Issues with Airport Organization and Reorganization

Finding the Perfect Organizational Structure for an Airport

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Managers from Colorado Springs Airport were among many who contributed insights on organizational structure, presented in ACRP Synthesis 40.

Airport managers face unprecedented political, environmental, and economic pressures. In the past decade, new challenges have included irregular operations, increased competition, changing regulatory issues, and economic pressures.

These external pressures have triggered changes in operations; in some cases, changes in business models and strategies have helped airports remain self-sustaining. Changing an organization's structure, however, requires sound leadership and high-level collaboration. Many airports are examining their internal organizational structures to rebalance workloads and identify outsourcing opportunities to improve efficiencies. Some are finding that a complete overhaul of their original organizational structure is warranted.

The Airport Cooperative Research Program (ACRP) undertook a synthesis study, which released ACRP Synthesis 40, *Issues with Airport Organization*

Case studies included small airports, as well as large, such as Salt Lake City International Airport.

and Reorganization.[1] The guiding principle from the research findings is that a well-understood and effective organizational structure can greatly assist an airport in meeting strategic, operations, and business goals and facilitate the delivery of core services.

Study Methodology

The synthesis employed a mixed methodology to gain the most robust and useful information from airport managers. A quick first step was to request electronic copies of airport organizational charts; approximately 40 charts were received and catalogued. The majority of the organizational charts focused on functions.

After the review of the organizational charts, researchers designed a questionnaire based on the Three Sigma Corporation's indicators for change (see sidebar, page 55). Airport executives were asked to identify their type of governance structure, their type of organizational structure, the number of employees in their workforce, which employees or job functions were outsourced, and how they defined

[1] www.trb.org/Main/Blurbs/169008.aspx.
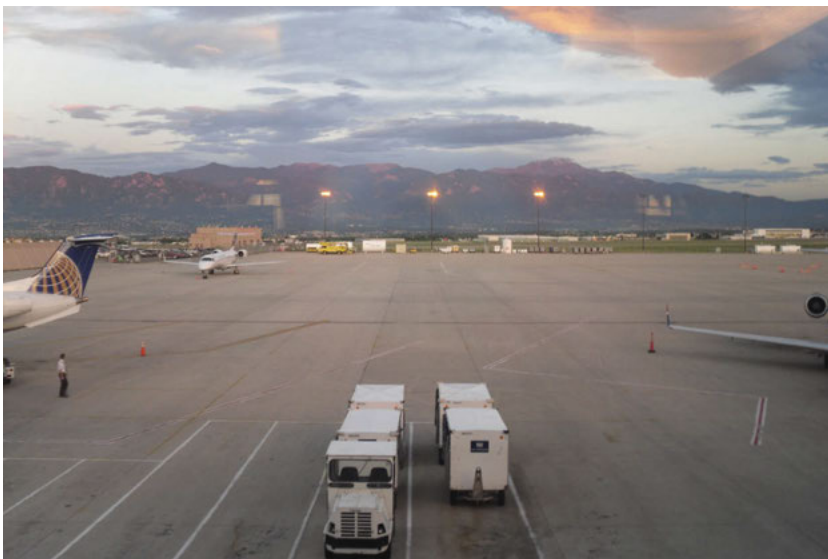
and determined organizational effectiveness and efficiency.

Twenty-two executives representing 36 airports completed the survey—a 100 percent response rate. The airports varied in size from 7 to 1,850 employees and represented each type of governance structure in each category of the Federal Aviation Administration's National Plan of Integrated Airport Systems.

After an analysis of the survey data, researchers selected five airports for a qualitative, in-depth interview. All five airports had experienced a recent significant change in organizational structure and were willing to share lessons learned from the change, along with advice to others initiating change in organizational structure and design. The five case study airports or airport systems were the Metropolitan Nashville Airport Authority, Tennessee; Louisville Regional Airport Authority, Kentucky; Salt Lake City International Airport, Utah; Rapid City Regional Airport, South Dakota; and the Colorado Springs Airport.

Organizational Charts

Nearly all the airports employed a functional organizational structure, with jobs separated by departments—such as operations, maintenance, finance, administration, and development—functioning largely as independent silos. Represented graphically, these functions do not cross one another and have clear lines of authority. Larger airports generally exercised larger spans of control.

The organizational structures affected the number of full-time employees (FTEs). Nonhub and small hub airports that have municipal governance structures tended to purchase certain services such as accounting, legal, aircraft rescue and firefighting, and law enforcement, reducing the number of FTEs. This outsourcing allowed smaller airports more flexibility in human resources and budgets; the organizational

A K-9 officer and explosive detection canine perform a search at San Diego International Airport. Like many larger airport and port authorities, the San Diego Unified Port District has its own law enforcement authority; smaller airports use contractors.
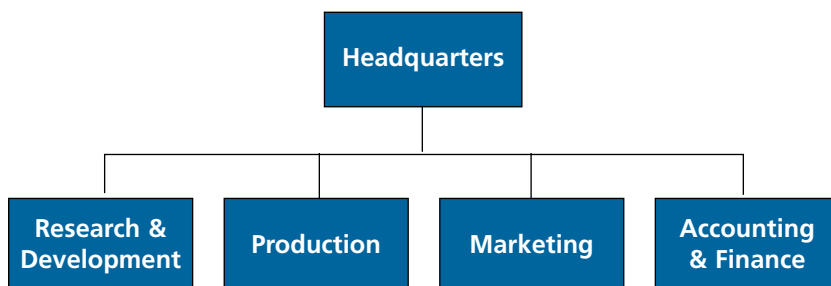
FIGURE 1 Team-based organizational chart: Minneapolis Parks Department.

FIGURE 2 Functional organizational chart.

The typical organizational chart no longer suffices for most organizations. Many organizations are using teams and structures without boundaries, which is difficult to represent. For example, Figure 1 (left) depicts a team-based organizational structure; the circles represent lines of business, areas of work, or functions, but the connecting lines are less strong; the chart seems to convey that the circles must encompass one another to work together; on most functional organizational charts, these lines would connect at the next level (Figure 2, below left).

Additional Findings

Several issues emerged: a clear vision and strategic plan was critical in driving any organizational change—strategy should drive structure. Endorsement from the governing entity was essential; the primary role of the leadership was to involve key employees in determining the organizational structure that would best serve the new strategic business objectives. An overarching theme emerged from the case study interviews: initiating and implementing organizational change takes time; patience must prevail; and celebrating the small successes along the way is advisable.
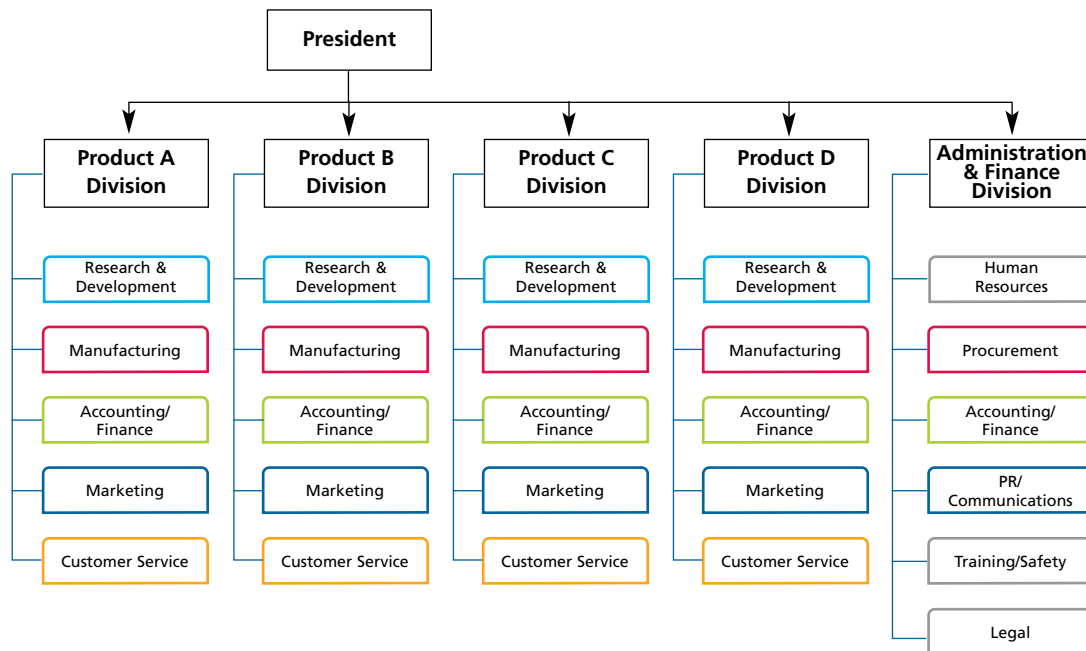
Neither the literature nor the data address assessment metrics. At first, the assumption was that changes in an organization would be data driven; some of the changes are difficult to measure, however, or have no appropriate and accepted measurement. Airports often reported that no quantitative measurement was conducted before or after the change; instead, they relied on a qualitative assessment indicating that the change was an improvement for the organization.

Self-reported assessments like these, however, lack the validity of an established metric. ACRP Report 19A, *Resource Guide to Airport Performance Indicators*, is a valuable, practical guidebook that could be used more widely in the industry to establish a better understanding of how to measure and assess an airport's performance.[2]

Organizational Structures

The synthesis summarizes current practices in organizational design, indicators for change, assessment metrics, and other industry trends in organizational change, including the barriers to change. The report describes organizational structures that have evolved in the past 100 years of management science and reviews the advantages and disadvantages of each structure, yielding useful approaches for airport managers who face structural change in their orga-

charts were more concise and focused on operations and maintenance.

Conversely, authority-owned airports tended to assume all of the functional areas and therefore to have less outsourcing and a higher number of FTEs. The correlation between authority and number of FTEs prevailed regardless of the airport size.

Because most airports followed the functional model, the majority of organizational charts did not cross over at certain levels of finance, administration, customer service, and human resources. For example, the operations department interfaces with accounting on purchases or with human resources for the evaluation, hiring, or firing of employees. This universal element of day-to-day business practice was seldom represented clearly in the airports' organizational charts.

nizations. The informal relationships within organizations and the impacts of change on organizational culture are also discussed.

The main types of organizational structures identified in the business literature range from conservative, centralized, and hierarchical to free-flowing, decentralized, and collaborative; in graphic representations of the structures, boxes and straight lines yield to circles and arrows. Each structure on the spectrum, from functional to division based to matrix, has advantages and disadvantages that airport managers can consider when restructuring.

These organizational structures are detailed in ACRP Synthesis 40. As organizations strive to represent graphically the connections needed to carry out core services, they are finding that conventional hierarchical structures often prohibit or confuse autonomy and teamwork both within and outside of the organization. Figures 2, 3, and 4 (page 56 and this page) represent organizational charts commonly found in the workplace.

In summary, in the real world of airport management, a matrix-type structure is emerging (Figure 4), with departments interacting with other functional areas to achieve organizational flexibility. The disparity between conventional organizational charts and actual practice is driving much-needed change. The research indicates that an organization must establish a collaborative, cohesive culture, in which work groups function seamlessly.

Flight Plan for Change

Drawing on findings from the organizational charts,

the survey of airports, and the case study interviews, along with the literature on organizational design, structure, and strategy, researchers developed a flight plan for airport executives. Following are the steps critical for a cohesive organizational change; the process is not immediate and—as shown in some of the airport case studies—may require up to five years.

1. Review the airport's vision, mission and business strategy—its strategic objectives—and determine its core services.
2. Define what is triggering the need to change.
3. Determine what needs to be changed—or validate the current structure.
4. Gain support and endorsement from the governing entity to proceed.
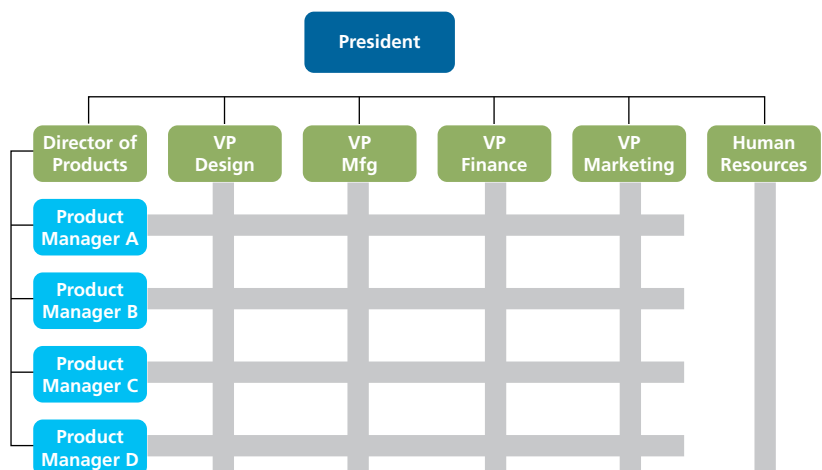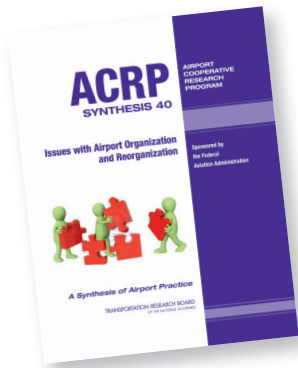
5. Develop a strategic vision for the change with a realistic time frame. Case studies indicate that minor changes take approximately one year and major changes take approximately 3 to 5 years. Consult informally with airport managers.

6. Choose a metric for the assessment of conditions before and after the change. Describe the current organizational culture, to facilitate assessment after the change. For guidance in applying airport performance indicators, refer to ACRP Report 19A.

7. Assemble a team for the redesign. An external facilitator or organizational consultant may offer a fresh perspective; a realistic, objective assessment; and robust experience. Involving key staff from different levels of the organization can encourage organizationwide buy-in and expand awareness of the informal organizational structure. Two of the case studies indicated that employee teams can be used effectively in the change process, and the survey revealed that a yearly internal organizational analysis was common; both resources can help in determining the need for developing new processes and procedures. Inform and educate key staffers who are not on the design team about the communication processes, the informal organizational structure, the time frame for change, the expected outcomes, and organizational culture.

8. Review types of organizational structures with the design team (for example, see Figures 1–4).

9. Determine which organizational structure would be most suitable and identify changes to be developed and assignments to be divided among the employee groups. Review the literature, the critical considerations identified in the survey and case studies, and the administrative and the organizational barriers, formal and informal, to implementation.

10. Implement the change, focusing on the mission and vision; celebrate small successes.

11. Develop or redesign processes and procedures to facilitate organizational changes.

12. Continue training and education for staff.

13. Assess the culture and establish a feedback loop from employees.

14. Revisit the triggering variable and apply the chosen metric to evaluate the change.

PHOTO: MIAMI-DADE AVIATION DEPARTMENT

Miami–Dade Aviation Director Emilio T. González meets with high-level officials to share information about major capital projects at Miami International Airport. Communication from airport leadership is key during reorganization and large projects.

Designing a New Strategy

ACRP Synthesis 40 provides airport managers with improved tools to help their organizations meet the changing needs of the airport industry. The synthesis examines relevant organizational design in the academic literature, along with current trends and practices in airport management. A discussion and synthesis of the literature with real-world experience, along with a flight plan for a successful strategy, aims to support airport leaders in aligning personnel and thriving in a rapidly changing environment.

Clearly, no "one size fits all" approach is applicable. Managers cannot simply copy and apply another airport's organizational chart. They need to create a strategy for their organization that optimally aligns the airport's core services and competencies and places employees to make a meaningful contribution to the organization.

Great pressures call for great measures. Airport managers can be proactive in the face of rapid change. A focused review of current practices, together with a thoughtful analysis of internal and external organizational issues, can help airport managers create organizations that will meet today's known challenges and be prepared for the unknown challenges of tomorrow.

PHOTO: JIMMY EMERSON, FLICKR

Rapid City Regional Airport in South Dakota was presented as a case study in ACRP Synthesis 40.