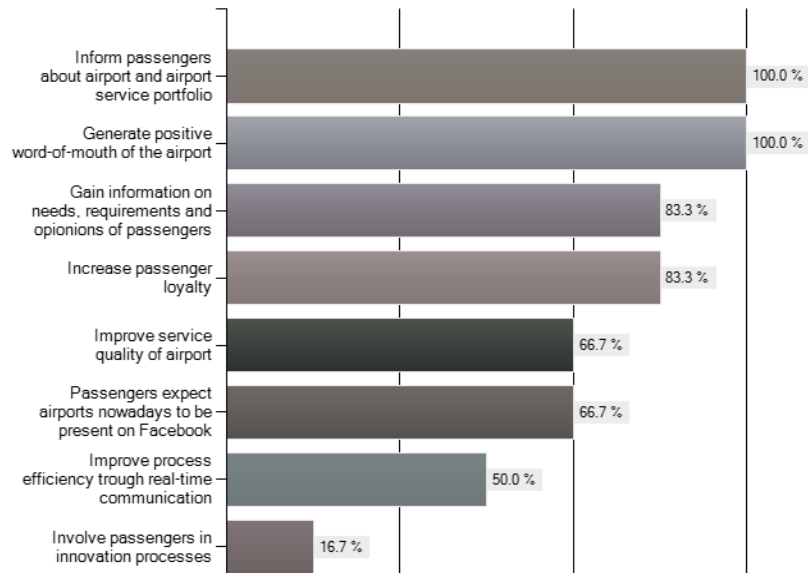
## **Need for Customer Advocacy – Customer Perspective**

SSP are based on informal communication between users. Web-based word-of-mouth (WOM) communication enhances the traditional WOM communication from personal one-to-one to virtual many-to-many communication. Interactions between users are publicly visible and persistent. When satisfied passengers become advocates for an airport, positive WOM is amplified through their social graphs (Jeong and Jang, 2011). By this, the reach of WOM is increases as compared to traditional communication channels. The theoretical construct ‘need for customer advocacy’ is operationalized by the following attitudinal questions:

1. We noticed an increase in the amount of positive WOM since using Facebook;
2. Since using Facebook the reach of positive WOM increased.

## **3. SSP as Mediator for Economic Need Satisfaction of Airport Organizations? – Initial Results from Expert Interviews**

The reasons for maintaining a Facebook profile for communication with passengers are not consistent across the airport sample (see Figure 2). While 100% of the respondents agree that they use Facebook to ‘inform passengers about the airport and the airport service portfolio’ and to ‘generate positive WOM’ about the airport, only 83.3% of the respondents use Facebook to purposefully ‘gain information on needs, requirements and opinions of passengers’ or to ‘increase passenger loyalty’. 66.7% of the respondents maintain a Facebook profile with the goal to ‘improve the service quality of the airport’ or because ‘passengers expects airports nowadays to be present on Facebook’. 50.0% of the sample indicated to use Facebook to improve their ‘process efficiency through real-time communication with the passenger’ and only 16.7% indicated that the reasons include the intention to ‘involve passengers in innovation processes’.



Source: own construction of author based on research results

Fig. 2. Reasons of Airports for Maintaining a Corporate Facebook Page

The results are not surprising, as all respondents reported that the department of Corporate Communication is initiator and driver behind the Facebook activities. Therefore, communication goals have priority over market research or process-oriented goals. Table 1 summarizes the results of the expert interviews with regard to the attitudinal questions of the study. Basis for the rating was a 5-point-likert scale. A rating of '3 = neither agree nor disagree' indicates no advantage of Facebook as compared to traditional communication channels, whereas a rating of '4 = somewhat agree' indicates the existence of some advantage and the rating of '5 = strongly agree' is equivalent to a strong advantage of Facebook. Generally, Facebook is considered to contribute to an increase of total economic need satisfaction (mean: 3.75). However, some economic needs such as 'customer advocacy' (mean: 4.17) or 'innovative strength' (mean: 4.06) are rated higher by the experts as compared to 'customer insights' (mean: 3.54) and 'operational efficiency' (mean: 3.83). Regarding the need for customer satisfaction (mean: 3.00), Facebook does not contribute to an increase of need satisfaction in the view of the respondents.

Table 1

Contribution of Facebook to Economic Need Satisfaction

	Mean	Std. Deviation	Kolmogorov-Smirnov Test
<b>Total Economic Need Satisfaction</b>	<b>3.72</b>	<b>0.293</b>	<b>p = 0.838</b>
Customer Insights	3.54	0.332	p = 0.721
Operational Efficiency	3.83	0.563	p = 0.550
Innovative Strength	4.06	0.443	p = 0.612
Customer Advocacy	4.17	0.816	p = 0.990
Customer Satisfaction	3.00	0.632	p = 0.518

p > 0.05: normal distribution can be assumed

5-point Likert-scale: 1 – strongly disagree; 2 – somewhat disagree; 3 – neither agree nor disagree; 4 – somewhat agree; 5 – strongly agree

Source: own construction of author based on research results



# New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

From the transcribed expert interviews explanations for the ratings were obtained to gain more information about the underlying opinions of the respondents. The data was analyzed for recurring patterns. If at least 67.7% of the sample mentioned the same topic, it was considered to be important and coded into an item. The most obvious items are the “topics that occur and reoccur” (Taylor and Bogdan, 1975, p. 83). Table 2 shows that concerning the need satisfaction for ‘customer insights’ two items were identified. The tonality of the items was both positive and negative. Airports report that Facebook enables them to get a better feeling of customer moods and opinions, because “people speak their mind freely” and they can “be closer to the passenger”. However, despite a constant increase of Facebook page likes for all airports, they complain that the customer insights obtained are not yet representative.

Table 2

## Need for Customer Insights – Results from Expert Interviews

No.	Tonality of Item	Item	Consolidated Interview Statements
1.	Positive	Get better feeling of customer moods and opinions	<ul style="list-style-type: none"> <li>• Be closer to the passenger / get insights into needs</li> <li>• Get insights into needs and positive, negative opinions</li> <li>• People speak their mind freely</li> <li>• It was not expected that a specific topic was of such interest for the passengers</li> </ul>
2.	Negative	Customer insights not yet representative	<ul style="list-style-type: none"> <li>• Only individual opinions</li> <li>• Critical mass not yet reached</li> <li>• Compared with total passenger volumes of the airport, tool not representative</li> <li>• Other tools still more representative</li> </ul>

Source: own construction of author based on research results

Table 3

## Need for Operational Process Efficiency – Results from Expert Interviews

No.	Tonality of Item	Item	Consolidated Interview Statements
1.	Positive	Suitable tool for crisis communication and communication of air traffic irregularities	<ul style="list-style-type: none"> <li>• Own experience confirms, that it works, e.g. strikes</li> <li>• Useful tool to quickly inform in times of crisis, strikes etc.</li> <li>• Tool used for communication of irregularities, e.g. strike</li> <li>• Useful for communication regarding acute incidents</li> </ul>
2.	Positive	Faster information dissemination and reaction possible	<ul style="list-style-type: none"> <li>• Communication on Facebook faster</li> <li>• Fast feedback to passenger possible</li> <li>• Faster information dissemination</li> <li>• Fast social channels complement traditional channels</li> </ul>
3.	Negative	No increased efficiency of complaint management processes	<ul style="list-style-type: none"> <li>• Not focussed</li> <li>• Public discussion of complaints not intended</li> <li>• Internal processes not yet completely set up</li> <li>• Does not facilitate internal processes</li> </ul>

Source: own construction of author based on research results





# New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

With regard to the need satisfaction for ‘operational process efficiency’ two positive and one negative item were identified and summarized in Table 3. Airports consider Facebook as a suitable tool for crisis communication and communication of air traffic irregularities that is appropriate for faster information dissemination and reaction. All respondents confirmed during the interviews that they have already used Facebook as a communication channel for acute incidents, for example strikes or severe weather conditions. By contrast, currently no airport uses Facebook to increase the efficiency of complaint management processes. Reasons include that respective internal processes are either not yet set up or not adequate, complaint management on Facebook is not focused by the airport or that a public discussion of complaints is not intended to avoid the risk of a viral dissemination of negative word-of-mouth.

With regard to the need satisfaction for ‘innovative strength’ two positive and one negative item were identified and summarized in Table 4. All airports agree that Facebook accounts for a facilitated communication of new services to the passenger. The second positive item that was identified relates to the fact that airports reported frequent initiatives to generate passenger feedback regarding specific topics. The approaches to generate passenger feedback have been reported to be rather ad-hoc than strategic. This is in line with the result that only 16.7% of the respondents claimed to be on Facebook to purposefully involve passengers in innovation processes. The respondents also stated that the obtained passenger feedback did not contain actionable knowledge. Reasons included too little participation of passengers as compared to total passenger volumes of the airport and the related problem of representativity.

Table 4

### Need for Innovative Strength – Results from Expert Interviews

No.	Tonality of Item	Item	Consolidated Interview Statements
1.	Positive	Facilitated communication of new services to passengers	<ul style="list-style-type: none"> <li>• Agreement to statement by all airports</li> </ul>
2.	Positive	Frequent initiatives to generate passenger feedback regarding specific topics	<ul style="list-style-type: none"> <li>• Passenger involvement takes place</li> <li>• Airport will continue to gather feedback</li> <li>• Feedback on new airport services gathered</li> <li>• Existing dialogue with departments to encourage use of Facebook to gather feedback on new services</li> </ul>
3.	Negative	So far, little actionable knowledge from feedback obtained	<ul style="list-style-type: none"> <li>• Too little passenger posts on requirements</li> <li>• Too little active and useful passenger feedback</li> <li>• Feedback not yet representative</li> <li>• Feedback not generalizable to all passenger</li> </ul>

Source: own construction of author based on research results

Concerning the need for ‘customer advocacy’ again two positive and one negative item were identified. The summarized items presented in Table 5 include the possibility to positively contribute to an emotionalization of the airport and by this increase the emotional attachment of the passenger to the airport. This is achieved by posting emotional stories and photos of the airport. As public opinion still regards airports as mere providers of infrastructure and noise producers, emotionalizing the airport experience is an important agenda point for the airport industry. Airports also reported on the opportunity



# New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

to purposefully increase WOM. Especially aviation related topics have been found to be of special interest to the Facebook fans of the airport and trigger interaction. The effect of the positive aspects is constraint by the fact that not all target groups can be reached on Facebook as compared to other communication channels. However, vice versa, the experts also noted that new target groups emerge on Facebook that cannot be reached by traditional media. It is therefore intended to integrate Facebook with other channels.

Table 5

## Need for Customer Advocacy – Results from Expert Interviews

No.	Tonality of Item	Item	Consolidated Interview Statements
1.	Positive	Emotionalization of airport possible	<ul style="list-style-type: none"> <li>• Increase emotional attachment of passenger to the airport</li> <li>• Feel fascination of aviation / aviation related postings</li> <li>• Tell interesting and emotional stories about the airport and people at the airport</li> <li>• Humanization of airport / introduce departments and people</li> <li>• The public still regards airports as infrastructure provider</li> </ul>
2.	Positive	Possibility to purposefully increase positive word-of-mouth (WOM) and virality	<ul style="list-style-type: none"> <li>• Emotional posts, i.e. no pure facts and figures, foster WOM</li> <li>• Creation of posts that foster WOM</li> <li>• Aviation related topics arouse special interest /trigger interactions</li> </ul>
3.	Negative	Not all target groups can be reached on Facebook	<ul style="list-style-type: none"> <li>• Not all target groups on Facebook</li> <li>• Other target group on Facebook</li> <li>• Limited reach</li> </ul>

Source: own construction of author based on research results

Table 6 shows that it is not yet clear, if Facebook has an impact on the customer satisfaction scores of airports, as it is currently not monitored and measured. Meaning, that no link exists between the Facebook activities and operational performance indicators of the airport.

Table 6

## Need for Customer Satisfaction – Results from Expert Interviews

No.	Tonality of Item	Item	Consolidated Interview Statements
1.	Negative	Influence of Facebook on customer satisfaction not measured	<ul style="list-style-type: none"> <li>• No monitoring, no benchmarking, no knowledge, if relationship exists</li> </ul>

Source: own construction of author based on research results

83.3% of the respondents believe that the future importance of Facebook and other SSP is going the increase, 16.7% predict a stable importance. Given the growing importance of the communication channel, organizational structure is seen as a success factor to be able to harvest its full potential (Table 7). Challenges mentioned by the experts include the transition from departmental silos to an



# New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

interdisciplinary, network-oriented approach to Facebook maintenance, the development of standards and routines and a lack of human resources.

Table 7

## Organizational Challenges – Results from Expert Interviews

No.	Tonality of Item	Item	Consolidated Interview Statements
1.	Neutral	Organizational structure as success factor for harvesting full potential of Facebook (interdisciplinary approach to Facebook management)	<ul style="list-style-type: none"> <li>• Adequate organization of Facebook activities as a precondition</li> <li>• Increase involvement of other departments</li> <li>• Routines need to be developed</li> <li>• Transition from hierarchical structure to network structure necessary</li> <li>• Lack of resources</li> </ul>

Source: own construction of author based on research results

## 4. Conclusions and suggestions for further research

The paper has shown that Facebook enables airport organizations to enter into a dialogue with passengers and leverage bridging social capital, i.e. network connections that cross organizational boundaries, to increase their economic need satisfaction. Despite that airports already report fruitful benefits of their Facebook activities, they are not yet able to fully exploit the potential of the SSP. This is due to both external and internal reasons:

1. Despite that the number of Facebook users connecting to airports is constantly increasing, the critical mass needed for passenger feedback to be representative is not yet reached. This currently restricts the utilization of Facebook for market research or an active involvement of passengers in innovation processes.
2. As the Facebook activities of airports are anchored in the department of Corporate Communications, communication goals, for example fostering positive WOM or faster information dissemination, have priority over other business process-oriented goals.
3. Airports are still at the beginning of a transition process for a more interdisciplinary approach to Facebook management, meaning that they face the challenge of adapting existing organizational structures as well as routines and resources.

In the view of the author airports need to focus on two principal success factors to further increase the degree of economic need satisfaction:

1. Development of critical mass: passenger insights must be representative to be of value for airport organization. It is therefore necessary to increase the number of Facebook 'page likes' and passenger interactions. As customers voluntarily enter into a dialogue with organizations on SSP, i.e. without any contractual obligation to maintain the relationship, further research is needed and currently conducted by the author, how the motivation of customers to engage with organizations, volunteer information or even act as organizational advocates can be sustained or increased. Obviously, more work is needed to fully understand the motivation of passengers to actively engage with airport organizations on SSP. Knowledge of the underlying motives is vital for airports to be able to correctly respond to customer needs. Otherwise, the expected future value of the relationship will decrease from the perspective of customers and so will the investment of



# New Challenges of Economic and Business Development – 2013

May 9 - 11, 2013, Riga, University of Latvia

effort in maintaining the relationship (cf. Lindenberg, 1990). Put in other words, in absence of reciprocal behavior, social capital will be discounted (Flap, 2001).

2. Adaption of organizational structure: an interdisciplinary, network-oriented approach to Facebook management is a precondition to be able to move from supporting communication processes to also increasing the efficiency and effectiveness of other operational processes. However, prior to embedding SSP into processes the identification of clear business goals based on corporate strategy as well as of key performance indicators (KPIs) is essential for a holistic approach to SSP.

As SSP are a relatively recent and still emerging phenomenon the conduction of a longitudinal study would be beneficial to assess changes in economic need satisfaction and adaption of organizational structures of German airport organizations caused by an increasing adoption of SSP by passengers over time. The study reports on a small sample size and is geographically limited to Germany. This restricts the generalizability of the research findings. Notwithstanding, though the study focuses on the airport industry, it can be adapted to any other industry by customizing the strategy map approach. It would be interesting to explore the differences in economic need satisfaction across industries (e.g. consumer brand organizations vs. service organizations).

## Bibliography

- Adler, P.S. and Kwon, S.-W., 2002. "Social Capital: Prospects for a New Concept", *The Academy of Management Review*, Vol. 27, No. 1, Jan., 2002, pp. 17-40.
- Atkinson, H., 2006. "Strategy Implementation: a Role for the Balanced Scorecard?", *Management Decision*, Vol. 44, No. 10, pp. 1441-1460.
- Boyd, D. M. and Ellison, N. B., 2007. Social Network Sites: Definition, History and Scholarship, *Journal of Computer-Mediated Communication*, Vol. 13, No. 1, pp. 210-230.
- Cohen, D. and Prusak, L., 2001. *In Good Company: How Social Capital Makes Organizations Work*, Harvard Business School Press, Boston, Mass.
- Facebook, 2012. *Quarterly Earnings Slides Q4 2012*. [Online] Available at: <http://de.scribd.com/doc/123034877/Facebook-Q4-2012-Investor-Slide-Deck> [Accessed 2 March 2013].
- Flap, H., 2001. "No Man is an Island. The Research Programme of a Social Capital Theory", in Favereau, O. and Lazega, E. (Eds.), *Conventions and Structures in Economic Organization. Markets, Networks and Hierarchies*, Edward Elgar, London, pp. 29-59.
- Granovetter, M.S., 1973. "The Strength of Weak Ties", *The American Journal of Sociology*, Vol. 78, No. 6, pp. 1360-1380.
- IBM, 2011. "From Stretched to Strengthened. Insights from the Global Chief Marketing Officer Study". [Online] Available at: <http://www.public.dhe.ibm.com/common/ssi/ecm/en/gbe03433usen/GBE03433USEN.pdf> [Accessed 20 March 2012].
- Jeong, E. and Jang, S., 2011. "Restaurant Experiences Triggering Positive Electronic Word-of-Mouth (eWOM) motivations", *International Journal of Hospitality Management*, Vol. 30, No. 2, pp. 356-366.
- Johnson, W.H., 1999. "An Integrative Taxonomy of Intellectual Capital. Measuring the Stock and Flow of Intellectual Capital Components in the Firm", *Technology Management*, Vol. 18 5/6/7/8, pp. 562-575.
- Kaplan, A.M. and Haenlein, M., 2010. "Users of the World, Unite! The Challenges and Opportunities of Social Media.", *Business Horizons*, Vol. 53, pp. 59-68.
- Kaplan, A.M. and Norton, D.P., 1992a. "The Balanced Scorecard. Measures that Drive Performance", *Harvard Business Review*, pp. 71-79.
- Kaplan, A.M. and Norton, D.P., 1996b. *The Balanced Scorecard: Translating Strategy into Action*, Harvard Business School Press, Boston, Mass.
- Kaplan, A.M. and Norton, D.P., 1996c. "Using the Balanced Scorecard as a Strategic Management Systems", *Harvard Business Review*, pp. 1-13.



## New Challenges of Economic and Business Development – 2013

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- Kaplan, R.S. and Norton, D.P., 2001. *The Strategy-Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment*, Harvard Business School Press, Boston, Mass.
- Kaplan, A.M. and Norton, D.P., 2004a. "The Strategy Map: Guide to Aligning Intangible Assets", *Harvard Business School Press*, Vol. 5, No. 32, pp. 10-17.
- Kaplan, R.S. and Norton, D.P., 2004b. *Strategy Maps: Converting Intangible Assets into Tangible Outcomes*, Harvard Business School Press, Boston, Mass.
- Kaplan, R.S. and Norton, D.P., 2004c. "The Strategy Map: a Guide to Aligning Intangible Assets", *Strategy & Leadership*, Vol. 32, pp. 10-17.
- Lindenberg, S., 1990. "Homo Socio-Oeconomicus: The Emergence of a General Model of Man in the Social Sciences", *Journal of Institutional and Theoretical Economics*, Vol. 146, pp. 727-748.
- Lin, N., 1999. "Building a Network Theory of Social Capital", *CONNECTIONS*, Vol. 22, No. 1, pp. 28-51.
- Malmi, T., 2001. "Balanced Scorecards in Finnish Companies: A Research Note", *Management Accounting Research*, Vol. 12, No. 2, pp. 207-220.
- McAfee, A. P., 2006, n. p. *Enterprise 2.0 – Version 2.0*. [Online] Available at: [http://andrewmcafee.org/2006/05/enterprise\\_20\\_version\\_20/](http://andrewmcafee.org/2006/05/enterprise_20_version_20/) [Accessed 19 February 2011]
- Mooraj, S., Oyon, D. and Hostettler, D. (1999), "The Balanced Scorecard: a Necessary Good or an Unnecessary Evil?", *European Management Journal*, Vol. 17, No. 5, pp. 481-491.
- Neely, A., Marr, B., Roos, G., Pike, S. and Gupa, O., 2003. "Towards the Third Generation of Performance Measurement", *Controlling*, Vol. 3, pp. 129-135.
- O'Reilly, T., 2007. "What is Web 2.0. Design Patterns and Business Models for the Next Generation of Software", *Communications & Strategies*, Vol. 65, No. 1, pp. 17-37.
- Porter, M.E., 2006. *On Competition, The Harvard Business Review Book Series*, 11th ed., Harvard Business School, Boston, Mass.
- Storbacka, K., Strandvik, T. and Grönroos, C., 1994. "Managing Customer Relationships for Profit. The Dynamics of Relationship Quality", *International Journal of Service Industry Management*, Vol. 5, No. 5, pp. 21-38.
- Taylor, S.J. and Bogdan, R., 1975. *Introduction to Qualitative Research Methods: A Guidebook and Resource*, Wiley, New York, NY.
- Tenge, M., 2012. "Public Social Software Platforms as Extension of Airport Organizations. A Social Capital Approach for Building Organizational Performance", paper presented at Conference Innovative Approaches of Management Research for Regional and Global Business Development, 03.08.-05.08., Kufstein, Austria.
- Tenge, M., 2013. Social Software Platforms as Motor of Relationship Marketing in Services: A Conceptual Framework with Focus on the Airport Industry. In H. Kaufmann, & M. Panni (Eds.), *Customer-Centric Marketing Strategies: Tools for Building Organizational Performance* (pp. 280-296). Hershey, PA: Business Science Reference.
- Vor dem Esche, J. and Hennig-Thurau, T., 2013. German Social Media Consumer Report 2012/2013, *Social Media Think:Lab Working Paper Series Westfälische Wilhelms-Universität Münster*, pp. 1-45. [Online] Available at: [http://www.socialmediathinklab.com/wp-content/uploads/2013/02/WWU\\_Social-Media-Consumer-Report\\_0213\\_Ansicht.pdf](http://www.socialmediathinklab.com/wp-content/uploads/2013/02/WWU_Social-Media-Consumer-Report_0213_Ansicht.pdf) [Accessed 26 February 2013]
- Wasko, M.M. and Faraj, S., 2005. "Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice", *MIS Quarterly*, Vol. 29, No. 1, pp. 35-57.