

Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of Management



Diploma thesis

**The Specifics of the Recruitment Process
in an Organization**

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CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Department of Management
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DIPLOMA THESIS ASSIGNMENT

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Economics and Management

Thesis title

The Specifics of the Recruitment Process in an Organization

Objectives of thesis

The concern of the thesis is to examine the current trends and specifics of the recruitment process in the aviation industry. The main goal of this thesis is to discover the way how to improve effectiveness of recruiting process to ensure the supply of labour matches the demand. Within this goal there will be the rules for searching relevant connections between candidates and available positions on the market established.

Methodology

Thesis is composed of two main parts: theoretical and practical. The theoretical part will be based on secondary source analysis. The practical part will be developed on the basis of results of qualitative research. Thesis will be elaborated in the following procedural steps by using scientific methods.

1. Objectives and methodology formulation.
2. Synthesis of initial knowledge base.
3. Characterization of selected entities
4. Implementation of qualitative/quantitative research
5. Aggregation of acquired knowledge and developing of own proposals.
6. Formal completion of thesis

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Recommended information sources

Armstrong, Michael. Armstrong's Handbook of Human Resource Management Practice. 9th edition, Kogan Page, 2005, 980 pages. ISBN: 0 7494 4105 4

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DECLARATION

I hereby declare that I have written the diploma thesis “The Specifics of the Recruitment Process in an Organization” independently with use of quoted resources in bibliography.

In Prague, on April 5, 2012,

Iva Kohoutková

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Specifika výběrového řízení v organizaci

The Specifics of the Recruitment Process in Organization

Souhrn

Diplomová práce se zabývá zkoumáním současných trendů a specifík výběrového řízení v letectví. Náborový proces se zaměřením na piloty se přirozeně liší od rekrutování zaměstnanců v jiných oblastech. Tato skutečnost je dána vysoce specifickými požadavky na personál leteckých společností, zde konkrétně na piloty. Kromě řádného tréninku a licencí, jsou požadavky kladeny také na dobrý zdravotní stav kandidáta a hlavně bezpečnost. Velice důležitou součástí jsou také jazykové znalosti, zejména angličtina, vzhledem k tomu, že lety jsou spíše mezinárodní než národní. Diplomová práce klade důraz zejména na zvláštnosti, týkající se tří hlavních částí výběrového procesu v letectví, a to od definování požadavků, přilákání kandidátů, přes selekci až po umístění pilotů. Dále se diplomová práce zabývá externími náborovými specialisty a jejich efektivností při výběru vhodných kandidátů. V neposlední řadě se diplomová práce pokusí vyzkoumat faktory, které hrají důležitou roli při výběru pilotů, a následně hledá řešení, jak zlepšit efektivitu výběrového procesu v letectví nejen z pohledu konzultantů, ale i potenciálních zaměstnanců, tak aby nabídka odpovídala poptávce.

Summary

The concern of the thesis is to examine the current trends and specifics of the recruitment process in the aviation industry. The aviation recruitment process needs to be significantly specific and different from the human resource activities in other industries since the requirements on the airline staff are highly specific. Except the proper training and licences, there are usually requirements on medical fitness of the potential employees as well as security related issues. Last but not least, it is the importance of the language skills since the flights are rather international than intranational, especially in the Europe.

Thesis gives a brief overview about recruitment process as a whole and further focuses on its main parts which comprise defining requirements, attracting candidates their selection and finally provides the process modified to aviation industry, especially applied on pilots recruitment. Moreover, the thesis will discuss why the specialised external consultant companies are highly efficient and frequently used way to recruit airline staff from the point of view of both the quality of hired staff as well as the financial effectiveness. Furthermore, we will try to discover the way how to improve effectiveness of recruiting process from the point of view of the recruiters as well as the potential employees to ensure the supply of labour matches the demand. Finally, we will undertake an analysis to investigate what are the other relevant factors playing an important role in recruiting the airline staff.

Klíčová slova: Letectví, nábor, specifika, metody výběru, trénink, licence, požadavky, kandidát, klient

Keywords: aviation, recruitment, specifics, selection methods, training, licences, requirements, candidates, clients, selection

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1 Introduction

The aviation recruitment process needs to be significantly specific and different from the human resource activities in other industries since the requirements on the airline staff are highly specific. Except the proper training and licences, there are usually requirements on medical fitness of the potential employees as well as security related issues. Last but not least is the importance of the language skills since the flights are rather international than intra-national, especially in the Europe. Therefore, demands on the employees have to be thoroughly identified, formulated and then used in the recruitment process implementation. Selection process is very time consuming not only in aviation industry, therefore all the recruiters wish to avoid the tedious comparing and selecting of suitable candidates for the available position. This thesis proposes a solution for such a tedious work by developing a method of speeding up the selection process.

The whole process of pilots' recruitment relates, above all, the decision making processes. Decisions can be, in general, structured according to various criteria, e.g. strategic or operational decisions, long-term or short-term decisions, expected or unexpected decisions, limited or unlimited, etc. Successful real pilots' recruitment is an example of the end of the decision making chain; therefore, it is necessary to prepare it carefully in advance. If some managers face a situation, when decisions are necessary, such decisions include a choice made among alternative possibilities. The final decision-making demands an enhanced understanding of how the alternatives can be compared and evaluated. The tool being proposed by this thesis can help managers in the airline industry to make as professional decisions as possible, since they would dispose of set of evaluations based on available information on various aspects of the whole recruitment process. The proposed tool can serve as helpful support for such managerial decision.

Airlines industry is an example of globalized economic activity. Experience, as well as skills and professional assumptions, can thus play their roles internationally. Therefore, also the practical tool proposed in this thesis could serve regardless the country; i.e. any transnational company would use it in all its branches in various countries.

2 Objectives of thesis and methodology

2.1 Objectives of thesis

The concern of the diploma thesis is to examine the current trends and specifics of the recruitment process in the aviation industry. This kind of industry needs a specific approach due to the demanding standards of the qualification of the employees in connection with the sense of the industry and the character of the work.

The aim of the thesis is to create useful and efficient mechanism for selecting suitable candidates matching the requirements of a given positions on the market. This technique brings optimization and standardization of the selection process and is conceived as a tool possibly being used for all the recruiters aimed in aviation industry, pilots in particular. The theoretical part of the work is aimed at the general summarizing of recruitment process and further discussing all necessary issues while recruiting and selecting pilots.

The main objective of the practical part is establishing of rules for searching relevant connections between candidates and available positions on the market, further for evaluation of results followed by creating offers. It may be used also for setting up a new database or other recruiting system in the company.

Everything in the practical part is demonstrated on examples of the CVs from the real life. The CVs are collected from a database of a company aimed in training of pilots, placing them into the airlines and also aimed in recruitment for international airlines for example in China or Pakistan.

2.2 Methodology

To analyse recruitment process in the aviation industry, different techniques have been used. Theoretical part is based on method of secondary sources collection. The sources have been collected from scientific literature aimed in recruitment, human resource management, as well as journals and other documents focusing on the aviation industry.

Practical part comprises different methodological techniques. Firstly, there are analysed secondary data by studying internal sources of the company, like available job descriptions, application forms and other documents connected with pilot recruitment.

To reach the aims of the thesis, descriptive analyses and causal explanations have been used. The problem-oriented research had analysed all specific issues concerning the pilots' recruitment process in order to be prepared for further work based on secondary as well as primary data.

As the next step, the analysis of the placement process has been done. At first, all the criteria have been defined. Primarily, criteria are set, based on the positions requirements; and secondly, criteria regarding pilots' qualifications have been identified. For clarity, everything is indicated in tables by using MS excel. At first, there was necessary to identify the columns and rows and assign the names, values, significance and also in what form they should be entered into the table. The further step was setting up of particular criteria, followed by assigning scores to these criteria. There was designed an algorithm for matching the requirements of both the airlines and individual candidates. Finally, the method has been defined, which is aimed on how to generally evaluate the results.

Moreover, other techniques have been used in the thesis, such as:

The scoring method, also known scoring, is a form of multi-attribute or multi-criterion analysis. This method involves identification of all the attributes that are relevant to the project, next step is the allocation of weights to each of the attributes to reflect their relative importance; and the allocation of scores to each option to reflect how it performs in relation to each attribute. The result is a single score for each option, which may be used to indicate and compare the overall performance of the options. (22) The scoring method is often used for computer selection in order to provide simplistic choices. For the purpose of the thesis scoring method was adapted for selection of pilots. The assigned score was chosen based on the importance of particular criteria. Some of the criteria have a positive score and some negative. For the most important criteria or requirements that cannot be omitted, the score is set up as a very high number, but negative. To the other criteria e.g. candidates' preferences can be assigned a positive score because the requirement is not so important and less influences the final result.

Method of ***data classification*** has been used to sort the information taken from pilots' CVs as well as from the job descriptions. It has been done by comparing pilots' qualifications included in CVs and also comparing particular requirements of the individual positions.

Based on the data classification also the basic criteria for the purpose of the proposed technique were selected.

Method of *coding criteria* is used in order to standardize the process of entering data and information about the candidates and positions into the excel spreadsheets. It contributes to better orientation in the whole procedure and also enables entering data by any person working with the toolkit.

Induction and deduction are scientific methods. “*Induction is the formation of a generalization derived from examination of a set of particulars, while deduction is the identification of an unknown particular, drawn from its resemblance to a set of known facts*“. (23) In other words, induction is a process of inferring a general law or principle from observation of particular instances and deduction is an inference by reasoning from generals to particulars. (5, pg. 352) For the research used in the thesis, mainly an inductive approach has been applied. An inductive approach was based on a broadly interpreted data and classification of information with the aim to get a “picture” of the field researched – i.e. high-quality pilots’ recruitment. Deduction, as a kind of theory verifying, prevails rather in marketing research; while induction is probably more suitable for management decisions. It is not possible to clearly separate the both processes, as they are usually linked. Since deduction goes from the more general sight to more specific aspects, it can be defined as a “top-down” approach, when a theory is focused on some less general hypothesis which is verified. In this diploma thesis, this method has been use mainly in the first part, to gain all necessary prerequisites, assumptions and aspects for posts of pilots. Induction, on the other hand, can be identified as a reverse process, when flowing from specific observations to wider theory is applied. It thus can be named as a “bottom-up” approach. In the thesis, this approach has been use mainly in the second practical part, when Excel spreadsheets have been drafted, while using individual parameters for the following applicants’ evaluation.

Analysis is a process of breaking a whole into more parts. It is breakdown of features, relations and facts. Analysis enables to distinguish between significant and insignificant.

Synthesis is defined as a process advancing from parts to a whole. In other words combining of different pieces of knowledge and putting them together. (8, pg. 43)

Microsoft excel filter was used in practical part in order to facilitate work while matching individual candidates with given positions.

The research is based on data:

- Required positions on the market - current vacancies.
- CVs of applicants from company's database.

During the formal adjustment of the thesis, the methods of sorting and systematic formatting and structuring of the text were used.

3 Literature overview

3.1 General features of the recruitment process

Recruitment process, i.e. recruitment and selection belongs to the activities of human resource management; specifically it forms part of resourcing as well as human resource planning and talent management. Armstrong defines recruitment and selection as “*obtaining the number and type of people the organization or client needs*” (1, pg.10). Recruitment process starts when the available position occurs and finishes when the suitable candidate is found and the vacancy is filled. (18, pg. 55)

The main aim of the recruitment and selection process should be to obtain at minimum cost the right number of well-qualified employees which are required by the company to satisfy its human resource needs. The overall recruitment and selection process includes three stages:

1. Defining requirements

The first stage of the process is a definition of requirements which basically consists of preparing job descriptions and its specifications as well as deciding terms and conditions of a given employment.

2. Attracting candidates

In the second stage there alternative sources of applicants are reviewed and evaluated, there both sources - inside and outside the company should be considered. An integral part of this stage is advertising as well as using different agencies and consultants.

3. *Selecting candidates*

The last stage starts with sifting applications followed by interviewing candidates, testing them and subsequently assessing them. Another way how to select candidates can be by assessment centres. Further come offering employment to candidate, obtaining candidates references and preparing contracts of employment. (1, pg. 395)

3.1.1 *Defining requirements*

Before starting with defining job requirements it is important to clarify what the job actually is. Mr. Cole in his book *Personnel management* defines job as “*a collection of tasks assigned to a position in an organization structure.*” (3, pg.159)

On the other hand Mr. Byars highlights in his book that the job is composed of several parts, the simplest unit micromotion that forms element, followed by task consisting of elements, and task followed by duties, responsibilities and position. Then finally job which is formed by group of identical positions with different tasks and responsibilities. (14, pg. 81)

3.1.1.1 *Job and role analysis*

In order to define requirements it is necessary to undertake the job and role analysis. These analyses belong to one of the most important techniques in human resource management.

Job analysis can be defined as “*the process of collecting, analysing and setting out information about the content of jobs in order to provide the basis for a job description and data for recruitment, training, job evaluation and performance management.*” (1, pg. 174). Job analysis basically concentrates on tasks the job holders perform, in other words what job holders are expected to do. On the other hand the role analysis also collects information about job’s content but here concentrates more on people and the part they play while performing their job rather than tasks. In other words, it is collecting information about expected behaviour of role holders. (1, pg. 174)

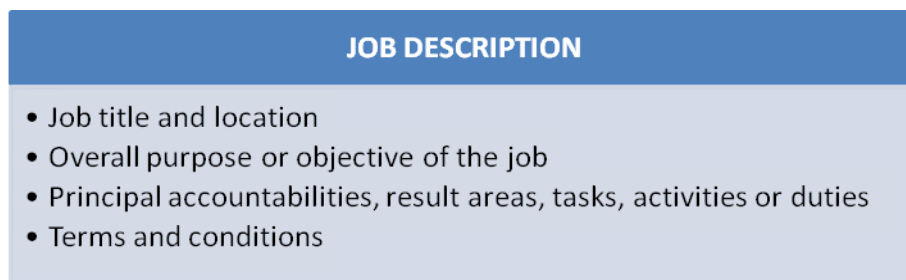
3.1.1.2 *Job description*

Job description is derived from the job analysis. It provides basic information about the job; basically it says what the job is, what is its purpose and overall objective, what are the main tasks or duties, responsibilities and any other special requirements or features that

a job holder is supposed to carry out. Finally the job description defines general working terms and conditions such as pay and benefits. The job description should be rather brief than go into too much detail. (1, pg. 396) It is important to create a clear and understandable job description in order to attract as much suitable candidates as possible. Attract too many candidates is time consuming. (19, pg. 94)

The basic framework of job description for recruitment purposes comprises simply:

Figure 1: Job description



Source: own work (1, pg. 194)

3.1.1.3 Role profile and person specification

The role profile and person specification comes as a result from the role analysis. A role profile is also known as a role definition and describes the part which people play while fulfilling their work requirements. The other product of analysis is a person specification that can be also called in different way as a job or personnel specification. This document concentrates more on setting out characteristics needed to perform the job satisfactorily. Among these characteristics belong education, qualifications, training, experience, personal attributes and competences, mental abilities, physical effort and skills, judgement and decision making. (1, pg. 175)

Person specification is usually divided into following headings:

Figure 2: Person specification



Source: own work (1, pg. 397)

Competences or competencies include information that applicant needs to know and be able to do while performing the role. This part contains even some special aptitudes or skills which are required for the given position. Qualifications and training comprise with the professional, technical or academic qualifications required to achieve an acceptable level of performance. There is also included the training that the candidate should have completed. Experience are usually divided into categories of work or organizations, there are also described the types of achievements and activities. Specific demands usually define the areas where the role holder will be expected to achieve. Organizational fit stands for the corporate culture, whether it is formal or informal. The other part of person specification is called special requirements and comprise for example travelling, unsocial hours, mobility etc. Finally by meeting candidate expectations are meant expectations in terms of career opportunities, training, security etc. which the organization can offer to candidate. (1, pg. 397)

3.1.1.4 Collecting job data

An important part while defining requirements is to obtain documents which give information about the job. This process is called data collection. Required information about the job can be obtained through an interview with a job holder or even in written form by email when the job requirements are already defined and prepared for recruiters. It is necessary to obtain all the relevant facts about the job, which comprise all the information already mentioned in the part of basic framework of job description. The recruiter should require the job title of job holder's company, title of a job, further should

ask for a brief description and finally for a list of the main tasks or duties that the job holder has to carry out. (1, pg. 176-177)

3.1.2 Attracting candidates

After defining requirements and obtaining proper job description through the job analysis follows a process of attracting candidates and job advertising. First step to attract a candidate will be to use the job or person specification as a basis for creating a shortened profile of the ideal candidate. The same process will take place with the job description which will be used to obtain brief information on the duties and responsibilities of the job holder. This extracted information will be then used to advertise the position and to send an 'information pack' to candidates. This is very important stage because the primary goal of each company is to attract a sufficient number of high quality and suitable candidates. (15, pg. 145) The exactly established job offer is essential for attracting the right candidates matching the requirements. (9, pg. 136)

3.1.2.1 Job advertising

Job advertising is one of the most frequent and widely used methods of attracting candidates. It can be defined as a placement of jobs in daily newspapers, magazines, in trade and professional publications, on the radio and television and nowadays, of course, mainly on the internet which informs people about available positions on the market. (14, pg. 138)

The main objectives of advertisement should be to:

- **Attract attention**, which means that the job announcement must be competitive or even more interesting for potential candidates compared to other employers.
- **Create and maintain interest** of a potential candidate can be done by making interactive and interesting information about the advertised job, the company, the terms and conditions of employment and the qualifications required.
- **Stimulate action** is the third and very important objective of advertisement. It means that message has to encourage people to read whole text to the end not just to overlook all the important information. By doing this we can prompt a sufficient number of replies from suitable candidates.

Another important step while attracting candidates and doing a job advertising is to establish how many jobs have to be filled and by when. Next step is to consider where suitable candidates come from, to think about the companies, jobs or education establishments they are in and country where they the most probably can be found. Finally define terms and conditions of the job that are formed by pay and benefits and think about the job or the organization which is likely to attract quality candidates. (1, pg. 402)

3.1.2.2 Sources of recruitment

Sources of recruitment are another essential topic of recruitment process which has to be discussed. Recruitment can be sourced both internally and externally, in other words, candidate will be found within the organization or outside the organization. This thesis will be focused mainly on the external recruitment focusing on the sources outside the organization.

Among external recruitment belong job centres, recruitment agencies, executive search agencies, casual callers, friends or relatives, school, colleagues, universities, advertisements, telephone hotlines, open days, internet etc. (15, pg. 145)

Internet recruiting

Internet recruiting is one way how to attract candidates or advertise jobs. It is kind of external recruitment. In this case, vacancies are advertised or 'posted' on the Internet. There can be also provided information about jobs and the employer. The internet also enables e-mail communications between employers and candidates. The other advantage of the internet recruiting is that candidates can not only apply for jobs online but they can also register and upload their CVs on any site they wish and just wait for e-mail from employers. Sites usually contain a database that covers information about current vacancies and due to that it is constantly searching for matches with uploaded CVs which have been posted by job seekers. (1, pg. 405)

Outsourcing recruitment

The other way of external recruitment is the outsourcing recruitment which deals with getting agencies or consultants which help the organization to go through all the CVs and to carry out preliminary work of submitting suitable candidates or drawing up a short list. It cost some money, but by letting others to do this lengthy work, company can save a lot

of time and trouble. (15, pg. 145) The expectation from outsourcing are usually to save costs, broaden the spectrum for solving problems which organization is not able to solve by its own and mainly it enables focusing on company's core business. (19, pg. 17)

Agencies are other possibility of external recruitment. They are usually quick and effective but quite expensive. However, the agencies are costly; they can be more economical for the company than delegating this task to some employee in the firm. His time spent by executing of personnel agenda may be more expensive than effective agency with guaranteed results. (4, pg. 64)

Recruitment consultants are “specialists that provide a service for organizations that want to outsource their recruitment and selection process”. (11, pg. 382) Their main competencies are generally to advertise, interview and produce a short list of candidates. Their advantage is that they provide expertise and reduce workload. The organization using recruitment consultants can be anonymous if it wishes while advertising jobs using recruitment consultants. (15, pg. 145)

Headhunters are considered to be independent recruitment consultants who provide a service of finding specialist staff for organizations. Headhunters are usually very expensive so their services are mostly used for recruiting senior staff where particular expertise is required. After making a shortlist of suitable and interested candidates, the selection process begins. (11, pg. 201)

3.1.2.3 Candidates sourcing techniques

In recruitment there exist a lot of different ways and possibilities how to get or attract suitable candidates. Below are listed the most common ways of candidate sourcing techniques:

Database search is one of tools used by recruiters or personnel agencies. It enables to search pilots CV regarding their skill sets, licence type, aircraft type knowledge, position, location if necessary or even the last contact.

Media advertising is very costly but it is the best way how to make the current vacancies even more visible. The jobs can be advertised via news papers, magazines, television commercials, radio advertisement, outdoor advertising, direct email or websites.

Networking and referrals or word of mouths are nowadays very frequently used method for searching candidates. Networking is an ability to communicate with people from in different environments. It is mostly conducted via the internet. Networking tries to find the best way how to get in touch with potential candidates or clients, how to start conversation, how to gain required information, subsequently deal with them and finally not to lose the gained contact. In general networking makes easier to keep in touch with other contacts around the world. As an example of online networking, in other words efficient tool for networking can be mentioned world famous business site LinkedIn.

Website registration as was already mentioned above enables to job seekers to upload their CV with a range of sites and just wait for e-mail from employers. Thanks to the database that covers information about current vacancies it is easy to match the available positions with uploaded CVs which have been posted by job seekers.

Shortlisting is a critical stage between recruitment and selection that involves deciding which applicants will be called forward for an interview or to participate in other selection procedures. It is said that process of shortlisting should be formalized, conducted by trained managers comparing information on applicants with the requirements of a person specification. Shortlisted candidates are those who match the person specification and at the same time possess the knowledge, skills, and abilities to fill the vacant post. (11, pg. 419)

3.1.3 Selection

The mission of recruitment activities can be considered successful, once the organization has attracted sufficient number of relevant candidates from the external labour market. After the recruitment activities follows selection. The main objective of selection is to identify the most suitable candidates and persuade them to join the organization.

Among the salient features of the selection process belong:

- The application details that comprise application forms, CVs and letters.
- The interview
- Selection tests and references

(3, pg. 196)

Figure 3: The key stages of selection process



Source: own work (3, pg. 196)

3.1.3.1 Personnel selection methods

Personnel selection methods are used for comparing or evaluating of individual applicants in relation to requirements of position they are applying for. The goal of selection is to decide which of the applicants is the most suitable for a given position. There exist many selection methods but any of those cannot guarantee success of selected candidate. There is no universal and the best method of personnel selection. In practice there are used usually combination of more methods. Personnel selection methods include *analysis of applicant documentation* which is the basic method for selection or pre-selection. Documents of candidates include CV, covering letter, completed application forms, evidence of education and other certificates proving qualification of candidate, medical examination and references. The analysis of candidate documentation is followed by *sorting applications*.

3.1.3.2 Personal records, documents & administration

Curriculum Vitae

The overall function of CV is to provide the basic information for job searching. It should contain personal details, education and employment history in chronological order. CV should be structured and simple, include information relevant to the applied position with the most important areas of experiences listed in reverse chronological order. (1, pg. 468) Nowadays is normally expected structured Curriculum Vitae. In the CV is important to follow how often the candidate changed a position, how long candidate stayed at one

employment, what were the reasons for leaving the employment, if candidates' competencies were increasing or decreasing, if there exist long periods between individual employments or if all the statements in CV match the statements in candidates' documents. (12, pg. 99)

Covering letter is an accompanying document to applicants' written materials. Firstly the cover letter should attract attention of evaluator; secondly presents applicant's interest in position with a given company and prove his/her job related qualifications to a given position. All of these facts should be relevant and true without exaggerating of candidates' skills and qualifications. (12, pg. 100)

Application forms

"Application forms set out the information on a candidate in a standardized format. They provide a structured basis for drawing up short lists, the interview itself and for the subsequent actions in offering an appointment and in setting up personnel records". (1, pg. 410)

Employment references

Another way to verify if the selected candidate is suitable is made through references. A candidate is asked to provide at least one and usually more than one referee. References then have two functions. One function of a reference is to provide confirmation that the information provided by the candidate is true and the second function is to provide character reference and describe the applicants' personal attributes. (15, p. 163) References exist in both oral and written form. The written references are considered as more reliable because what is written is always more binding; on the other hand the written reference may not have any predictive value, we cannot ask directly the questions which are interesting for us. A disadvantage of oral references is that they may be positively or negatively biased. The reasons are to help a leaving employee or an employer promised positive reference if the person leaves a job. The negative references usually result from problems of interpersonal relationship at work. (12, pg. 100)

3.1.3.3 Candidate evaluation

In recruitment there exist different ways of evaluating candidates. Between the most common methods of evaluation belong:

- Candidate assessment
- Recruiter interview
- Verification of qualifications
- Reference checks

3.1.3.4 Candidate selection

The candidate selection includes the following steps. At first candidate is screened, and then follows assessing of candidates suitability against clients' requirements, further the licences and documentation must be checked along with reference checks. The next step is submitting of qualified candidate details, fully briefed about client's vacancy to the client. Finally the interviews are always arranged as requested.

Very important activity of selection is a support during interview stage. The support includes following stages:

- Candidate obtains an interview confirmation which is sent on client's behalf and gives full details on the interview venue.
- Consultant checks with candidate day before interview that all is in order for the candidate to attend.
- Post interview feedback from candidate
- Post interview feedback from client
- Consultant confirms the candidate whether the client decided to offer him / her a job or that the candidate was rejected by the client.

(12, pg. 99)

3.1.3.5 Selection interview

“Interview is formal exchange of facts, impressions and viewpoints between a prospective employer and prospective employee”. (3, pg. 203)

Interview is a good tool for making an early decision about candidate’s suitability regarding the offered position. (10, pg. 416) Selection interview is usually structured. Consultants ask each candidate the same questions and write it down into the interview sheet. In the ‘Supplement 1’ there is example of such an interview sheet adapted for interviewing pilots.

3.2 Specifics of the recruitment process in the aviation industry

3.2.1 Types of aircrafts

In this subchapter are explained fundamental differences between basic variants of aircrafts further discussed in the thesis.

Boeing 737 (B737) is an airliner which belongs to the category of a narrow-body airliner jets. It is the most frequently flown aircraft in the world. B737 is able to transport passengers or cargo. Maximum capacity is up to 215 passengers. B737 is divided into three basic generations, Original, Classic and Next Generation; each of them has many variants. Two basic generations of B737 mentioned in thesis are Boeing 737 Classic (B737 CL) and Boeing Next Generation (B737 NG). The most significant difference between them is that B737 NG has a new digital cockpit, in other words glass cockpit, other new features are also wings and engines. B737 NG was produced to compete on the market with Airbus 320. Boeings operate e.g. CSA, Ryanair and many other world airlines.

Boeing 747 (B747) also called Jumbo jet is the second largest wide-body commercial or cargo aircraft after Airbus 380. The aircraft is able to accommodate up to 524 passengers. It is owned by world airlines such as British Airways, Korean Air or Air China.

Airbus (A320) belongs to the same category as the B737 that means narrow-body airliners. It is passenger transporter with capacity up to 220 passengers. It was the first type of aircraft with the glass cockpit. Airbuses are operated by the well-known airlines such as Wizzair, British Airways and Air Asia.

Airbus (A330) is wide-body commercial or cargo aircraft which is able to accommodate up to 335 passengers. Airlines which operate this type of aircraft are e.g. Air France, Lufthansa or Air China. (24)

3.2.2 Pilots requirements

All the pilots who are applying for a job are asked to provide following information.

General information comprise personal details such as name, date of birth, contact details etc. In Chinese airlines there are for example required also information about candidate's religion or diet.

Other requirements are information relating to **flying licence**. There are included a type of licence, its number, which type of airplane is the licence for, where and when was the licence issued, until when is valid and finally if there exist any limitations.

Flying hours represent total time flown on different types of aircraft. Flying hours on a given type are further itemized according to pilot's position in the aircraft such as First Officer (F/O), Captain (CPT) differently Pilot in command (PIC) or Instructor. There are also important dates when the first and especially last flight on given type was done and when the last simulator was.

Employment record shows the history of candidates' previous occupations set in time from the most recent one to the earliest one. There are always mentioned the name of a company, country, type of flown aircraft and position held within this company.

Training record provides information where the pilot passed his training and on which type of aircraft.

Least but not last requirement is **medical certificate** that prove a pilot's good health. There is made demand on the date of issuance or its validity. The medical must be done according to the age of pilots once or twice a year. Pilot always must have a valid medical.

And finally **references** which are already explained above.

Required documents:

Each airline requires from pilot basic documents to prove his qualifications. Among these documents belong pilot's CV, several last pages of logbook, scanned copy of passport (photo page), flight crew licence, simulator check, medical licence and

accident/incident books. The individual documents are explained in the practical part of the thesis while defining criteria.

3.2.3 Selection methods

Content of selection process:

The selection procedure regularly carried out by a company is done for the two purposes. One of those is selection of candidates for the Training Program – Ab Initio and the second selection is more common one because it is section of candidates for the position of pilot with an air operator.

➤ *Psychometric tests on a computer*

Psychometric tests are formed by 225 sets of questions. The individual test consists of pairs of statements. Each of two statements of a pair might be more or less appealing to candidate. The candidate is not expected to answer yes or no because there is no correct answer. The candidates should select and mark one of two offered options that best suits the given theme and that they consider most suitable for them. The purpose is to examine the candidate's personal qualities – his personality profile. The tests have been produced by the Institute for Aviation Psychology in Netherlands and are currently used by a number of top air operators.

➤ *Compass*

The second part of selection is Compass which is formed by performance and proficiency tests on a computer focused on:

- Psychomotor coordination (eyes, arms, legs)
- Short-term memory
- Mathematical perceptiveness
- Space orientation
- Coping with double roles

The aim of the compass is to examine mental perceptiveness and capacity of the candidate and his ability to coordinate his movements, thinking and acting. It is an up-to-

date training system developed in 1997 by Capt. Robin Acton – a British Airways pilot of Boeing B767 who led pilot training courses in Prestwick and Oxford.

➤ *Technical tests and Technical interview*

In technical part there are two sets of technical tests designed for candidates interested in training program – AB-INITIO TEST or the second test is for candidates interested in being Airline pilots – ADVANCED TEST.

1. AB-INITIO TEST is formed by set of 40 questions in English language. Time limit for the test is 45 minutes with required minimum score 70%. Each question consists of one picture with a text box and multiple-choice answers (A, B, C...), only one answer is correct. Test is conducted on PC, automatic assessment is instant. The range of tested knowledge covers physics (mechanics, aerodynamics, optics, electronics, hydrodynamics, thermodynamics...) on the level of average technical high school or gymnasium (secondary school) curriculum. The main target of the testing is to prove the ability to apply theoretical knowledge on practical and logical examples from the abovementioned fields of knowledge.
2. ADVANCED TEST is formed by set of 45 questions in English language conducted on PC. Here is the time limit 50 minutes and is supplemented by a set of 14 questions in classic paper form with the time limit of 15 minutes. Questions on PC are multiple-choice where the only one answer is correct. Each correctly answered question is rated one point, automatic assessment is instant. Paper part of the test consists of questions with a text box and multiple answers (A,B,C...), only one answer is correct. Some questions require filling out the missing words (for example to explain abbreviations) or the whole text - free formulation of answers. Each correct answer is evaluated with one point. Assessment is manual executed by the examiner. Test is rated as a complex by the sum of points achieved in both parts of the test. Required minimum score is 75%. The range of tested knowledge covers the fields of aerodynamics, aircraft avionics and instruments, aviation regulations IFR, CRM/MCC and, SOP, performance of aircraft, flight preparation, meteorology - in the extent of detailed ATPL knowledge. The main target of testing is to prove the ability to apply theoretical knowledge on practical examples from the abovementioned fields of knowledge. If the candidate succeeds in written part, he will be straight away invited to an

interview with the examiner. The examiner is always an active pilot or type rating instructor (TRI). Duration of the interview is approximately 30 minutes.

Under the scrutiny of our examiner the candidate will carry out pre-flight preparation and flight planning with the use of given documentation (meteo, NOTAM, Jeppesen, OFP...). In a technical interview may appear questions from several different areas such as Aerodynamics, Engines, Jet and Propeller Aircraft Differences, Navigation, Atmosphere and Speed, Aircraft Instruments and Systems, Performance and Flight Planning, Meteorology and Weather Recognition, Flight Operations and Technique, Human performance and finally Type-Specific Questions. The questions may differ according to interview a pilot is attending. The posed questions, besides general questions, are usually focused on type of aircraft the pilot is applying for. The examiner decides on his own whether or not the candidate's performance was satisfactory or insufficient.

Figure 4: Questions for technical interview

Sample questions for technical interview:

Meteorology: What is temperature?

“Temperature is a measure of molecule agitation in substance, which is represented as the hotness of a body. Therefore, temperature can be thought of as a measure of the hotness of a body.” (2, pg. 223)

Aerodynamics: What is lift?

“Lift is a phenomenon generated by an aerofoil due to pressure differences above and below the aerofoil” (2, pg. 3)

Aircraft Instruments and Systems: What is a gyroscope?

“A gyroscope is a body (usually a rotor/wheel) rotating freely in one or more directions that possesses the gyroscopic properties of rigidity and precession“

(2, pg. 135)

Source: own work

➤ ***English tests and interview in English***

The objective of English test and interview is to check candidate's English language knowledge in both written and spoken form.

Written test consists of 3 parts:

- Answers to simple questions in English
- Translation of simple sentence from Czech into English
- Listening to a recorded message in English, taking record and interpretation of some aviation terms and abbreviations.

Interview lasts 10-20 minutes and it is focused on the candidate's ability to communicate in English.

➤ ***Final interview***

Final interview contains a summary of the candidates' results in the individual parts of the selection procedure and provide space for complementary questions asked by the examination board members. In the event that the candidate is selected for a concrete airline / future employer, this part of procedure is attended by the operator's representatives.

➤ ***Flight simulator testing***

Flight simulator testing includes testing of normal and emergency procedures, instrument flight rules (IFR) procedures and overall ability to operate the aircraft.

4 Research /Analysis

Practical part of diploma thesis has been developed for the purpose of recruitment agencies, independent recruitment consultants, headhunters or anyone else involved in the recruitment process in the aviation focused on pilots. Research part has been elaborated on the basis of information and data gathered by analyzing current recruitment process in the company aimed in pilots training and followed by placing these trained pilots into the airlines. Used sources have been basically selected pilot vacancies currently available on

the market which the company operates with, CVs of pilots applying for the available position through this company and other internal sources such as email or telephone communication with clients or candidates and different documents related to recruitment process.

4.1 Characteristics of the company

Company, where the experience was gained and the most of data were gathered wished to remain anonymous. This limited company with headquarter in Prague was founded in 2005. This small business company employs 4 people.

Main Activities of the company:

- Selection Procedures
- Training Program
- Training Costs Funding
- Global Recruitment Services

The main aim of the company is to deliver selection and training of flight personnel that meet the real world needs of the airline industry. The company has a rich history of pilot training and flight school operation, knowledge of the demands and requirements of airlines, and experience gained through the long involvement in the airline business and human resources. The company helps people organize the entire training path in the best pilot schools from complete beginner right up to Type Rating for Boeing or Airbus airplanes. The company offers the complex support, training organization and financing.

Moreover, one year ago the owner of the company decided to expand the firm's activity in the way of creating there small personnel agency of two people aimed in recruiting pilots world-wide. As it is very small company there is necessary to implement an efficient system for recruiting and selecting candidates which apply on the positions through this company. The proposed method is explained below.

4.2 Defining requirements for positions

For the purposes of the thesis were selected 9 vacancies on the market. The reason for selecting just these vacancies was the availability of data. All the available positions are

from a different part of world and different cultures. The positions are based around the world. The bases are following: Pakistan, China, Turkey, Singapore and India.

Requirements, in other words criteria for position can be divided into 5 main groups.

The division is following:

- General information
- Basic position requirements
- Required documents
- Offered benefits
- Others

General information includes:

Table 1: General information

General information
Type of aircraft
Type of operation
Type of contract
Location
Rank

Source: own work

Type of aircraft includes the concrete aircraft that the pilot will fly on if he succeeds in selection process. Considering the available data, thesis refers only to different kinds of Airbus and Boeing aircrafts.

Another distinction taken in account is **Type of operation**. For example there is distinguished whether the aircraft is cargo or passenger aircraft.

Last but not least is the **Type of contract**. There exist two types of contract, commuting or full-time contract. These two contracts differ according to days when the pilots is flying or has days off. Commuting contract enable to the pilots not to live at the same place where the job is performed. The advantage of the commuting contract is mostly for expatriate pilots. They have possibility to go back each month to see their family abroad.

Location refers to the place, namely country where the available position takes place.

Rank, there is also always specified the required rank of pilot, whether the company is searching for a person with qualifications of first officer, captain or instructor. This requirement is intended to reflect whether the pilot is e.g. first officer (FO), captain (CPT), synthetic flight instructor/examiner (SFI), synthetic flight examiner (SFE) or possibly type rating examiner (TRE), type rating instructor (TRI). Given available data, thesis only focuses on FOs and CPTs.

The other group of criteria are basic position requirements, the requirements which the pilots are supposed to meet:

Table 2: Basic position requirements

Basic position requirements
Total Time (hrs)
PIC on type (hrs)
Total hours on type
Current type rating
Current on type (months)
Sim Check (valid last months)
Age (years)

Source: own work

Total time belongs to one of the most important criteria. It illustrates total flight hours in the whole pilot career since being student until present, total time are all hours that can be logged excluding hours on simulator.

PIC on type stands for Pilot in command. It is a person who is responsible for all the operations and safety during a flight. This criterion is indicated in hours and it says how many hours the pilot has flown as PIC. PIC on type means that hours must be flown on the type of aircraft the pilot is applying for within the position. It is taken in account when the captains are selected.

Total hours on type tell us a number of flight hours flown by pilot on a given type.

Current type rating refers to the aircraft type. It means that pilot is allowed to fly on certain types of aircraft. Type rating requires an additional training on a given type of aircraft. Airlines may require type rated pilots for the aircraft which the candidate is going

to fly on or sometimes they do not require type rating because they are able to provide it for the pilot within the airline.

Current on type is the requirement for pilots to be flying on a given aircraft type for certain period. It says how many months ago the pilot had his last flight on the given type of aircraft. Airlines can set as their main requirement to be current on type within several months.

Sim check means that the candidates have to provide that they have passed the simulator within certain months. It says for how many months the sim check should be still valid.

Age is another very important requirement while applying for the position. It is normal that the airline defines as one of its main requirements that pilot cannot be older than 55 or so.

Table 3: Required documents

Required documents
Licence
Medical Class 1
Log book
English level
Dangerous goods
CRM
Aviation security
Passport
No accidents/incidents
No criminal record
Reference contacts/letters

Source: own work

Licence refers to the commercial pilot licence, in other words pilot's certificate that permits the holder to act as the pilot in command of a single pilot aircraft, or as co-pilot of a multi-pilot aircraft and be paid for his work. There exist two basic types of licences and these are JAA licence and FAA licence.

- **JAA licence** stands for the Joint Aviation Authorities licence. JAA represents the civil aviation regulatory authorities of a number of European States. These states had agreed to co-operate in developing and implementing common safety regulatory standards and procedures. It is licence issued by authorities according to European standards.

- **FAA licence** is abbreviation for licence issued by Federal Aviation Administration. This licence is evidence that an individual is duly authorized to exercise piloting privileges. The pilot certificate is one of several kinds of airman certificates issued by the FAA.

Medical Class 1 is a certificate that proofs pilot's physical and mental fitness in order to exercise safely the privileges of the applicable licence. It is needed for pilots before they fly solo in airplane. Medical certificates are designated as third-class, second-class and first-class, while the first-class medical with the most demanding and the most restrictive medical standards is designed for airline transport pilots, the second-class is for commercial pilots and the third-class medical is intended for students, recreational and private pilots. Certificate can be issued by JAA or FAA.

Log book enables pilot licence holders to record flying experience and further it facilitates to prove pilots flying experience.

Each pilot must have a minimum **English level**. A minimum level of English is tested by ICAO language proficiency check. For the pilots is required the minimum English level 4. Each level has different validity. Level 4 is valid for 3 years, level 5 for 6 years and level 6 is unlimited.

Dangerous goods certificate covers the broad principles relating to the carriage of dangerous goods by air. It certifies that the pilot is familiar with the general philosophy of the regulations and limitations on dangerous goods as well as general marking and labelling identification and emergency procedures.

CRM is an abbreviation for Crew Resource Management. It is certificate which proofs that the pilot is able to cooperate with other crew member in a cockpit. It is focused mainly on safety, interpersonal communication, leadership and decision making.

Aviation security is essential part for each pilot. This document certifies that the pilot had passed aviation security training appropriate to the level of his involvement in the aviation industry.

Passport is another essential component of pilots' documents. The airlines require passport to verify the candidates' details, such as birth of date, nationality, validity of passport and so on.

No accidents/incidents refer to the no accidents and incidents letter from previous employers that proves that the pilots did not have any accident or incident during his career.

No criminal record reflects the pilot's criminal history. Airlines often require confirmation that the pilot has not committed any offense.

Reference contacts / letters are already explained in the theoretical part. The reference contacts or letters are very often required by airline in order to confirm information provided by candidates.

Table 4: Benefits

Benefits
Annual Salary (USD)
Per Diems (USD)
Overtime/hour (USD)
Accommodation/month (USD)
Annual Bonus (USD)
Annual Travel Allowance/year (USD)
Flight round tickets/year
Annual Leave (days/year)
Sick Leave (days/year)
Annual Loyalty Bonus (USD)

Source: own work

Annual salary is an amount in dollars totalling all the months in one year. Usually airlines provide annual salary instead of monthly salary.

Per Diem is an amount of money that pilots receive as a daily allowance for expenses to cover living and travelling expenses connected with work.

Overtime is a bonus paid to the pilot for flying more than specified number of hours.

Accommodation includes amount of money intended for accommodation. This benefit is usually provided by airline per month. Some airlines directly provide accommodation in a hotel instead of monetary contribution.

Annual bonus is a bonus paid to the pilots each year.

Flight round tickets is an amount of tickets the airline provides to pilot per year.

Sick leave includes a number of days when pilot does not have to come to work and still gets paid.

Annual loyalty bonus is the bonus after accomplishment of one year with the airline.

Table 5: Other

Other
Contract Term (years)
Base
Roster (days on;off)

Source: own work

Contract term is always set before starting the contract. The length of contract term varies from one airline to another.

Base refers to the concrete place where the pilot will start and finish with the aircraft.

Roster, in other words flight plan or working pattern, it means which days pilot will be on and which days off. For pilots, knowing their fixed roster is a great advantage.

4.3 Defining pilots criteria

Defining pilots' criteria was based on CVs of candidates applying on the given positions mentioned above. Most of the candidates' criteria are consistent with criteria for positions. This fact is very important for following matching of the positions and candidates requirements.

Pilots' criteria are again divided into 5 groups. These groups are following:

- General information
- Basic requirements
- Required documents
- Required benefits
- Others
- Personal information

Table 6: General information II

General information
Type of aircraft
Type of operation
Type of contract
Location
Rank

Source: own work

All of these criteria are the same for positions as well as for candidates. Individual requirements are already defined in the previous part of Defining position criteria. For this reason it is not necessary to define all the requirements again. Important point of defining candidates' requirements is that all the criteria must be considered from the opposite side, it means from the candidates point of view. Type of aircraft includes all the aircrafts flown by the pilot during his career. Type of operation, type of contract and location all of these criteria depend basically on candidates' preferences. In case of rank it is a bit different. It refers to a rank of pilot. Pilot with a higher rank can choose the position with the lower rank but the pilot with the lowest rank e.g. cadet or first officer cannot be accepted for a position with higher rank e.g. captain position.

Basic requirements:

These requirements are also the same as for the positions. The only difference is again in the candidate's point of view. It says how many flight hours on which type of aircraft has the candidate already flown in his whole career and from the position's point of view it is the minimum number required by an airline. Type in case of PIC on type or Total hours on type always refers to the type of aircraft indicated in criterion Current type rating. Date of birth must be stated as well in order to prove the age of the pilot.

Table 7: Basic requirements II

Basic requirements
Total Time (hrs)
PIC on type (hrs)
Total hours on Type
Current type rating
Current on Type (months)
Sim Check (valid last months)
Age (date of birth)

Source: own work

Required documents are again the same with the difference that the candidate provides the documents to the airline while the airline requires documents from the candidate. All of these documents are essential for candidate's placement. It means that candidate is obliged to provide all of them. If any candidate is not able to provide even one of them he cannot be processed on and subsequently accepted for the position.

Table 8: Required documents II

Required documents
Licence
Medical Class 1
Log book
English level
Dangerous Goods
CRM
Aviation Security
Passport
No accidents/incidents
No criminal record
Reference contacts/letters

Source: own work

Required benefits also maintain the same as for the positions. Airlines offer benefits to candidates while candidates require certain benefits from the airlines, in other words each candidate is willing to work for a different salary and different kind or amount of benefits.

Table 9: Benefits II

Benefits
Annual Salary (USD)
Per Diems (USD)
Overtime/hour (USD)
Accommodation/month (USD)
Annual Bonus (USD)
Annual Travel Allowance/year (USD)
Round Flight Tickets/year
Annual Leave (days/year)
Sick Leave (days)
Annual Loyalty Bonus (USD)

Source: own work

Others:

In case of these requirements, the criteria are again the same. Candidate may require or prefer the specific period of contract term, specific base or the roster. The only additional criterion here is International experience which is always advantage for pilots. The more international experience pilot has the more chances he does have to succeed in selection process.

Table 10: Other II

Other
Contract Term (years)
Base
Roaster (days on/off)
International experience

Source: own work

Personal information includes additional criteria which differ from the positions. It is because the airlines never disclose these criteria as their requirements. Unfortunately it is not always true that airlines do not consider these kinds of criteria in practice. However, for the purpose of recruiters or personnel agencies these criteria are not taken into account while matching candidates with positions. The only reason for gathering this personal information is to create overall profile of candidate for purpose of airlines or any other own purpose.

Table 11: Personal information

Personal information
Nationality
Height (cm)
Weight (kg)
Marital status
Language spoken
Religion

Source: own work

Nationality should not be but sometimes it is considered by airline. For example if the airline has some bad experience with pilots from the given country from previous years, they can decide not to accept certain nationality.

Height and **Weight** are not very important criteria but still certain airlines require this information.

Marital status may be taken into account if the pilot is going to relocate because of his new job opportunity. Since he does not have a family he will be probably willing to relocate without any problems, moreover he will not require any extra benefits for his family.

By **Language spoken** are meant other languages except English because English language is essential for pilots and it is already included in English level criterion. Other languages can be taken as an advantage if pilot relocates to another country where he would use other foreign language.

Religion is quite personal information but still some airlines require religious affiliation for the same reason as nationality.

4.4 Method of coding criteria

This subchapter gives instructions how to code matching criteria. The individual criteria are itemized in MS Excel by using tables. The tables are adapted for each criterion. Each table can be extended with additional information according to needs and requirements of individual organization.

Each criterion is encoded in a different way but in general there are applied following symbols:

Table 12: Symbols

Code	Symbols
>	Minimum
<	Maximum
-	Range
&	And
	Or
;	Two independent numbers
,	List with more than one value
N/A	Information is not available
	Not specified
!	With no exceptions
(...)	Parentheses

Source: own work

- **Minimum** (greater or equal than) is used when determining a numerical value. For example, if an airline asks the pilot to provide a certain number of flight hours. There the minimum is applied because the requirement is never specified as an exact number of hours but it says that the pilot should not have less than required number naturally if he had flown more hours than the given number it is always better.
- **Maximum** (greater or less than) is used for the similar purpose, also when determining numerical value. In this case there is an example of age required from the airline. Again, the airline will never require exact age of candidate but will set maximum age by which the candidate is accepted.
- **Range** is used for a range of numerical values. The range is meant "including".
- **And** is used when two or more values have the same importance and the both are required or offered.
- **Or** is used when requiring or offering two values where only one will be further considered. For example, type of contracts. If candidate is willing to work on different types of contracts but only one will be finally chosen.
- **Two independent numbers** serve if there are indicated two different numbers which not depending on each other, into one field. As an example can be used roster where days on and days of are indicated within one field.
- **List with more than one value** is used when providing different values within one criterion. For example, candidate's experience on different types of aircrafts where is needed to indicated more than one aircraft.
- **Information is not available** stands for not having the information at all, in other words airline or candidate has not provided the information to the recruiter or personnel agency.
- **Not specified** or left the field blank says candidate or airline has not specified their requirement, they are in favour with all the alternatives offered. E.g. candidate's location preference or expected salary, if the candidate has no preference or expectations the field is left blank.

- **With no exceptions** emphasizes the importance of a given criteria. As an example can be used maximum age of candidate required form the airline. In some cases an airline accepts the candidate even if he is older than required age due to his excellent qualifications and experience. But if there is applied ‘with no exceptions’ candidate cannot be accepted under no circumstances. The exclamation point is placed at the end or beginning of the expression.
- **Parentheses** can be used to improve the clarity of notation, or for coding of more complex expressions.

4.4.1 Coding criteria for position

Type of aircraft. For each position there always exists only one type of aircraft. As an input data in excel the specific codes are required. These codes are defined in the table below. There will be set drop down list which will include all the necessary alternatives of aircraft types. The types of aircrafts can be freely added into the already existing list.

Example of coding the aircraft types is in the following form:

Table 13: Type of aircraft

Code	Type of aircraft
B737 NG	Boeing 737 New Generation
B737 CL	Boeing 737 Classic
B747	Boeing 747
A320	Airbus 320
A330	Airbus 330

Source: own work

Type of operation will be consisted of two options. The right option will be chosen by using a drop down list.

Table 14: Type of operations

Type of operations
Cargo
Passenger

Source: own work

Type of contract offers two possibilities of contracts which will be also found in drop down list.

Table 15: Type of contract

Code	Type of contracts
Full	Full-time contract
Comm	Commuting contract

Source: own work

Location

There will be also set a drop down list that will include alphabetical list of countries. To demonstrate our countries sample see the table below:

Table 16: Location

Location
China
India
Pakistan
Singapore
Turkey

Source: own work

Rank is again set up in a drop down list where it is possible to choose from different kinds of pilots' ranks. The rank is always only one for each position. Example of coding is following:

Table 17: Rank

Code	Rank
Cadet	Cadet
FO	First Officer
CPT	Captain
SFI	Synthetic Flight Instructor
SFE	Synthetic Flight Examiner
TRI	Type Rating Instructor
TRE	Type Rating Examiner

Source: own work

Total Time, PIC on type, Total hours on type

All these criteria will be entered in numerical form as flight hours. Airlines usually regard this number as minimum, it means that for fulfilling the given requirements, pilot should have the same or higher number of flight hours. In case that the number is considered as minimum the information will be encoded by using angle brackets in front of the number. See the example of coding below:

Table 18: Total time

Total time
>5000
>500

Source: own work

Current type rating is set in the same way as Type of aircraft but here can be also applied an alternative which comprises both Boeing737 New Generation and Boeing737 Classic because airlines may required both type ratings within one position. It is indicated by using ‘List with more than one value’. See the examples below:

Table 19: Current type rating

Code	Current type rating
B737 NG	Boeing 737 New Generation
B737 CL	Boeing 737 Classic
B747	Boeing 747
A320	Airbus 320
A330	Airbus 330
B737 NG, B737 CL	Boeing 737 New Generation, Boeing 737 Classic

Source: own work

Current on type, Sim check

In case of these criteria, data are entered in a numerical form. The entered number then refers to the amount of months. This number of months indicates maximum time period since the pilot’s last flight on the given type of aircraft. In case of **Current on type** there can be also chosen the option 0, it indicates that the pilot is currently flying on the given type. Following table shows the examples of coding these criteria. For better understanding, see also the table of used symbols stated at the beginning of this chapter.

Table 20: Current on type

Code	Current on type
<12	Flying within last 12 months
<6	Flying within last 6 months
0	At present flying on type

Source: own work

Age is expressed in three different ways. In the first case the candidate can be accepted if he is less than 55 years old but if his experience or other part of his profile is good enough he can be accepted. The second code strictly says that the candidate cannot be older than 55 years old. Finally, the last code specifically determines range of candidate's age. For better understanding of the examples demonstrated in the table below, see also the table of used symbols stated at the beginning of this chapter.

Table 21: Age

Code	Age
<55	No older than 55 years with exceptions
<55!	No older than 55 years with no exceptions
35-55	Between 35 -55 years, 35 and 55 included

Source: own work

Licence refers to JAA licence and FAA licence. Airline always must indicate what kind of licence is accepted within the offered position. Below is an example of coding this criterion. There are four alternatives. The first two alternatives say that airline may require only one licence. The third alternative says that airline accepts the pilot if he has at least one of these licences and the last alternative says that the candidate must have both licences to match the requirements of the position.

Table 22: Licence

Code	Licence
JAA	Airline requires only JAA licence
FAA	Airline requires only FAA licence
JAA/FAA	Airline requires JAA or FAA licence
JAA&FAA	Airline requires both JAA and FAA licence

Source: own work

Medical Class 1, Log book, Dangerous goods, CRM, Aviation security, passport, no accident/incident letter, No criminal record, references contacts/letter

All of these documents criteria are entered in the same way. There it is necessary to know if the airline requires the stated document for the given position or not. See the example below:

Table 23: Medical class 1

Code	Medical class 1
yes	Airline require the document
no	Airline does not require the document

Source: own work

English level is entered in a numerical form with the symbol in front of the number or not. If there is a symbol minimum, it means that the pilot will be accepted with English level 4 but even if he meets a higher level. In the second case, there is given that the airline accepts pilots only with English level 6.

Table 24: English level

Code	English level
>4	Level 4 or higher level
6	Only level 6

Source: own work

Annual salary, Per Diems, Overtime, Accommodation, Annual bonus, Annual travel allowance, Annual loyalty bonus

All of these criteria will be inserted in numerical form. All of the numbers refers to the amount of money. Each of the amounts will be stated in USD. If the benefit will be indicated in another currency, the currency must be converted into USD. Difference between these criteria will be only whether the number of one criterion is per hour, per month, per year or one-time payment.

Flight round tickets will have also numerical form but this time it will refer to number of tickets.

Annual leave, Sick leave will be entered in numerical form and it will show for how many days per year or per month the candidate is entitled to have days off.

Contract term is encoded for any number indicated in years. It says how long the candidate will sign the contract for. It is possible to enter the individual year but also choose the alternative which includes all the possibilities as the candidate can choose the most suitable option for him. To understand used symbols in this table of coding examples, see the table with at the beginning of this chapter.

Table 25: Contract term

Code	Contract term
1	Contract for 1 year
2	Contract for 2 years
3	Contract for 3 years
1 2 3	Each of alternatives possible

Source: own work

Base will be chosen from a drop down list that will include alphabetical list of countries as well as cities.

Roster is entered in numerical form. There are always entered two numbers by using semicolon in between them. The first number refers to the days when the pilot should be flying and the second number stands for a break between two flights. For better understanding, see the table of used symbols stated at the beginning of this chapter and the example of coding this criterion below.

Table 26: Roster

Code	Roster
4;2	4 days on ; 2 days off

Source: own work

4.4.2 Coding criteria for candidates

Coding criteria for candidates is more complicated than for positions. Now it is necessary to look at the criteria from the candidate's point of view. Candidates have usually more alternatives than positions. Criteria for positions are strictly defined

Type of aircraft will be written as the entire code. It refers to the candidates experience on particular aircrafts during his career. Candidate may specify one or more types of aircrafts. In order to indicate more than one type of aircraft there will be used comma in between the two aircraft types. There can be entered infinite number of aircrafts.

Table 27: Type of aircraft II

Code	Type of aircraft
B737 NG	Boeing 737 New Generation
B737 CL	Boeing 737 Classic
B747	Boeing 747
A320	Airbus 320
A330	Airbus 330
A330,A320	Airbus 330,Airbus 320

Source: own work

Type of operation will be again chosen from the drop down list. There will be, as the additional alternative, Cargo or Passenger which indicates that the candidate feels free to fly on the aircraft with the both types of operations.

Table 28: Type of operations II

Type of operations
Cargo
Passenger
Cargo Passenger

Source: own work

Type of contract is similar as the previous criterion. There is also drop down list with two alternatives. Moreover, there is one extra alternative. It is an option to choose the both types of contracts. It says that candidate would like to apply for the both types of contracts.

Table 29: Type of contract II

Code	Type of contracts
Full	Full-time contract
Comm	Commuting contract
Full Comm	1 st or 2 nd possibility

Source: own work

Location is encoded manually in the way demonstrated in the table below. There can be indicated only one country or a list of countries by using comma. This criterion reflects candidate's preference regarding location of the position. There is also important the blank field which indicates that candidate does not have any preferences regarding location.

Table 30: Location II

Location
China
India
Pakistan
Singapore
Turkey
China, India

Source: own work

Rank is written manually according to the specific code of the rank. One candidate have at least one rank, in case that he has more than one, it will be indicated by using comma in between two selected ranks. The ranks are entered in the following form:

Table 31: Rank II

Code	Rank
Cadet	Cadet
FO	First Officer
CPT	Captain
SFI	Synthetic Flight Instructor
SFE	Synthetic Flight Examiner
TRI	Type Rating Instructor
TRE	Type Rating Examiner
TRI,TRE	Type Rating Instructor, Type rating Examiner

Source: own work

Total Time, PIC on type, Total hours on type

All these criteria will be entered in numerical form. The numbers are indicated in flight hours. Candidate always gives the exact number of his flight experience in flight hours.

Table 32: Total Time II

Total time
11340

Source: own work

Current type rating is encoded in a similar way as for the positions, but unlike the positions, for candidates criterion have to be taken into account that candidate may have more than one type rating. It means that he has already been flying different types of

aircrafts during his career. For example if the pilot has two type ratings, it will be designated by using comma in between these two type ratings.

Table 33: Current type rating II

Code	Current type rating
B737 NG	Boeing 737 New Generation
B737 CL	Boeing 737 Classic
B737	Boeing 737 (NG+CL)
B747	Boeing 747
A320	Airbus 320
A330	Airbus 330
A330,A320	Airbus 330,Airbus 320

Source: own research

Current on type, Sim check

In case of candidates these criteria are encoded in a date format. Thereby the candidate gives the information how long ago he had his last flight on given type of aircraft.

Table 34: Current on type II

Current on type
15.2.2012

Source: own work

Age, unlike the positions is entered as a date format. The reason is clear; if there is always entered exact age someone should update this information every year. Because of that the value is entered as a date of birth which is always actual.

Table 35: Age II

Age
15.2.1961

Source: own work

Licence, Medical Class 1, Log book, Dangerous goods, CRM, Aviation security, passport, no accident/incident letter, No criminal record, references contacts/letter

All of these criteria are entered in different way as for positions. This criterion says that candidate has passed all the necessary examinations or courses and now is able to provide individual documents which prove his know ledges, skills, health status etc., required by

airline. These criteria are essential and very important for pilots due to that these criteria always have to be filled in. If candidate is not able to provide these documents he cannot be processed on neither be accepted by any airline.

Table 36: Licence II

Code	Licence
yes	Pilot provided the document
no	Pilot does not provided the document

Source: own work

English level. Pilot always has to specify his level of English. There are four alternatives, the level lower than 4, with this level pilots cannot be accepted; minimum level 4; higher level 5 and the highest level 6 that refers to English knowledge of native speaker. These alternatives are set up in drop down list.

Table 37: English level II

Code	English level
<4	not acceptable
4	level 4
5	level 5
6	level 6

Source: own work

Annual salary, Per Diems, Overtime, Accommodation, Annual bonus, Annual travel allowance, Annual loyalty bonus

All of these criteria will be inserted in numerical form. All of the numbers refers to the amount of money. Each of the amounts will be stated in USD. If the benefit will be indicated in another currency, the currency must be converted into USD. Difference between these criteria will be only whether the number of one criterion is per hour, per month, per year or one-time payment. In contrast to position criterion here pilot require certain amount of money or other benefit for which he is willing to work for the given company. For example, candidate can specify that his preference is job with the higher salary than 120000 USD, in order to indicate this criterion there is used angle bracket in front of the number. If the field is blank candidate does not care about an amount of his future salary. N/A is an abbreviation for Not Available and it implies that the candidate has not provided the information at all.

Table 38: Annual salary

Code	Annual salary
>120000	More than 120000 USD
	No preferences
N/A	No information

Source: own work

Flight round tickets have also numerical form but this time it refers to number of tickets that candidate requires from his employer.

Annual leave, Sick leave will be entered in numerical form and it will show for how many days per year or per month the candidate requires.

Contract term is encoded for any number of years for how long the candidate will sign the contract. It is possible to enter the individual year but also choose the alternative which includes all the possibilities as the candidate can choose the most suitable option for him.

Table 39: Contract term II

Code	Contract term
1	Contract for 1 year
2	Contract for 2 years
3	Contract for 3 years
1 2 3	Each of alternatives possible

Source: own work

Base will be encoded in the same way as location criterion, it means manually in the way demonstrated in the table below. This value refers to the city where the candidate would like to work. There can be indicated only one city or a list of cities by using comma. This criterion reflects candidate's preference regarding base of position. There is also important the blank field which indicates that candidate does not have any preferences regarding base.

Table 40: Base

Base
Karachi
Istanbul
Beijing
Beijing, Shenzhen

Source: own work

Roster is entered in numerical form. The criterion is the same as for positions. There are always entered two numbers by using semicolon in between them. The first number refers to the days when the pilot should be flying and the second number stands for a break between two flights.

Table 41: Roster

Code	Roster
4;2	4 days on ; 2 days off

Source: own work

International experience is entered as a number totalling all the countries where the candidate was working as a pilot except his own country.

Table 42: International experience

International experience
0
1
2
3

Source: own work

Nationality will be also set up in a drop down list which will include alphabetical list of countries.

Height, Weight is entered in numerical form. Height is indicated in centimetres and weight in kilograms.

Marital status is set up in drop down list with the following alternatives:

Table 43: Marital status

Marital status
Single
Married
Divorced
N/A

Source: own work

Language spoken is entered manually because there is again high possibility that the candidate speaks more than one language. More than one possibility is always split by a comma. There are included all the world languages except of English. If the candidate is English native speaker and do not speak any other foreign language it is indicated as zero.

Table 44: Language spoken

Language spoken
Dutch
Spanish
Sweden
Dutch,Spanish,Sweden
0

Source: own work

Religion is chosen from the drop down list where are listed all the world religions in alphabetical order. See the example below:

Table 45: Religion

Religion
Muslim
Christian
No religion
N/A

Source: own work

4.5 Rules and workflow

4.5.1 Scoring criteria

Scoring method involves identification of all the criteria that are relevant to the project, next step is the allocation of score to each of the criteria in order to reflect their importance; and the allocation of scores to each option to reflect how it performs in relation to each criterion.

First of all it is important to explain the scoring scale, parameters and assigned score. The score is positive. The higher score the more acceptable candidate. If total score of candidate is lower than 0 (parameter) he is not acceptable anymore.

If the **aircraft type** given by the airline is included in the list of aircraft types indicated by pilot, the score equals zero. If the aircraft type determined by airline is not included in the list, the score is -500.

If the **type of operation** offered by airline is included in the one of pilots' alternatives, score is 0. If it is not included, the score is -30.

If the **type of contract** offered by airline is included in the one of pilots' alternatives, score is 0. If it is not included, the score is -30.

In case of **location** it differs a bit. If location specified by airline is included in the one of pilots' preferences from the indicated list, the score is 10. If it is not included, score is 0. Not having the same preference in the pilots list as airlines offer does not imply that pilot cannot be accepted.

If the rank of pilot meets the **rank** required by airline his score is 0. If the pilot does not meet the airline's rank, the score is -500.

In case of **Total time**, if the candidate meets the required number, the score is 0. If he exceeds required number of flight hours by 500 hours, the score is 10 and then it is the same with every 500 flight hours extra, every other 500 hours extra, again score 10. Conversely, if the candidate is in the range of 500 hours less than required number, the score for him is -10.

This way of scoring is also applied within the two following criteria **PIC on type** and **Total hours on Type**. Only in case of PIC on type hours, the only difference is that the score of 10 is added or deducted if the flight hours differ only by -100 hours.

If the **Current type rating** required by the airline is included in the list of type ratings indicated by pilot, the score equals zero. If the aircraft type determined by airline is not included in the list, the score is -500.

For **Current on type** applies: If the date indicated by candidate is out of the range required by airline, the score is -100. If the date is in the range, the score is 0.

Sim check is scored with following score. If candidate is out of the range required by airline, the score is -30. If the date is in the range, the score is 0.

For **age** there are two different ways of scoring. At first the criterion is designated as without exceptions, it means that if the **age** of pilot is out of the range determined by airline, the score is -500. Secondly the criterion is with exceptions, it says if the pilot is out of range score is -3 per each year out of range. If the pilot's age is within the range, the score is 0

Licence, Medical Class 1, Log book

These criteria belong to the most important ones. Score for not matching these criteria equals -500. If candidate can provide these documents, the score is 0.

English level, Dangerous goods, CRM, Aviation security, passport, no accident/incident letter, No criminal record, references contacts/letter

For all of these criteria applies the score 0 if candidate have the document and the score -100 if the candidate cannot provide it.

Annual salary, Per Diems, Overtime, Accommodation, Annual bonus, Annual travel allowance, Annual loyalty bonus, Contract term, Base, Roster

For these criteria is applied the same logic as for the location. If one of these criteria specified by airline is included in the one of pilots' preferences from the indicated list, the score is 10. If it is not included, score is 0. Not having the same preference in the pilots list as airlines offer does not imply that pilot cannot be accepted.

Each **International experience** in candidate's history is scored by 3. If candidate has no international experience, the score equals 0.

Table 46: Scoring

Criteria	Score		
	Match	Not match	Note
General information			
Type of aircraft	0	-500	
Type of operation	0	-100	
Type of contract	0	-30	
Location	10	0	
Rank	0	-500	10 if higher rank than needed
Basic requirements			
Total Time (hrs)	0	-10(500hrs less)	10(500hrs extra)
PIC on type (hrs)	0	-10(100hrs less)	10(100hrs extra)
Total hours on Type	0	-10(500hrs less)	10(500hrs extra)
Current type rating	0	-100	
Current on Type	0	-100	
Sim Check (valid last months)	0	-100	
Age (date of birth)	0	-500	-3/1year out of range
Required documents			
Licence	0	-500	
Medical Class 1	0	-500	
Log book	0	-500	
English level	0	-100	
Dangerous Goods	0	-100	
CRM	0	-100	
Aviation Security	0	-100	
Passport	0	-500	
No accidents/incidents	0	-100	
No criminal record	0	-100	
Reference contacts/letters	0	-100	
Required benefits			
Annual Salary (USD)	10	0	
Per Diems (USD)	10	0	
Overtime/hour (USD)	10	0	
Accommodation/month (USD)	10	0	
Annual Bonus (USD)	10	0	
Annual Travel Allowance (USD)	10	0	
Round Flight Tickets/year	10	0	
Annual Leave (days/year)	10	0	
Sick Leave (days)	10	0	
Annual Loyalty Bonus (USD)	10	0	
Others			

Contract Term (years)	10	0	
Base	10	0	
Roaster (days on/off)	10	0	
International experience	3/1experience	0	

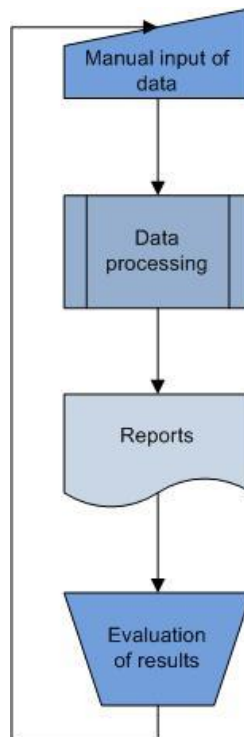
Source: own work

4.5.2 Algorithm (Control Flow)

For better understanding of the proposed selection method there are three graphs that show the flow of the particular steps necessary for completing of the whole selection process.

The figure 5 stated below shows the entire process step by step. Primarily, data are entered manually according to the defined codes different for each criterion mentioned in the previous subchapter. Secondly, all the data are processed by using comparative and scoring method. This second step results in reports which show the overall score of candidates, their ranking and in case of unsuccessful candidates also the report that specifies the reasons of candidate's failure. The final step is a written evaluation of the results.

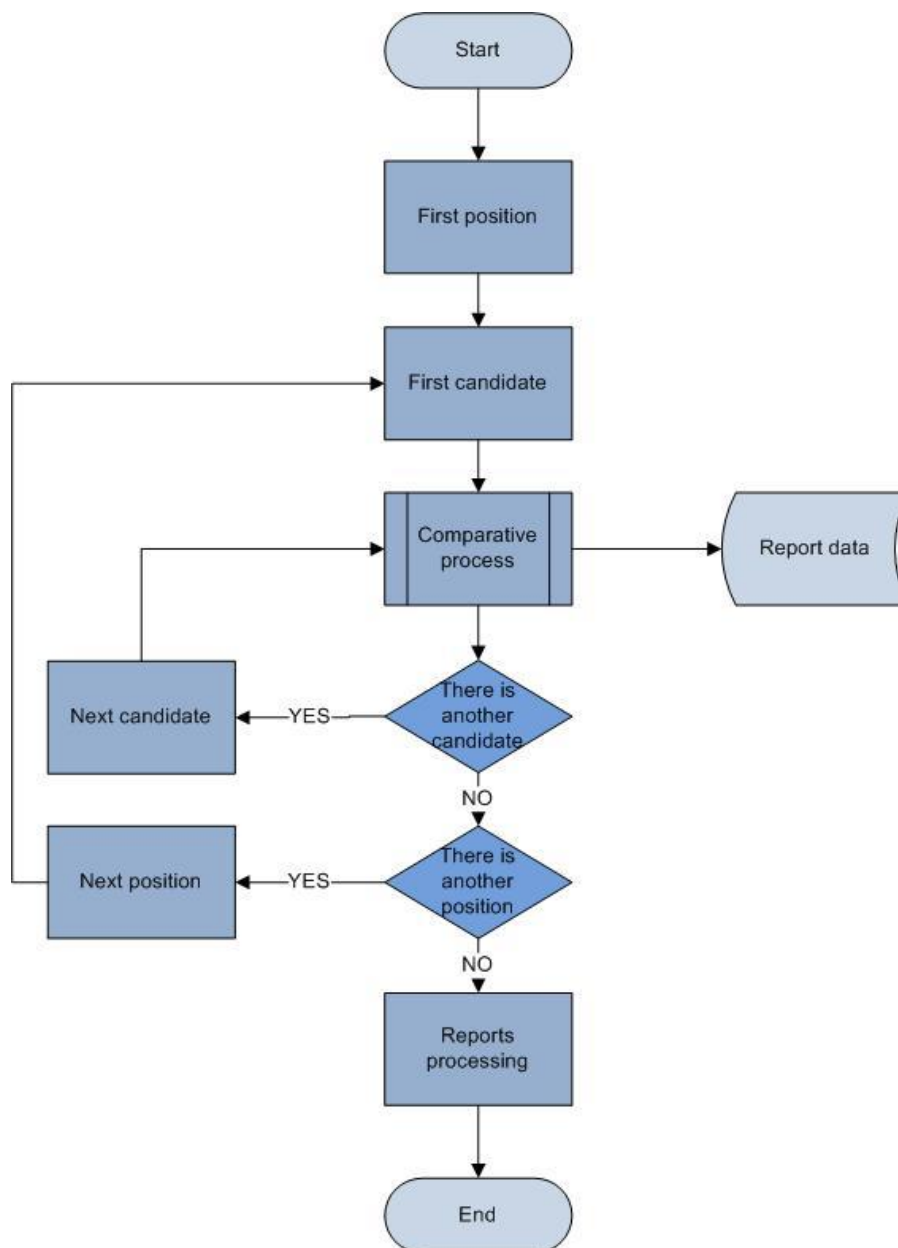
Figure 5: Whole process



Source: own work

In the main cycle of the selection process all the candidates are compared with each of the given position (refer the following diagram). The list of the pilots matching the specified criteria along with identification of the tested position is printed into the report. Sorting criteria in the report are the name of the position and pilot's score. The list of pilots who do not meet specified criteria is imprinted into the second report. The sorting criteria in this report are the same as in the previous one. The report of unsuccessful pilots includes even the reason of candidates' failures.

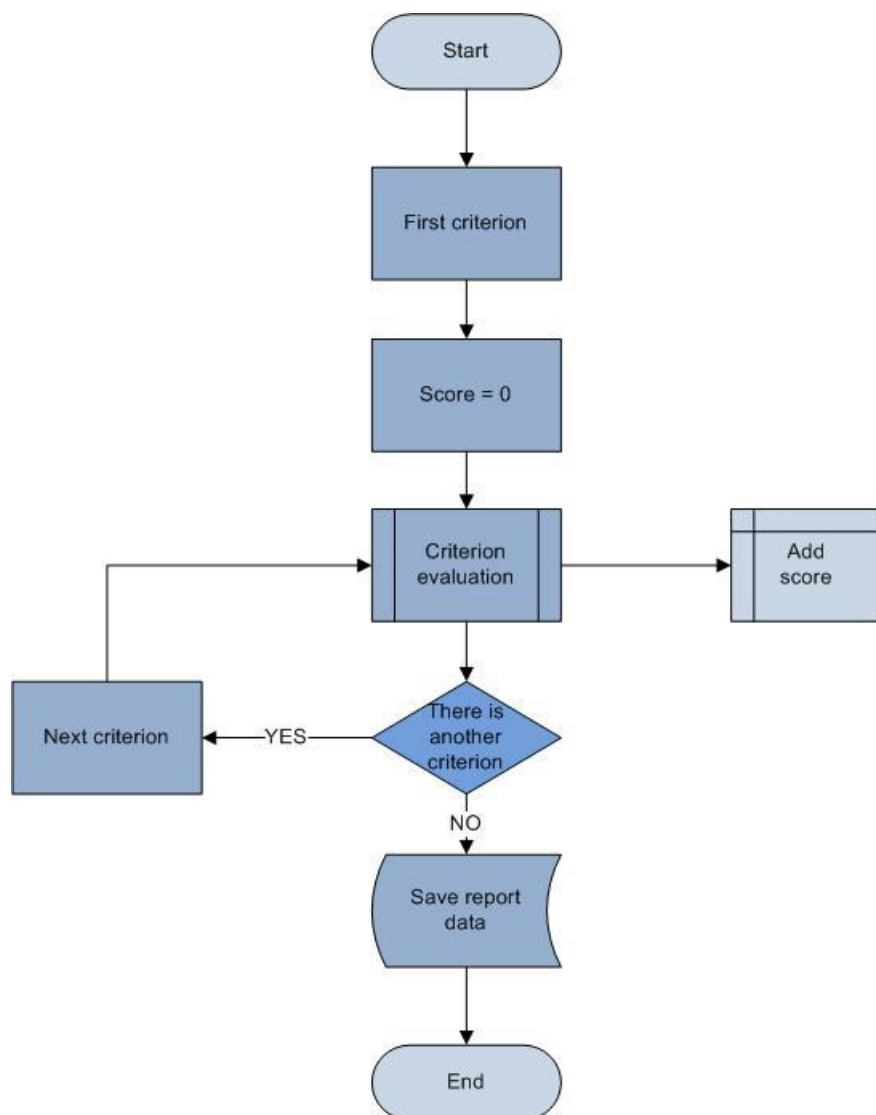
Figure 6: Main cycle



Source: own work

The following diagram describes the process while testing a particular candidate for the given position. The recruiter go through the individual requirements step by step in the same order as was already mentioned in previous subchapter of defining criteria. Score for each comparison is added to the previous one. After passing through the comparative process, the achieved score is evaluated. When exceeding a specified limit (system parameter), the selection is declared unsuccessful and the result is entered into the report of unsuccessful candidates. When the score is below the given limit (parameter) the result is entered into the report of successful candidates.

Figure 7: Comparative process



Source: own work

4.6 Testing of proposed method

4.6.1 Manual input of data

The first step of the process is to enter the gathered information about the positions and the candidates into the Excel or other suitable software program. Below are listed individual positions and an example of candidate's profile adapted for the purpose of this method.

4.6.1.1 Positions

For the testing of proposed method were selected nine positions available on the international market. All the positions are listed below. The numbers in front of the positions are used for an identification of the individual positions during the selection process.

1. B737NG CPT – commuting
2. B747-400 CPT – cargo
3. A330 CPT
4. B737-400 CPT
5. B737-400 FO
6. B737 CPT
7. B737 CPT
8. A320 CPT
9. A320 FO

All the positions are more or less distinct. Each position varies due to different criteria. All the criteria for the positions have been already mentioned in the subchapter 'Defining position requirements'. Now it is important to briefly introduce the particular positions which are also clearly listed in 'Supplement 3'.

- 1. Position** is located in China with base in Shenzhen. The rank required by the Chinese airline is Captain. The aircraft type that the prospective candidate will fly on is B737NG. The aircraft operates in a passenger configuration. Further airline offers to the candidate commuting contract which means that candidate can be employed by the

airline with the base in different location than is his domicile. Currently, when the European market is saturated this type of contract is mostly preferred by the pilots from this area. Contract is signed for three years. The important requirements for this position are that the candidate must have at least 3000 total flight hours, minimum 500 hours as pilot in command, followed by other requirements such as to be type rated on the given type of aircraft, in case of the first position B737NG type rating also must be current on this type of aircraft within 15 months and must have valid simulator check within last 6 months. For this position there is also set the requirement on candidate's age which should not exceed 55 years old. Candidate must be holder of JAA licence and provide all the required documents such as 1st class medical certificate, log book to proof indicated flight hours, passport, no accident/incident letter, no criminal record and reference contacts or letter. Moreover, candidate's English level must be minimum 4 or higher which applies for all the nine positions. Offered benefits from the prospective employer are the annual salary of \$127 200, annual bonus of \$6800, annual loyalty bonus of \$10 200 and annual travel allowance of \$8000 with 6 round flight tickets and finally all the candidates will be provided with the 5 days of sick leave per one year. The other criteria are not specified.

- 2. Position** is also located in China but the base is in Beijing. The required rank is again Captain. Aircraft type is B747 also called Jumbo jet which operates in cargo configuration. This position is offered as a full-time contract, it means that candidate is supposed to relocate preferably to Beijing. The contract is signed at least for 2 years. For this position candidates must meet following requirements, minimum of 5000 total flight hours and 500 hours as pilot in command, again type rating for the given type of aircraft and to be current on type within 12 months. The last simulator check must be done also within the last 12 months. Required age for this position is less than 56 years old. Licence and other documents provided by the candidate are the same as for the first position. Offered benefits with the second position are the annual salary of \$195 900, paid overtime of \$165 per hour, annual bonus is \$5000, travel allowance \$12 000 with 7 round flight tickets. Accommodation is cover by airline up to \$2000 per month. The holiday entitlement for full-time candidates is 28 days of annual leave and 12 days of sick leave. The other criteria are not specified.

- 3. Position** is again located in China with base in Beijing, required rank is Captain. The aircraft type is A330 which operates in passenger configuration. Contract is again full-time with no specification of contract period. The flight hour's requirements for this position are the highest; candidate must have at least 6000 total flight hours and minimum of 1000 hours as pilot in command. Again must have type rating for the given type of aircraft (A330), to be both current on type and have the simulator check within 6 months. The candidate cannot be older than 55 years old. The required licence, documents and certificates are the same as for the previous two positions. Benefits provided by airline are annual salary of \$204 000, paid overtime of \$233 per hour, annual travel allowance of \$4000 with 7 round flight tickets. Finally the candidates are entitled for 30 days of annual leave and 12 days of sick leave. Any other criteria are not specified.
- 4. Position** is located in Pakistan with base in Karachi. Required rank with this position is again Captain. The type of aircraft is B737 CL which transports passengers. Contract for this position is full-time for time period of one year. Further airline in Pakistan requires at least 5000 of total flight hours and minimum of 500 hours as pilot in command. The candidate must be B737 CL type rated must be current on type and have the last simulator check within the last 6 months. The maximum age accepted with the fourth position is 59 years old. The candidate must be holder of JAA or FAA licence, both are accepted. The other required documents are Medical class 1, Log book and passport. Moreover, there are required certificates such as Dangerous goods, CRM and Aviation security. English level must be also 4 or higher than 4. Benefits offered by Pakistani airline are annual salary of \$90 000, accommodation allowance of \$660 per month and per Diems of \$50.
- 5. Position** is the same airline as the forth one but in this case the required rank is First officer, therefore some requirements are lower but also the benefits are lower than for Captains. The minimum total flight time cannot be less than 3500 hours and of course there is no limit for pilot in command hours as the first officer is always the second pilot. The salary for the First officers is significantly lower, the annual salary is \$48 000. The other criteria maintain the same as for the previous position.

- 6. Position** is located in India with base in Mumbai. The airline requires for this position rank of Captain. The type of aircraft is B737 NG for passengers. Contract is full-time, possible term of contract is for one, two or three years. Minimum total flight time is 4500 hours and pilot in command time at least 500 hours. The required type rating can be either B737 NG or B737 CL. The candidate must be current on type within last 8 months. Airline accepts again both licences JAA or FAA and requires Medical class 1, log book, passport and reference contacts. English level must be again 4 or higher. The benefits offered by the airline are annual salary of \$114 000 and annual loyalty benefit of \$6600. Annual leave entitlement is 15 days and 10 sick days. The other criteria are not specified.
- 7. Position** is located in Turkey with base in Istanbul. The required rank is again Captain. The type of aircraft with this position is B737 NG which operates in passenger configuration. The contract is full-time for two years. The candidate must have minimum of 4000 total flight hours and at least 1000 pilot in command hours. Further he must be B737 NG type rated and his age cannot exceed 59 years. Documents required by airline are JAA licence, Medical class 1, logbook, passport, no accident/incident letter, no criminal record and proof of English level 4 or higher. Benefits offered are salary of \$100 320, per Diems of \$40 and annual leave is 14 days. The other criteria are not specified.
- 8. Position** is located in Singapore with base in Singapore. Required rank for this position is Captain. The contract full-time for 3 years. The aircraft type that the prospective candidate will fly on is A320. The aircraft operates in a passenger configuration. Further requirements for this position are that the candidate must have at least 3000 total flight hours, minimum 500 hours as pilot in command, followed by other requirements such as to be A320 type rated. The candidate must be current on this type of aircraft within 15 months and must have valid simulator check within last 6 months. Candidate must be holder of JAA or FAA licence and provide all the required documents such as 1st class medical certificate, log book and passport. Candidate's English level must be again minimum 4 or higher. The only benefits specified by airline is the annual salary of \$164 000. Finally annual leave is 25 days. The other criteria are not specified.

9. Position and also the last position is specified as the previous one with the difference that here airline searches for First officer instead of Captain, therefore only minimum time and benefits are distinct. In this case, airline requires minimum total flight time on type that must be at least 1000 hours. Annual salary is then \$107 850. The other criteria maintain the same as the position 8th or are not specified by the airline.

4.6.1.2 Candidates

The further step for testing the proposed method was to select 15 CVs of different candidates. Information matching the given criteria was extracted. Based on this structured information adapted to the position criteria, comparative process could start.

For demonstration, see below a profile of the first candidate. The other 14 profiles of candidates are shown in ‘Supplement 4’.

1. Candidate is a Swiss Captain who has been already flying on two types of aircrafts and these are B737 NG and B737 CL (small planes from beginning of pilots career are not included because they are not interesting for this purpose). Further he does not mind to fly cargo neither passenger aircraft. He is applying for a commuting contract because he does not want to be relocated. His total time equals 11 340 hours, pilot in command time on type (B737 NG) is 2280 hours as well as total time on type. He has B737 type rating; he is current on type and has valid simulator check. He is 51 years old. Further the first candidate is a holder of both licences JAA and FAA licence and is able to provide all the necessary documents. His English level is 4 which is the minimum but still acceptable. He prefers contract term for one, two or three years and has 3 international experiences as a Captain. There is also personal information about candidate but this is not relevant for the purposes of this selection but only for storing information about candidate in a company’s database which is also important. Of course, in reality there will be also included the name of each candidate but it was intentionally omitted for the purpose of diploma thesis.

4.6.2 Processing candidates

In the second step of the process was taken each of nine positions and all the fifteen candidates which were compared one by one with the positions' criteria. According to the matching or not matching of candidates criteria with the positions criteria, the score was assigned to the score field next to each criterion. Refer to the supplements 5, 6, 7, 8, 9, 10, 11, 12 and 13 where are shown the particular steps of comparative process.

4.6.3 Reports

The third step of the process also can be said outputs from the process are three main reports. These reports are also considered as the results of the proposed mechanism and they are used for final evaluation of results as well as for a subsequent proposing of solutions.

- Report 1: Overall score of all the candidates
- Report 2: List of successful candidates assigned to each position
- Report 3: List of unsuccessful candidates with the reasoning of failures,

i.e. why they do not meet the positions criteria

If the candidate matched all the positions criteria and his score was positive (higher than zero) he was considered as successful and his results was imprinted into the report of successful candidates (refer the 'Table 48'). If the candidate did not match any of the criteria and his overall score was negative (lower than zero), he was considered as unsuccessful and subsequently imprinted into the report of unsuccessful candidates with all his particular failures (refer the 'Supplement 14').

5 Results

As already mentioned above, in order to test the proposed method of candidate's selection, nine particular positions and fifteen candidates were chosen. Based on the available data and gained information the most suitable candidate is selected. As the parameter for meeting the requirements of given position is set number 0. The higher score candidate has the more suitable for the considered positions he is. If candidate's score is lower than zero he does not match the requirements for the given position and has to be compared with another position. If any of the currently available positions is not suitable for the candidate, the agency or recruiter starts to try searching some new suitable position for the unsuccessful candidates which is available on the market. The main output i.e. result of this proposed mechanism are the three reports, the first one with overall score of all the candidates comparing to the individual position, the second one where the successful candidates are listed with regards to the individual position and finally the third report where the unsuccessful candidates are indicated with the reasons of their failure. These three reports are further discussed in more details.

'Table 47' presents the first output of the proposed mechanism which shows overall score results of all the candidates compared to the given positions. Positive numbers indicated with dark blue colour refer to the successful candidates. Fields with negative numbers indicated with light blue colour are unsuccessful candidate which did not meet the requirements of available positions. It shows that the total number of successful selections done by comparing all the fifteen candidates separately with the nine positions is 22 from the total of 135 selections. Maximum number of successful selections for one candidate is 3. For example, 'Candidate 1' is suitable for 3 different positions, namely 'Position 1', 'Position 6' and 'Position 7'. Only 4 candidates from the total of 15 were not successful at any of the selection process, which is very positive result. These unsuccessful candidates are 'Candidate 10', 'Candidate 12', 'Candidate 14' and 'Candidate 15'. Candidates 10 and 14 are First officers with low total flight time. For the most of positions were required rank of Captain, therefore these candidates did not meet the criteria. If the position was intended for FOs, they had low flight time or no experience on the given type of aircraft. 'Candidate 12' was not suitable for any of the positions because his rank had been Cadet that means pilot with no experience which was not required for any of the available positions. Finally

‘Candidate 15’ who was the worst one from all the 15 selected candidates. The crucial failure for him is that he does not even have the Medical class 1 and the right Licence which are documents essential for all of these given positions.

Table 47: Score results

	Position 1	Position 2	Position 3	Position 4	Position 5	Position 6	Position 7	Position 8	Position 9
Candidate 1	339	-731	-801	-234	-370	270	230	-700	-831
Candidate 2	-317	-387	-457	-387	-877	-377	-417	653	223
Candidate 3	-784	-824	-894	-824	-914	-814	-854	216	146
Candidate 4	33	-1037	-1137	-567	-547	-27	-67	-997	-987
Candidate 5	283	-817	-887	-307	-417	223	183	-777	-827
Candidate 6	-1083	-1150	-1233	359	229	-128	-1181	-698	-818
Candidate 7	-606	-616	-686	394	294	-106	-646	-576	-696
Candidate 8	-867	-877	-987	93	43	-367	-907	-437	-477
Candidate 9	-1517	-1557	-1627	-557	23	-1017	-1557	-1587	-997
Candidate 10	-510	-1550	-1620	-1050	-470	-540	-580	-1610	-1070
Candidate 11	-857	-997	-1067	3	43	-487	-927	-957	-937
Candidate 12	-760	-1740	-1840	-1270	-1190	-740	-670	-1710	-1680
Candidate 13	-51	-611	-701	-691	-961	-151	-31	379	139
Candidate 14	-574	-1474	-1634	-1104	-1164	-464	-504	-1674	-1124
Candidate 15	-2580	-2620	-2670	-2720	-2140	-2580	-2620	-2680	-2150

Source: own work

More information about the candidates’ scores is included in the following two reports, i.e. the Report of successful candidates (‘Table 48’) and the Report of unsuccessful candidates (‘Table 49’).

The following table (‘Table 48’) shows the report of successful candidates. This report represents ranking, number of candidate and overall score of the successful candidates assigned to each position. There are only seven positions because any of the selected candidates did not match the criteria for the second and third position. Obviously these two positions have the highest requirements for example total flight time and pilot in command time but the most significant problem is that any of the selected pilots have never flown on the given aircraft and moreover, they do not have type rating for the given type of aircraft.

The most of the pilots succeeded in position 5 which is First officer position in Pakistan, the requirements are recognisably the lowest. The reason is that for this position is required First officer and the type of aircraft is the most common one. The candidates were mainly Captains therefore suitable for the position, many of them had also B737 type

rating. However, the problem was that the most of them were B737 NG type rated instead of B737 CL type rated. This was the essential reasons for not succeeding of the rest of candidates.

If more than one candidate has the same score, then there is no other possibility than look back into the individual criteria and chose the one which meets the most important criteria.

Following step regarding the successful candidates is verification of the candidates' qualifications. It is done by checking all the documents, licences and certificates. The candidate is also interviewed what can be done face to face or even online by using Skype or any other communicator. If everything is in order, then all candidates' details along with required documents and licences are send to the client or airline which offers the given position. If the client wishes to proceed the selected candidate, the date of screening is arranged. If candidate confirm the date, he can come for the screening and the next process starts. After passing the screening within the airline prepared for the purposes of the recruiting new pilots for the given position, he is finally accepted.

Table 48: Successful candidates

	Position 1	Position 4	Position 5	Position 6	Position 7	Position 8	Position 9
1	Candidate 1 339	Candidate 7 394	Candidate 7 294	Candidate 1 270	Candidate 1 230	Candidate 2 653	Candidate 2 223
2	Candidate 5 283	Candidate 6 359	Candidate 6 229	Candidate 5 223	Candidate 5 183	Candidate 13 379	Candidate 3 146
3	Candidate 4 33	Candidate 8 93	Candidate 8 43				Candidate 3 216
4	Candidate 11 3		Candidate 11 43				
5			Candidate 9 23				

Source: own work

In the table below, 'Table 49', is shown an example of the report for the first position where are indicated results of unsuccessful candidates in descending order. There is always ranking, number of candidate, the overall score and the criteria which had not match the position criteria. The reason of failure is always indicated as the concrete criterion which was not met while comparing the candidates with positions. This way of record enables easily find candidates weaknesses in retrospective and help to find another suitable position for the unsuccessful candidate. For example, in case of the 'Candidate 13' the output of the selection process is his overall score of -51. It says that this candidate is the 1st one who has not matched the set requirements for the 'Position1', thus was not

successful in the selection for the first position. As is seen in the report below (‘Table 49’) the reason is candidate’s Current type rating and Sim check. Going back to the excel spread sheet where all the candidates are compared with the first position (refer ‘Supplement 5’), there it is easy to find the specific reason for not matching the criteria. The crucial reason for the failure in case of ‘Candidate 13’ was gaining the negative score of -500 because his type rating is not current on the type of aircraft required by the airline – B737 NG. The report shows that this candidate is currently flying on A320 which means that he does not match the given criterion. On the other hand, from the criterion type of aircraft is visible that the candidate was already flying on the B737 NG aircraft in the past. That means if this candidate wants to fly on A320 again, it is enough for him to renew his simulator check on A320 or gain more current hours on this type of aircraft before applying for the B737 NG position. Considering the other criteria such as total flight time or pilot in command time it is obvious that the candidate has a lot of overall flying experience as well as Captain experience which implies reconsidering his qualifications and may be bring him back to the selection process in case that the number of successful candidates for the ‘Position 1’ is still not completed. In the same way all the other unsuccessful candidates can be reconsidered and bring back into the selection process. This backward step is possible thanks to the report of unsuccessful candidates with the reasoning of candidates’ failures. It is also helpful when making suggestions for improvement or requalification of the unsuccessful candidate, therefore enable to the candidate find a suitable position for him. ‘Supplement 14’ shows the whole report for each position.

Table 49: Unsuccessful candidates

	Position 1	Score	Reason for rejection
1	Candidate 13	-51	Current type rating, Sim check
2	Candidate 2	-317	Type of aircraft, Current type rating
3	Candidate 10	-510	Rank, PIC hours on type
4	Candidate 14	-574	Rank, Total time, PIC hours on type
5	Candidate 7	-606	Type of aircraft, Type of contract, Current type rating
6	Candidate 12	-760	Type of contract, Rank, Total time, PIC hours on type, Current on type, Sim check
7	Candidate 3	-784	Type of aircraft, Current type rating
8	Candidate 11	-857	Type of aircraft, Current type rating
9	Candidate 8	-867	Type of aircraft, Current type rating, Sim check
10	Candidate 6	-1083	Type of aircraft, Current type rating, Age, Licence
11	Candidate 9	-1517	Type of aircraft, Rank, PIC hours on type, Current type rating, Sim check
12	Candidate 15	-2580	Type of aircraft, Rank, PIC hours on type, Current type rating, Sim check, Licence, Medical Class 1

Source: own work

6 Conclusions

The profession of a pilot is a demanding job with great responsibility. There are a lot of specific and personnel prerequisites for a pilot position. For example, the pilot has to have psychomotor coordination of eyes, arms, and legs; good short-term memory, mathematical perceptiveness, excellent space orientation, etc. All these requirements thus have to be part of the recruitment process.

Therefore, the recruitment process has to reflect the above mentioned and also other specificity, which means that all the necessary characteristics have to be taken into account, among others education, qualifications, training, experience, personal attributes and competences, mental abilities, physical effort and skills, judgement, etc.

To be able to assess all these attributes, it is necessary to have an adequate tool helping the company to finally select as qualified staff as possible in the shortest time. Therefore, such concrete instrument has been proposed, while using all the necessary approaches. The algorithm, based on MS Excel spreadsheets, has thus been developed as a practical toolkit for recruitment agencies, independent recruitment consultants, headhunters or whoever involved in the recruitment of pilots. This technique brings optimization and standardization of the selection process of pilots. The proposed procedure enables comparing and evaluating of individual applicants in relation to requirements of position they are applying for. Therefore, the use of this proposed instrument enables decision-makers to decide which applicant is the most suitable person for a given position. The scoring involves identification of all criteria which are relevant for reflecting of how all applicants perform in relation to defined criteria. The higher is the score, the more suitable is the candidate.

The proposed mechanism was tested by using nine positions currently available on the market and fifteen selected candidates with different qualifications, requirements and also from different countries and cultures. The outputs of the selection process were three reports. The first report presents overall score. The second report includes list of successful candidates, matching the requirements of the given position with their scores and the third one indicates the list of unsuccessful candidates with the reasoning of particular failures of each candidate. Overall result was the total number of successful selection procedures done by comparing all the fifteen candidates separately with the nine positions which was 22

from the total of 135 selections. Maximum number of successful selections for one candidate was 3, it means that one candidate is suitable for 3 different positions. Further only 4 candidates from the total of 15 were not successful at any of the selection process, which is very positive result. The most frequent reasons of candidates' failures were that the candidates did not have any flight experience on given types of aircrafts, or insufficient flight time experience for the given position. Other frequent failures were due to the lower rank than required or that the candidates were not current on the given type of aircraft.

As the recruitment process is quite and expensive and time demanding task, the proposed instrument might help save expenditure as well as time of the company, when it decides to recruit pilots. It is possible to adapt the tool according to some more requirements and weights of the concrete company.

This mechanism for selecting suitable candidates matching the requirements of a given positions may be also useful for setting up a new database or other recruiting system in the organization. All the criteria have been defined and subsequently coded in order to standardize the procedure and help other people to better understand of the whole procedure.

To sum up the applicability of the proposed technique - it could be used also in other economic branches, after the adjustment of the individual requirements and parameters. Decision-makers should decide while using as much information as possible; but, on the other hand, there is time constrain of dealing with too great amount of information. Therefore, various instruments are outlined to help them.

This thesis has tried to propose such an instrument, which could support the decisions in the field of recruitment of pilots, could bring the optimization and standardization of the selection process in aviation industry that is also applicable to the other different economic branches, and thus increase efficiency, save time and money of the organization. Moreover, the mechanism can be used for setting up of new database in an organization.

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In diploma thesis was mostly used internal data source from personal agency involved in aviation.

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Supplement 1: Interview Sheet

INTERVIEW SHEET

Name:

Candidate Number:

Position:

Nationality:

Date of Birth:

Availability:

Preferred Location:

PROFILE

Licence Type		PIC hours on Type	
Total Time		Last Flight on type	
Hours on AC above 27/50t		Last SIM	
Hours on Type		Last Medical	

EMPLOYMENT HISTORY

UNEMPLOYMENT GAPS – identify any gaps – duration/reason - for five year background check
 From – To Date Reason:

BACKGROUND INFORMATION	
<p>PROFILE:</p> <p>Prompts: Personality - what sort of Captain/First Officer are you? How would your colleagues describe you? What do you think of CRM? How easily do you feel you could adapt to new SOP's</p> <p>Ambitions and Aspirations <i>what are their long term</i></p>	

<p><i>plans and ambitions- where do they see themselves in 3/5 years time</i></p> <p>Personal situation – happy/easy to relocate)</p> <p>Flying history Any accidents/incidents in the past? Criminal record</p>	
<p>Current situation & full description of current/most recent role - duties and responsibilities</p>	
<p>Any instructor experience/ qualification TRI/TRE/ etc</p>	
<p>ICAO LEVEL: (What is their spoken English Like over the phone?)</p>	
<p>Interests & Hobbies What do you do in your spare time?</p>	
<p>Pipeline: <i>i.e. Any interviews, offers or holidays booked?</i></p>	
<p>The following docs will be required:</p>	<ol style="list-style-type: none"> 1. Copy of licence 2. Copy of medical 3. Extract of his log book showing total experience and experience on type. 4. Currency certificate on type 5. Copy of passport 6. Copy of Driving Licence 7. Name & contract details of two referees – most recent position/management pilots

N.B. At the end of the interview check with the candidate that there is no aspect of their career i.e. experience or skills they feel relevant that we have not discussed during this process and which they feel would support their application for a position.

Supplement 2: Application form

PILOT APPLICATION FORM

GENERAL INFORMATION							
First Name				Last Name			
Nationality at Birth				Present Nationality			
Date of Birth				Marital Status			
Position Applied for				Notice Period			
Passport Number				Height (cm)	Weight (kg)		
Permanent Address							
Language Spoken				Religion or Diet Requirement			
Phone No.				Mobile No.	English Level		
E-mail				Referrer			
FLYING LICENSE							
License Type	Number	Type Ratings	Country of Issuance	Date First Issued (D/M/Y)	Valid Until (D/M/Y)	Limitations	
Total Flying Time in Your Career:							
Flying Hours, By Type							
Aircraft Type	Total Time	PIC Time (P1)	FO Time (P2)	Instructor Time	Date of First Flight (D/M/Y)	Date of Last Flight (D/M/Y)	Date of Last SIM Check (D/M/Y)
TOTALS							
EMPLOYMENT RECORD							
From (Date)	To (Date)	Name of Company	Country	Aircraft Type	Position Held		
TRAINING RECORD							
Company Name	Aircraft Type	Specify Approvals i.e. Line Base, SIM, CAA, FAA					
MEDICAL CERTIFICATE							
Class	Country of Issuance	Date of Issuance	Valid Until	Limitations			
(1) Are there any Restrictions/Limitations on your current Medical Certificate (e.g. Glasses or Contact Lens): Yes No							
(2) Has any Medical Certificate issued to you in association with any flying license ever been suspended or revoked: Yes No							
(3) Have you ever been refused a Medical Certificate: Yes No							
(4) Have you been involved in any aircraft accidents, incidents or ATC violations: Yes No							
REFERENCES							
Name	Position	Company	Phone No.	EMAIL			

Supplement 3: Positions

Name of position	B737NG CPT - commuting	B747-400 CPT - cargo	A330 CPT	B737-400 CPT	B737-400 FO	B737 CPT	B737 CPT	A320 CPT	A320 FO
Number of position	1	2	3	4	5	6	7	8	9
General information									
Type of aircraft	B737 NG	B747	A330	B737 CL	B737 CL	B737 NG	B737 NG	A320	A320
Type of operation	Passenger	Cargo	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger	Passenger
Type of contract	Comm	Full	Full	Full	Full	Full	Full	Full	Full
Location	China	China	China	Pakistan	Pakistan	India	Turkey	Singapore	Singapore
Rank	CPT	CPT	CPT	CPT	FO	CPT	CPT	CPT	FO
Basic position requirements									
Total Time (hrs)	>3000	>5000	>6000	>5000	>3500	>4500	>4000	>3000	
PIC on type (hrs)	>500	>500	>1000	>500		>500	>1000	>500	
Total hours on Type									1000
Current type rating	B737 NG	B747	A330	B737 CL	B737 CL	B737 NG / CL	B737 NG	A320	A320
Current on Type (months)	15	12	6	6	6	8		5	5
Sim Check (valid last months)	6	12	6	6	6			11	11
Age (years)	<55	<56	<55	<59	<59		<59		
Required documents									
Licence	JAA	JAA	JAA	JAA/FAA	JAA/FAA	JAA/FAA	JAA	JAA/FAA	JAA/FAA
Medical Class 1	yes	yes	yes	yes	yes	yes	yes	yes	yes
Log book	yes	yes	yes	yes	yes	yes	yes	yes	yes
English level	>4	>4	>4	>4	>4	>4	>4	>4	>4
Dangerous Goods				yes	yes				
CRM				yes	yes				
Aviation Security				yes	yes				
Passport	yes	yes	yes	yes	yes	yes	yes	yes	yes
No accidents/incidents	yes	yes	yes				yes		
No criminal record	yes	yes	yes				yes		
Reference contacts/letters	yes	yes	yes			yes			
Benefits									
Annual Salary (USD)	127200	195900	204000	90000	48000	114000	100320	164000	107850
Per Diems (USD)				50	50		1500		
Overtime/hour (USD)		165	233						
Accommodation/month (USD)	0	2000		660	660				
Annual Bonus (USD)	6800	5000							
Annual Travel Allowance(USD)	8000	12000	4000						
Flight round tickets/year	6	7	7						
Annual Leave (days/year)		28	30			15	14	25	
Sick Leave (days/year)	5	12	12			10			
Annual Loyalty Bonus (USD)	10200					6600			
Other									
Contract Term (years)	3	2		1	1	1 2 3	2	3	3
Base	Shenzhen	Beijing	Beijing	Karachi	Karachi	Mumbai	Istanbul	Singapore	Singapore
Roaster (days on/off)	4;2							5;2	5;2

Supplement 4: Candidates

No. of Candidate	1	2	3	4	5	6	7
General information							
Type of aircraft	B737 NG, B737 CL	A320	A320	B737 NG, B737 CL	B737 NG, B737 CL	B737 CL	B737 CL, MD-80
Type of operation	Cargo Passenger	Cargo Passenger	Cargo Passenger	Cargo Passenger	Cargo Passenger	Cargo Passenger	Cargo Passenger
Type of contract	Comm	Comm	Full Comm	Comm	Comm	Comm	Full
Location							Pakistan
Rank	CPT	CPT	CPT	CPT	CPT	TRI, TRE	CPT
Basic requirements							
Total Time (hrs)	11340	10930	7297	3600	9980	14650	16 000
PIC on type (hrs)	2280	5850	1800	730	2007	2168	1900
Total hours on Type	2280	5850	3500	2270	5803	3381	1900
Current type rating	B737 NG	A320	A320	B737 NG	B737 NG	B737 CL	B737 CL
Current on Type	31.2.2012	27.1.2012	22.3.2012	20.11.2011	16.11.2011	18.10.2011	31.2.2012
Sim Check (valid last months)	31.12.2011	26.11.2011	12.2.2012	15.9.2011	13.12.2010	23.1.2012	24.2.2012
Age (date of birth)	15.2.1961	9.9.1959	4.5.1961	15.2.1978	23.11.1969	19.7.1952	17.5.1962
Required documents							
Licence	JAA&FAA	JAA	JAA	JAA	JAA	FAA	JAA&FAA
Medical Class 1	yes	yes	yes	yes	yes	yes	yes
Log book	yes	yes	yes	yes	yes	yes	yes
English level	4	4	4	6	4	6	6
Dangerous Goods	yes	yes	yes	yes	yes	yes	yes
CRM	yes	yes	yes	yes	yes	yes	yes
Aviation Security	yes	yes	yes	yes	yes	yes	yes
Passport	yes	yes	yes	yes	yes	yes	yes
No accidents/incidents	yes	yes	yes	yes	yes	yes	yes
No criminal record	yes	yes	yes	yes	yes	yes	yes
Reference contacts/letters	yes	yes	yes	yes	yes	yes	yes
Required benefits							
Annual Salary (USD)							
Per Diems (USD)							
Overtime/hour (USD)							
Accommodation/month (USD)							
Annual Bonus (USD)							
Annual Travel Allowance/year (USD)							
Round Flight Tickets/year							
Annual Leave (days/year)							
Sick Leave (days)							
Annual Loyalty Bonus (USD)							
Others							
Contract Term (years)	1 2 3	1 2 3	1 2 3	1 2 3	1	1 2 3	1 2 3
Base							
Roaster (days on/off)							
International experience	3	1	2	1	1	4	8
Personal information							
Nationality	Swiss	Spanish	Spanish	Swedish	Turkmenistan	Pakistan	Dutch
Height (cm)	173	174		170		178	178
Weight (kg)	67	79		70		79	95
Marital status	Married	Married	Married	Single	Married	Single	Married
Language spoken	German	Spanish		Swedish	Turkmen	Arabic	Dutch
Religion	No religion	Christian	Christian	No religion		Muslim	N/A

Supplement 5: Position 1

Criteria	Position 1	Candidate 1	Score	Candidate 2	Score	Candidate 3	Score	Candidate 4	Score	Candidate 5
General information										
Type of aircraft	B737 NG	B737 NG, B737 CL	0	A320	-500	A320	-500	B737 NG, B737 CL	0	B737 NG, B737 CL
Type of operation	Passenger	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger
Type of contract	Comm	Comm	0	Comm	0	Full Comm	0	Comm	0	Comm
Location	China		0		0		0		0	
Rank	CPT	CPT	0	CPT	0	CPT	0	CPT	0	CPT
Basic position requirements										
Total Time (hrs)	>3000	11340	160	10930	150	7297	80	3600	10	9980
PIC on type (hrs)	>500	2280	170	5850	530	1800	130	730	20	2007
Total hours on Type		2280	0	5850	0	3500	0	2270	0	5803
Current type rating	B737 NG	B737 NG	0	A320	-500	A320	-500	B737 NG	0	B737 NG
Current on Type (months)	15	31.2.2012	0	27.1.2012	0	22.3.2012	0	20.11.2011	0	16.11.2011
Sim Check (valid last months)	6	31.12.2011	0	26.11.2011	0	12.2.2012	0	15.9.2011	0	13.12.2010
Age (years)	<55	15.2.1961	0	9.9.1959	0	4.5.1961	0	15.2.1978	0	23.11.1969
Required documents										
Licence	JAA	JAA&FAA	0	JAA	0	JAA	0	JAA	0	JAA
Medical Class 1	yes	yes	0	yes	0	yes	0	yes	0	yes
Log book	yes	yes	0	yes	0	yes	0	yes	0	yes
English level	>4	4	0	4	0	4	0	6	0	4
Dangerous Goods		yes	0	yes	0	yes	0	yes	0	yes
CRM		yes	0	yes	0	yes	0	yes	0	yes
Aviation Security		yes	0	yes	0	yes	0	yes	0	yes
Passport	yes	yes	0	yes	0	yes	0	yes	0	yes
No accidents/incidents	yes	yes	0	yes	0	yes	0	yes	0	yes
No criminal record	yes	yes	0	yes	0	yes	0	yes	0	yes
Reference contacts/letters	yes	yes	0	yes	0	yes	0	yes	0	yes
Benefits										
Annual Salary (USD)	127200		0		0		0		0	
Per Diems (USD)			0		0		0		0	
Overtime/hour (USD)			0		0		0		0	
Accommodation/month (USD)	0		0		0		0		0	
Annual Bonus (USD)	6800		0		0		0		0	
Annual Travel Allowance/year (USD)	8000		0		0		0		0	
Flight round tickets/year	6		0		0		0		0	
Annual Leave (days/year)			0		0		0		0	
Sick Leave (days/year)	5		0		0		0		0	
Annual Loyalty Bonus (USD)	10200		0		0		0		0	
Other										
Contract Term (years)	3	1 2 3	0	1 2 3	0	1 2 3	0	1 2 3	0	1
Base	Shenzhen		0		0		0		0	
Roaster (days on/off)	4:2		0		0		0		0	
International experience		3	9	1	3	2	6	1	3	1
Total score			339		-317		-784		33	

Supplement 6: Position 2

Criteria	Position 2	Candidate 1	Score	Candidate 2	Score	Candidate 3	Score	Candidate 4	Score	Candidate 5	Score
General information											
Type of aircraft	B747	B737 NG, B737 CL	-500	A320	-500	A320	-500	B737 NG, B737 CL	-500	B737 NG, B737 CL	-500
Type of operation	Cargo	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0
Type of contract	Full	Comm	-30	Comm	-30	Full Comm	0	Comm	-30	Comm	-30
Location	China		0		0		0		0		0
Rank	CPT	CPT	0	CPT	0	CPT	0	CPT	0	CPT	0
Basic position requirements											
Total Time (hrs)	>5000	11340	120	10930	110	7297	40	3600	-30	9980	90
PIC on type (hrs)	>500	2280	170	5850	530	1800	130	730	20	2007	150
Total hours on Type		2280	0	5850	0	3500	0	2270	0	5803	0
Current type rating	B747	B737 NG	-500	A320	-500	A320	-500	B737 NG	-500	B737 NG	-500
Current on Type (months)	12	31.2.2012	0	27.1.2012	0	22.3.2012	0	20.11.2011	0	16.11.2011	0
Sim Check (valid last months)	12	31.12.2011	0	26.11.2011	0	12.2.2012	0	15.9.2011	0	13.12.2010	-30
Age (years)	<56	15.2.1961	0	9.9.1959	0	4.5.1961	0	15.2.1978	0	23.11.1969	0
Required documents											
Licence	JAA	JAA&FAA	0	JAA	0	JAA	0	JAA	0	JAA	0
Medical Class 1	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Log book	yes	yes	0	yes	0	yes	0	yes	0	yes	0
English level	>4	4	0	4	0	4	0	6	0	4	0
Dangerous Goods		yes	0	yes	0	yes	0	yes	0	yes	0
CRM		yes	0	yes	0	yes	0	yes	0	yes	0
Aviation Security		yes	0	yes	0	yes	0	yes	0	yes	0
Passport	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No accidents/incidents	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No criminal record	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Reference contacts/letters	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Benefits											
Annual Salary (USD)	195900		0		0		0		0		0
Per Diems (USD)			0		0		0		0		0
Overtime/hour (USD)	165		0		0		0		0		0
Accommodation/month (USD)	2000		0		0		0		0		0
Annual Bonus (USD)	5000		0		0		0		0		0
Annual Travel Allowance/year (USD)	12000		0		0		0		0		0
Flight round tickets/year	7		0		0		0		0		0
Annual Leave (days/year)	28		0		0		0		0		0
Sick Leave (days/year)	12		0		0		0		0		0
Annual Loyalty Bonus (USD)			0		0		0		0		0
Other											
Contract Term (years)	2	1 2 3	0	1 2 3	0	1 2 3	0	1 2 3	0	1	0
Base	Beijing		0		0		0		0		0
Roaster (days on/off)			0		0		0		0		0
International experience		3	9	1	3	2	6	1	3	1	3
Total score			-731		-387		-824		-1037		-817

Supplement 7: Position 3

Criteria	Position 3	Candidate 1	Score	Candidate 2	Score	Candidate 3	Score	Candidate 4	Score	Candidate 5	Score
General information											
Type of aircraft	A330	B737 NG, B737 CL	-500	A320	-500	A320	-500	B737 NG, B737 CL	-500	B737 NG, B737 CL	-500
Type of operation	Passenger	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0
Type of contract	Full	Comm	-30	Comm	-30	Full Comm	0	Comm	-30	Comm	-30
Location	China		0		0		0		0		0
Rank	CPT	CPT	0	CPT	0	CPT	0	CPT	0	CPT	0
Basic position requirements											
Total Time (hrs)	>6000	11340	100	10930	90	7297	20	3600	-50	9980	70
PIC on type (hrs)	>1000	2280	120	5850	480	1800	80	730	-30	2007	100
Total hours on Type		2280	0	5850	0	3500	0	2270	0	5803	0
Current type rating	A330	B737 NG	-500	A320	-500	A320	-500	B737 NG	-500	B737 NG	-500
Current on Type (months)	6	31.2.2012	0	27.1.2012	0	22.3.2012	0	20.11.2011	0	16.11.2011	0
Sim Check (valid last months)	6	31.12.2011	0	26.11.2011	0	12.2.2012	0	15.9.2011	-30	13.12.2010	-30
Age (years)	<55	15.2.1961	0	9.9.1959	0	4.5.1961	0	15.2.1978	0	23.11.1969	0
Required documents											
Licence	JAA	JAA&FAA	0	JAA	0	JAA	0	JAA	0	JAA	0
Medical Class 1	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Log book	yes	yes	0	yes	0	yes	0	yes	0	yes	0
English level	>4	4	0	4	0	4	0	6	0	4	0
Dangerous Goods		yes	0	yes	0	yes	0	yes	0	yes	0
CRM		yes	0	yes	0	yes	0	yes	0	yes	0
Aviation Security		yes	0	yes	0	yes	0	yes	0	yes	0
Passport	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No accidents/incidents	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No criminal record	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Reference contacts/letters	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Benefits											
Annual Salary (USD)	204000		0		0		0		0		0
Per Diems (USD)			0		0		0		0		0
Overtime/hour (USD)	233		0		0		0		0		0
Accommodation/month (USD)			0		0		0		0		0
Annual Bonus (USD)			0		0		0		0		0
Annual Travel Allowance/year (USD)	4000		0		0		0		0		0
Flight round tickets/year	7		0		0		0		0		0
Annual Leave (days/year)	30		0		0		0		0		0
Sick Leave (days/year)	12		0		0		0		0		0
Annual Loyalty Bonus (USD)			0		0		0		0		0
Other											
Contract Term (years)		1 2 3	0	1 2 3	0	1 2 3	0	1 2 3	0	1	0
Base	Beijing		0		0		0		0		0
Roaster (days on/off)			0		0		0		0		0
International experience		3	9	1	3	2	6	1	3	1	3
Total score			-801		-457		-894		-1137		-887

Supplement 8: Position 4

Criteria	Position 4	Candidate 1	Score	Candidate 2	Score	Candidate 3	Score	Candidate 4	Score	Candidate 5	Score
General information											
Type of aircraft	B737 CL	B737 NG, B737 CL	0	A320	-500	A320	-500	B737 NG, B737 CL	0	B737 NG, B737 CL	0
Type of operation	Passenger	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0
Type of contract	Full	Comm	-30	Comm	-30	Full Comm	0	Comm	-30	Comm	-30
Location	Pakistan		0		0		0		0		0
Rank	CPT	CPT	0	CPT	0	CPT	0	CPT	0	CPT	0
Basic position requirements											
Total Time (hrs)	>5000	11340	120	10930	110	7297	40	3600	-30	9980	90
PIC on type (hrs)	>500	2280	170	5850	530	1800	130	730	20	2007	150
Total hours on Type		2280	0	5850	0	3500	0	2270	0	5803	0
Current type rating	B737 CL	B737 NG	-500	A320	-500	A320	-500	B737 NG	-500	B737 NG	-500
Current on Type (months)	6	31.12.2012	0	27.1.2012	0	22.3.2012	0	20.11.2011	0	16.11.2011	0
Sim Check (valid last months)	6	31.12.2011	0	26.11.2011	0	12.2.2012	0	15.9.2011	-30	13.12.2010	-30
Age (years)	<59	15.2.1961	0	9.9.1959	0	4.5.1961	0	15.2.1978	0	23.11.1969	0
Required documents											
Licence	JAA/FAA	JAA&FAA	0	JAA	0	JAA	0	JAA	0	JAA	0
Medical Class 1	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Log book	yes	yes	0	yes	0	yes	0	yes	0	yes	0
English level	>4	4	0	4	0	4	0	6	0	4	0
Dangerous Goods	yes	yes	0	yes	0	yes	0	yes	0	yes	0
CRM	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Aviation Security	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Passport	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No accidents/incidents		yes	0	yes	0	yes	0	yes	0	yes	0
No criminal record		yes	0	yes	0	yes	0	yes	0	yes	0
Reference contacts/letters		yes	0	yes	0	yes	0	yes	0	yes	0
Benefits											
Annual Salary (USD)	90000		0		0		0		0		0
Per Diems (USD)	4500		0		0		0		0		0
Overtime/hour (USD)			0		0		0		0		0
Accommodation/month (USD)	660		0		0		0		0		0
Annual Bonus (USD)			0		0		0		0		0
Annual Travel Allowance/year (USD)			0		0		0		0		0
Flight round tickets/year			0		0		0		0		0
Annual Leave (days/year)			0		0		0		0		0
Sick Leave (days/year)			0		0		0		0		0
Annual Loyalty Bonus (USD)			0		0		0		0		0
Other											
Contract Term (years)	1	1 2 3	0	1 2 3	0	1 2 3	0	1 2 3	0	1	10
Base	Karachi		0		0		0		0		0
Roaster (days on/off)			0		0		0		0		0
International experience		3	9	1	3	2	6	1	3	1	3
Total score			-231		-387		-824		-567		-307

Supplement 9: Position 5

Criteria	Position 5	Candidate 1	Score	Candidate 2	Score	Candidate 3	Score	Candidate 4	Score	Candidate 5	Score
General information											
Type of aircraft	B737 CL	B737 NG, B737 CL	0	A320	-500	A320	-500	B737 NG, B737 CL	0	B737 NG, B737 CL	0
Type of operation	Passenger	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0
Type of contract	Full	Comm	-30	Comm	-30	Full Comm	0	Comm	-30	Comm	-30
Location	Pakistan		0		0		0		0		0
Rank	FO	CPT	10	CPT	10	CPT	10	CPT	10	CPT	10
Basic position requirements											
Total Time (hrs)	>3500	11340	150	10930	140	7297	70	3600	0	9980	120
PIC on type (hrs)		2280	0	5850	0	1800	0	730	0	2007	0
Total hours on Type		2280	0	5850	0	3500	0	2270	0	5803	0
Current type rating	B737 CL	B737 NG	-500	A320	-500	A320	-500	B737 NG	-500	B737 NG	-500
Current on Type (months)	6	31.2.2012	0	27.1.2012	0	22.3.2012	0	20.11.2011	0	16.11.2011	0
Sim Check (valid last months)	6	31.12.2011	0	26.11.2011	0	12.2.2012	0	15.9.2011	-30	13.12.2010	-30
Age (years)	<59	15.2.1961	0	9.9.1959	0	4.5.1961	0	15.2.1978	0	23.11.1969	0
Required documents											
Licence	JAA/FAA	JAA&FAA	0	JAA	0	JAA	0	JAA	0	JAA	0
Medical Class 1	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Log book	yes	yes	0	yes	0	yes	0	yes	0	yes	0
English level	>4	4	0	4	0	4	0	6	0	4	0
Dangerous Goods	yes	yes	0	yes	0	yes	0	yes	0	yes	0
CRM	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Aviation Security	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Passport	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No accidents/incidents		yes	0	yes	0	yes	0	yes	0	yes	0
No criminal record		yes	0	yes	0	yes	0	yes	0	yes	0
Reference contacts/letters		yes	0	yes	0	yes	0	yes	0	yes	0
Benefits											
Annual Salary (USD)	48000		0		0		0		0		0
Per Diems (USD)	4500		0		0		0		0		0
Overtime/hour (USD)			0		0		0		0		0
Accommodation/month (USD)	660		0		0		0		0		0
Annual Bonus (USD)			0		0		0		0		0
Annual Travel Allowance/year (USD)			0		0		0		0		0
Flight round tickets/year			0		0		0		0		0
Annual Leave (days/year)			0		0		0		0		0
Sick Leave (days/year)			0		0		0		0		0
Annual Loyalty Bonus (USD)			0		0		0		0		0
Other											
Contract Term (years)	1	1 2 3	0	1 2 3	0	1 2 3	0	1 2 3	0	1	10
Base	Karachi		0		0		0		0		0
Roaster (days on/off)			0		0		0		0		0
International experience		3	9	1	3	2	6	1	3	1	3
Total score			-370		-877		-914		-547		-417

Supplement 10: Position 6

Criteria	Position 6	Candidate 1	Score	Candidate 2	Score	Candidate 3	Score	Candidate 4	Score	Candidate 5	Score
General information											
Type of aircraft	B737 NG	B737 NG, B737 CL	0	A320	-500	A320	-500	B737 NG, B737 CL	0	B737 NG, B737 CL	0
Type of operation	Passenger	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0
Type of contract	Full	Comm	-30	Comm	-30	Full Comm	0	Comm	-30	Comm	-30
Location	India		0		0		0		0		0
Rank	CPT	CPT	0	CPT	0	CPT	0	CPT	0	CPT	0
Basic position requirements											
Total Time (hrs)	>4500	11340	130	10930	120	7297	50	3600	-20	9980	100
PIC on type (hrs)	>500	2280	170	5850	530	1800	130	730	20	2007	150
Total hours on Type		2280	0	5850	0	3500	0	2270	0	5803	0
Current type rating	B737 NG / CL	B737 NG	0	A320	-500	A320	-500	B737 NG	0	B737 NG	0
Current on Type (months)	8	31.12.2012	0	27.1.2012	0	22.3.2012	0	20.11.2011	0	16.11.2011	0
Sim Check (valid last months)		31.12.2011	0	26.11.2011	0	12.2.2012	0	15.9.2011	0	13.12.2010	0
Age (years)		15.2.1961	0	9.9.1959	0	4.5.1961	0	15.2.1978	0	23.11.1969	0
Required documents											
Licence	JAA/FAA	JAA&FAA	0	JAA	0	JAA	0	JAA	0	JAA	0
Medical Class 1	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Log book	yes	yes	0	yes	0	yes	0	yes	0	yes	0
English level	>4	4	0	4	0	4	0	6	0	4	0
Dangerous Goods		yes	0	yes	0	yes	0	yes	0	yes	0
CRM		yes	0	yes	0	yes	0	yes	0	yes	0
Aviation Security		yes	0	yes	0	yes	0	yes	0	yes	0
Passport	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No accidents/incidents		yes	0	yes	0	yes	0	yes	0	yes	0
No criminal record		yes	0	yes	0	yes	0	yes	0	yes	0
Reference contacts/letters	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Benefits											
Annual Salary (USD)	114000		0		0		0		0		0
Per Diems (USD)			0		0		0		0		0
Overtime/hour (USD)			0		0		0		0		0
Accommodation/month (USD)			0		0		0		0		0
Annual Bonus (USD)			0		0		0		0		0
Annual Travel Allowance/year (USD)			0		0		0		0		0
Flight round tickets/year			0		0		0		0		0
Annual Leave (days/year)	15		0		0		0		0		0
Sick Leave (days/year)	10		0		0		0		0		0
Annual Loyalty Bonus (USD)	6600		0		0		0		0		0
Other											
Contract Term (years)	1 2 3	1 2 3	0	1 2 3	0	1 2 3	0	1 2 3	0	1	0
Base	Mumbai		0		0		0		0		0
Roaster (days on/off)			0		0		0		0		0
International experience		3	9	1	3	2	6	1	3	1	3
Total score			270		-377		-814		-27		223

Supplement 11: Position 7

Criteria	Position 7	Candidate 1	Score	Candidate 2	Score	Candidate 3	Score	Candidate 4	Score	Candidate 5	Score
General information											
Type of aircraft	B737 NG	B737 NG, B737 CL	0	A320	-500	A320	-500	B737 NG, B737 CL	0	B737 NG, B737 CL	0
Type of operation	Passenger	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0
Type of contract	Full	Comm	-30	Comm	-30	Full Comm	0	Comm	-30	Comm	-30
Location	Turkey		0		0		0		0		0
Rank	CPT	CPT	0	CPT	0	CPT	0	CPT	0	CPT	0
Basic position requirements											
Total Time (hrs)	>4000	11340	140	10930	130	7297	60	3600	-10	9980	110
PIC on type (hrs)	>1000	2280	120	5850	480	1800	80	730	-30	2007	100
Total hours on Type		2280	0	5850	0	3500	0	2270	0	5803	0
Current type rating	B737 NG	B737 NG	0	A320	-500	A320	-500	B737 NG	0	B737 NG	0
Current on Type (months)		31.2.2012	0	27.1.2012	0	22.3.2012	0	20.11.2011	0	16.11.2011	0
Sim Check (valid last months)		31.12.2011	0	26.11.2011	0	12.2.2012	0	15.9.2011	0	13.12.2010	0
Age (years)	<59	15.2.1961	0	9.9.1959	0	4.5.1961	0	15.2.1978	0	23.11.1969	0
Required documents											
Licence	JAA	JAA&FAA	0	JAA	0	JAA	0	JAA	0	JAA	0
Medical Class 1	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Log book	yes	yes	0	yes	0	yes	0	yes	0	yes	0
English level	>4	4	0	4	0	4	0	6	0	4	0
Dangerous Goods		yes	0	yes	0	yes	0	yes	0	yes	0
CRM		yes	0	yes	0	yes	0	yes	0	yes	0
Aviation Security		yes	0	yes	0	yes	0	yes	0	yes	0
Passport	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No accidents/incidents	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No criminal record	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Reference contacts/letters		yes	0	yes	0	yes	0	yes	0	yes	0
Benefits											
Annual Salary (USD)	100320		0		0		0		0		0
Per Diems (USD)	1500		0		0		0		0		0
Overtime/hour (USD)			0		0		0		0		0
Accommodation/month (USD)			0		0		0		0		0
Annual Bonus (USD)			0		0		0		0		0
Annual Travel Allowance/year (USD)			0		0		0		0		0
Flight round tickets/year			0		0		0		0		0
Annual Leave (days/year)	14		0		0		0		0		0
Sick Leave (days/year)			0		0		0		0		0
Annual Loyalty Bonus (USD)			0		0		0		0		0
Other											
Contract Term (years)	2	1 2 3	0	1 2 3	0	1 2 3	0	1 2 3	0	1	0
Base	Istanbul		0		0		0		0		0
Roaster (days on/off)			0		0		0		0		0
International experience		3	9	1	3	2	6	1	3	1	3
Total score			230		-417		-854		-67		183

Supplement 12: Position 8

Criteria	Position 8	Candidate 1	Score	Candidate 2	Score	Candidate 3	Score	Candidate 4	Score	Candidate 5	Score
General information											
Type of aircraft	A320	B737 NG, B737 CL	-500	A320	0	A320	0	B737 NG, B737 CL	-500	B737 NG, B737 CL	-500
Type of operation	Passenger	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0
Type of contract	Full	Comm	-30	Comm	-30	Full Comm	0	Comm	-30	Comm	-30
Location	Singapore		0		0		0		0		0
Rank	CPT	CPT	0	CPT	0	CPT	0	CPT	0	CPT	0
Basic position requirements											
Total Time (hrs)	>3000	11340	160	10930	150	7297	80	3600	10	9980	130
PIC on type (hrs)	>500	2280	170	5850	530	1800	130	730	20	2007	150
Total hours on Type		2280	0	5850	0	3500	0	2270	0	5803	0
Current type rating	A320	B737 NG	-500	A320	0	A320	0	B737 NG	-500	B737 NG	-500
Current on Type (months)	5	31.2.2012	0	27.1.2012	0	22.3.2012	0	20.11.2011	0	16.11.2011	0
Sim Check (valid last months)	11	31.12.2011	0	26.11.2011	0	12.2.2012	0	15.9.2011	0	13.12.2010	-30
Age (years)		15.2.1961	0	9.9.1959	0	4.5.1961	0	15.2.1978	0	23.11.1969	0
Required documents											
Licence	JAA/FAA	JAA&FAA	0	JAA	0	JAA	0	JAA	0	JAA	0
Medical Class 1	yes	yes	0	yes	0	yes	0	yes	0	yes	0
Log book	yes	yes	0	yes	0	yes	0	yes	0	yes	0
English level	>4	4	0	4	0	4	0	6	0	4	0
Dangerous Goods		yes	0	yes	0	yes	0	yes	0	yes	0
CRM		yes	0	yes	0	yes	0	yes	0	yes	0
Aviation Security		yes	0	yes	0	yes	0	yes	0	yes	0
Passport	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No accidents/incidents		yes	0	yes	0	yes	0	yes	0	yes	0
No criminal record		yes	0	yes	0	yes	0	yes	0	yes	0
Reference contacts/letters		yes	0	yes	0	yes	0	yes	0	yes	0
Benefits											
Annual Salary (USD)	164000		0		0		0		0		0
Per Diems (USD)			0		0		0		0		0
Overtime/hour (USD)			0		0		0		0		0
Accommodation/month (USD)			0		0		0		0		0
Annual Bonus (USD)			0		0		0		0		0
Annual Travel Allowance/year (USD)			0		0		0		0		0
Flight round tickets/year			0		0		0		0		0
Annual Leave (days/year)	25		0		0		0		0		0
Sick Leave (days/year)			0		0		0		0		0
Annual Loyalty Bonus (USD)			0		0		0		0		0
Other											
Contract Term (years)	3	1 2 3	0	1 2 3	0	1 2 3	0	1 2 3	0	1	0
Base	Singapore		0		0		0		0		0
Roaster (days on/off)	5;2		0		0		0		0		0
International experience		3	9	1	3	2	6	1	3	1	3
Total score			-700		653		216		-997		-777

Supplement 13: Position 9

Criteria	Position 9	Candidate 1	Score	Candidate 2	Score	Candidate 3	Score	Candidate 4	Score	Candidate 5	Score
General information											
Type of aircraft	A320	B737 NG, B737 CL	-500	A320	0	A320	0	B737 NG, B737 CL	-500	B737 NG, B737 CL	-500
Type of operation	Passenger	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0	Cargo Passenger	0
Type of contract	Full	Comm	-30	Comm	-30	Full Comm	0	Comm	-30	Comm	-30
Location	Singapore		0		0		0		0		0
Rank	FO	CPT	10	CPT	10	CPT	10	CPT	10	CPT	10
Basic position requirements											
Total Time (hrs)	>3000	11340	160	10930	150	7297	80	3600	10	9980	130
PIC on type (hrs)		2280	0	5850	0	1800	0	730	0	2007	0
Total hours on Type	>1000	2280	20	5850	90	3500	50	2270	20	5803	90
Current type rating	A320	B737 NG	-500	A320	0	A320	0	B737 NG	-500	B737 NG	-500
Current on Type (months)	5	31.12.2012	0	27.1.2012	0	22.3.2012	0	20.11.2011	0	16.11.2011	0
Sim Check (valid last months)	11	31.12.2011	0	26.11.2011	0	12.2.2012	0	15.9.2011	0	13.12.2010	-30
Age (years)		15.2.1961	0	9.9.1959	0	4.5.1961	0	15.2.1978	0	23.11.1969	0
Required documents											
Licence	JAA/FAA	JAA&FAA	0	JAA	0	JAA	0	JAA	0	JAA	0
Medical Class 1		yes	0	yes	0	yes	0	yes	0	yes	0
Log book	yes	yes	0	yes	0	yes	0	yes	0	yes	0
English level	>4	4	0	4	0	4	0	6	0	4	0
Dangerous Goods		yes	0	yes	0	yes	0	yes	0	yes	0
CRM		yes	0	yes	0	yes	0	yes	0	yes	0
Aviation Security		yes	0	yes	0	yes	0	yes	0	yes	0
Passport	yes	yes	0	yes	0	yes	0	yes	0	yes	0
No accidents/incidents		yes	0	yes	0	yes	0	yes	0	yes	0
No criminal record		yes	0	yes	0	yes	0	yes	0	yes	0
Reference contacts/letters		yes	0	yes	0	yes	0	yes	0	yes	0
Benefits											
Annual Salary (USD)	107850		0		0		0		0		0
Per Diems (USD)			0		0		0		0		0
Overtime/hour (USD)			0		0		0		0		0
Accommodation/month (USD)			0		0		0		0		0
Annual Bonus (USD)			0		0		0		0		0
Annual Travel Allowance/year (USD)			0		0		0		0		0
Flight round tickets/year			0		0		0		0		0
Annual Leave (days/year)			0		0		0		0		0
Sick Leave (days/year)			0		0		0		0		0
Annual Loyalty Bonus (USD)			0		0		0		0		0
Other											
Contract Term (years)	3	1 2 3	0	1 2 3	0	1 2 3	0	1 2 3	0	1	0
Base	Singapore		0		0		0		0		0
Roaster (days on/off)	5;2		0		0		0		0		0
International experience		3	9	1	3	2	6	1	3	1	3
Total score			-831		223		146		-987		-827

Supplement 14: Unsuccessful

	Score	Reason for rejection
Position 1		
1	Candidate 13 -51	Current type rating, Sim check
2	Candidate 2 -317	Type of aircraft, Current type rating
3	Candidate 10 -510	Rank, PIC hours on type
4	Candidate 14 -574	Rank, Total time, PIC hours on type
5	Candidate 7 -606	Type of aircraft, Type of contract, Current type rating
6	Candidate 12 -760	Type of contract, Rank, Total time, PIC hours on type, Current on type, Sim check
7	Candidate 3 -784	Type of aircraft, Current type rating
8	Candidate 11 -857	Type of aircraft, Current type rating
9	Candidate 8 -867	Type of aircraft, Current type rating, Sim check
10	Candidate 6 -1083	Type of aircraft, Current type rating, Age, Licence
11	Candidate 9 -1517	Type of aircraft, Rank, PIC hours on type, Current type rating, Sim check
12	Candidate 15 -2580	Type of aircraft, Rank, PIC hours on type, Current type rating, Sim check, Licence, Medical Class 1
Position 2		
1	Candidate 2 -387	Type of aircraft, Type of contract, Current type rating
2	Candidate 13 -611	Type of aircraft, Type of operation, Current type rating, Sim check
3	Candidate 7 -616	Type of aircraft, Current type rating
4	Candidate 1 -731	Type of aircraft, Type of contract, Current type rating
5	Candidate 5 -817	Type of aircraft, Type of contract, Current type rating, Sim check
6	Candidate 3 -824	Type of aircraft, Current type rating
7	Candidate 8 -877	Type of aircraft, Current type rating
8	Candidate 11 -997	Type of aircraft, Current type rating, Current on type
9	Candidate 4 -1037	Type of aircraft, Type of contract, Total time, Current type rating
10	Candidate 6 -1150	Type of aircraft, Type of contract, Current type rating, Age, Licence
11	Candidate 14 -1474	Type of aircraft, Rank, PIC hours on type, Current type rating
12	Candidate 10 -1550	Type of aircraft, Rank, PIC hours on type, Current type rating
13	Candidate 9 -1557	Type of aircraft, Type of operation, Rank, PIC hours on type, Current type rating
14	Candidate 12 -1740	Type of contract, Rank, Total time, PIC hours on type, Current type rating, Current on type
15	Candidate 15 -2620	Type of aircraft, Rank, Total time, PIC hours on type, Current type rating, Sim check, Licence, Medical Class 1
Position 3		
1	Candidate 2 -457	Type of aircraft, Type of contract, Current type rating
2	Candidate 7 -686	Type of aircraft, Current type rating
3	Candidate 13 -701	Type of aircraft, Current type rating, Current on type, Sim check
4	Candidate 1 -801	Type of aircraft, Type of contract, Current type rating
5	Candidate 5 -887	Type of aircraft, Type of contract, Current type rating, Sim check
6	Candidate 3 -894	Type of aircraft, Current type rating
7	Candidate 8 -987	Type of aircraft, Current type rating, Sim check
8	Candidate 11 -1067	Type of aircraft, PIC hours on type, Current type rating, Current on type
9	Candidate 4 -1137	Type of aircraft, Type of contract, Total time, PIC hours on type, Current type rating, Sim check
10	Candidate 6 -1233	Type of aircraft, Type of contract, Current type rating, Age, Licence
11	Candidate 10 -1620	Type of contract, Rank, Total time, PIC hours on type, Current type rating
12	Candidate 9 -1627	Type of aircraft, Rank, PIC hours on type, Current type rating, Sim check
13	Candidate 14 -1634	Type of aircraft, Rank, PIC hours on type, Current type rating, Current on type, Sim check
14	Candidate 12 -1840	Type of aircraft, Rank, Total time, PIC hours on type, Current type rating, Current on type, Sim check
15	Candidate 15 -2670	Type of aircraft, Rank, Total time, PIC hours on type, Current type rating, Sim check, Licence, Medical Class 1
Position 4		
1	Candidate 1 -234	Type of contract, Current type rating
2	Candidate 5 -307	Type of contract, Current type rating, Sim check
3	Candidate 2 -387	Type of aircraft, Type of contract, Current type rating
4	Candidate 9 -557	Rank, PIC hours on type, Sim check
5	Candidate 4 -567	Type of contract, Total time, Current type rating, Sim check
6	Candidate 13 -691	Type of aircraft, Current type rating, Current on type, Sim check
7	Candidate 3 -824	Type of aircraft, Current type rating
8	Candidate 10 -1050	Rank, PIC hours on type, Current type rating
9	Candidate 14 -1104	Type of aircraft, Rank, PIC hours on type, Current on type, Sim check
10	Candidate 12 -1270	Rank, Total time, PIC hours on type, Current type rating, Current on type, Sim check
11	Candidate 15 -2720	Type of aircraft, Rank, Total time, PIC hours on type, Current type rating, Current on type, Sim check, Licence, Medical Class 1
Position 5		