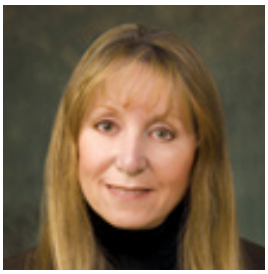
An Air Travel Security Planning Map

by Carol Panza



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Carol holds a BS degree in Marketing and an MBA in Industrial Relations. She is a member of the 2001 - 2003 Board of Directors for the International Society for Performance Improvement (ISPI). Carol has held various leadership roles on the local chapter level for both ISPI and the American Society for Training and Development (ASTD). She is a member of the American Society for Quality Control (ASQC), the International Federation of Training Development Organizations (IFTDO) and the British Institute of Management (BIM).

Background

One useful technique for clarifying and highlighting organization level issues and opportunities involves the creation of graphics or pictures that show the high-level interaction of the functions and the operation of the processes in an organization. We refer to these pictures as Organization Relationship Maps. This article describes how the development of an Organization Relationship Map can help a performance improvement team gain insight into the scope and true nature of the issues and opportunities they face.

All airports in the USA, are certainly focused on optimizing the safety and security of air travel. In addition, they all operate within a highly regulated environment. Since the stunning and tragic events of 9-11, there has been and continues to be high visibility for airport operations with a focus on security, and the Federal Government has moved aggressively to address one important component of airport operations, i.e., passenger (and baggage) screening.

However, any airport's executive management will point out that an airport is an extremely complex environment. There are a variety of airport functions, vendors/contractors, government agencies, and tenants (such as airlines) that all interact in order to support air travel. Many people representing a variety of airport functions as well as vendors, contractors and tenants "touch" every departing flight, whether that flight is turning around from an incoming flight, or the aircraft comes from the airline's hangar. Improving or even optimizing the passenger screening process, though it will have a large and important impact on the safety of departing flights, is not the ONLY opportunity for security to be breached and safety to be jeopardized. Ensuring that the entire complex airport operating environment has been "engineered" to support safety and security, is the ultimate concern of airport executives on behalf of their ultimate customer, the flying public.

The Strategic View

The Air Travel Security Planning Map was actually drafted back in early January 2002 when the US government, via the Department of Transportation (DOT), had begun to focus on airport security and, specifically passenger and baggage screening. DOT's initial step was to issue Requests For Proposals (RFP's) to potential contractors for the development of training and other equipment and job aids to support passenger screeners and the passenger and baggage screening process. However, passenger and baggage screening alone, could not account for all security risks for departing flights. That is, screening is only one part of a complex set of interfaces that result in the departure of safe, uneventful flights. We drafted the map, that appears at the end of this article, as an example of the complexity of airport operations, and as a

tool to convince airports, and the US government to consider what a comprehensive analysis of an airport environment might look like. The strategic organization view that we advocate here, seeks to document the dependency relationships and the issues and opportunities that exist in the interface between Sky/Red Caps and curbside check-in, airline ticketing, passenger screening, baggage handling, food and other retail concessions, airport facility maintenance, gate agents, etc. Given the complexity of the operation of any airport and the fact that airport executives function within a highly regulated environment, it is important to ensure that all parts of any airport including tenants, vendors and regulators are able to come to agreement on how it all fits together. They need a common picture. This information is important for supporting the performance effectiveness of each contributing process, function, company and/or agency and, certainly, for the airport overall. Some important questions that get answered at this strategic relationship level of organization analysis include the following.

- What are all of the interactions required to support the safe and secure departure of flights from an airport, in compliance with regulatory guidelines, maintaining desired relationships with airline tenants and operating within cost and revenue goals? *So, what are the specific services provided by airport security staff, passenger screeners, and airline personnel including ticketing, baggage checking, gat agents and flight attendants? What about airport maintenance including runways, etc. and buildings/facilities?*
- Are there issues or questions that arise when you view all parts of the complex system that is an airport and narrow your focus to things that can have an impact on air travel safety? *How, for example, are deliveries of goods for resale at retail concessions inside of security, screened to ensure that no dangerous items are "stocked" or stored? What about maintenance workers that are able to come in contact with aircraft from outside of the terminal?*
- Have issues or potential issues and questions been identified in a comprehensive way that has been, or could be, communicated to all "players?" *We anticipated that many issues and questions, that would be identified and documented through the strategic analysis process, might have been raised before and/or would already be known to staff and management who work at airports, whether that be for the airport facility, for an airline or for the FAA or NTSB. Has a comprehensive set of security related issues and questions ever before been compiled in one place, gathered from the many vantage points that represent the operation of the whole airport as a complex, multifunctional operating system?*

With our map we took an "educated guess" at the responsibilities of each part of the overall airport system and the way that they depend on each other as they interact to support air travel safety, passenger and tenant satisfaction, regulatory compliance and cost effective airport operations. We did this as a device to expedite and support the process of developing and confirming the actual information for any airport that consented to participate. Our intent was to support airports in taking this important look at their own performance beginning with customers, suppliers, regulators and the local community as well as including the interaction of all components, both those within the direct control of airport management, and those managed by other companies, like the airlines. This strategic

organization level analysis is important to any airport's ability to get maximum benefit from the installation of any new training, equipment or job aids or to identify additional and supporting processes, policies, procedures, goals, incentives, equipment, learning resources, job aids and so forth that may be mandated by the government or that may already be under development by the airport.

It was and continues to be our belief that this organization analysis step is necessary input into the specification of a practical, comprehensive and effective, performance requirements document. Such a document is key to providing a road map for airports to support the development and prioritization of improvement requirements for strategic planning and budgeting. We have presented this concept with our map as the key visual to airline officials, airport executives and representatives of government regulatory agencies. There has been a uniform reaction that we are talking about reality and raising critical issues in an understandable manner. To date, however, we have not gotten commitment from the US Government, nor from an individual airport or consortium of airports, to proceed with this analysis which we believe would give an airport the opportunity to optimize its own performance results as well as to serve as a model for other airports nationwide, and potentially even worldwide.

Approach

The approach to organization analysis and performance improvement that this sample map represents, begins at the most strategic level for any enterprise and proceeds in a systematic manner. The first underlying premise is as follows.

Start with the overall context and relationship view of the organization vs. process specification. You need to start at the overall or macro level to view the organization and its key functional parts in the context of the marketplace in which it operates, i.e., the organization's customers, suppliers, partners and regulatory authorities. Defining performance context is the essential first step and it must precede analysis and improvement actions focused on processes, even key cross-functional processes. Are there, for example, vulnerabilities (security risks) that are based on contact with an aircraft while it's in the airline's hanger, from mechanics or refuelers at the gate, etc., that will not be addressed by exclusively treating passengers and bags through a thorough and technology assisted screening process?

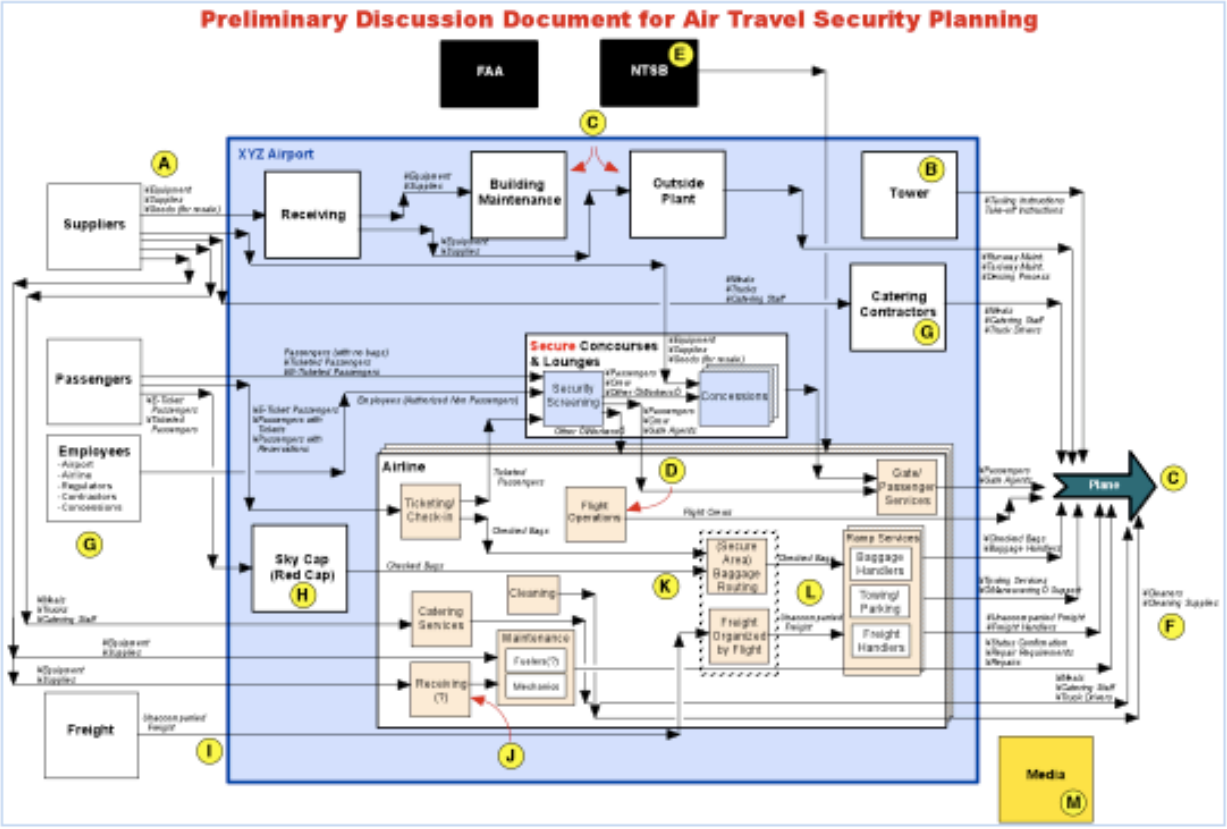
Not only do we suggest that airports begin at the most strategic level to look at the entire interdependent system of functions, process, companies and agencies that must interact in support of air travel, but we also contend that the ensuing analysis should be conducted in a systematic manner. That is, analysis should proceed from the strategic or organization level, to the process level, and, then, to the position or job level. A systematic macro-to-micro analysis process, allows the enterprise to ensure that actions taken or changes that are made in one area, do not inadvertently cause performance issues or problems in another. It also supports the development of goals and objectives along with key measures, that are critical to guiding performance that will be truly supportive of overall enterprise level goals, rather than those that are merely typical of measures for some function or, even, just easy to count. The next logical step is to develop the specific and interlocking process and position expectations

that link from the organization level, through key processes to the job level. In this way, the alignment is created for goals and objectives throughout the organization and based on critical organization success measures. It also provides the important "line of sight" information that enables performers to clearly see that each of them has an impact on the performance results of the organization as a whole.

Conclusion

A focus on business process analysis, improvement and ongoing management, is valuable to the long-term success of any enterprise, whether it is an airport, a large corporation, a small business or a nonprofit organization. The strategic organization relationship analysis represented by the Air Travel Security Planning map, is one way to support achievement of real return on investments made in improvement actions at the process level, and properly set (or update) investment priorities. This strategic analysis step helps to avoid investments of time, effort and money at an individual process or job level, that may actually have a negative impact in another part of the enterprise, thereby deteriorating any positive, and possibly resulting in a net negative for the enterprise as a whole.

Notice the letters in yellow circles on the Air Travel Security Planning map. They correspond to issues or questions for further study that are listed in the large red bordered box accompanying the map. By constructing the map and showing the airport in the context of its operating environment as well as the various functions that must interact within an airport, we can begin to identify current or potential interface breakdowns or vulnerabilities. We can certainly see the dependencies of the functions, vendors, tenants and regulatory groups on each other, and the interdependency of the entire system. Once these insights are documented (and, in this case, pictured on the map) and relationship issues identified and confirmed, we are able to proceed with confidence to prioritize both action steps and areas for further, more detailed, process analysis. Furthermore, the strategic analysis and "mapping" process itself, provides the opportunity and the tools for bringing representatives of all of the various constituencies within an entire enterprise/system together to "own" and address enterprise level issues in addition to, and as a "context" for, their individual process issues and opportunities.



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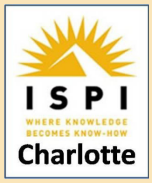
Sample Issues/Questions for Further Study

(Preliminary Discussion Document for Air Travel Security Planning)

- **A** Is there "central receiving" for equipment goods and supplies that come into the airport or do airlines and concessions have their own separate & direct receiving? How are goods for resale at concessions inside security screened prior to being "stocked" at any concession?
- **B** Are workers (Controllers & others) in the Tower, Federal employees? How is Tower security maintained? When does the Tower/ Controllers get the "hand-off" & take control of a flight? (When it is released from the Gate? When it enters an active taxiway? While it is parked at the gate?)
- **C** How are workers screened who do not enter, work or leave via a concourse and gate within a terminal building?
- **D** Do domiciled flight crews typically access aircraft through Flight Ops rather than through the concourse?
- **E** NTSB Representatives/Investigators have the authority to board any flight including access to the cockpit? How are their credentials monitored & how do they access aircraft?
- **F** Where are cleaning supplies stored and how are products and "tools" accessed by cleaning staff members?
- **G** How are the meals, truck drivers & other catering staff screened prior to contact with planes (since they do not get to planes through the concourses and gates)?
- **H** Can passengers check bags at curbside?
- **I** How are the contents of unaccompanied freight determined or confirmed?
- **J** Do most airlines have a centralized receiving group & whether or not they do, how are supplies, equipment & delivery personnel screened?
- **K** How can baggage contents be determined for checked bags (until screening equipment is widely available)?
- **L** Is freight handled separately from checked bags & by different personnel? (How is the process monitored/ managed?)
- **M** What are the "freedom of information issues where the media publicizes the loopholes or gaps in security, for example?



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