

AN EVALUATION OF THE EFFECTIVENESS OF THE CRITERIA TO  
DETERMINE THE LEVELS OF COMPENSATION, PROMOTION AND OTHER  
BENEFITS FOR THE CREW MEMBERS AND ITS EFFECTS ON AIRLINES,  
CUSTOMERS, AND CREW

by

Danilo Andrade  
Thiago Branco  
Diogo De Carvalho  
Alexandre Gandini  
Priscila Hernandez

A Capstone Project Submitted to Embry-Riddle Aeronautical University in Partial  
Fulfillment of the Requirements for the Aviation Management Certificate Program

Embry-Riddle Aeronautical University  
Sao Paulo, Brazil  
November 2017

AN EVALUATION OF THE EFFECTIVENESS OF THE CRITERIA TO  
DETERMINE THE LEVELS OF COMPENSATION, PROMOTION AND OTHER  
BENEFITS FOR THE CREW MEMBERS AND ITS EFFECTS ON AIRLINES,  
CUSTOMERS, AND CREW

by

Danilo Andrade  
Thiago Branco  
Diogo De Carvalho  
Alexandre Gandini  
Priscila Hernandez

This Capstone Project was prepared and approved under the direction of the  
group's Capstone Project Chair, Dr. Peter E. O'Reilly.  
it was submitted to Embry-Riddle Aeronautical  
university in partial fulfillment of the requirements  
for the Aviation Management  
Certificate Program

Capstone Project Committee:

---

Dr. Peter E. O'Reilly  
Capstone Project Chair

---

Mr. Fabio Barros Franco de Campos  
Executive Director  
Central & South America

---

Date

## Acknowledgements

This project was only made possible as a result of teamwork, the support, and help of many individuals and organizations, all of which inspired us.

We would like to thank the ITL for the scholarship our appreciation also goes to the GOL Airlines and LATAM Airlines for allowing and encouraging our participation during the course in the best aviation and aerospace university in the world, Emery-Riddle Aeronautical University.

Gratitude is extended to the members of our committee, Mr. Fabio Campos, Dr. Beverly Wood and Dr. Leila Halawi. Thank you for your feedback, direction, and assistance when we needed it. We would like to especially thank Dr. Peter O'Reilly for his sage advice and expertise that gave us all the necessary support for the construction of this project.

We would like also to extend our thanks to our families for their support, encouragement and patience during our pursuit of the Aviation Management Certification Program.

## Abstract

Group: Andrade, D.  
Branco, T.  
Carvalho, D.  
Gandini, A.  
Hernandez, P.

Title: An evaluation of the effectiveness of the criteria to determines the levels of compensation, promotions and other benefits for the crew members and its effects on airlines, customers, and crew.

Institution: Embry-Riddle Aeronautical University

Year: 2017

This study analyzes the effectiveness of management of flight crewmembers' careers based entirely on seniority. The research evaluated if it is possible, through the exclusive use of seniority criteria, to recognize and compensate high-performance crewmembers. Although the seniority model indeed creates stability and predictability for managers and crew members, the employee's performance is not considered in career development, failing to recognize and reward good performance. The statistical analysis showed that the seniority does not have direct relationship with the performance of the crew member. Results also showed that crew who were promoted in seniority criteria, would not have been selected for promotions if the criterion of evaluation was performance-driven. To establish a system structured and clear of bias, this study recommends the development of a policy that ensures a consistent, impartial and detailed process to measure, analyze, monitor performance and make decisions based on structured KPIs closely tied to company' strategic objectives, introducing a meritocracy model based on both seniority and performance, and designing a phased-in approach with different weight among the years. By acknowledging high performers, the companies tend to maximize their results and generate a win-win relationship between company, crew, and customer.

## Table of Contents

	Page
Capstone Project Committee .....	ii
1 Acknowledgements .....	iii
2 Abstract.....	iv
3 List of Tables.....	viii
4 List of Figures .....	ix
Chapter	
I Introduction .....	1
Project Definition .....	1
Project Goals and Scope .....	3
Definitions of Terms.....	5
List of Acronyms.....	7
II Review of the Relevant Literature .....	9
Seniority.....	9
Meritocracy .....	10
Performance management.....	12
Readiness for change .....	14
III Methodology.....	16
Experimental Design .....	16
Benchmark.....	16
Equation Model. ....	16
A = Technical competence evaluations.....	17

	B = Disciplinary procedures.....	18
	C = Customer evaluation (Complaints and compliments).....	18
	D = Absenteeism.....	19
	E = On-time performance.....	19
	Statistical test.....	20
	Data Source(s), Collection, and Analysis.....	22
	Technical competence evaluations.....	22
	Disciplinary procedures.....	22
	Absenteeism.....	22
	On-time performance.....	22
	Benchmark data.....	23
IV	Outcomes.....	24
	Benchmark.....	24
	Statistical test.....	24
	Data Source(s), Collection, and Analysis.....	27
	Experts point of view for seniority.....	29
V	Conclusions.....	30
	Conclusions.....	30
	Recommendations.....	30
	Future Research.....	34
	Key Lesson Learned.....	35
	References.....	36

Appendix A.....	40
Benchmark results .....	41
A1 Performance Management Survey.....	41
A2 Benchmark with Airline W .....	43
A3 Benchmark with Airline X .....	45
A4 Benchmark with Airline Y .....	47
A5 Benchmark with Airline Z.....	49

## List of Tables

	Page
Table	
1 Ranking of top 10 in seniority score.....	288
2 Ranking of top 10 in performance score.....	288
3 Implementation of performance evaluation .....	<b>Error! Bookmark not defined.2</b>

## List of Figures

	Page
Figure	
1 Regression for performance vs seniority .....	25
2 Relationship between performance and seniority. ....	26
3 Variation accounted for by the regression model.....	27

## **Chapter I**

### **Introduction**

The world's aviation industry has been consistently growing for the last years to meet the needs of a globalized world. New aircraft with new technologies made the operation more efficient in terms of costs. New computers and software made management easier not only in terms of passenger attendance and accessibility but also in terms of business management itself.

In a highly competitive industry as aviation, satisfying the customer's necessities and desires and achieve the company' goals, such as efficiency, is a constant challenge. Investing in new products and services is not enough to achieve these goals.

With the fast aviation development around the globe and customers' requirements being more and more demanding, there is a strong need to offer a better service. A way to achieve this goal is to have an effective and modern Human Resource Management (HRM) structure in place.

Employee management is crucial, especially for the group of staff, who is directly involved in the operational environment, carrying the image of the airline with them and directly influencing customer satisfaction and loyalty. This research focused on crew members as this group is the only that still have career moves, recognition and rewards based on seniority in contrast with other areas within the airline that have moved to the decision making model based on meritocracy long ago.

### **Project Definition**

The relevance of this study lies on analyzing the effectiveness of current career development of flight crewmembers and decision making in terms of what goals airlines

intend to achieve, based entirely on seniority. Policies based solely on seniority are considered dated (Takahashi, 2006, p. 202). The seniority criteria naturally became a standard and a culture in the aviation industry worldwide that lasts until these days in many airlines. Likewise, the Brazilian aviation industry uses seniority as a way to determine compensation levels, promotions, ownership, and other opportunities/benefits, maintaining the old aviation's day culture.

A seniority-based system eliminates the perception of favoritism. It is also easy for the airline to manage, once the seniority list will only change if a crewmember is hired or dismissed from the company.

Although the seniority model indeed creates stability and predictability for managers and crew members, the employee's performance is not taken into account in career development. It fails in recognizing and rewarding good performance. The career movement and benefits are some examples of factors that cause greater demotivation of crewmembers.

A survey revealed that 66% of employees prefer receiving incentives for productivity over raises based on seniority (Aichlmayr, 2009). A performance-based system can provide motivation leading to increased productivity. It can also be effective in creating a sense of accountability among employees.

With the fast aviation industry development around the globe, the high competition and customers' requirements becoming more and more demanding, there is a strong need to improve and engage the team to achieve the company's goals through an effective and modern HRM structure in place. The strategy of offering crewmembers a reasonable and good career plan can bring to the airline a more motivated staffing

environment, which consequently generates improvements in the service level the airline offers for its customers.

The operational environment that pilots and flight attendants work has some peculiarities that make the oversight of people performance hard to manage, in particular in the old times when connectivity and data management was limited by technology. A system based on merit needs to be structured and clear to avoid conjecture. It is crucial to detail a policy that ensures a consistent, impartial process of determining compensation levels, promotions, ownership, and other opportunities/benefits.

Although workforce performance management is not a new concept, it has never been applied to airline flight crewmembers in Brazil. By proposing to airlines a performance measurement model for crewmembers, this study also covered an important part of HRM in aviation.

### **Project Goals and Scope**

The research included the analysis of the relationship between seniority and performance and the revision of the model used to determine compensation levels, promotions, ownership, and other opportunities/benefits for crew members. The project evaluated a critical question airlines face: the possibility of, through the exclusive use of seniority criteria, which currently determines the levels of compensation, promotions and other opportunities/benefits to the crew, to recognize and recompense the high-performance crewmembers.

The goal of this project was to propose an alternative decision making model to replace the currently seniority-based criteria, based on crew's performance criteria. The objective was to ensure that the best crew members are placed in the right positions and

recognized for their real engagement and performance, and consequently, encourage other crewmembers to achieve high performance.

This was achieved by using the vital key performance indicators (KPIs) of an airline, which is closely tied to strategic objectives. The KPIs solidifying the process of decision-making on the proposed model of this project includes Voice of Business (VOB) and Voice of Customer (VOC).

VOB, for the purpose of this research, was derived from organizational information and data. It comprises of KPIs such as:

- Absenteeism (include nonattendance, sick leave, etc.);
- On-time performance (the accumulated time of delay for check-in measured in minutes in a period );
- Technical competence evaluations (ICAO language grades, recurrence programs); and
- Disciplinary procedures.

VOC was measured through the use of products and services. Customers provide ongoing feedback and help the company identify development opportunities. It includes KPIs such as:

- Number of customers' complaints;
- Number of customers' compliments.

In the proposed model, crewmembers were evaluated considering the high-performer based on the key KPIs presented and were rewarded and recognized based on performance and seniority.

It was expected that high performers would be leading other crewmembers to

achieve best results in the overall KPIs, for instance, service quality and treatment of customers, once being a high performer means that the staff was well evaluated both by the company and by customers. If customers are satisfied, it means this crewmember provided a good service to them.

In addition, this project intended to show to the crewmembers' unions the importance of a performance evaluation system focused on professional development and airline suitability. This was important as unions are an integral part in approving such changes.

### **Definitions of Terms**

Absenteeism	“The practice of regularly staying away from work or school without good reason.” (Oxford. n.d.).
Crewmember	“A group of people who work on and operate a ship, aircraft, etc.” (Oxford, n.d.). For the purpose of this project crewmember include pilots and flight attendants.
Disciplinary Procedure	“Written, step-by-step process which a firm commits itself to follow in every case where an employee has to be warned, reprimanded, or dismissed.” (BusinessDictionary.com, n.d.).
KPI	“A quantifiable measure used to evaluate the success of an organization, employee, etc. in meeting objectives for performance.” (Oxford, n.d.).

Meritocracy	<p>“A system in which the talented are chosen and moved ahead on the basis of their achievement.”</p> <p>(Merriam-Webster's dictionary. n.d.).</p>
Minitab	Computer program for statistical analysis
NA	<p>“Neglect or failure to attend: lack of attendance had no explanation for his nonattendance at the meeting” (Merriam-Webster's dictionary, n.d.).</p>
On-Time	<p>“Used to describe something that arrives, happens, or is done when it should and is not late”</p> <p>(Cambridge dictionary, n.d.).</p>
Performance	<p>“The fulfillment of a claim, promise, or request.”</p> <p>(Merriam-Webster's dictionary, n.d.).</p>
Performance Management	<p>“An assessment of an employee, process, equipment or other factor to gauge progress toward predetermined goals.” (BusinessDictionary.com, n.d.).</p>
Punctuality	<p>“The fact or quality of being on time.” (Oxford, n.d.).</p>
Seniority	<p>“A privileged status attained by length of continuous service (as in a company).” (Merriam-Webster's dictionary, n.d.).</p>
Technical Competence	<p>“Knowledge of, and skill in the exercise of, practices required for successful accomplishment of</p>

a business, job, or task.” (BusinessDictionary.com, n.d.).

VOB “Encompasses the primary needs of a business and its stakeholders, including profitability, revenue, growth and market share, and can be used to establish goals and define success within a life cycle map.” (BusinessDictionary.com, n.d.).

VOC “Collective insight into customer needs, wants, perceptions, and preferences gained through direct and indirect questioning. These discoveries are translated into meaningful objectives that help in closing the gap between customer expectations and the firm's offerings.” (BusinessDictionary.com, n.d.)

### **List of Acronyms**

CPE	Crew Performance Evaluation
GDP	Gross Domestic Product
HRM	Human Resources Management
ICAO	International Civil Aviation Organization
KPI	Key Performance Indicator
NA	Nonattendance
OTP	On-Time Performance
SLR	Simple Linear Regression

VOB

Voice of Business

VOC

Voice of Customer

## Chapter II

### Review of the Relevant Literature

Relevant literature show significant differences in opinions about seniority, meritocracy and performance management. Some studies state that seniority is more “controllable” than meritocracy, while others advocate the use meritocracy to attract and retain top talent. However, some authors prefer a combination of experience and talent as the basis of a just evaluation criteria.

#### Seniority

According to Merriam-Webster's collegiate dictionary (2017), “seniority is defined as a privileged status attained by length of continuous service (as in a company).” In addition, the Dictionary of Human Resources and Personnel Management (2006) defines seniority as “the fact of being older or having been an employee of the company longer.” Therefore, seniority is a system of job allocation and employment protection based on how long an employee has worked for a company.

Seniority is more common in union and government work careers (Owens, 2011, p. 693). According to Heathfield (2017), “in a union-represented workplace, seniority drives the majority of decisions made about employees. These decisions include such areas as employee wages, hours available to work, vacation time, promotions, overtime, preferred jobs, preferred shifts, cross-training opportunities, and other benefits and privileges available to employees.”

The importance of seniority lies in the fact that going to work every day is an integral part of all societies as pointed out by Smith (2013), “... we all work to survive... But it goes beyond physical survival. Psychologists have equated losing a job with the

trauma of divorce or a family death, and enormous issues arise, from financial panic to sinking self-esteem. Through work, we build our self-identity, our lifestyle, and our aspirations.”

Some advantages brought by the seniority are perceived by workers. The objectiveness of the seniority system brings to workers a sense of security as work length is easy to measure and reduces space for subjectivity and favoritism. From the perspective of employers, seniority is simple and easy to administer, it is supported by most unions and helps to reward loyal workers (Randhawa, 2007, p. 163).

On the other hand, despite the seniority advantages, some drawbacks are observed when seniority is the sole criterion. Excessive seniority emphasis results in promotion of less competent people, once work length does not necessarily mean better ability (Tripathi & Reddy, 2008, p.232). In addition, seniority fails to motivate workers to seek for qualification improvement as the next step in one’s career depends only on “putting in time”, which affects adversely the morale of meritorious workers. Lastly, ideally seniority should be coupled with merit to decide promotion (Tripathi & Reddy, 2008).

Both sides of those who support and reject seniority use different ideas for their arguments. While economists think that seniority discourages efficient allocation of resources, workers believe that seniority encourage worker loyalty and prevent employer discrimination (Owens, 2011, p. 694).

### **Meritocracy**

According to Merriam-Webster's collegiate dictionary (2017) the definition of meritocracy is “a system in which the talented are chosen and moved ahead based on their achievement.” Inglis and Aers (2008) believe the main advantage of meritocracy is

that “his or her success ratifies the principle of equality of opportunity because in no way depending upon prior and unearned privileges of birth, inheritance, education or social class” (p. 131). Kim and Choi (2017) believed “meritocracy as a social system is still evolving. The conception of merit within a society may vary according to the context and culture.”

According to Cegalini, Cardoso and Fleury (2016), all companies that one way or another want to be competitive, should look for sustained excellence through its most valuable assets, its people. His study was about evaluating the performance of young athletes of an institute by using individual monitoring in trainings and competitions to decide about scholarship program, keeping the athlete in the group and summoning to new competitions. All athletes with individual monitoring presented evolution during the observation period. According to his research, meritocracy concepts increase athletes’ performance and could be replicated in other organizational environments.

On the other hand, some companies reinforce their commitment to meritocracy by not having diversity policies. In other words, companies evaluate people based on their skills, abilities, and merit, without considering gender, race and sexuality. If managers are objective in their assessments, then there is no need for diversity policies. The meritocracy model must have a fair methodology. Companies should reward their employees according to the performance demanded, independently of their sex, race, age, religion (Cooper, 2015).

Castilla (2016) conducted experiments with more than 400 people with managerial experience. These subjects were asked to make bonus, promotion and termination recommendations for several hypothetical employee profiles according to

their annual performance. Castilla manipulated the gender of the employees in the profiles. The results showed that managers tended to favor a male employee over an equally qualified female in the same job, with the same supervisor and the same performance evaluation scores. The bonuses were approximately 12% higher, on average, for men than they were awarded to equally performing women.

Barbosa (2014) found that those who defend meritocracy argue that the comfort zone generated by Brazilian paternalist culture is a vicious circle that should be broken. To the high administration, meritocracy implantation is a solution to increase organizational results and survival in the market. In addition, Barbosa's research found the following:

If assessment systems do not allow a reliable definition of who makes more and better, how is it possible to reward one and not reward another, or both? How to hierarchize? Similar to the anti-meritocratic speech, "why now" adepts would rather ensure "a little for all, and not for some, anymore." What may sound demotivating, an injustice to meritocratic speech, to this speech sounds the opposite.

However, the author also mentioned that it is probable that the possible changes following the current demands for meritocracy will be restricted to certain dimensions of organizations and will remain cohabiting other social hierarchy criteria inside them (Barbosa, 2014).

### **Performance management**

According to Pudelko (2006), even the seniority principle "has often been described as a key ingredient in the traditional Japanese HRM model.... increasing

numbers of testimonials in the literature report that this practice is dramatically declining in significance. Results of this empirical study indicate that: 1) compared to the past, the seniority principle is significantly losing importance for promotion and compensation decisions; 2) this is a trend likely to continue into the future; 3) the seniority principle is declining more than any other Japanese HRM practice; 4) the American model serves as an important source of inspiration in introducing a more performance-oriented system; 5) when compared to western countries, however, seniority is likely to remain of importance." (p. 276).

Findings indicate that promotion and compensation practices in Japanese companies are significantly more seniority oriented than in American or German firms, which rely to a higher degree on honoring individual performance (Pudelko, 2006).

Research by Broadbent and Laughlin (2009) supports that the performance management system "is often used in the context of human resource management (HRM) systems and in relation to controlling individual (employee) behavior. Performance management includes: planning work and setting expectations, continually monitoring performance, developing the capacity to perform, periodically rating performance in a summary fashion, and rewarding good performance."

Rao (2016) studied performance management and defined it as "doing all that is required to continuously improve performance of every employee in relation to his/her role, dyad, team and the entire organization in the context of the short and long term goals of the organization" (p. 01). Performance management relies on the analysis of how an organization's employees have historically accomplished tasks and overall

contribution to the organization in accordance with the values and goals of the company to improve future performance (HR Council, n.d.).

Mone, Eisinger, Guggenheim, Price and Stine (2011) stated that “an expanded view of performance management can serve as a useful framework for managers, one that guides them in the day-to-day management of their employees’ performance while also fostering high levels of employee engagement and avoiding burnout.” An important part of performance management is to use the assessment outcome to inform the various aspects of the HRM, including career planning, employee training and development, job allocation and reward (Varma et al., 2008).

### **Readiness for change**

According to Weiner (2009), “Organizational readiness for change varies as a function of how much organizational members value the change and how favorably they appraise three key determinants of implementation capability: task demands, resource availability, and situational factors.” Organizational readiness refers to organizational members' change commitment and change efficacy to implement organizational change.

Research by Haque, TitiAmayah, and Liu (2016) supports that “Implementing organizational change is one of the most important, yet, least understood skills of contemporary leaders. Leaders need to formulate an inspirational vision, and effectively communicate the vision via multiple channels to create a sense of readiness for change. By improving change readiness organizations should be able to create initiatives effectively for organizational growth and competitiveness”

Lehman, Greener and Simpson (2002) studied the readiness for change concept and affirms that the main factors are institutional (resources) and personal (motivation),

organizational dynamics, including climate for change and staff skills. Motivational readiness happens when the leader and staff need and feel pressure for change. Combined with personal attributes, such as professional growth, efficacy, influence and adaptability, it stimulates readiness. In organizational climate, the components to consider are clarity of mission and goals, staff cohesion, communication and especially openness to change. In institutional resources, staffing and training levels, physical resources, computer and system usage are the main factors (Lehmann et al., 2002).

The organizational dynamics can help support movement for change. Similarly, if staff do not possess attributes necessary for change, such as adaptability and growth-orientation or the company do not provide the resources, the change process might get stuck. Therefore, besides supporting theory, companies should have all conditions above set up and put performance management into practice to have a successful implementation (Lehmann et al., 2002).

## Chapter III

### Methodology

This research project focused on gathering the main KPIs on crew performance management and weight each one by importance. With the variables and the weights, an equation for final performance was built to guide crew performance management in terms of evaluation, career development and promotion.

A statistical test was done to analyze the relationship between high performance and promotions in Brazil, highlighting the influence of seniority in promotions. Through the statistical conclusion, the study aimed to show the overall benefits of performance measurement versus the seniority system that still prevails against meritocracy in crew performance management in Brazil.

#### Experimental Design

This study used three basic sources of information: literature, current management at the airlines where the authors work, and experts in crew performance management in the industry.

**Benchmark.** In addition, a benchmark was done with two international airlines, which already use meritocracy as the basis for crew performance management. This information helped in guiding the authors to define the model that would be used to drive crew performance management moving forward in Brazil. The survey and its answers are available in Appendix A.

**Equation Model.** The equation considered the main variables used in crew performance management, such as absenteeism, technical competence evaluations, on-time performance, customer evaluations and performance measures (see Equation 1).

According to the importance given by the international airlines benchmarked, different weights were attributed to each KPI, resulting in the final equation as follows:

$$CPE = 0.27A + 0.22B + 0.18C + 0.18D + 0.15E \quad (1)$$

Where:

CPE = Crew Performance Evaluation, final individual score.

A = Technical competence evaluations.

B = Disciplinary procedures.

C = Customer evaluation (complaints and compliments).

D = Absenteeism.

E = On-time performance.

Each KPI was evaluated relative to each peer performance, where the individual with the highest performance obtained 100 points and the individual with the poorest performance received a 0 for that KPI. This rule was used for each KPI except when stated differently. The formula for each KPI is further described.

**A = Technical competence evaluations.** The average of the technical training grades performed by the crew members (see Equation 2) was calculated as a simple mean of all tests done by each crewmember:

$$A_{Technical} = \left( \frac{G_1 + G_2 + G_3 + \dots + G_n}{n} \right) \quad (2)$$

Where:

$G_n$  = grade in training  $n$ .

$n$  = number of trainings performed in the 1-year period.

**B = Disciplinary procedures.** The disciplinary procedures were computed in the performance evaluation of the crew member, discounting points according to the type of disciplinary measure received (see Equation 3). Each disciplinary measure had a weight according to the severity of the occurrence:

$$B_{Disciplinary\ Procedures} = 100 \times [1 - (\frac{P}{P'})] \quad (3)$$

Where:

$$P = P_{Verbal\ Guidance} + P_{Formal\ Warning} + P_{Suspension}.$$

$$P_{Verbal\ Guidance} = (0.1 \times n_{Verbal\ Guidance}).$$

$$P_{Formal\ Warning} = (0.3 \times n_{Formal\ Warning}).$$

$$P_{Suspension} = (0.6 \times n_{Suspension}).$$

$n$  = number of disciplinary procedures received in the 1-year period.

$P'$  = the  $P$  of the individual with the highest discounted points in 1-year period.

**C = Customer evaluation (complaints and compliments).** By analyzing the customer's feedback (see Equation 4), the yearly customer satisfaction score was obtained using the compliments and:

$$C = 100 \times (\frac{C_{Customer\ Score}}{C'_{Customer\ Score}}) \quad (4)$$

Where:

$$C_{Customer\ score} = C_{compliments} - C_{complaints}.$$

$C_{compliments}$  = number of compliments in the evaluated period.

$C_{complaints}$  = number of complaints in the evaluated period.

**D = Absenteeism.** The KPI score related to absenteeism was calculated based on the individual with the highest number of absenteeism (see Equation 5). The equation for this case was:

$$D_{Absenteeism} = 100 \times [1 - (\frac{d}{d'})] \quad (5)$$

Where:

$d$  = number of absences in the 1-year period (days).

$d'$  = number of absences of the individual with the highest absences in the 1-year period (days).

**E = On-time performance.** The crewmembers' delays were computed and a score of zero to one hundred was given, where zero was the most delayed crew member and 100 the crewmember with the least delays in the 1-year period (see Equation 6):

$$E_{On\ Time\ Performance} = 100 \times [1 - (\frac{e}{e'})] \quad (6)$$

Where:

$e$  = sum of delay in minutes.

$e'$  = sum of delay in minutes of the individual with the highest sum of delay in 1-year period.

An equation model was also necessary to compare seniority. For this analysis, the hiring date was used for this purpose. Initially, every crew member received a score calculated by subtracting the hiring date from the present date. The result was an index corresponding to the time in service measured in days. That index was later normalized to result in a score between 0 and 100 where 100 is the crew member with the highest seniority points (see Equation 7):

$$S_{Seniority} = 100 \times \left(\frac{d}{d'}\right) \quad (7)$$

Where:

$d$  = number of days the crew member is in service.

$d'$  = number of days in service of the crew member with more days in service within the analyzed group.

**Statistical test.** Based on the findings and on the equation model designed for assessing crewmembers' performance through the KPIs, a statistical test was done to analyze the relationship on staff promotions, between high performers and seniority.

For this test, a population of 163 crew members of the airline X, was tested according to the performance equation (see Equation 1). Likewise, the same population was tested according to the seniority equation (see Equation 7).

Since different airlines have different methodologies for measuring the KPIs as well as different time of existence in the market, the result of Equations 1 and 7 should be used to compare members of the same group within the same airline. With that said, this study used a group of 100% of chief purser of an airline (representing a sampling error of

0), however, the methodology presented in this study is valid for any group (pilots and flight attendants) within any airline, see item Data Source(s), Collection, and Analysis.

The confidence level is equivalent to  $1 - \alpha$ . Thus, the significance level used was 0.05, corresponding to a confidence level of 95%.

The Simple Linear Regression Analysis (SLR) method was used to measure the relationship between seniority and performance (see Equation 8) and resulted in a linear equation expressed as:

$$y = \beta_0 + \beta_1 x + \varepsilon \quad (8)$$

Where:

$x$  = seniority score as an independent variable.

$y$  = performance score as a dependent variable.

$\beta_0$  = the  $y$  intercept.

$\beta_1$  = line slope, being a positive  $\beta_1$  a direct relationship between  $x$  and  $y$ , a null  $\beta_1$  an indication of no relationship between  $x$  and  $y$ , and a negative  $\beta_1$  an indication of inverse relation between  $x$  and  $y$ ;

$\varepsilon$  = the error term.

All statistical calculations were performed using the Minitab (Minitab Inc. 2010, Version 16.2.2.0). The null hypothesis “ $H_0$ ” tested was that there is no relationship between seniority and performance. The alternative hypothesis tested was that there is a relationship between seniority and performance.

H<sub>0</sub>: Seniority and high performance have a no linear relationship ( $\beta = 0$ ).

H<sub>a</sub>: Seniority and high performance have a linear relationship ( $\beta \neq 0$ ).

The r-squared parameter was used to validate the model. Any r-squared greater than 0.95 would indicate a good adherence to the model, giving enough statistical evidence to accept the equation model.

### **Data Source(s), Collection, and Analysis**

For this study, a primary database was used once all data was extracted from the internal systems of the airlines the authors work for. All data retrieved were only related to cabin crew members, the data related to pilots were not readily available for this research. However, all methodology presented in this study are applicable for both, pilots and flight attendants.

The results were weighted according to the formulas previously presented. The individual identification of crewmembers were removed for this project.

**Technical competence evaluations.** The average of the technical training grades performed by the individual was calculated through the database of the training sector of each airline.

**Disciplinary procedures.** Data related to disciplinary procedures extracted from the annual file database of each individual. This is an internal system where each manager inserts the disciplinary procedures applied.

**Absenteeism.** Data related to absenteeism were collected from a report drawn from the flight crew scheduling program.

**On-time performance.** Data related to on-time performance were collected from a report drawn from the flight crew scheduling program, where the acronym "Delay"

shows the days that the individual was delayed at check-in.

**Benchmark data.** Data for this survey was collected using an online survey platform. The participants were given a link to an online survey, which the authors created using Survey Monkey (<http://www.surveymonkey.com>). A survey containing a total of 9 questions was sent to the selected airline managers as described on Appendix A.

## **Chapter IV**

### **Outcomes**

The result of this research showed that performance indicators should be applied for crewmembers career progression, according to benchmarked airlines. The statistical test proved there was no relationship between seniority and performance, proving that seniority is not the best indicator to drive HRM for crewmembers.

However, according to the benchmark, seniority should still be one of the indicators to measure performance of crewmembers, due to union issues and to keep experience as part of the criteria for evaluation.

### **Benchmark**

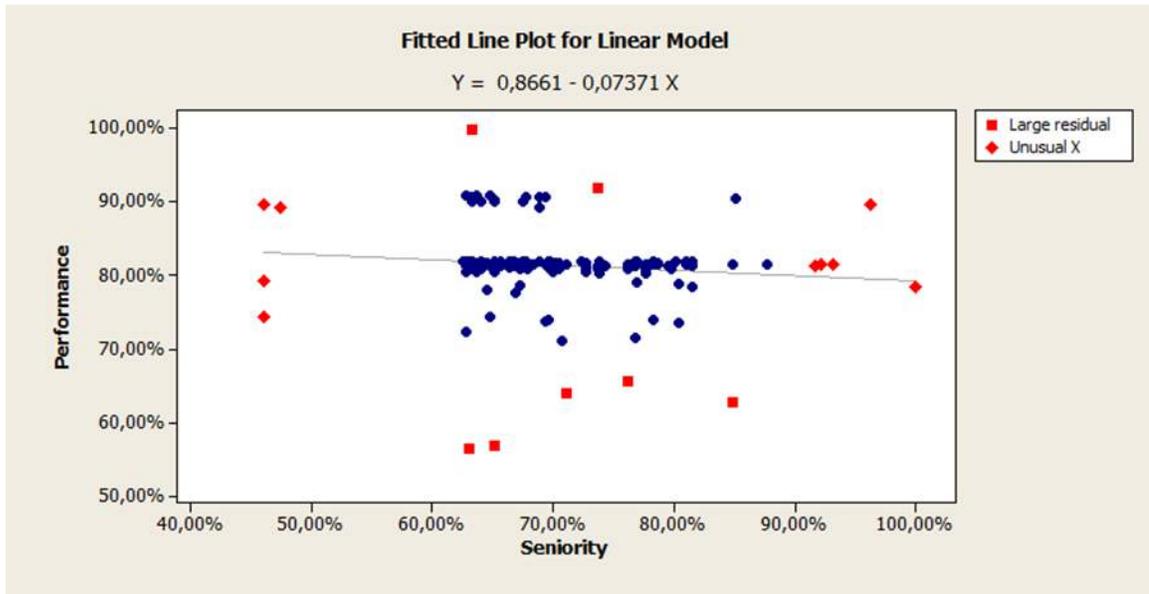
With the benchmark done with Airline X and Airline Y regarding performance management, the coefficients (multipliers) of the variables were defined and weighted according to the degree of importance given by the survey respondents.

The survey resulted that performance indicators should apply on crew member's evaluation. These should be used to guide HRM decisions towards staff promotions and replacements. The KPIs were weighted according to the importance given to each one: Technical tests > Disciplinary Procedures > Customer Evaluation > Absenteeism > On-Time Performance.

### **Statistical test**

After the SLR analysis was used to test the relationship between seniority and performance following the proposed model, the results showed that there is no relationship between the two variables.

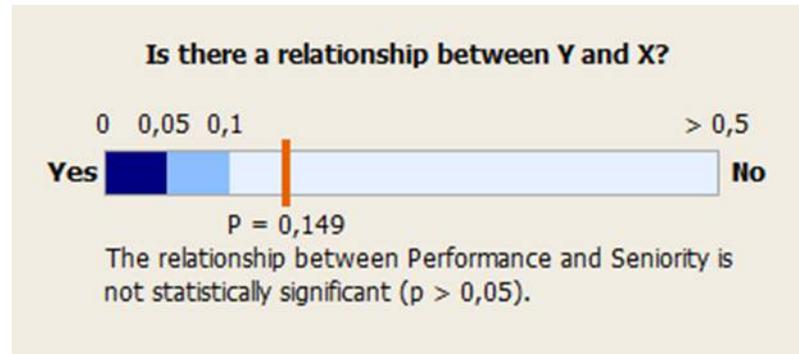
The scatter plot obtained through the sample shows the combination of seniority (axis X) and performance (axis Y) for each individual in the sample, as seen in Figure 1.



*Figure 1.* Regression for Performance vs Seniority. This scatter plot illustrates the regression for seniority and performance.

According to the scatter plot obtained from Minitab, the sample size was large enough ( $n = 163$ ) to obtain a precise estimate of the strength of the relationship and the p-value obtained through the simple linear regression resulted in  $p = 0.149$ .

The intervals and conclusions given a certain p-value are showed in Figure 2.



*Figure 2.* Relationship between performance and seniority. This figure illustrates the % of variation accounted for by model.

In Figure 2:

- $p < 0,05$  indicates the test is statistically significant.
- $p > 0,05$  indicates the test is not statistically significant.

As the test resulted in  $p = 0.149$ , the conclusion was that there is no correlation between seniority and performance.

As shown in Figure 1, the fitted equation for the linear model that described the relationship between Y and X is shown in equation 10 below:

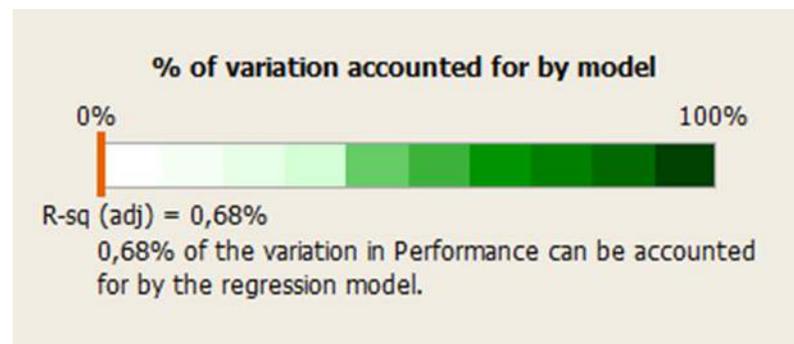
$$Y = 0,8661 - 0,07371 X \quad (10)$$

As the test's conclusion indicated that there was no relationship between the two variables, the equation cannot be used to predict performance based on seniority.

Moreover, even if the relationship had been confirmed, it would be a negative relationship once  $\beta_1$  value resulted in a negative number (-0,07371). Therefore, the test would be confirming that performance has the inverse relation with seniority. In other words, the higher seniority is, the lower would be the performance.

The other analytical check that was done in the simple linear regression was the r-squared value. This was the statistical measure of how data fits the regression line. It was the adherence, or the percentage of the response variable variation explained by the linear model.

According to Figure 3, the r-squared resulted in 0.68%. In other words, 0.68% of the variation in performance can be accounted for by the regression model. The closer to 0%, the less adherent the regression was and the closer to 1% r-squared was the more adherent the regression was.



*Figure 3.* Variation accounted for by the regression model. This figure illustrated the % of variation accounted for by the regression model between Performance and Seniority.

### **Data Source(s), Collection, and Analysis**

Further exploring the data, a summary of the top 10 staff ranked by seniority (Table 1) and by performance (Table 2) was done.

Table 1

*Ranking of top 10 in seniority score*

<u>Rank Seniority</u>	<u>Seniority KPI</u>	<u>Rank Performance</u>	<u>Performance KPI</u>
1	100%	147	78%
2	96%	17	90%
3	93%	76	82%
4	92%	76	82%
5	92%	105	81%
6	88%	75	82%
7	85%	11	91%
8	85%	161	63%
9	85%	76	82%
10	82%	146	79%

*Note.* Data related to the column “Seniority KPI” obtained using formula 7 and data related to the column “Performance KPI” obtained using formula 1.

Table 2

*Ranking of top 10 in performance score*

<u>Rank Performance</u>	<u>Performance KPI</u>	<u>Rank Seniority</u>	<u>Seniority KPI</u>
1	100%	135	63%
2	92%	44	74%
3	91%	117	65%
4	91%	131	64%
5	91%	148	63%
6	91%	76	69%
7	91%	74	69%
8	91%	141	63%
9	91%	81	68%
10	91%	136	63%

*Note.* Data related to the column “Seniority KPI” obtained using formula 7 and data related to the column “Performance KPI” obtained using formula 1.

Both tables helped to identify the difference between the two points of views: seniority and performance. Among the top 10 in seniority ranking, the best performance

occupied the 11<sup>th</sup> position in performance. Moreover, the most senior crew member occupied the 147<sup>th</sup> position in performance as well.

On the other hand, among the top 10 in performance ranking, the most senior person was the 44<sup>th</sup> in seniority. Also, the best performance occupied the 135<sup>th</sup> position in seniority.

Within the top 10 high performers, seniority level was 18,7 years on average. However, the same average in the top 10 most senior crew members was 25.5 years, which adds to the point that high performance is not directly related to seniority.

### **Experts point of view for seniority**

In regard to the survey and using the statistical investigation results, even though it was proved that seniority and performance have no linear relationship, the other airlines and experts mentioned that it was important to keep considering seniority as part of the evaluation. This view is supported mainly by two reasons:

1. Due to the acceptance of crew members and union. The career promotion system based on seniority was embedded into aviation culture and an abrupt change would cause resistance from the various stakeholders.
2. The use of seniority brings a psychological feeling of stability to the group, but a smaller weight to that parameter should be considered.

The authors' recommendations considering these outcomes will be discussed in the next chapter. Other recommendations are also highlighted in the following chapter.

## **Chapter V**

### **Conclusions**

The study revealed that using the current model based on seniority as the strict criteria of promotion and career development for crew members, the higher performers were not recognized and rewarded. In addition, the company does not maximize the overall performance. This was true in situations where the most senior crewmember didn't have the best performances among the sample analyzed.

### **Conclusions**

In result of the analysis of the relationship between seniority and performance proposed in the project goals and scope, the first conclusion the study presented was there is no relationship between seniority and crew performance. The second conclusion ascertained was that all crewmembers, who were promoted, would not have been selected for promotions if the criterion of evaluation was performance-driven.

Also, the study found that all experts participating in benchmark advocate that crewmembers in the aviation industry should be evaluated by performance indicators. Lastly, the study concluded that it is not possible to recognize and compensate high-performance crewmembers through the use exclusively of seniority criteria, which currently determines the levels of compensation, promotions and other opportunities/benefits.

### **Recommendations**

In order to maximize the results to achieve the company goals and recognizing the high-performing employees for their efforts, the study recommends replacing the currently seniority-based criteria for the meritocracy based criteria and performance

management.

By acknowledging high performers, an airline tends to maximize their results and generate a win-win relationship between company, crew, and customer:

- Reduce absenteeism and improving on-time performance rates, optimizing company's productivity and overall business performance. By managing employee attendance, the company optimizes the crew schedule, which generates fewer costs and delays.
- Improve customer satisfaction, as high performers tend to receive more compliments and fewer complaints from customers. Providing an excellent experience for customers onboard, customers keep flying and recommending the airline improving financial results.
- Optimize the technical competence and discipline behavior. Evaluation of performance stimulates crew members to study and get better grades in company training, besides being more in tune with corporate culture and mission. Then, crewmembers will be more prepared regarding safety, security, operational procedures.
- Ensure that the best crew members are placed in the right positions, been recognized for their real engagement and performance.

In order to establish a system based on merit structured and clear to avoid bias, the study recommends:

- Developing a policy that ensures a consistent, impartial and detailed process of the model determining compensation levels, promotions, ownership, and other opportunities/benefits.

- Developing a tool for measuring, analyzing, monitoring and making decisions based on vital KPIs closely tied to company' strategic objectives.
- Introducing a meritocracy model based on both seniority and performance.  
The fact that seniority has been embedded into aviation culture, especially for own staff and the union, brings a psychological feeling of stability to the whole group of crew members. It is important to maintain resemblance of seniority as one of the variables to measure crew performance. Design a phased-in approach with different weight among the years until a complete phased out of seniority.

The approach recommended to implement this model is to introduce performance with a small weight at the beginning and keep seniority as the major KPI. Year after year, in a seven-year period, seniority would decrease its relevancy, while performance would increase until the ideal model, as detailed in Table 3.

Table 3

*Implementation of performance evaluation*

<u>Period</u>	<u>Seniority</u>	<u>Performance</u>
Year 0	70%	30%
Year 1	60%	40%
Year 2	50%	50%
Year 3	40%	60%
Year 4	30%	70%
Year 5	20%	80%
Year 6	10%	90%

*Note.* Columns “Seniority” and “Performance” shows the weight of each KPI on each individual evaluation. Formula 11 is to be used after the 6th year of implementation.

The seniority phase-out was designed to be very smooth, giving time for seniors

to prepare themselves for the change. It will allow all crew members to better comprehend the new system of evaluation. It would also allow crew members to better focus their efforts to meet or exceed the new requirements and grading system.

After completing seniority's phase out, the final proposed model can be expressed as follows:

$$y = 0.1S + 0.9P \quad (11)$$

Where:

y = final score.

S = seniority score.

P = performance score.

By using exclusively the seniority criteria, airlines might be putting the ineffective people in the key positions. Leaders must lead by example for their subordinates, not only by seniority but also in execution and adherence to the company's goals and mission. Keeping the criterion of seniority in HRM for crew members, probably will not optimize personal and collective achievements.

In order to have meritocracy philosophy as the main driver in the professional development of teams and the best results for companies, the recommendation of this study is that seniority should be part of the system, but not the only factor. Implementing the model presented in this research, measuring and managing the crewmembers performance through the key KPIs for decisions making, should be the optimal solution for airlines.

## **Future Research**

The areas of future research that could be pursued regarding this study should test different weights for each KPI designed. In addition, it is suggested to expand this research to include more potential fields coverage, such as other industries, airlines from other continents besides South and North America, more experts' interviews and cases of success.

Although all efforts were made to develop a group of KPIs that reflects the real performance, some factors were not included in this research, such as adherence to the Standard Operating Procedures (SOP) and safety related indicators. Those topics were excluded from the proposed model, as the access to safety data was restricted. However, future research could include those safety indicators given the importance of safety inside aviation industry.

In addition, more insights on the seniority phase out could be more explored, starting with a new initial weight and the timeframe. Moreover, after implementing the performance evaluation model, independently of KPIs, weight and seniority phase out, it would be interesting to measure customer satisfaction in order to identify if improvements were made, as the study initially expected, especially regarding compliments and complaints KPI.

Lastly, even though the study proved that seniority and performance have no correlation, the statistical test could be enacted with a sample from a different region other than Brazil or try other industries, such as automobile, cruise ship casino and hotels.

**Key Lesson Learned**

The main lesson learned in this study was that the decision model for crew member career development can affect three distinct scopes: company's scope, individual's scope and customer experience. If the decision model does not reflect the company's goals and do not engage the team directly involved with this goal achievement, the three mentioned scopes will be affected.

Moreover, the key for a successful implementation of a meritocracy model based on performance is to have reliable information available. Planning the data collection to support the model is vital. As important as defining the KPI is to validate the process of collecting that data, any flaw in that process could jeopardize the credibility of the whole decision model.

## References

- Absenteeism. (n.d.). In *Oxford dictionaries*. Retrieved July 13, 2017, from <https://en.oxforddictionaries.com/definition/absenteeism>
- Aichlmayr, M. (2009, August 01). Critical Position. *Material Handling and Logistics (MHL News)*. Retrieved from <http://www.mhlnews.com/labor-management/critical-position>
- Angeli, E., Wagner, J., Lawrick, E., Moore, K., Anderson, M., Soderlund, L., & Brizee, A. (2010, May 5). *General format*. Retrieved from <http://owl.english.purdue.edu/owl/resource/560/01>
- Armenakis, A. A., & Harris, S. G. (2002). Crafting a change message to create transformational readiness. *Journal of Organizational Change Management*, 15(2), 169-183. Retrieved from <http://search.proquest.com.ezproxy.libproxy.db.erau.edu/docview/197577120?accountid=27203>
- Barbosa, L. (2014). Meritocracy and Brazilian society. *RAE: Revista De Administração De Empresas*, 54(1), 80-85. doi:10.1590/S0034-759020140108.
- Broadbent, J., & Laughlin, R. (2009). Performance management systems: A conceptual model. *Management Accounting Research*, 20(4), 283-295. doi:10.1016/j.mar.2009.07.004.
- Castilla, E. J. (2016). Achieving meritocracy in the workplace. *MIT Sloan Management Review*, 57(4), 35-41. Retrieved from <http://search.proquest.com.ezproxy.libproxy.db.erau.edu/docview/1802194783?accountid=27203>
- Cegalini, V. L., Cardoso, M. V., & Fleury, F. (2016). Implementation of meritocracy as a performance platform in a high performance sports entity. *Podium*, 5(3), 75-88. doi:10.5585/podium.v5i3.200.
- Cooper, M. (2015, December 01). The false promise of meritocracy. *The Atlantic*. Retrieved from <https://www.theatlantic.com/business/archive/2015/12/meritocracy/418074>
- Crew. (n.d.). In *Oxford dictionaries*. Retrieved July 13, 2017, from <https://en.oxforddictionaries.com/definition/crew>
- Disciplinary procedure. In *BusinessDictionary.com*. Retrieved July 13, 2017, from <http://www.businessdictionary.com/definition/disciplinary-procedure.html>
- Haque, M. D., TitiAmayah, A., & Liu, L. (2016). The role of vision in organizational readiness for change and growth. *Leadership & Organization Development Journal*, 37(7), 983-999. Retrieved from <http://search.proquest.com.ezproxy.libproxy.db.erau.edu/docview/1826809486?accountid=27203>

- Heathfield, S. M. (2017, August 01). *What Seniority Means at Work*. Retrieved from <https://www.thebalance.com/what-seniority-means-at-work-1919372>
- HR Council. (n.d.). Keeping the Right People. Retrieved from <http://hrcouncil.ca/hr-toolkit/keeping-people-performance-management.cfm>
- Meritocracy. (2008). In F. Inglis, & L. Aers, *Key concepts in education*. London, UK: Sage UK. Retrieved from <http://ezproxy.libproxy.db.erau.edu/login?url=http://search.credoreference.com/content/entry/sageuked/meritocracy/0?institutionId=951>
- Kim, C. H., & Choi, Y. B. (2017). How meritocracy is defined today?: Contemporary aspects of meritocracy, economics and sociology, 10(1), 112-121. doi:10.14254/2071-789X.2017/10-1/8
- Key performance indicator. (n.d.). In *Oxford dictionaries*. Retrieved July 13, 2017, from [https://en.oxforddictionaries.com/definition/key\\_performance\\_indicator](https://en.oxforddictionaries.com/definition/key_performance_indicator)
- Lehman, W. E. K., Greener, J. M., & Simpson, D. D. (2002). Assessing organizational readiness for change. *Journal of Substance Abuse Treatment*, Available from <http://www.sciencedirect.com.ezproxy.libproxy.db.erau.edu/science/article/pii/S0740547202002337>
- Meritocracy. (n.d.). In *Merriam-Webster's dictionary*. Retrieved July 13, 2017, from <https://www.merriam-webster.com/dictionary/meritocracy>
- Mone, E., Eisinger, C., Guggenheim, K., Price, B., & Stine, C. (2011). Performance management at the wheel: Driving employee engagement in organizations. *Journal of Business and Psychology*, 26(2), 205-212. doi:<http://dx.doi.org.ezproxy.libproxy.db.erau.edu/10.1007/s10869-011-9222-9>
- Nonattendance. (n.d.). In *Merriam-Webster's dictionary*. Retrieved July 13, 2017, from <https://www.merriam-webster.com/dictionary/nonattendance>
- On-time. (n.d.). In *Cambridge dictionary*. Retrieved July 13, 2017, from <http://dictionary.cambridge.org/pt/dicionario/ingles/on-time>
- Owens, L. (2011). Seniority. In W. D. Folsom (Ed.), *Facts on File Library of American History. Encyclopedia of American Business*, Rev. ed. (Vol. 2, pp. 693-694). New York: Facts on File. Retrieved from <http://go.galegroup.com.ezproxy.libproxy.db.erau.edu/ps/i.do?p=GVRL&sw=w&u=embry&v=2.1&it=r&id=GALE%7CCX1980900770&asid=b9070385502d13cbd62224f2fe85da23>
- Performance. (n.d.). In *Merriam-Webster's dictionary*. Retrieved July 13, 2017, from <https://www.merriam-webster.com/dictionary/performance>
- Performance management. In *BusinessDictionary.com*. Retrieved July 13, 2017, from <http://www.businessdictionary.com/definition/performance-management.html>

- Pudelko, M. (2006), The seniority principle in Japanese companies: A relic of the past? *Asia Pacific Journal of Human Resources*, 44, 276–294. doi:10.1177/1038411106069412.
- Punctuality. (n.d.). In *Oxford dictionaries*. Retrieved July 13, 2017, from <https://en.oxforddictionaries.com/definition/punctuality>
- Rao, T. V. (2016). *Performance management: toward organizational excellence*. Retrieved from <https://ebookcentral.proquest.com>
- Randhawa, G. (2007). *Human Resource Management. Promotions (Transfers, Demotions and Separations)*. Available from <https://books.google.com.br/books?id=MmYiX5JxPY8C&pg=PA163&dq=advantages+of+seniority&hl=ptBR&sa=X&ved=0ahUKEwj6nOaUuefWAhUFHpAKHeTRBnEQ6AEIQDAD#v=onepage&q=advantages%20of%20seniority&f=false>
- Shetty, K. I., & Hansman, R. J. (2012). Current and historical trends in general aviation in the United States. *General format*. Retrieved from <https://dspace.mit.edu/bitstream/handle/1721.1/72392/ICAT%20REPORT%20SHETTY.pdf>
- Seniority. (n.d.). In *Merriam-Webster's dictionary*. Retrieved July 13, 2017, from <https://www.merriam-webster.com/dictionary/seniority>
- Smith, V. (Ed.) (2013). *Sociology of work: An encyclopedia* (Vol. 1). Thousand Oaks, CA: SAGE Publications Ltd. doi:10.4135/9781452276199.
- Takahashi, K. (2006). Effects of wage and promotion incentives on the motivation levels of Japanese employees. *Career Development International*, 11(3), 193-203. doi:10.1108/13620430610661722.
- Technical competence. (n.d.). In *BusinessDictionary.com*. Retrieved July 13, 2017, from <http://www.businessdictionary.com/definition/technical-competence.html>
- Tripathi, P. C., & Reddy, P. N. (2008). *Principles Of Management (Performance Appraisal)*. Available from <https://books.google.com.br/books?id=trMz8Jy89C8C&pg=PA232&dq=disadvantages+of+seniority&hl=pt-BR&sa=X&ved=0ahUKEwjhvOCTufWAhXHHZAKHZMpBesQ6AEIJzAA#v=onepage&q=disadvantages%20of%20seniority&f=true>
- Varma, A., Budhwar, P. S., & Denisi, A. S. (2008). *Performance Management Systems: A Global Perspective* (p.202-203). Available from [https://books.google.com.br/books?hl=ptBR&lr=&id=RgOSvPhG5VIC&oi=fnd&pg=PP1&dq=Performance+Management+Systems:+A+Global+Perspective+\(p.202203\)&ots=sYZmNx4Ei7&sig=KDUDObt3OnngD6cfuri6e8bbqGs#v=onepage&q=202&f=false](https://books.google.com.br/books?hl=ptBR&lr=&id=RgOSvPhG5VIC&oi=fnd&pg=PP1&dq=Performance+Management+Systems:+A+Global+Perspective+(p.202203)&ots=sYZmNx4Ei7&sig=KDUDObt3OnngD6cfuri6e8bbqGs#v=onepage&q=202&f=false)
- Voice of business. (n.d.). In *BusinessDictionary.com*. Retrieved July 13, 2017, from <http://www.businessdictionary.com/definition/voice-of-business-VOB.html>

Voice of customer. (n.d.). In *BusinessDictionary.com*. Retrieved July 13, 2017, from <http://www.businessdictionary.com/definition/voice-of-the-customer.html>

Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation Science* : IS, 4(1), 67-67. doi:10.1186/1748-5908-4-67.

## **Appendix A**

### **Benchmark results**

- A1 Performance Management Survey
- A2 Benchmark with Airline W
- A3 Benchmark with Airline X
- A4 Benchmark with Airline Y
- A5 Benchmark with Airline Z

## A1 Performance Management Survey

**Q1 Name**

---

**Q2 Company**

---

**Q3 Are you a member of an airline or any company in the aviation industry?**

Yes \_\_\_

No \_\_\_

**Q4 Have you ever used performance management for any staff evaluation in your work experience?**

Yes \_\_\_

No \_\_\_

**Q5 Do you think crewmembers in the aviation industry should be evaluated by performance indicators?**

Yes \_\_\_

No \_\_\_

Justify \_\_\_\_\_

**Q6 How would you rank the crewmembers' Key Performance Indicators (KPIs) below by importance, from 1 to 5, being 1 the most important and the least important?**

Absenteeism 1\_\_ 2\_\_ 3\_\_ 4\_\_ 5\_\_

Technical Competence Evaluations (language tests, trainings, etc.) 1\_\_ 2\_\_ 3\_\_ 4\_\_ 5\_\_

On-Time Performance(their individual delays in check in) 1\_\_ 2\_\_ 3\_\_ 4\_\_ 5\_\_

Customer Evaluation(compliments and complaints) 1\_\_ 2\_\_ 3\_\_ 4\_\_ 5\_\_

Disciplinary Procedures 1\_\_ 2\_\_ 3\_\_ 4\_\_ 5\_\_

Q7 Concern the question above, would you add or remove any KPIs?

Yes \_\_\_

No \_\_\_

Justify \_\_\_\_\_

**Q8 If you implement meritocracy in crewmembers environment, would you keep considering seniority as one of the variables regarding crew performance management?**

Yes \_\_\_

No \_\_\_

**Q9 Open comments**

\_\_\_\_\_

## A2 Benchmark with Airline W

Collector: Survey Monkey

Started: Thursday, October 05, 2017 12:41:28 PM

Last Modified: Thursday, October 05, 2017 12:46:52 PM

Time Spent: 00:05:24

Page 1: AVM 6200 Certificate Capstone Project- Crew Performance Team

**Q1 Name**

Expert W

**Q2 Company**

Airline W

**Q3 Are you a member of an airline or any company in the aviation industry?**

Yes

**Q4 Have you ever used performance management for any staff evaluation in your work experience?**

Yes

**Q5 Do you think crewmembers in the aviation industry should be evaluated by performance indicators?**

Yes

**Q6 How would you rank the crewmembers' Key Performance Indicators (KPIs) below by importance, from 1 to 5, being 1 the most important and the least important?**

Absenteeism 3

Technical Competence Evaluations (language tests, trainings, etc.) 1

On-Time Performance(their individual delays in check in) 4

Customer Evaluation(compliments and complaints) 5

Disciplinary Procedures 2

**Q7 Concern the question above, would you add or remove any KPIs?**

Yes (specify):

Customer evaluation. Passengers are not capable of evaluating a pilots professional skills

**Q8 If you implement meritocracy in crewmembers environment, would you keep considering seniority as one of the variables regarding crew performance management?**

No

**Q9 Open comments**

I would implement performance evaluation in management and check airman positions, but seniority has been a staple in pilot professions. That would be very difficult to change.

## A3 Benchmark with Airline X

Collector: Survey Monkey

Started: Sunday, October 15, 2017 4:25:57 PM

Last Modified: Sunday, October 15, 2017 4:44:15 PM

Time Spent: 00:18:18

Page 1: AVM 6200 Certificate Capstone Project- Crew Performance Team

**Q1 Name**

Expert X

**Q2 Company**

Airline X

**Q3 Are you a member of an airline or any company in the aviation industry?**

Yes

**Q4 Have you ever used performance management for any staff evaluation in your work experience?**

Yes

**Q5 Do you think crewmembers in the aviation industry should be evaluated by performance indicators?**

Yes

**Q6 How would you rank the crewmembers' Key Performance Indicators (KPIs) below by importance, from 1 to 5, being 1 the most important and the least important?**

Absenteeism 3

Technical Competence Evaluations (language tests, trainings, etc.) 1

On-Time Performance(their individual delays in check in) 5

Customer Evaluation(compliments and complaints) 4

Disciplinary Procedures 2

**Q7 Concern the question above, would you add or remove any KPIs?**

Yes (specify):

Evaluation of the cabin chief, behavioral assessment

**Q8 If you implement meritocracy in crewmembers environment, would you keep considering seniority as one of the variables regarding crew performance management?**

Yes

**Q9 Open comments**

Respondent skipped this question.

## A4 Benchmark with Airline Y

Collector: Survey Monkey

Started: Sunday, October 15, 2017 9:02:04 PM

Last Modified: Sunday, October 15, 2017 9:07:39 PM

Time Spent: 00:05:34

Page 1: AVM 6200 Certificate Capstone Project- Crew Performance Team

**Q1 Name**

Expert Y

**Q2 Company**

Airline Y

**Q3 Are you a member of an airline or any company in the aviation industry?**

Yes

**Q4 Have you ever used performance management for any staff evaluation in your work experience?**

Yes

**Q5 Do you think crewmembers in the aviation industry should be evaluated by performance indicators?**

Yes

*They need to know their performances to know if they are in the Right way*

**Q6 How would you rank the crewmembers' Key Performance Indicators (KPIs) below by importance, from 1 to 5, being 1 the most important and the least important?**

Absenteeism 2

Technical Competence Evaluations (language tests, trainings, etc.) 5

On-Time Performance(their individual delays in check in) 3

Customer Evaluation(compliments and complaints) 1

Disciplinary Procedures 4

**Q7 Concern the question above, would you add or remove any KPIs?**

Yes (specify):

*Disciplinary*

**Q8 If you implement meritocracy in crewmembers environment, would you keep considering seniority as one of the variables regarding crew performance management?**

Yes

**Q9 Open comments**

Respondent skipped this question.

## A5 Benchmark with Airline Z

Collector: Survey Monkey

Started: Sunday, October 15, 2017 9:32:31 PM

Last Modified: Sunday, October 15, 2017 09:35:14 PM

Time Spent: 00:02:43

Page 1: AVM 6200 Certificate Capstone Project- Crew Performance Team

**Q1 Name**

Expert Z

**Q2 Company**

Airline Z

**Q3 Are you a member of an airline or any company in the aviation industry?**

Yes

**Q4 Have you ever used performance management for any staff evaluation in your work experience?**

No

**Q5 Do you think crewmembers in the aviation industry should be evaluated by performance indicators?**

Yes

**Q6 How would you rank the crewmembers' Key Performance Indicators (KPIs) below by importance, from 1 to 5, being 1 the most important and the least important?**

Absenteeism 5

Technical Competence Evaluations (language tests, trainings, etc.) 1

On-Time Performance(their individual delays in check in) 2

Customer Evaluation(compliments and complaints) 4

Disciplinary Procedures 3

**Q7 Concern the question above, would you add or remove any KPIs?**

Yes (specify):

*Fuel savings*

**Q8 If you implement meritocracy in crewmembers environment, would you keep considering seniority as one of the variables regarding crew performance management?**

Yes

**Q9 Open comments**

Respondent skipped this question.