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"DEVELOPING A COMPETENCY MODEL IN MANUFACTURING: THE CASE OF VA. B. W. FILEUR"

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Developing a competency model in manufacturing: the case of va. B. W. Fileur

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INTRODUCTION

Recently I had the opportunity to read a report written by Accenture about the future of the workforce titled "Reworking the revolution, are you ready to compete as intelligent technology meets human ingenuity to create the future workforce?" (Shook, Knickrehm, 2018).

This report analyses how the constant development of technologies is revolutionizing our business context, and it focuses on the necessities that our companies invest in the digital competencies of their employees, and especially in the AI. The authors support their thesis by highlighting some data: Accenture estimates that investing in AI might increase the revenues of the companies by 38%, and the employment level by 10%, in the next five years.

In order to understand how businesses are gearing up to face this period of incredible change, they interviewed more than 1,200 CEOs and top executive and more than 14,000 employees about the future relationships between AI and Workers in the workplace; their study included 11 economies and 12 industries.

Some data coming from the results of their report really captured my attention: 61% of top managers expect an increase in job positions requiring collaboration with Al in the next three years, 54% think that collaboration between machines and workers will be significant in achieving their strategic objectives, and 46% told that the actual job descriptions have already become outdated. But, after having read the previous data, what I consider incredible is that only 3% of the executives interviewed plan to enhance investments in training and reskilling programs significantly in the next three years.

From these data is possible to notice how businesses understand how the needs of the workforce are quickly changing, but that only a minimum part of them intends to increase the investments on the competencies and on the growth of their employees.

This is the reason why I was very motivated when I was offered the chance to work on a real project that aimed at the long-term growth of the competencies of the employees of voestalpine Böhler Welding Fileur.

Va. B. W. Fileur is an Italian manufacturing company that is living a period of deep organizational change; they decided to invest in the competencies of their workers by implementing a competency model and a talent management project. This decision has been taken for two main reasons: the first one is because they believe that making competencies the "core" around which to manage all the HR activities could help them in solving some critical

situation regarding HRM; the second one is because they think that investing in the growth of their employees will be essential in order to achieve the new strategic objects.

This thesis is divided into four chapters. The first chapter discusses the importance of having reliable information about the real nature of a job in order to take any future decisions related to human resources. It does it by presenting how to project, apply and exploit a process of job analysis.

Starting from the studies of McClelland, Boyatzis, Spencer and Spencer, the second chapter analyses the positive effects resulting from an effective implementation of a competency model; it presents what competencies are, their characteristics, the phases necessary to build a competency model and how to structure it in order to allow the workers to achieve outstanding work performances.

The third chapter explains how to manage the information gathered thanks to the job analysis and the competency model in order to structure a full process of talent management. It presents how to move from the evaluation of the competencies, through the implementation of training programmes, to finally arrive at the long-term growth of the employees.

The fourth and last chapter tries to apply all the previous theoretical pieces of knowledge into the real case of va. B. W. Fileur. It presents the company, its characteristics and how they intend to achieve their strategic objectives thanks to a talent management process. In this context, this thesis had two main tasks: the first was more practical and consisted in understanding around which transversal competencies the company should have built their competency model; the second was more theoretical and involved giving to va. B. W. Fileur some tips about how to plan and structure all the future activities that aim to the implementation of the project.

CHAPTER 1 - COLLECTING INFORMATION FOR HUMAN RESOURCES: JOB ANALYSIS

1.1 - Introduction to job analysis

The role of a Human Resource manager within an organization is very fascinating, it can be stated that its purpose is to consider the employees of a company as business resources, and to strategically manage them so that they can effectively perform their work activities, in order to create value for the organization and permit the company to achieve its mission and vision.

To do that, an HR manager always needs a lot of information and an in-depth understanding of the work that people do in that organization. The process by which this understanding is developed is called job analysis.

Later in the chapter will be discussed deeply what a job analysis it, to begin we can say that is the process by which all the information about a job are collected, providing a solid basis for every human resource function; always keeping in mind that the final purpose is the achievement of an organizational successful performance.

It is a mistake to think that job analysis only generates benefits to the organization, if properly used it is an instrument that creates relevant advantages for the workers too. Consider for example some possibilities that the information provided by a correctly applied job analysis can give to workers: to be hired in a job for which it has been studied for years, to be able to exploit their competencies and strengths point, to know the mission of their job and therefore to have the daily motivation to accomplish their duties and find satisfaction in their work, to perceive if their level of performance is adequate or not; in synthesis, it could give the possibility of "feeling in the right job".

Job analysis born during the industrial revolution, after the appearance of the assembly line, because of the necessity to study how to maximise the profit starting from every single action made by the workers; at the time job analysis was simply considered as a technical study of the movements necessary to accomplish workers' duties and a calculation about how to maximise the profits resulting from the time at their disposition. With the passing of years and the evolution of how jobs were performed and conceived, also the concept of job analysis evolved, coming to be what it will presented in this chapter.

Nowadays, job analysis doesn't enjoy a lot of consideration by the organizations and often it is considered a superfluous tool (mostly by the non-HR managers). Given the importance that in reality it plays in the management of human capital, it is surprising that job analysis is not

regarded as a more critical instrument in the field of human resources. One possible explanation could be that it is difficult to demonstrate the direct positive effect, and the causality relationship, that it has on the profits and on the value of the company. For all the organizations would be fundamental to rediscover the importance of this tool when appropriately applied.

The last consideration before defining properly what a job analysis is: a work-doing system consists of three interacting components: work, worker, and work organization. That must be always kept in mind while doing analysis in Human Resources since dividing these three elements would mean to remove meaning to all of them, reaching misleading and confusing conclusions. It can be considered like a system in which the results of the entire organization are given by the relationships of all the three elements. This fact is important to be remembered while reading the chapter.

1.2 - Definition of job analysis

All managers (not only HR) need reliable information to organize their employees, solve organizational problems, implement changes or, more in general, to carry out their everyday work; the term Job analysis refers to the procedure of gathering information about which daily activities organization's employees perform and how they do it. The final purpose is to have all the information needed to create the perfect conditions in which the employees can achieve superior performances and make the company more profitable.

Using broad terms, it can be asserted that "Job analysis refers to the process of discovery of the nature of a job" (Brannick, Levine, Morgeson, 2007, p. 7), and it can be defined as "A systematic procedure for gathering detailed and objective information on a job, task or role in place or in a project" (Pearn, Kandola, 1988, p. 9).

As Prien, Goodstein, Goodstein, and Gamble (2009) underline, in the definition of job analysis the main point is the focus on the systematic collection of data on the observable job behaviors of employees, what is accomplished by these jobs and which technologies, competencies and organizational structure are required to do so.

The emphasis of this broad definition is therefore on the process of analysis, how it is managed, its phases, its characteristics and not on the use to which these data are intended (for example there could be some confusion between job analysis and job description), since the use made with the output of a job analysis can variate based on the organization that processes it, the role of the analyst inside the company, its purpose and the methods used.

Using a definition more specific and detailed Harvey (1991) defined job analysis as a gathering of information on

- 'job-oriented' behavior, such as job tasks and work procedures;
- 'worker-oriented' behavior, as for example supervision, information processing, and decision making;
- behaviors about the utilization of tools, machines, and materials;
- methods of evaluating performance, such as productivity and error rates;
- job context, with particular information about working conditions and type of compensation systems;
- personal characteristics required, such as competencies, physical ability, skills, and personality traits.

Since, as has been said, Job analysis is the process of discovering the real nature of a job, before studying how to process it, it seems necessary to understand what is intended with the term job: "The job is defined as a collection of related positions that are all similar enough in terms of the work performed or in the goals that they serve for the organization so that everybody in the organization agrees to call the position by the same title" (Brannick, Levine, Morgeson, 2007, p. 7), while "a position is a set of duties, tasks, activities, and elements able to be performed by a single worker" (Brannick, Levine, Morgeson, 2007, p. 7).

Indeed, a job can be divided into several different smaller parts (table 1.1) and Job analysis could be considered as the systematic process by which is understood the real essence of a job by dividing it into smaller units.

T . 1.	
Job	Collection of related positions that are all similar enough in terms of the work performed
	or in the goals that they serve for the organization so that everybody in the organization
	agrees to call the position by the same title.
Position	Set of duties, tasks, activities, and elements able to be performed by a single worker.
Duty	Collection of tasks all directed at general goals of a job.
Task	Collections of activities that are directed toward the achievement of specific job objectives.
Activity	Clusters or groups of elements directed at fulfilling a work requirement.
Element	The smallest unit of work that can be identified as having a clear beginning, middle and
	end. Any smaller unit of work content would require descriptions of physical motions or
	sensory process.

Table 1.1: The decomposition of jobs (Brannick, Levine, Morgeson, 2007, p. 7)

This procedure can result in one or more different written products (we will focus on it later) with the purpose of describing what is done in the job and what capabilities and competencies are needed to effectively and efficiently perform the selected job.

It will be discussed later in the chapter which methods exist and how to process a job analysis, but to understand this procedure it is necessary to underline how it is not a "mechanical and standard exercise" and how it is deeply influenced by the environment in which the job analyzed is embedded.

If it is true that, in order to have an effective job analysis, it is necessary to "break and decompose" the job taken in consideration, there is the concrete risk that this process can distort the job, position or duties analysed: while breaking them down into specific elements, the risk of focusing too much on the details of the "single unit", may not grasp aspects of the general picture that are critical to success. Therefore, this procedure of "decomposition" is essential, but it has always to be done considering that, in the end, it is the job that is being analyzed and the result of the job analysis will be only one and it will be something that modifies the organization of work as a whole.

According to Pearn, and Kandola (1988), in a Job analysis process, the collection of valuable information can be thwarted by three factors:

- 1- Changes determined by time: a job isn't always stable during the time, it can change with the passing of the months and years. During a Job analysis, there is the risk to "fix" the characteristics of the job as it presents itself in a specific moment, without considering that a job, role or task can vary, even if very slightly, during time.
- 2- Changes determined by the person: according to the holder of the job, there could be differences in how jobs, positions, duties, and tasks are managed. Two different persons can behave differently even though they have the same job in the same organization. This may depend on the different characteristics and perceptions of the person that owns the job.
- 3- Changes determined by the situation: different situations may require different behaviors and actions. While doing a job analysis it is necessary to understand if the results are affected by some particular situation and act accordingly.

1.3 - Some possible applications of job analysis

As said before, the purpose of a job analysis is to provide an in-depth understanding of what a job contemplates, what it requires, its expected results, its role in the organization and its

implications. It is a fundamental process since it collects information necessary to accomplish an incredibly high number of purposes and it is the ground on which numerous organizational functions are based, even though this relevance is rarely acknowledged.

Many authors tried to develop an exhaustive list of uses of job description, for example, Ash (1988), Ash and Levine (1980), McCormick (1979). Here is presented a list of 12 different uses of job analysis developed by Brannick, Levine, and Morgeson (2007).

The authors themselves state that this list may be not complete, and they mention the example of "quality of work life" and "stress management," the fact that it is really complicated to make an exhaustive list of the purposes of Job analysis, is proof of its role in every organization.

Every purpose is not necessarily the exclusive use of a Job analysis in a company, one doesn't exclude another or even some others. Job analysis is the process while the uses are multiple and combinable with each other.

The definitions that here follows about the possible uses of job analysis are not exhaustive and depth, for every different application the intent is only to give a broad idea of what these terms mean, underlying their variability and their importance inside an organization.

Job description: a tool that describes and communicates the essence of a job. Usually contains job title, tasks, duties, competencies required and expected performances.

Job classification: a process of placing one or more jobs into a family of similar jobs. It becomes a tool useful to evaluate jobs, performances, hire new employees and setting pay rates.

Job evaluation: a tool that helps in comparing, evaluating and ranking the value that every job or position confer to an organization. It helps in attracting and retaining people.

Job, team, and system design and redesign: job analysis permits to understand the actual organizational "situation and design" and to improve it whenever necessary.

Human resource requirements and specifications: job analysis is fundamental to understand which characteristics of the workers are necessary or desirable to perform effectively a specific job.

Performance appraisal: rewarding adequately the performances of the employees helps in building commitment, increasing motivation, reducing the turnover of performant workers and increasing operative results.

Training: having trained and competent worker is essential for every organization that aims to have a competitive advantage.

Worker mobility: career counseling provides individuals with information about jobs and about themselves that is intended to promote beneficial worker mobility.

Workforce planning: an organization depends on the workers it is made up of. A job analysis allows planning its "human capital needs" needs for the future in terms of numbers and KSAO.

Efficiency: understand deeply a job means to have the possibility to improve it with a general or specific reorganization, creation of new tools and remove everything that doesn't create value.

Safety: highlighting some situations, behaviors or conditions that can affect the safety conditions of the workers, to prevent and avoid injuries and accidents.

Legal and quasi-legal requirements: Application of law in managing all the HR functions for example hiring, training, promoting, fining and paying employees.

Going deeper it could be said that Job analysis has also some "social purposes": its effect can extend beyond the boundaries of the company that elaborates it and can produce positive effects for the society in which the organization is embedded.

It is the case for example of the elaboration of labor market data thanks to the information about where the market is moving to and the competencies needed to enter on it; another purpose is the "vocational guidance" in which counselors can give personal advice in the possible matching between worker and job; moreover, it could help in indicating to the education system the necessities that the labor market is facing to improve synergies between education and labor institutions.

1.4 - Contents of job analysis

Every job analysis can be considered as a unique and different process: each is specific of an organization, elaborated by one person or a team of selected analysts, whit one or more explicit purposes in mind, using several methodologies and in a precise moment in the life of the company. If we consider that all these variables are really "situation-specific", it is very difficult to find a job analysis identical to another.

Nevertheless, to process an effective and valuable job analysis, there are some elements that should be present.

According to Prien, Goodstein, Goodstein, and Gamble (2009), traditional job analysis presents four typical components:

- 1. A description of the work activity (WA) or tasks involved in doing the job;
- 2. The knowledge, skills, and abilities (KSA) or competencies necessary to perform the job;
- 3. Data on the range of job performance;
- 4. The characteristics of the workplace.

Description of work activity: the first section of a job analysis should present the "division" of the job in its smallest units and portray all the functions, activities and actions required to perform it. Usually is present also the description of the tools and equipment used and the expected results of all the activities. One relevant element that should be included is the discretion with which every employee can or must (it depends on the point of view) perform its daily work.

One difficulty that may be encountered is to understand until which level the job should be broken up in its activities: which is the most basic level that allows describing deeply the essence of a job without losing sight of its globality? Unfortunately, it is difficult to give a clear answer to this problem, it depends on case by case and here enters the ability and experience and knowledge of the analysts.

Knowledge, Skills, and abilities: a fundamental element that can't miss in a job analysis is the description of the specific competencies required for successful job performances in the job considered. This section is usually called "KSA" but often, given the complexity and width of the content, there is the need to widener its meaning changing the name in "KSAO" where O means "other"; that's why the word competencies can be better used to include all the possible terms that indicate personal characteristics related to the achievement of high performances (we will speak in depth about competencies in chapter 2).

To describe briefly the components of KSA, in general, Knowledge is defined as the theoretical information owned by an individuum, usually acquired during the education process or with some specific training.

Skill is instead defined by Prien, Goodstein, Goodstein, and Gamble (2009, p.22) as the "proficiency in the manual, verbal, or mental manipulation of people, ideas, or things."

To conclude, are considered as Abilities all the personal capacities to execute an activity, an action or a function, applying the required knowledge and skills to the specific situation.

Job performance: after having discussed which activities and duties has a worker to accomplish and which are the competencies needed to do it, in a job analysis the next step is to understand which is the level of job performance these activities and competencies aim to. In this case, the analyst must make some choices that are not easy and depend mainly from the use to which the job analysis is intended: the desired level of performance can be different in case of a selection process, promotion and career path, retribution, training or many other possibilities.

That's why, in the drafting of a job analysis, doesn't exist a unique correct level of job performance and it has to be set as a function of the use to which it is to be put. The final decision must be done by the analysts because with their common sense and global vision of the process, are the only that can do it.

Characteristics of the workplace: the fourth and last section of a job analysis is the description of some important characteristics of the workplace that might impact job performances. Organizations vary considerably in how they are set, in their norms, climate, and moreover in their culture; it should not be underestimated how these factors can influence job performances and the job considered as a whole. Therefore, a competent job analysis identifies the important workplace characteristics of the organization, trying to explicit information that otherwise would remain "black".

1.5 - How to proceed with Job analysis

As mentioned above, there exist many different Job analysis methods, and the choice between which one to use depends on some specific characteristics of every single case.

According to Brannick, Levine, and Morgeson (2007), to better explain and understand in which ways every Job analysis process can differ from the others, the consequences and the implications of these differences, is possible to use the four "Building Blocks". These blocks permit to dig into the job analysis process and describe it through four categories. To better describe them it will be used several lists, in this way is possible to be clear and synthetic in mentioning all the different aspects or components of every single block.

In the previous paragraph have been presented the expected contents of a job analysis, they mustn't be confused or mixed with the elements of the blocks that are listed below: the blocks are a tool used by the authors to simplify and describe the methods through which a job

analysis can be processed. Obviously, contents and methods are related between them, but it must be paid attention in not confusing them.

The four Building Blocks are:

- 1- Kinds of job data collected
- 2- Methods of gathering data
- 3- Sources of job information
- 4- Units of analysis

1.5.1 - kinds of job data collected

When an analyst begins a new process of job analysis, he usually has clear in mind which is the purpose he intends to reach; the choices about how to proceed are therefore guided by the aimed final result. The first step to do is, usually, to understand which kind of data is necessary to achieve the designed purpose, the possibilities are many and will condition the continuation of the whole project. Below are listed some of the most used kind of job data, the list is not exhaustive, and the explanation is just introductory.

- Organizational philosophy and structure: this kind of data refers to the way in which the designed job fits into the organization, its mission and its relationships with the other jobs. In a synthetic way, it could be said that this kind of data reflects the organizational chart. This information is essential since two jobs with the same job title can have different implication based on the organization in which they are embedded; understanding these implications is essential to the job analysis.
- Licensing and other government-mandated requirements: legal requirement data are essential to understand the deeply a job: its content could be really influenced by law, rules or licenses.
- Responsibilities: the level of authority and accountability can change the nature of a
 job. This kind of information is, for example, essential in doing job evaluation,
 performance evaluation, compensation, and many other HR functions.
- *Professional standards:* professionals are usually organized in associations that influence and guide some professional standards and practices.
- *Job context:* this kind of information could be considered more general, here should be included all data that deal with the environment that surrounds the job and the settings with which job activities take place. Some examples could be the schedule, the payment system, the location and so on...

- Products and services: data on products and services are often essential to understand
 a job. Obviously, the final output of a work conditions several aspects of the expected
 work situation.
- *Machines, tools, equipment, work aids, and checklists:* Some job's understanding is strictly related to the information on tools and equipment daily used. It is impossible to explain the duties and activities of a job without an analysis of what is used to accomplish that job.
- Work performance indicators: expected performances of a job can give numerous information about work times, standards and efforts. Usually, these data are produced directly by the organizations and companies.
- *Personal job demands:* the focus is here on physical demands. Some job requires specific physical qualities to accomplish duties and activities, it is the case of police officers, astronauts, fireman but also some gardeners or specific technicians.
- *Elemental motions:* sometimes it is necessary to analyze separately all the individual elements that constitute a job. It is the case of some job in which many complicated maneuvers are made sequentially and quickly.
- Worker activities: this kind of data focus on worker's point of view, they are related to what "could happen" inside the worker as for example decision making, problemsolving, planning, interpretation activities or emotions that the worker should find in the analyzed job.
- *Work activities:* here the focus is instead outside the worker and more specifically on the observable behaviors that the worker is expected to maintain, it communicates the actions that he must accomplish.
- Worker characteristic requirements: to succeed in some job are required some specific
 personal characteristics as values, abilities, attitudes, skills, personality traits and
 knowledge. This kind of information is essential to put the right worker in the right
 workplace.
- *Future changes:* a job analysis is a process that studies the present to improve the future. If some changes, in all the kind of data previously described, are already planned or expected, they must be present in the analysis.
- *Critical incidents:* if some extraordinary happenings could happen, they must be considered in the job analysis.

1.5.2 - Methods of gathering data

After having selected the data necessary for the job analysis it's time to collect them, therefore it must be figured out the best way to gather them. Every different method has some pros and some cons, in a job analysis process is indeed suggested to use more than only one of them, to cope the possible cons, to avoid incoming biases and to compare the results to have more reliable data.

The authors have identified eleven different ways to collect the desired data, they will be presented briefly.

- Observing: many information about what a worker does can be simply collected by directly observing and recording. The analyst can accompany the employee through his daily activities for a period of time and ask him details or explanations about some specific actions. With this method, the data collected are simple, direct and easy to analyze. However, it is likely that the fact of being observed conditions the observed worker's behavior, in a positive or negative way.
- Interviewing individuals: this method involves interviewing directly the jobholders and their supervisors about one specific job. During this interview is asked to tell what took place during a specific period of time (one day, last week, one month...). Also, this method guarantees easily manageable information, but it must be considered that they are filtered by the memories of the interviewed and by what he wants to tell. The interviews guarantee better results if they are previously planned and structured.
- *Group interviews:* similar to individual interviews but can guarantee a more efficient use of analyst's time. With group interviews are also easier to compare the answers given by the different respondents.
- *Technical conference:* this technique implies the involvement of some experts to better understand some specific characteristics of the job being analyzed. The data collected in this way are more technical and not organization-specific, so they have to be accompanied by some other internal analysis.
- *Questionnaires:* the purpose of a questionnaire is similar to that of the interviews, and it is asking information about the activities done in a specific period directly to the jobholders. Generally, since the questionnaires use a numerical scale to evaluate different aspects, the data gathered are more quantitative respect those coming from an interview, and they permit some different kind of analysis.

- *Diaries:* with this method, every jobholder is asked to write down periodically the activities he has been engaged in at a particular time. At the end of the selected period, the analyst collects all the diaries and analyses the information gathered.
- *Equipment-based methods:* to better use the time or to avoid some "direct observation biases", the analyst can gather data using equipment of some sort. Usually, this equipment consists of a recording device like a camera, video tape recorder or an audiotape recorder.
- *Reviewing records:* previously collected data can be very useful information. Sometimes analysts can use the previous job performance appraisal material, position descriptions, accident reports, correspondence or other material.
- Reviewing literature: reports and books produced inside or outside a particular organization can be consulted to implement a job analysis. The inside materials might include training manuals, training materials, checklists, and user manuals. Instead, the outside materials that can be used are specific books, job analysis conducted by others or databases.
- Studying equipment design specifications: if a job depends on the use of some specific equipment or machinery, the information provided with this material can provide important insights on how the workers should behave.
- Doing the work: some analysts can try to "impersonate" the worker for a little period
 of time, to learn about the job doing it. It is a learning by doing technique. However,
 in reality, it is very difficult to put in practice it.

1.5.3 - Sources of job analysis data

The source of job analysis data depends highly by the selected method of data collection.

Between the possible sources that are listed below, the only that wasn't mentioned while discussing the methods is "clients and customers". Client and customers can be an incredible source of information for quantity and quality: they can help in establishing standards of performance or suggesting tasks that have to be done better on in different ways. Since they are "the reason for" a product or service is done, the information that comes from them has to be considered very relevant.

Sources that may supply job analysis data are:

- The job analyst
- The jobholder's immediate supervisor

- A high-level executive or manager
- The jobholder
- A technical expert
- An organizational training specialist
- Clients or customers
- Other organizational units
- Written documents
- Previous job analysis

1.5.4 - Units of analysis

So far, it has been discussed about the choice of which data to collect, from where these data come from and with which method to collect them. According to the authors, the fourth and last block is related to how to summarize, analyze and report the data. It is the step that connects the process of job analysis with the practical use of the arising information. As said earlier in the chapter, a job analysis is always processed with one or more practical purposes in mind, therefore to prepare adequately the data is fundamental for the good result of the project.

- *Duties:* one of the most used representations of job analysis is describing the major duties performed by a worker in a particular job. With this mode of analysis is possible to capture and summarize a great deal of useful information about a job. It is mainly used for expressing the responsibilities of a job and for functions like job evaluation, job classification or job families.
- Tasks: a possible choice is to analyze and present our data at tasks level. Tasks
 communicate what must do a worker and they can be used for a variety of different
 applications. One of the most common applications of this unity of analysis is
 employee selection.
- *Activities:* activities are often used as reference unit in questionnaires. They are used in this role since are easier to report than their combination in duties or tasks.
- *Elemental motions:* when the main interest is to understand the most efficient way to do physical work, elemental motions could be the best option. The data summarized in this unit are often used in designing work and in teaching new workers how to accomplish a task.
- *Job dimensions:* a job dimension "focus in the workers' sensory and mental processes as well as the workers' models of response." (Brannick, Levine, Morgeson, 2007,

- p.17) Some examples could be "Decision making", "Planning", "Problem-solving" or "Organisation of work". Job dimensions can be useful, for example, in employee's training planning.
- Worker characteristic requirements: in some situation, it may be useful to analyze worker characteristics instead of work characteristics. Some methods of job analysis have predetermined listings of characteristics requirements. Also, this unit of analysis is often used in selection processes.
- Scales applied to units of work: not all analysts are interested in all the duties, tasks or activities of a job, some may be interested only in some specific element of the job. This focus permits them to make some judgment about a specific dimension. These scales may be used for some task comparison, analysis of interactions or for the creation of training processes.
- Scales applied to worker characteristics: as some analyst may be interested in only some dimensions of a work, the same could be for the characteristics of the worker.
 This unit of job analysis is often applied to competency evaluations of for designing a training program.
- Qualitative versus quantitative analysis: some analysis relies on narrative descriptions of the results rather than on statistical analysis of numerical outcomes. Numbers are in general more reliable but in some cases also qualitative description can find their role in some documents, one example is job description.

Descriptor	Method of Data Collection
1. Organization philosophy and structure	1. Observing
2. Licensing and other government-mandated	2. Interviewing individuals
requirements	3. Interviewing groups
3. Responsibilities	4. Technical conferences
4. Professional standards	5. Questionnaires
5. Job context	6. Diaries
6.Products and services	7. Equipment-based methods
7. Machines, tools, work aids, and checklists	8. Reviewing records
8. Work performance indicators	9. Reviewing literature
9. Personal job demands	10. Studying equipment design specification
10. Elemental motions	11. Doing the work
11. Worker activities	
12. Work activities	

13. Worker trait requirements	
14. Future changes	
15. Critical incidents	
Sources of Job Analysis Data	Units of Analysis
1. Job analyst	1. Duties
2. Job holder's supervisor	2. Tasks
3. High-level executive	3. Activities
4. Job holder	4. Elemental motions
5. Technical expert	5. Job dimensions
6. Organizational training specialist	6. Worker characteristics requirements
7. Clients or customers	7. Scales applied to units of work
8. Other organizational units	8. Scales applied to worker characteristics
9. Written documents (for example, records,	requirements
equipment specifications)	9. Qualitative versus quantitative considerations
10. Previous job analysis	

Table 1.2: Summary of Building Blocks (Brannick, Levine, Morgeson, 2007, p. 19)

1.6 - A brief introduction to Job description

In a previous paragraph, some possible applications of job analysis were illustrated, here will be presented the most common one: job description.

Its popularity is one of the reasons why it is the only taken into analysis, the second one is because the terms job analysis and job description are often mistakenly confused and sometimes are even used interchangeably, creating much confusion and misunderstandings.

In reality, the difference is quite remarkable: job analysis is a process of searching for information and a job description is a product of that process.

If a job analysis result is a written report, a job description may be described as a little-written summary of the information learned thanks to the job analysis. Job description can be therefore synthetically considered as a brief summary of a job.

Job description must be short: it is a streamlined presentation. It should contain only:

- *Job title and classifying information:* this section usually contains the title of the job, the location, and reporting relationships.
- *Job summary:* here should be present a general statement of the job, with explained which the mission of the jobholder is.

- *Duties and tasks of the job holder:* the purpose of this section is to present what actually the jobholder does, are therefore stated the duties and tasks with a brief explanation about how and why these duties are performed.
- *General information:* this section is more "job specific" and may contain different information considered essential for that exact case. The most common information given are job schedules, job evaluation, necessary educational preparation, environmental conditions, physical demands, and working conditions.

It is recommended that job description present a job as it is now, and not as it should be according to the managers or as it is expected to be in the future. If it doesn't reflect the reality, it becomes a useless tool and just a waste of time and resources.

For example, we cannot proceed with a recruitment process basing it on a misleading job description, otherwise, we will look for employees who will do a job that is not the one presented to them. In this way, we may hire employees that are not adequate to the job that they really must perform, and they may not be doing the job that they expected, leading to inefficiency for both the organization and the employees.

The fact that a job can be improved according to the company's strategy, or that it can change over time, is the reason why the job description should be always updated. Only in this way it can be a functional tool and can bring advantage for the organization processing it.

1.7 - Chapter summary

In this chapter, it was highlighted how organizations have extreme needs in finding information about the job done by their workers. This information is essential to implement all HR functions like recruitment, selection, talent management, job evaluation, job classification, performance analysis, compensation analysis, succession planning, training and many more.

Job analysis is the process by which this information can be collected, and it has been defined as "a systematic procedure for gathering detailed and objective information on a job, task or role in place or in a project" (Pearn, Kandola, 1988, p. 9).

In practice, it is done by breaking the job up into smaller units (duties, tasks, activities or elements) to analyze them separately, the next step is to "re-build" the job to produce a written product describing all the information gathered.

To proceed with a job analysis, a systematic procedure specific for the organization taken in consideration is necessary, it involves several steps that are specified in advance by the

particular method chosen by the job analyst. In particular, this procedure should specify the kinds of job data collected; the methods of gathering data; the sources of job information and the units of analysis.

Every job analysis results in some written product, a summary that should contain a description of the work activity or tasks involved in doing the job; the knowledge, skills, and abilities (KSA) or competencies necessary to perform the job; data on the range of job performance and the characteristics of the workplace. This summary is the tool from where can be found the information to implement all the HR function listed before.

Job description is one of the possible applications of job analysis. Job description can be described as a small written text containing job title and classifying information; Job summary; duties and tasks of the jobholder and some general information.

It must always remember that the judgments and ratings are to be based on the job as it is now actually performed, not as it might ideally or in the future be done.

CHAPTER 2: WHAT A COMPETENCY MODEL IS AND HOW TO APPLY IT

2.1 - Competencies as source of competitive advantage

As well-known, the purpose of a company is to create long-term value for its owners and for its stakeholders; to do that is necessary an effective implementation of the company's strategy that can be described an action plan to achieve the set objectives, to outperform competitors and to achieve superior profitability. A strategy is about competing differently from rivals, doing what competitors don't do or, even better, doing what they can't do in order to deliver a unique mix of value. (Porter, 1996)

Being different from others could mean having an advantage on the market compared to the competitors and this may lead in the long run to the creation of value for the stakeholders. This concept is called "competitive advantage".

There are many ways in which to gain a competitive advantage, but it is a very demanding process and, moreover, is getting more and more complex and intricate over time. The incredible acceleration we are living in terms of technological innovation and foreign competitiveness is changing the traditional elements that, in the classical business vision, were giving competitive advantage: quality, innovation, technologies, reputation, image, speed and so on, seems no longer being able to guarantee long-lasting advantage in the market on their own.

Competition tends to erode competitive advantage and companies must therefore continuously seek to exploit new sources of competitive advantage to create long-term value.

In the last decades we are assisting how material content of economic activities is being slowly substituted by immaterial components, is in this context that technologies, products, finance, marketing, human resources and all the other activities of a company are more and more becoming a concentrated of knowledge more than a concentration of substance and.

The fact that knowledge starts to be considered an essential factor for the organizations, however, isn't usually associated with an exhaustive analysis of how knowledge is achieved, generated, exchanged, utilized or lost. Knowledge is often thought as given, immutable and stable during time and for this reason, isn't always considered as a product of the enterprise.

In an organization knowledge can be considered as the result of all the individuals' information and intellectual abilities that compose it, we can't think about it just like a simple sum because it must be considered the single value of every person, their organization, the

synergies and the spillover that may arise thanks to the collaboration, confrontation and work together.

Knowledge can make one organization unique, different from the others and favor long-term competitive advantage because it is a resource intangible, rare, inimitable and non-substitutable.

The process of generating and managing knowledge is founded on the interaction that emerges from tacit and explicit knowledge and its spread from the individual to the group to the whole organization and vice versa. With tacit knowledge it can be intended technical know-how, skills, motives, mental models, values, interpretation models that belong the individuals; fundamental is the nature of knowledge and the fact that individual knowledge and competencies can be widespread and become the heritage of the organization. (Camuffo 1998)

Is in this context that emerged and took relevance the role of individual competencies: it has been understood that an organization's knowledge cannot prescind from individual knowledge and all the different components that characterize it. We can call these personal characteristics with the term competencies.

It is from this perspective that, since the '70s, competencies are a relevant topic in business and management: by mapping and analyzing them, companies can have all the information they need to hire, train, motivate and organize their workers. Companies can build their competitive advantage only if they possess the adequate human resources both in terms of quality and quantity needed to achieve strategical objectives. Only in this way, companies can be defined as "competent organization", and only competent organization have all the possibilities to achieve their competitive advantage. Competency models are the tools responsible for ensuring the presence of the needed competencies in an organization.

2.2 - Linguistic clarification

Depending on the historical period and the country, there may be some linguistic differences between the use of the words "competence" and "competency" (the plurals are competences and competencies). In the modern and more accepted language, these differences are few and weak: there are some linguistical technical variations, in fact, some use the two terms with a small difference in connotation, but the inner meaning may be considered equivalent. Therefore, to avoid misunderstanding, it was decided to use the two different terms with the same meaning and value, hoping not to have an incorrect use of the English language.

2.3 - Why a competency model

During the last decades of the 20th century, the so-called "Competency movement" was born among the theories of Human Resource Management. It can be considered as a new HRM concept that aims to place the worker at the center of every HR activity and function, considering him as a person with his personal characteristics and with his specific competencies. This new way of managing human resources has, in fact, considerable impact in the selection process, hiring, training, compensation, performance analysis, succession plans, talent management, outplacement, and all the other activities.

The basic idea is to consider the competencies of each worker as one of the main elements that can lead to the implementation of the company strategy and to gain a competitive advantage; thanks to a Competency model, companies can analyze, organize, plan and to make growth their employees, considering them a fundamental resource to have success in the present and in the future.

According to Sanghi (2016), there are five main advantages of implementing a competency framework in an organization:

- *Direction:* A "competency framework" defines the competencies and behavior indicators necessary to produce results. These indicators can help organizations to find a clear direction, bringing consistency and helping to build a culture of efficiency and growth. A result is also that the direction taken is in sync from the top of the organization to the bottom, going through all the middle levels.
- *Measurable*: Competencies can be measured, this allows quantitative analysis on them. When the measurement of competency is combined with an adequate analysis of the real effects of these competencies on the business results, it improves the possibilities to programme and structure the development of competencies. Therefore, it is possible to evaluate competencies at an individual level to try to understand the impact and influence provided at the organizational level.
- *Development:* Competencies are not fixed and immutable on an individual level, they can be learned. This means that, if an organization is able to determine the critical behavior that has a causal relationship with the work performances of its employees, it can implement a process to teach these competencies to his workers and improve the results by developing the capability of their employees. This would fill the gap between the needed competencies and those possessed.

- Distinct: Competencies represent behavioral dimensions that are unique and specific
 of each organization. Different but similar companies in the same country, in the same
 sector, and of comparable dimensions, can achieve business result enough different
 between them, this can be caused by the different presence and management of
 competencies inside their organization.
- *Integration:* As stated before, competency models can be integrated to all the HR functions, becoming to all effect the core around which all activities of HRM rotates.

2.4 - Definition of competency

Understanding how to build and apply a competency model in an organization, and how to make the personal characteristics of employees a competitive advantage to make the company more valuable, is probably the "main interest" of those threaten with competency model.

But, before trying to analyze how to build an effective model, it is necessary to define what a competence is, to examine how it is composed and all the features that may define it.

"Competency has its origins in the Latin word "competentia" which means "is authorized to judge" as well as "has the right to speak" (Caupin et al., 2006).

As it possible to notice in table 2.1, during the years has been given dozens of different definitions of competency, but an exact and widely recognized definition of competency still eludes both those researching the field and trainers themselves (Jubb and Robotham, 1997).

Among the large quantity of definitions given with the years, seems widely accepted and adopted by the majority of the scientific community the one given in 1982 by the American psychologist (collaborator also of McClelland at McBer & Company) Richard Boyatzis; he defines competencies as underlying characteristics of an individual, which are, causally (change in one variable cause change in another) related to effective job performance (Boyatzis, 1982).

Author	Definition
Klemp (1980)	An underlying characteristic of a person which results in effective and/or
	superior performance on the job.
Boyatzis (1982)	Competencies as underlying characteristics of an individual, which are,
	causally (change in one variable cause change in another) related to effective
	job performance.

Hogg (1993)	Competencies are the characteristics of a manager that lead to the
	demonstration of skills and abilities, which result in effective performance
	within an occupational area. Competency also embodies the capacity to
	transfer skills and abilities from one area to another.
Parry (1996)	A cluster of related knowledge, skills and attitudes (KSA) that affects a major
	part of one's job (a role or responsibility), that correlates with performance
	on the job, that can be measured against well-accepted standards and that can
	be improved via training and development.
Marrelli (1998)	Competencies are measurable human capabilities that are required for
	effective work performance demands.
Dubois (1998)	Competencies are those characteristics-knowledge, skills, mindset, thought
	patterns and the like-that, when used either singularly or in various
	combinations, result in successful performance.
Hoffman (1999)	Analyzed past literature and summarized three key points in defining a
	competency: (a) underlying qualification and attributes of a person, (b)
	observable behaviors and (c) standard of individual performance outcomes.
Selby et al. (2000)	Competencies are abilities expressed in terms of behavior.
Jackson and	Competencies are defined as "the skills, knowledge, abilities and other
Schuler (2003)	characteristics that someone needs to perform a job effectively"
L. M. Spencer,	A competency is an underlying characteristic of an individual that is causally
S.M. Spencer	related to criterion-referenced effective and/or superior performance in a job
(2004)	or situation.
Diana Kramer	Competencies are skills, knowledge, and behaviors that individuals need to
(2004)	possess to be successful and in the future.
Gartner Group	A competency is a set of characteristics, including skills, knowledge, and
	attributes, that causes or forecasts performance.
American Nurses	An individual who demonstrates "competence" is a performing successfully
Association	at an expected level. A "competency" is an expected level of performance
	that results from an integration of knowledge, skills, abilities, and judgment.
Lucia & Lepsinger	That can be improved via training and development.
(1999)	
People Soft	A set of measurable and observable knowledge, skills and behaviors that
	contribute to success in a job/position.

Table 2.1: History of competency's definition (Sanghi, 2016, p.9)

Despite the different definitions born over the years, it seems that there are some common aspects of competencies that most scholars have highlighted. These aspects are present in almost all the definitions given and can help us to define properly what a competency is. We will analyze them using the definition of Boyatzis:

- *Underlying characteristics* means that competencies are intrinsic and long-lasting features of the personality of an individual that are the cause of his behaviors in different situations in his life, at work as in the free time.
- Causally means that the individual competencies have a direct effect of on the behaviors, there is, therefore, a causality relationship between competencies and behaviors, and consequently on the final results achieved; competencies are the cause of the final output of an action.
- Related to effective job performance means that the actions, causally connected with a competency, must obtain better results that the actions not caused by some specific competencies. "A characteristic is not a competence if doesn't predict something meaningful in real life" (Spencer, Spencer, 1993). What is important is to fix before which are the measures with whom evaluate the competencies. This is very important while building a competency model.

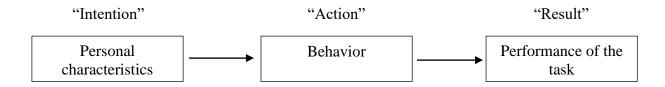


Figure 2.1: The causal flow model of skills (Spencer, Spencer, 2017, p.34)

Boyatzis (1982) also introduces another interesting subdivision into categories: he states how the desired results to be obtained thanks to a competency model can influence the way in which the whole project is managed and the "philosophy" behind it. In fact, it is very different if the aim of the organization is to have employees who perform superior performances, or if the desired result is just to have in the organization the competencies necessary to have the work done. Is, therefore, possible to distinguish between "Distinctive competencies" and "Threshold competencies".

- "Distinctive competencies" are those that distinguish the outperformers from the average performers. Those competencies are possessed only by those that can achieve superior performances.

- "Threshold competency is a person's generic knowledge, motive, trait, self-image, social role, or skill which is essential to performing a job, but it is not causally related to superior job performance" (Boyatzis, 1982, p.23).

To conclude, to define a competency, we must determine a system and sequence composed by the personal characteristics, the behaviour, and the results or effects, considering always what the intent or meaning of the actions and results were.

2.5 – History of the "Competency movement"

The idea of companies as organizations made of competent workers is quite recent and, in the past, it has not always been debated as one main topic in businesses administration.

At the beginning of the 20th century, in the era of the scientific management, where Frederick Taylor's and Henry Ford's use of assembly line brought the attention from workers to time-and-motion study. Complexity was maximized and in a depressed economy, employees had little value. (Sanghi, 2016)

Later, in the years following the II World War, despite the hierarchical structure built on command and control, in the companies started to gain significance the role of employees, the information in they possessed and their specialization. In this period of profound societal change and incredibly prosperous growth for the economy, however, the market demand was almost unlimited and the competition was low, this led organizations to focus their attention more in acquiring and maintaining the market shares rather than improving the internal efficiency of their organization, with workers who are not yet at the center of production and organizational processes.

In the following years, when the international competition strengthened, and the global economy slowed down due to some political and social crisis, demand began to decelerate.

Companies needed to change their business model and found that, in order to stand out from the others and build their competitive advantage, they had the necessity to bring their employees closer to the center of their production process, they needed more effective and efficient employees, and in particular, a more competent management. In short, companies have understood that to overcome others and achieve better results, they needed better workers than the competitors, they needed competent employees.

That's why in those years scholars, in particular psychologists, were concerned with the concept of measure of ability (Sternberg & Killigian, 1990) and it is in this contest that the competency movement arises. It is now unanimously recognized that the official born of this

movement was in 1973 thanks to the article by the American psychologist David McClelland "Testing for competence rather than for intelligence".

This article had a remarkable influence on the psychological theories of the period and in management studies later; it is still a milestone for those that want to deal with competencies models or with competencies in general.

McClelland starting point was his interest in understanding if there exist some elements or methods capable of effectively predicting future work performances, since in his opinion the methods used at the time (mostly school grades, intelligence, and aptitude test) were not reliable and led to misleading results and, moreover, were discriminatory toward some social and ethnic minorities.

Barret and Depinet (1991) in their book highlighted how David C. McClelland's 1973 article has deeply influenced both professional and public opinion.

They underline how, in it, he presented five main arguments:

- School grades are not good predictors of occupational success;
- Intelligence and aptitude tests do not predict occupational success or other important life outcomes;
- The relationship with social status is the only reason why test and academic performance predict job performance;
- Such tests are unfair to minorities;
- Competencies would be better able to predict important behaviors than would more traditional tests.

In the introduction of the book "Competence at work", written in 1993 by L. Spencer and S. Spencer, McClelland himself presents how he elaborated at the beginning his theories and work method, thanks to the narration of the first application of his new model.

To put into practice his knowledge and theories he founded a consulting company specialized in Human Resource Management called McBer. Through this consulting agency, he was asked by the USIS (US foreign Information Service) to develop a new method that could predict future worker's performance.

This national agency was sending in many foreign countries young diplomats that had the role to represent the US, its values and its culture around the world and their final purpose was to create consent for American policies in foreign countries, and to make sure that as many people as possible support the US and its foreign policies.

To select their diplomats, they had always strict selection criteria composed by knowledge test, aptitude test, and academic path analysis. Despite they were hiring only those who, according to their selection methods, were supposed to be "excellence", later they discovered very different performance among hired diplomats and, moreover, the selection process presented clear discrimination against social, ethnic and economic minorities.

Therefore, the USIS needed a selection process that could predict the level of performance of its diplomats without any biases and without any prejudice or discrimination, to hire the best US representatives available. That was the task given to McBer.

The exact method used by McClelland will be described later in the chapter dedicated to the building of "competency model", but to present it in brief, this method allows to highlight which are the competencies that distinguish an outstanding worker from the others. Consequently, it gives the possibility to use these competencies to implement all the human resources functions, the selection process included.

In the case of the US diplomats, McClelland work demonstrated that the competencies distinguishing a successful official were the interpersonal sensibility towards the other cultures, the positive attitude towards others and the capacity to recognize quickly power relations.

The studies of McClelland had a considerable following. Starting from his article in 1973 (and the following he wrote to implement and deepen his theories) many scholars began to study the phenomenon of competencies, its developments and possible applications in the business environment.

At the beginning of the 90s, the "competency method" had already been used by more than 100 researchers in 24 countries; among the considerable quantity of works published about this topic, took relevance the book published in 1993 by L. Spencer and S. Spencer called "Competence at work".

Their project took inspiration in 1989 examining the study of more than 200 job analysis reports, produced by different scholars, made following the competency model elaborated by McBer. Since they noticed that some competencies regularly characterize the performance of outperformers, without any distinction about which job was considered, their idea was to build a dictionary that contains the competencies which result more common in work outperformers in general.

That's why they call their study a "general dictionary of competencies": because their scales can be applied to all jobs but exactly to no one (even though they proceed also with some job specific analysis). They identified general scaled competencies that, according to their analysis, can cover from the 80% to the 98% of all the competencies needed, while they

weighed that the job-specific competencies can vary from the 2% to the 20%. What really distinguishes a job from the other is therefore which of these "main competencies" are essential in every specific job and the mix of competencies necessary to outperform.

The "McBer competencies dictionary" contains 20 competencies divided in 6 macro-categories (Table 2.2) that are: "operative and realization competencies", "service and assistance competencies", "influence competencies", "managerial competencies", "cognitive competencies" and "personal effectiveness competencies".

Category	Competencies	
Operative and realization competencies	- Achievement orientation	
	- Concern for order, quality, and accuracy	
	- Initiative	
	- Information seeking	
Service and assistance competencies	- Interpersonal understandings	
	- Customer service orientation	
Influence competencies	- Impact and influence	
	- Organizational awareness	
	- Relationship building	
Managerial competencies	- Developing others	
	- Directiveness: Assertiveness and use of	
	positional power	
	- Teamwork and cooperation	
	- Team leadership	
Cognitive competencies	- Analytical thinking	
	- Conceptual thinking	
	- Technical/Professional/Managerial	
	expertise	
Personal effectiveness competencies	- Self-control	
	- Self-confidence	
	- Flexibility	
	- Organizational commitment	

Table 2.2: General dictionary of competencies (Spencer, Spencer, 2017, p. 13)

The study of L. Spencer and S. Spencer went deepener: according to them every competency can be possessed and applied with different intensities and in different ways. They decided

that in order to evaluate competencies is, therefore, necessary to organize them in one or more dimensions on the base of scalar gradations, according to the different characteristics and use of every competency.

They reanalyzed the database with the data of job analysis and built new matrices with the competencies reorganized and classified differently, this time taking into account the different dimensions expressed by the respondents. They individuated 4 main dimensions.

- Intensity of the intention: The results show as all the competencies can be analyzed according to the "intensity of the intention", that means how strong the individual wants to accomplish his intention, and how complete are the actions that he undertakes to achieve it.
- Dimension of the effort: This dimension is for a lot of competencies the second for importance, it expresses the quantity of effort and the quantity of extra-time necessary to achieve the desired effect.
- *Dimension of the effect*: To describe the number of people involved they used the "dimension of the effect", it means that the use of a competency can have influence for just the person that uses it, for some colleagues, for the subordinates, for the superior and so on. Usually, this dimension is more relevant for those competencies needed by a person with a high role in the hierarchical structure, since their decisions often have influence for a lot of workers and for the company.
- Complexity: It refers to the difficulty of the behavior necessary (how many tasks, people, data, ideas...) usually is relevant for the cognitive competencies.

"Competence at work" gives us several theoretical and practical instruments thanks to which is possible to start analyzing and evaluate competencies in an organization. To build a competency model is really complicated and the elements that guarantee a successful project may be that are not effective for another one, it is really a firm-specific project and even more, is a role-specific analysis in a firm-specific context; and that's why, if well built, it can constitute a source of competitive advantage.

2.6 - Different types of competencies

Competencies are intrinsic characteristics that indicate "the ways to behave or to think that repeat themselves, in their broad manners, in different situations and last for a period of time reasonably long" (Guion, 1991, p. 335)

According to the milestone of Spencer and Sperncer (1993), there are five different types of characteristics that can be considered a competence: motives, traits, self-concept, knowledge, and skills.

- Motives are intended as the internal reasons that push a person to act. They are mental schemes, needs or inner feelings that drive, guide and select behaviors toward precise objectives or goals.
- *Traits* indicate the physical characteristics owned by an individual and his capacity to react to determinated situations or information.
- *Self-Concept* is the values, attitudes, and self-image of a person; they can predict the reactions or the responses of a person in a determined situation, they may be considered as the inner reason of a reaction.
- *Knowledge* is the information a person has in specific disciplines, content area or arguments.
- *Skills* are the ability to execute a specific physical or mental task.

While dealing with competency models in an organization, it is necessary to keep in mind that not all the competencies are identical and that exist a different kind of personal characteristics: each different type has its implications, needs, consequences, and effects in a business context.

It is possible to explain these implication thanks to the "Iceberg model" designed by L. Spencer and S. Spencer (1993) and represented in Figure 2.2. This model compares the competencies of a person with an iceberg in which the bigger part is the "base", and since it is covered by the water it is not possible to see it; while the top of the iceberg, that is the smallest part, is above the surface of the sea and it is visible.

In the same way, in a person, motives, traits, and self-concept (the base) are more difficult to see and to analyze since they are "deep" inside the personality of the individual, they are ingrained in a person and that makes more difficult to develop and to change them; while knowledge and skills (the top), since they are the emerged part of a personality, are easier to identify and develop.

Considering now some practical aspects of the Human Resources Management, in a selection process motives, traits and self-concept are more difficult to evaluate in terms of time,

resources and even effectiveness; therefore, most of the time, recruiters select new employees based primarily on their knowledge and skills. The mistake that is often made is not to consider the fact that motives, traits, and self-concept are much more difficult to develop and implement since it is complicated to change a person in his "depth", it may be very expensive and the effectiveness is doubtful; therefore, even if the organization may need this change, the results are absolutely not guaranteed. For skill and knowledge is different: it is possible, for example with a training course, to improve them with limited expenses and with a higher possibility of obtaining the desired results.

That's why, during a selection process, recruiters should try to evaluate carefully the "submerged" personal characteristics; it is more difficult, but they may forecast better future work performances, especially in more complex jobs, and bring to a greater profitability for the company in the long run.

It is possible to express this concept with a famous quote from an Italian volleyball trainer named Gian Paolo Montali: when once he wanted to convince the owner of his team to buy an expensive player, he said "It is possible to teach to a turkey to climb a tree, but for that task, it may be better to hire a squirrel".

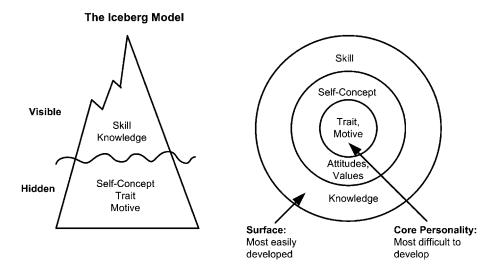


Figure 2.2: The Iceberg Model (Spencer, Spencer, 2017, p.33)

It is possible to transfer the concepts of the Iceberg Model also as regards self-evaluation. If it is difficult to analyze and evaluate competencies of other people, it can sometimes may be even harder to self-examine and investigate one's own competencies: individual characteristics are often unconscious aspects of the person and a high level of auto-analysis capacities are necessary to stop, "look inside" and understand which are our motives, traits,

and self-concept) and comprehend why we behave in a certain way (knowledge and skills are a bit easier also to auto-identify).

This difficulty may lead to an auto-image or auto-consideration different from which we are in reality, and it could be the cause of dissatisfaction, presumption, auto-devaluation or to other emotions that could bring in difficulties in relating with the others, in the "normal life" and in the workplace.

This can explain one of the tasks that HR managers have to accomplish: even if a positive result is not guaranteed, it is essential to try to analyze the "deep aspects" of a person and help them to find the perfect collocation in the work context, trying to create the perfect environment that can lead to achieving superior work performances. The implementation of a competency model can help in this difficult task, bringing remarkable advantages.

2.7 – How to build a competency model

Building a competency model is not an easy task since it presents several critical aspects, many problems can arise and if managed poorly it can turn out to be just a waste of time and resources rather than helping to create a competitive advantage.

The first critical aspect to face is the fact that there is not a correct univocal way to build a model: from the decision to build it to its regular use in the following years it is completely a firm-specific process, included all the intermediate steps as the design, the analysis of the current situation, the strategic planning, the creation of the portfolio, the valuation of the competencies, the implementation, the use and so on.

In an organization, the purpose of a competency model is to possess all the human resources needed in terms of numbers, capabilities, relations, planning, and motivation to accomplish the company's strategy and gain competitive advantage. If it isn't "sewn on the skin" of the specific organization, how can it help in achieving the strategic objectives?

Therefore, the starting point of every competency model must be to clearly have in mind what the company requires and expects from the model, which is the current situation of the organization and, more importantly, it must be clear an idea of the roadmap that the company wants to undertake in the near and far future, with specified the strategic objectives.

Although we must always remember that every firm is different and unique, and therefore the model must be self-developed for the specific situation (with the help of consultants if needed), to build a competency model it is possible to draw inspiration from the methodology

that others have developed or used, as it may help to highlight and solve some critical aspects, also giving some insights on how to tackle some key points.

The fact that it doesn't exist a unique way to build a competency model makes more difficult also describing how to do it: the cases and the solutions could be numerous and different between them, but the "principle roadmap" is quite similar for everyone.

2.7.1 - Creation of the Portfolio

To start with a project of a competency model, the first step is to "build" the portfolio in which to insert the competencies deemed necessary to allow employees to achieve superior work performance. It is a fundamental passage since the selected competencies will become the core of the whole project.

There are some different ways to create the portfolio; the classic method, born in the '70s with McClelland and his partners, suggests an approach that is still one of the "most revolutionary" aspects of their work: they advise to create two different groups of analysis, one composed by the employees considered outstanding in terms of work performances, and the other made by average and low performers (the sampling should be made by those who have the best information to evaluate the performances of the workers, i.e. superiors, HR managers, upper managers; if possible would be better to use a quantitative way).

The idea behind this first step is to try to understand if there exist some personal elements or characteristics that distinguish the outperformers from the other workers, trying to understand which the causes of the difference in performance results may be.

The second step suggested is, indeed, to analyze separately the competencies of the members of the two groups and determine which are the differences between them. According to McBer consultants and their experience, even though there are various techniques to accomplish it, the one that guarantees the best relationship between accuracy of results and costs is the Behavioural Event Interview, called also BEI (we will analyze deeper this technique later in the chapter while speaking about all the tools to evaluate competencies, here it will be only introduced).

This technique involves asking respondents to describe in detail what they did in some critical situations happened at work not too long ago. Practically, their suggestion is to ask all the employees separately to tell some great work successes and other major work failures, specifying how it went, how that situation was achieved, how did he react, what happened next, and similar questions. Examining past situations occurred not too long ago, these questions allow analyzing the characteristics of the people interviewed, highlighting which

are possessed by the outperformers workers that are not possessed by the average ones, and supposing therefore that these competencies are the cause of the difference in performance.

In this way, it is possible to create a list of competencies that, in the context of that specific firm, differentiate the outperformers from the rest of the employees. These competencies are significant because they already "make the difference", selecting them it is possible to build a portfolio for the implementation of a competency model that aims to a higher level of performances for the workers.

Even though the analysis of the two different samples, thanks to BEI, guarantees a portfolio well built, it could be a quite expensive process and, moreover, it requires great experience with this complicated and time-requiring interview technique.

The "classic method" developed by McClelland is the one more suggested in the literature, but there are other ways in which to build a portfolio that can be considered reliable and which can meet the right balance between effectiveness and feasibility of the process.

One solution less costly and less time demanding is to organize a focus group in which to invite people with different roles, inside or outside the company, and to ask them about the competency that can lead to superior work performance. For example, it can be composed by internal managers, external managers but operating in the same sector, HR managers, external consultants, University professors, operators of the company, head of production and so on. Since in this case, the results come from the opinions of some people and not from behavioral evidence, they can be a little less reliable of those obtained with the BEI, but if this phase is well managed they can for sure considered trustworthy.

Another possibility is to is ask to all the subjects suggested for the focus group to answer a questionnaire. In this way, the obtained results can be considered in a more quantitative way and deeper analysis can be done. Moreover, it is possible to weight the results according to the role of the respondent, and for example to consider more important the opinions of the head of production respect to those of the operators.

Just to repeat a thought previously expressed, in deciding how to build the portfolio of competencies, every organization must balance the available resources available for this project, the characteristics of the company and the expected results of every method.

Dealing with the construction of a portfolio of competencies, whatever the selected technique is, there are some key points that must be remembered:

- Look to the future: while creating the portfolio, the first question that an organization should ask itself is if there are some changes expected in the future that could require

some specific competencies: it could be the case of an internal transformation, a process of digitalization, internationalization, a human resources reorganization or any kind of specific need.

This is essential since all firms should always be focused on future strategic objectives, and competencies are central to the success of fixed targets. If a competency is considered fundamental for the future, it must be present in the portfolio.

- Pay attention to the maintenance phase: While building a competency model, it must always be kept in mind that it is a long-term project and it does not finish with the first evaluation of the competencies. The results of a competency model project can be seen only in the long period, and the maintenance phase is as essential as the initial building phase; it is a lifelong learning process and we need a useful tool for the future (the maintenance phase will be analyzed deeply later).

To maintain a well done human resources management based on competencies, is therefore fundamental to find the perfect number of competencies to include in the portfolio during the building phase: we need to balance the number of competencies taken into consideration, trying to have all the information needed but also taking care of the feasibility and functionality of the project.

If in the portfolio aren't present enough competencies, the risk is that it becomes a useless tool since it doesn't analyze deeply enough the situation. If instead, the number of competencies is too large it becomes too much demanding in terms of resources, time and efforts; the risk is that it is used at the beginning and then it is left cause of the difficulties of its use.

That's why to choose the right number of competencies for the portfolio is essential; in the literature is suggested that the correct number should be around the dozen, but it may variate according to the company's necessities.

Decide in advance the scale of evaluation: as Spencer and Spencer (1993) suggested, most of the competencies can be evaluated according to more than one behavioral indicators. To proceed with an effective process, it is, therefore, necessary to identify in advance these indicators and organize them according to a graduated scale of evaluation. In this way, all the phases of the project can be harmonized and in sync. For example, they tell that the competency "achievement orientation" can be evaluated according to three different indicators: "intensity and completeness of the action motivated by the result", "effect of the results" and "level of innovation". If a company decides to include this competency in its portfolio, it must decide in advance

(before starting with the evaluation of the competencies of the workers) which indicators it wants to take in consideration and hence build the graduated scales.

2.7.2 - Competency evaluation

One of the most relevant steps of all the project is, of course, the evaluation of the competencies possessed by the workers, to obtain the best possible indication of people's current or potential competence level to perform the job at the targeted standard. (Sanghi 2016)

There are several tools that can be used to assess competencies; not all of them guarantee the same effectiveness and precision, and not all of them require the same time and expenses. Every organization should find the perfect balance that suits them, their objectives and their situation to get the best possible result remembering to consider their available resources.

Obviously, the competencies that will be analyzed are those selected in the portfolio.

To validate the model and avoid biases due to some specific elements of the selected tool, the analysis conditions and the time is taken, it is suggested to use more than one tool when assessing the worker's competencies.

Every organization must decide how many and which instruments to use and how to apply them in order to make them suitable for their situation.

A group of trained and experienced experts should be set up who clearly have in mind the objectives of the organization and the whole organizational context.

Here follow some of the most used tools; to analyze enough of them the description is quite synthetic.

- Evaluation from others: one of the possible tools is to select one or more members of the organization and ask them to give a personal judgment about the competencies of the selected workers. It can be an evaluation made by a superior, a peer, an HR manager, or by someone that has the possibility to see daily how the employee fulfills his duty. Not all the judgment has the same value: an assessment made by a superior is more valuable than one made by a peer, for this reason in must though in advance how to weight all the evaluation collected and which consideration to give them.

It must be kept in mind that when a person (whoever he is) evaluates someone, different elements may influence the assessment: the positive or negative relation that exists between them will probably affect the result since it is difficult to remain perfectly objective and neutral; it doesn't mean that for sure someone that has a positive relationship with the

evaluated will give grades too high (or contrary), it may happen that he is conscious of this risk and tends to give a too low evaluation in the attempt to not be influenced. That's why an evaluation made by someone internal to the organization has always to be accompanied by some other assessments.

- *Self-assessment:* asking employees to evaluate themselves can be a good opportunity to allow them to think about themselves, in this case in terms of competency. It may help in accepting the whole evaluation process, in implementing their commitment toward this competency model project and toward the company in general: if they understand that they have some aspects in which they can improve themselves, they may feel motivated in learning and it could bring them to be thankful toward the organization.

Attention must also be paid in the feedback phase since the relationship between the idea of self and the real assessment provided by the assessor can lead to some emotional effects.

Obviously, the results of the self-assessment must be weighted in the final evaluation of the competencies as also, in this case, can be easily present biases and, to do a reliable job, it should be given to self-assessment the appropriate consideration.

Assessment center: The "Guidelines and Ethical Considerations for Assessment Center Operations", endorsed by the "38th International Congress on Assessment Methods" held in Virginia in October 2014, states as "An assessment center consists of a standardized evaluation of behavior based on multiple inputs. Any single assessment center consists of multiple components, which include behavioural simulation exercises, within which multiple trained assessors observe and record behaviors, classify them according to the behavioral constructs of interest, and (either individually or collectively) rate (either individual or pooled) behaviors" (International Taskforce on Assessment Center Guidelines, 2015, p. 1248).

To sum, a panel of assessors is nominated, and it has the task to design and administer several tests (and then harmonize the results) to evaluate the selected employees' competencies.

It is a highly demanding process in terms of time and resources, it can last for a long period and requires the collaboration of experts, organization and employees for several moments. However, it is probably the tool that guarantees the best and more reliable evaluation of competencies, combining several and different tools applied at different times, validating and verifying all the process and the results.

Below are only listed some types of tools that may be used in an assessment centre, the list is not exhaustive but is a good sample of the variety and types of possible tools: Written exercises, Case studies, In-tray, Technical skills/Knowledge assessment, Presentations, Analytical exercises and interactive exercises, One-to-one exercises, Fact-finding exercises, Role plays, Work sample, Vignettes, Group exercises, Simulation, Assigned group roles, Practical team exercises.

- BEI: this technique has already been presented but it is worth to deepen it further.

"The purpose is to use sets of structured questions to gain insights into the levels of skills of the person being interviewed" (Sanghi, 2016, p.194). The basic reasoning of the Behavioural Event Interview is that the past behaviors can be reliable predictors of future ones. This is why respondents are asked to answer questions about some past events or specific situations that occurred at work; these facts must have happened in the last period because in the short term it is probable that personal behaviors will not change, while in the long term they may have some small variations.

The questions are asked in person during an interview and not with written tests, in this way it is difficult for the interviewee to invent or change the answer in order to "receive better grades", since the answers must be quick and spontaneous, and in this way, the evaluation shouldn't be biased.

The typical structure of BEI provides to ask about some situations happened at work not too much time before; those situations must be remarkable for the respondent in a positive or negative way, or alternatively is possible to ask questions about some specific aspects relevant for the company's objectives (team-work, performance improvement, leadership...).

The interviewer has then to try to go deeper in the situation asking some details about the feelings, the thoughts, the actions taken, the teachings, the reactions, the expectations, the results that the respondent felt or lived in that exact situation; in this way the assessors are able to evaluate the competencies demonstrated in the past in really happened situation, and not in hypothetical once.

An example of a BEI path could be to start with a very wide question like "Give me an example of a situation in which...?", deepening then with" And how did you react...?", "What was the outcome...?", "What did you think...?" and it may be concluded with "What did you learn...?".

The answers of the employees are assessed with previously prepared scaled evaluators that permit to give a "grade" to the previously selected competencies.

The assessors should always be two or more since it is not easy to analyze the exact words of someone while he is speaking, being more than one it is possible to reduce the errors and have a better assessment.

BEI is difficult to execute and can be done only by specialized professionals, but the relationship between costs and reliability of the results is remarkable.

Personality Questionnaires: are attempts to measure some characteristics of the
personality of the interviewee and to report them into some pre-build personality
templates; the number and the kind of characteristics analyzed can vary from test to
test.

These tests are for the great majority self-report questionnaires composed by introspective questions to which the respondent has to answer; the questions are referred to the preferences, habits, opinions, feelings, and desires of the respondent. The answers are then converted in values pre-arranged according to scaled standards and then grouped to build the personality profile of the individual.

The scientific validity of these tests is still debated but are considered good indicators that can widen the information collected with the other evaluation tools. It is extremely not suggested to use their results alone in the evaluation of competencies.

2.7.3 - Feedback phase

After having evaluated all the competencies selected in the portfolio build previously, and after having analyzed all the results emerged, it is time to face the "feedback phase".

In a competency model, employees are recognized as an essential resource to help the company achieve the long-term goals; the workers themselves, however, can "gain something" from a well-built and applied competency model: it may help them to grow up professionally and as a person.

This underlines more and more (if necessary) how the whole model is built to "extract" as much as possible from the relationship between workers and organizations, leading to an advantage for both the players.

In this sense, it is expected that the employees receive singularly personal feedback from the analysts. If it is done and communicated with the explicit intent to bring some benefit to the workers (and if all the project has been presented adequately at the beginning), it permits every employee to know better themselves, their strengths and their weaknesses, where they should work a bit on themselves and where instead they have to be more confident, this can

permit them to grow up. It is important to let them understand that they will benefit from this growth also outside the work environment and that the acquired or improved competencies will help them in their whole life. Eventually, also in case of a change in job or company.

If well introduced and presented, the "competency model" could help the organisations in the difficult task to improve employees' commitment toward the company, strengthening the bond between firm and workers: it is possible to pass the idea that also the workers will benefit from it, that could make them grateful to be part of that organization and they could accept and live better all the project.

This may lead to some "lateral effects": if a worker is happy and thankful for his company, he may work with more satisfaction and in a more productive way; he may speak well to his friends about the firm helping to build the brand image and acting as a "marketer"; he can create a better atmosphere with his colleagues and he may accept more easily some other aspect in which the company should improve itself, that otherwise would be a source of complaint from the employees.

2.7.4 - Maintenance phase

As stated before, the creation of a competency method is worth only if it is protracted and used for a long period of time; it has any sense to create a portfolio and evaluate all the competencies without gathering the results that its use can bring in the long period.

Moreover, longer the model is used, more benefits it is supposed to create: with the passage of time the historical data becomes more and more detailed and can help in making new decisions in all HR functions; the competency's evaluation process can be consolidated; it is possible to verify if the competencies present in the portfolio are those really needed and, if not, it is possible to change them; last but not least, the member of the organization start to get used to the idea of "evaluate competencies".

That's why the maintenance phase is as important as the other phases.

To maintain at best the model, it should be decided how often (six months, one year, one year and a half...) the evaluation of the competencies should be re-made. In a company there are always a lot of urgent tasks to accomplish, therefore it is a good practice to decide in advantage when it must be done the update of competencies' evaluation, otherwise there will be always other tasks that will have the priority on it, since the benefits of the competency model are not visible immediately;

Indeed, in an organization, it is a good idea to establish a commission that has the task to monitor and review periodically the course and progress of the model, analyze if some improvement should be made, listen to possible suggestions or complains and adapt it to new strategic objective decided by top management. Having some specific person in charge of that may help in giving continuity to this project.

The progress of the project should also be shared periodically with the top managers and with all the middle managers: it should help in highlighting eventual improvements that must be done, it makes possible to share the objective and the positive effects achieved thanks to competency model, and it should maintain the commitment toward this project from all the organization.

2.8 - From Competencies to Effective performance

During this chapter it has been discussed what a competency is, how to build a competency model, the history of this topic in HR management and other aspects regarding competencies and their "sphere"; it is necessary now a last thought on what are the internal organizational conditions that may influence the result of a "competency model", the last question is therefore if are competencies sufficient alone to achieve better performances or if it is needed something more; because, at the end, the final purpose of building a competency model is to allow workers to achieve superior performances.

The first to answer this question is Richard Boyatzis and he did it through a model (Figure 2.3) that aims to explain which conditions are necessary to make individual competencies an effective action or behavior, leading the worker to higher performance's level.

According to him, an effective job performance "is the attainment of specific results (i.e. outcomes) required by the job through specific actions while maintaining or being consistent with policies, procedures, and conditions of the organizational environment" (Boyatzis, 1982, p.12).

In the author's opinion, an individual's competencies are necessary but not sufficient for effective performance in a job. He states that there are three conditions necessary to achieve an effective action or behavior, and only if all the three critical components of the model are consistent an effective performance can be reached. If anyone of these three components of the model is inconsistent or do not correspond with the others, then it is expected that ineffective behaviors or actions will result (Boyatzis, 1982).

The three components that Boyatzis identified are:

- *The individual's competencies:* just to repeat the definition given before, he considers competencies as underlying characteristics of an individual, which are, causally related to effective job performance.

They are personal characteristics of the single employees; the focus of this condition is therefore on the single individual and his characteristics.

- Job demands: as seen in the previous chapter, a job is usually described in terms of a title and a list of responsibilities that the worker is expected to perform, the tasks that he or she is expected to make, and performances that he is expected to achieve. The center of this fundamental element is the tasks, the actions, the duties and the responsibilities that the individual must accomplish, and it may be seen as his role in the organization. It is a clear example of the importance of an effective job analysis.
- Organizational environment: every organization born and exists in a specific environment; with the term environment, it is intended as a number of different factors that describe how the organizational structure, policies, procedures, and relations have an impact on the culture and climate of the organization. All these factors may be tacit or explicit, desired or casual, positive or negative, but all contribute to creating the appropriate environment to accomplish the organization's objectives. In this condition, therefore, the attention of Boyatzis is centered at the organizational level.

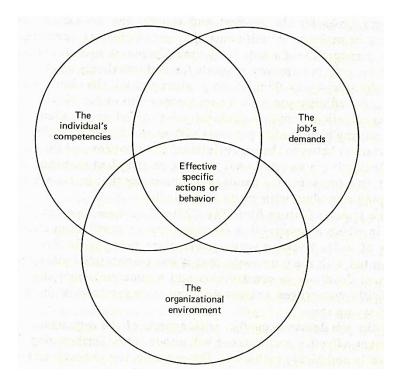


Figure 2.3. A model of effective job performance. (Boyatzis, 1982, p.13)

We can notice as the three conditions that Boyatzis considers essential to achieve an effective behavior, and therefore a higher performance, have three different dimensions and focuses: competencies are individual characteristics necessary to accomplish their tasks, job's demand are individual actions and duties required from the organization and the environment is how the whole organization in arranged.

If an individual hasn't the necessary competencies, for sure will not be able to complete his duties and all the organization would be affected; if the job tasks are not well designed and attributed to the right person, the competencies are useless and also a good organization may be not enough; if the environment isn't supportive and doesn't create the necessary conditions, the individual competencies and how they do their work wouldn't be sufficient for a good performance.

We can notice how everything is "concatenated", how every element is fundamental to the final purpose, and how only in their "intersection" can stand the desired job performance.

That's why a competency model has the necessity to be firm-specific, in sync with the company's strategy and objectives, constantly updated and must "run parallel" to all HR functions.

An effective performance is achievable, it requires a lot of efforts and the success is not guaranteed but, thanks to the competency model, organizations can have all the human resources to create its own competitive advantage.

2.9 - Chapter summary

During this chapter, it has been discussed how an effective implementation of a competency model can help an organization build its competitive advantage. The aim of a competency model is to ensure that all the competencies, in terms of number and quality, necessary to achieve the strategy of the company are present in the organization, and it does so by making competencies the "core" on which all the HR function are based.

The competency movement born in the 70's due to the interest to discover some elements of the personality of the workers that could explain and predict work performances and distinguish the outperformers from the average employees. The most important authors of the period were D. McClelland, R. Boyatzis, L. Spencer and S. Spencer.

Competencies have been defined as underlying characteristics of an individual, which are causally related to effective job performance; therefore, a competency can be considered as a

personal characteristic that is the cause of one or more specific actions that results in high work performances.

It is possible to distinguish between five different kinds of personal characteristics that are motives, traits, self-concept, and skills. As taught by the Iceberg Model, it is relevant to highlight this distinction since motives, traits and self-concept are more "deep" in the personality and are more difficult to change, while knowledge and skills are the aspects of a person that are easier to be improved, changed or influenced. These differences have to be kept in mind since can have great influence in the management of the various HR functions.

It is not easy to implement a competency model: the starting point must be to have clear in mind the strategic objectives of the company, the future expected development, the purposes of the model and the actual situation of the organization. For this reason, it doesn't exist a competency model equal to another, it is really a firm-specific project.

Normally the phases that should be followed are the creation of the portfolio, evaluation of the competencies, feedback, and maintenance.

The objective of the phase "creation of the portfolio" is selecting which competencies distinguish an outperformer worker from the others in the exact context of that company. To do that, the classical method by McClelland suggests the use of Behavioural Event Interviews but it is possible to use other tools as questionnaires, focus groups or more generic interviews. Once that have been chosen which competencies to include in the portfolio, it is possible to assess them. Therefore, in this phase, every worker is subject to the evaluation of his competencies and usually, it is done through assessment centers, evaluation from others (superior, hr managers…) or self-evaluation.

The aim of the feedback phase is to make the employees conscious of their situation, in order to try to motivate them to improve themselves and to better the commitment of the workers toward the company.

Since a competency model produces its effects only in the long period, it is fundamental to maintain it with periodical analysis, revisions, and updates, otherwise it becomes useless and just a waste of resources. This is why the maintenance phase is as important as the previous ones.

The last thought of the chapter is that, in order to achieve an effective job performance, it is necessary that the individual's competencies, the job's demands, and the organizational environment are consistent between them, if only one of these elements is discordant with the others, it is impossible to lead workers to a superior performance.

CHAPTER 3: HOW TO IMPLEMENT TALENT MANAGEMENT

3.1 - From information and competencies to organization's growth

In the previous chapters, it has been discussed how information about a job (chapter 1) and competencies (chapter 2) can be excellent starting points to implement effectively most of the HR functions, and how they can lead companies to a long-term competitive advantage. Job analysis and competency model have been presented as the tools that can be used to foster the processes of managing information and competencies within an organization.

The last topic that this thesis wants to analyze is a process directly connected with both job analysis and competency model, and it can be thought as a natural consequence of them: talent management. It has been decided to focus on talent management because it is a development process that exploits the collected information about jobs and competencies in order to plan a long-term sustainable growth of the company.

To better explain this concept: data about jobs and competencies allow an evaluation of the employees in their specific job position; then, it is possible to plan suited training processes to fill the highlighted gaps and needs but with the advantage to having clear objectives in mind, with the possibility to lead to a consistent growth the employees and consequently of the whole organization.

Therefore, the process of talent management begins from information, and through consistent evaluation and training, leads to employees' growth with the final purpose of fostering company growth and competitive advantage.

One of the reasons why this thesis deals with talent management is because it is worth much more than the attention it is currently receiving since, even though it can bring enormous advantages, it still not considered enough by most of the companies. Or better: maybe the majority of the companies would like, or try, to apply processes of talent management, but it is difficult to create a whole project of talent management consistent and properly harmonized among all its elements and with the strategy of the company; moreover, it is a high demanding procedure that demonstrates its value and results only in the long-run.

But why is talent management a so sensible topic nowadays? Talent management exactly suits today's dynamic competitive environment (Mellahi, Collings, 2009): in an economic context in which only flexibility and continuous development processes allow companies to deal with

the uncertainties and the constantly changing market conditions, it is incredibly important and strategic to identify the contribution of the individual to organisational value, the intellectual capital possessed by the employees and their individual ability to learn, administer and apply this patrimony to their operative activities.

This chapter will define properly what talent management is, will recap what was presented in the second chapter about employees' evaluation and then will present how to plan employees' growth through talent management models.

3.2 - Definition of talent management

Despite over a decade of debate, the concept of talent management remains not perfectly clear among scholars and still are present some differences in how it is conceived (Lewis, Heckman, 2006). One reason is that the real boundaries that define what talent management is are not perfectly clear yet. Another cause seems to be the fact that not all the organizations consider the term "talent" in the same way: some consider as "talent" only employees who are already top performers, other views under this term also those with high potential, while in some companies everyone can be considered "talent".

Generally speaking, talent management can be defined as company's abilities to recruit, retain, and develop the most talented employees (Wellins, Smith, Erker, 2009), but the contents of this description seem in reality limiting and not exhaustive.

This definition of talent management is a source of debates also because it is not clear the relationship existing between strategic human resources management and talent management: is talent management only a specific function of HRM? Are them the same concept under different names? Is talent management an alternative to the practices of HRM? These doubts can create confusion among managers and therefore it seems necessary to analyze a bit more deeply what talent management is.

To review briefly, strategic HRM is considered a method of managing the human resource that involves developing and implementing a set of internally consistent policies, practices, and activities that ensure an organization's human capital (employees collective competencies) contributes to the achievement of its strategic objectives (Huselid, Jackson, Schuler, 1997).

To analyze the relationship between HRM and TM, Lewis and Heckman (2006) highlighted three main schools of thought around the concept of talent management.

Scholars and managers that belong to the first current of thought are those who simply substitute the label talent management for human resource management. They often limit their focus to some specific HR activities such as recruitment, training, succession planning, leadership development and similar. It can be considered simply a rebranding of HRM.

A second group is formed by those that consider talent management as the planning of the future of talents, focusing on forecasting and projecting the need of employees, and managing the progression of employees through positions. The main focus of this stream is usually succession planning. Even though they adopt a relatively narrow focus, this concept underlines a little differentiation between talent management and HRM.

The third and last school of thought focuses its attention on the management of talented employees only. This stream argues that all the roles of an organization should be filled with "outperformers" and emphasizes the necessity of keeping poor performers outside the organization.

This last definition is similar to the one given at the beginning of the chapter and still is too wide; even though it could help in outlining what talent management is, it doesn't specify what talent management does and the differences with HRM.

This excursus about the concept of talent management has been highlighted because Mellahi and Collings (2009) developed their definition of talent management from the ideas of this last school of thought: they defined talent management as all the activities and processes that involve the identification of key positions which are essential in the creation of organization's sustainable competitive advantage, the development of a talent pool of potential and actual high performing employees to fill these roles, and the development of a human resource architecture that ensures the filling of these positions with competent incumbents and to guarantee their long-term commitment to the organization (Mellahi, Collings, 2009).

This definition is based on the concept that, for any talent management program, the beginning should be the identification of the key positions which are critical to an organization's sustainable competitive advantage. The starting point is, therefore, the identification of key positions and not of talented individuals per sae (Mellahi, Collings, 2009).

With this new "point of view" is possible also to distinguish conventional HRM from talent management: HRM regards all employees of the organizations (i.e. including poor performers and top performing employees), while talent management is referred only to the workers that occupy some strategical work positions.

3.3 - Reasons for investing in talent management

The purpose of investing in a strategic talent management process is to have a positive impact on critical individual and organizational level results (Bethke-Langenegger, Mahler, Staffelbach, 2011).

To be more specific, the benefits of talent management are many and various, sometimes it can be even difficult to estimate the real positive effects TM has on the organizations since it causes positive spillovers that contribute to the results of the whole company. After having defined what talent management is, here will be listed some of the reasons why organizations should invest in it.

- Attract top talent: Showing that an organization invests in talent management contributes to the building of employer brand, which organically helps in attracting more talents, leading to higher business performances and results.
- *Employee motivation:* Employees, above all those talented, often look for something more than just money. Motivation comes also from other factors and feeling that the company is investing in your talent helps in creating attraction and retention toward the organization.
- Continuous coverage of critical roles: As explained before, talent management processes start with the detection of those job positions that are critical to the maintaining of the competitive advantage. In this way, the critical roles should be always covered.
- Retain top talent: Talent management improves engagement and reduces turnover.
 Talents appreciate the efforts of the organizations and are motivated to remain inside the company. This means remarkable saves on performance management costs and on recruitment in the long period.
- *Increase employee performance:* Thanks to talent management it is easier to identify "talent" during the recruitment phase. This can lead to more efficiency at the beginning of the careers of the employees and means a consistent saving of resources.
- *Improve business performance*: If the employees of a company have all the competencies to succeed, and are motivated and engaged, it is more likely to achieve high business performances.

3.4 - Employees evaluation

In the second chapter have been analyzed some evaluation tools. In that case the focus was on transversal competencies, but the application of these tools doesn't change so much while treating with technical competencies, technical knowledges or other personal characteristics that the HR managers can decide to evaluate within a process of talent management and, as we have seen before, in a talent management project are evaluated those competencies deemed necessary to well perform in the job positions considered essential in contributing to the company's competitive advantage.

Therefore, in this chapter will not be presented the same tools since the differences would be very feeble. The focus here will be on how to structure the process of evaluation.

Just to recap, these were the tools presented to evaluate personal competencies: Evaluation from others, Self-assessment, Assessment center with all its possibilities (Written exercises, Case studies, In-tray, Technical skills/Knowledge assessment, Presentations, Analytical exercises and interactive exercises, One-to-one exercises, Fact-finding exercises, Role plays, Work sample, Vignettes, Group exercises, Simulation, Assigned group roles, Practical team exercises), BEI and Personality Questionnaires.

In order to structure evaluation processes, some essential elements must be remembered. First of all, any competence is specifically contextualized, and it cannot be separated from its organizational conditions. Second, competencies must be the cause of a concrete action or behavior. Third, these behaviors must guarantee outstanding and concrete results.

Therefore, since the results must be tangible, competencies, in order to exist, require the judgment of others (Le Boterf, 1998).

But how to evaluate effectively employees?

Since it is essential that the personal characteristics evaluated are coherent with the strategy and the culture of the organization, companies should put in writing clearly what that specific competency means for them; in other words, every organization must state the definition and meaning that these competencies have in their exact context.

Later, to translate the behaviors of the employees into a rating, it is necessary to prepare in advance a well-defined grid of behavioral indicators with a measurement scale. Only in this way, it is possible to demonstrate that competencies have an actual influence on organizational life; moreover, these scales permit to be as much objective as possible and to have something concrete to evaluate. If these scales are maintained over time, allow also to make evaluation consistent in the years, since the behaviors evaluated can be always the same.

Who evaluates competencies?

Also in this case, the possible answers can be many and various. The most common evaluators are the supervisors, in the majority of the cases they have a privileged perspective since they are witness every day of the performances of the evaluated. Self-evaluation can be an effective solution since in this way the employees can understand where the company would like to see some improvements, starting a mental process of commitment toward that improvement. If the relationships among colleagues are good, it could be possible to implement peers-evaluation, but with the awareness that it could cause tensions between the employees. If the job position of the employees involves a lot of contacts with the customers, it could be possible to use their opinion to evaluate workers, but keeping in mind that it is an external evaluation and giving to it the proper weight.

At the end of the evaluation process, will be possible to analyze all the information gathered, in order to have a clear vision of the actual situation and to plan future actions.

To sum, these should be the phases of an evaluation process embedded in a talent management program:

- 1- Select the position considered critical to competitive advantage
- 2- Define which competencies to evaluate and weight their importance
- 3- State the company's definition about these competencies
- 4- Understand the influences that the environment could have on these competencies
- 5- Select the evaluators
- 6- Select evaluation methods
- 7- Evaluate competencies
- 8- Gather and analyze data
- 9- Give feedback to the evaluated employees
- 10- Take decision for future actions

3.5 - Employees training

Once that the evaluation of the employees has given some results, and the analysis of the data has been processed, it is possible to structure training courses with the aim of filling the highlighted gaps.

The positive or negative result of a training course depends on various variables that are organization-specific (a constant while speaking about Hr and organization). What is really

important is that the whole training is planned in detail before its start, in order to translate the information given by the analysis in a clear project.

First of all, to extrapolate the maximum efficiency possible from the project, the employee attending the training must be put in the best conditions possible to learn (it is not as obvious as it seems): he must be aware of the objectives of the training and he must understand that this could have benefits for its career, only in this way it is possible for him to find the motivations that guarantee the aimed learning. Furthermore, he must feel the full support from the colleagues and the superiors. After the training, the organization must put him in the conditions to put into practice what he learned from the course, in this way the employee can be motivated to apply for future possible other training.

The trainers can be internal or external the organization, this choice should be done considering if the knowledge, competencies, practices or strategies that are going to be taught are specific of the organization, or if also someone from the outside can teach them. Another consideration that should be done is if someone inside the company has the competencies and the time to "be the teacher", and if the relationship with the employee can have some influence or not on the success of the training.

According to the topic of the training course, there are different techniques among which to choose. These techniques can be grouped into three macro-categories: learning by absorbing, learning by doing, learning by interacting with others.

Learning by absorbing includes all the tools that permit to learn theoretical notions. Learning by doing aims to teach something by letting the students do it. Learning by interacting with others focuses on the techniques that involve the interaction of the student with other people: peers, experts, mentors, and coaches.

At the end of the course, it is really important to evaluate its efficiency: a good evaluation allows to understand if the expected results have been achieved, in order to have valuable information when there will be the necessity to plan a new one.

There are some instruments that allow understanding if the training has been successful or not: one example is the Kirkpatrick model (Kirkpatrick, 1959), that identifies for different fields in which to evaluate a training:

1- Reaction: the author is interested in discovering the employee's reaction to the training. Are they satisfied? Did it respect their expectations? The tool suggested to investigate these questions are questionnaires addressed to those that took part in the training.

- 2- Learning: to evaluate a training is essential to understand if it caused some improvement in the knowledge, abilities or skills of the students; it is possible to verify it thanks to special tests.
- 3- Behaviors: since the purpose of a training is an improvement in the behaviors, this expected change should be tested with some tests or observation activities.
 - 4- Results: it is advised to use some performance indicators to have analytical evidence of the positive business results achieved thanks to the training. Maybe used some indicators that measure individual productivity, customer satisfaction or changes in the volumes of product.

3.6 - Employees growth

As stated many times, the purpose of talent management is to ensure the presence of the required talents in the positions considered critical in an organization.

To do that, it is necessary that the employees of a company grow adequately and in a consistent way with the strategy of the company, to lead to growth also the whole organization. It must be created a synergy between company and employee.

It is not an easy task, the only way in which an organization can do that is by paying attention to actual and future needs of the employees, to improve their motivation, engagement, sense of belonging, gratitude, and retention.

Some of the instrument that can be useful are succession planning, internal mobility, coaching and mentoring. The difficulty of these models can be in understanding how to use and apply them; to this purpose, the next paragraph will analyze how to build a complete and consistent talent management model.

3.7 - Talent Management Models

Considering that talent management deals with the key strategical positions inside an organization, its management can be different according to some specificities of the company in which it is implemented and the roles of the involved employees.

Although there are many different talent management models, it is possible to identify five main phases that may help in analyzing them. These five phases are planning, attracting, developing, retaining and transitioning.

As it is possible to notice in Figure 3.1, these phases don't have a clear and rigid order, they can be represented in a circle since each is the consequence of the others and they have reason to exist only if in a consistent relationship with the others. Only if harmonized, these five phases can conduct to a sustainable long-term competitive advantage.

- Planning: even though the phases of the model shouldn't be thought with an order, the first phase analyzed is the planning phase. The reason for this is because the planning phase is the essential starting point the first time a talent management model is implemented in an organization, but it must be underlined that it doesn't finish after the first implementation and it lasts for the whole period in which the model remains, since continuous planning activities are essential to achieve effective results. It is under this perspective that also the planning phase is embedded in the "circle of the model".

This phase is composed of three main elements:

- O Understanding the organizational/business strategy: as well-known, the strategy of the company is the essential thread of the "talent management process", since it is impossible to plan any aspect of the future without knowing the strategic objectives that the company has fixed. That is why the beginning of the planning phase is to understand properly the strategy.
- Evaluation and measurement/analytics: a workforce plan must be developed trying to put in relation to the current workforce situation and the future desired state. An assessment of the actual workforce profile is therefore necessary, with a deepening on employee's performance and behaviors.
- O Developing a workforce plan: as the last aspect of this phase, the workforce plan is drafted, and it should ensure that the right people, at the right time and with the right skills are employed and work towards the strategy. Or, more simply, the workforce plan aim is to translate business strategy into organizational talent needs.

Another aspect that is usually included in the planning phase is an analysis of the environment surrounding the organization since it can have enormous influences on the success of the whole project.

- Attracting: companies that understand that their value depends a lot on their employees, try to attract the best possible ones. Attraction depends on the impression that the candidates have, and it could guide their decision to take potential job

opportunities or remain with the organization if they are already in. To attract talents, it is essential to provide them a realistic view of the company, and at the same time to highlight the value they can get entering in it, showing that the organization has something to offer to a candidate.

The components of this phase are:

- Employee Value Proposition: to attract the best employers is necessary to show them that also the company can offer a potential value and it is usually done through an Employee Value Proposition (EVP). The EVP shows to employees a realistic statement of the value the organization can offer to them.
- o Marketing: a fundamental aspect of this phase is the marketing strategy and it is developed depending on the workforce plan previously done. This might be structured in a simple way as an online notice of positions available, or with more elaborated activities as hosting a stall at career or school fairs. The employer branding activities are essential in this phase, as EVP and the general brand of the organization.
- Talent acquisition: it is usually done through a recruitment process, which must be carried out in a consistent way with the strategy.
- *Developing:* this phase contributes to an organization's continuous improvement through a constant planning and execution of the development of the employees and their abilities. In this way is possible to meet changing requirements, organizational innovation and it can also support retention.

This third phase can be described with five main elements:

- On-boarding: this term identifies the first period after a new employee is hired, it is essential to create the best possible transition into the new company and to adequately communicate organization's mission, vision, and culture.
- O Performance Appraisals/Management: performance's appraisal is a tool to realign talent with the job requirements, culture and overall strategy of an organization. To develop a talent is essential that both employer and company are satisfied with the relationship, performance appraisals are perfect to discuss how the development is proceeding.
- Learning and Development: obviously the training is essential in the development of the talents. Since the possibilities are many, it must be sure that the choices about training are consistent with the workforce planning and therefore with organizational strategy.

- Capability frameworks: these tools are used in order to monitor the development of the talents and to put in relationship their actual performances with their potential. The aim of these tools is to understand if the employees are developing as the company hoped or planned, and therefore to take the best possible decision in organizing them.
- Career pathways: this tool identifies the possible development that the career of
 the employees can follow once they have achieved the necessary requirements.
 It can help in motivating and retaining the employees by fixing clear steps in
 the direction that they aspire.
- *Retaining:* the aim of this phase is do not let "escape" the talents that the company searched, attracted and developed in the past and in which invested relevant resources.

A well done retaining phase can save on additional recruitment costs by reducing turnover, and consequently, it can also save on the time it takes for a new employee to learn the job and start performing.

Retaining talent includes several aspects as perspectives of development (of which we already talked), organizational culture, and its remuneration strategy.

Oculture: to define what is the organizational culture in a few lines is quite impossible. Culture is made of many elements and can be broadly described as the way in which the members of an organization think, learn, speak and act; it is a continuous commitment and can be changed over time only with great efforts. Culture is essential also in attracting potential candidates and retaining current employees.

Some of the elements that can be analyzed when assessing the culture of an organization are organizational structures, power structures, control systems, stories, symbols, rituals and routines (the list is not complete, but it can give the first idea)

o Remuneration strategy: a company needs to motivate their employees in order to retain them. There are various ways to motivate them, as for example the possibility to grow professionally inside the organization in the future, the possibility to learn from the colleagues, the possibility to insert the name of a specific company in the resume and many more. One of the most important aspects that convince the employees to remain in a company is remuneration: according to the workforce plan, a company can decide which should be their remuneration strategy, with the purpose of attracting and retaining the talent they require to achieve business goals.

- *Transitioning:* this phase deals with the changes that may happen in an organization. Every change can be seen as a threat, but it can also bring some advantages and the results depend on many reasons as for example if they were expected and if the organization was ready to react. Since the focus of a company should be to extract always as much value as possible, every transition should be faced with preparation and awareness.

Here follow some changes that may happen in a company.

- Succession planning: it can be considered part of the workforce plan and it can be described as a proactive measure that plans the replacement of the employees and the fulfillment of empty positions. It considers the amount of time required to develop talent for a particular role, or to bring someone in by the extern; both in case of unexpected or planned departure.
- Internal mobility: an organization must never stop trying to improve, that's why
 it must always consider internal changes, even though it could mean to revalue
 some past decisions.
- Retirement: since the analysis of the workforce profiles should be always updated, if is noticed that an employee is close to the retirement age, appropriate measures should be taken in advance for replacing him. Having this information in advance means that a company can plan ahead for gaps in critical roles that will happen soon and in this way is also possible to support their employees in planning in advance for their future.
- Knowledge management: this term encases several activities whose aim is to manage the knowledge of the employees to increase innovation, in order to improve growth capacity and efficiency in the organization.
- Exit interviews: whatever the reason why an employee leaves, an exit from the organization can guarantee valuable information, data, and feedback.
 Therefore, every company should practice "exit interviews" trying to understand how was
- o working for that company, the pros and the cons, how were the relationships with peers and superiors, what he would improve and so on. These practices can give relevant information on how managing actual and future talents.

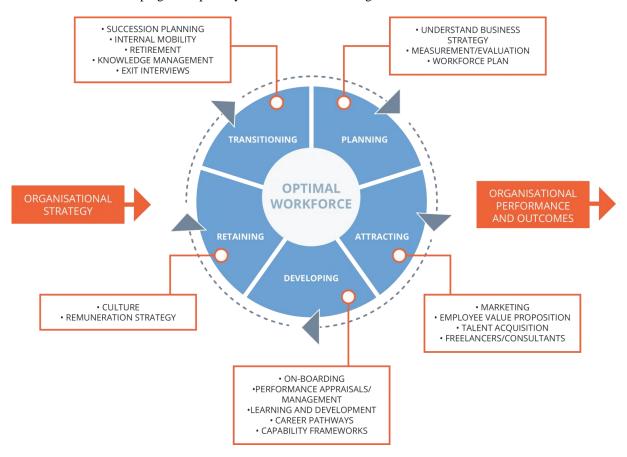


Figure 3.1: Talent management model (https://expert360.com/blog/talent-management-important/)

3.8 - Chapter summary

This chapter analyses how information about jobs and information can be a good base on which build a talent management project.

We defined talent management as all the activities that aim to the identification of key positions which are critical in the creation of an organization's sustainable competitive advantage; the development of a talent pool of potential and actual high performing employees to fill these roles and the development of a human resource architecture that ensures the filling of these positions with competent incumbents and to guarantee their long-term commitment to the organization.

If well managed and applied, a talent management process can have several positive effects, among them it can help the organization in attracting top talent, improving employee motivation, assuring continuous coverage of critical roles, retaining top talent, increasing employee performance and improving business performances.

To do that, an initial evaluation phase is required, in which are assessed the personal characteristics deemed necessary for the employees to outperform in the selected critical positions. Among the many different possibilities used to evaluate employees, it is worth remembering that a competency is valuable only if it translates itself in a concrete action or behavior that leads to superior performance. Therefore, whatever it is the selected evaluation method, it must be able to assess the concrete action of the employees.

After the assessment of the competencies, it is possible to plan the training of the employees. Also, in this case, the possibilities are a lot, but what is really important is that the training must be consistent with the information received by both the evaluation and the strategy of the company.

The choice of the trainer is crucial, as it is the fact that the employees must see the training as an opportunity and they must be committed with that. It is also suggested to do some analysis to measure the effectiveness of the training.

Companies need to understand that their growth is strictly connected with the growth of their employees, and that talent management is a process and not a spot activity: it is a constant search for information to understand where to improve and a non-stop listening and investing on their talent.

Usually, the five phases that most of the talent management propose are planning, attracting, developing, retaining, transitioning.

CHAPETR 4: APPLICATION OF THE THEORY: THE IMPLEMENTATION OF A COMPETENCY MODEL IN VOESTALPINE BÖHLER WELDING FILEUR

4.1 - The organizational context

Voestalpine Böhler Welding Fileur is a manufacturing company situated in Cittadella that produces seamless cored wires. This company is experiencing a period of deep change: in 2013 voestalpine GmbH, one of the European and world leaders in the steel and metal engineering market, acquired the 90% of the shares of the previously called "Trafilerie di Cittadella – Fileur", a middle-sized family firm hit by the world financial crisis, becoming the majority shareholder.

Seamless cored wires are wires made of aluminum used for the welding of metals in the construction of many different engineering works of any type, size, and complexity. They are "cored" since inside them there is a mixture of powdered metals that, when melted during the welding, give to the structure is being worked some specific physical properties according to the specific needs, as for example resistance, flexibility, conduction of electricity and so on; the R&D department of the company studies all the different mix with which to fill the wires and the mixes are secreted.

Seamless means that at first the wires are prepared and later are filled with the powders, in this way they don't present any "seam" on the aluminum that covers them, assuring a higher effectiveness of the work. It is a highly specialized product and, in fact, only 3 companies in the world produce seamless cored wires.

The incoming property, through the drawing up of a new business plan, defined new demanding productive objective and planned a remarkable business growth: with the production plan called "ST3 Project" (Seamless Ten Thousand Tons) va. B. W. Fileur was expected to improve the annual quantity of final product from the 4.232 tons achieved in 2013, to the 10.000 projected for 2018, for a planned production growth larger than 100% in 5 years.

In order to achieve a production target so ambitious, it has been necessary to invest considerably in the machinery and in the company's staff, mostly in the productive side but also on the administrative one.

After the successful achievement of the production target fixed for 2018, va. B. W. Fileur received from the holding the new production objectives: the target is now to reach 15.000 tons of final product in 2023, for a further growth of 50% in 5 years.

It is not easy to manage the passage from being an independent Italian family firm to be a subsidiary of a giant multinational, there are a lot of changes to handle and the positive results are not guaranteed.

If before the acquisition va. B. W. Fileur had to manage inside all the primary and transversal activities needed by the "company life", now some activities, as for example commercial relationships, marketing and most of the logistics, are managed directly by the holding, while va. B. W. Fileur keeps inside all its production, the R&D department related to its products, the HR of the plant and its administrative offices.

The massive increase required in production has been and still is, a great challenge for va. B W Fileur since it has been necessary to hire new employees, increase work shifts and rearrange internal organization.

In addition to the productive increase, there are other challenges that the company will face soon: this rapid growth is hard testing the organization of the spaces since the plants were not initially designed for the forecasted volumes, machinery, and employees; moreover, soon will be necessary to start the "digitalization process" of the manufacturing process with the introduction of a new sap or mes.

4.2 – Human Resources Management

Analyzing the actual situation of the Human Resources Management in va. B. W. Fileur, this big increase in productivity brought and will bring also to some relevant challenges in the HRM: only 4 years ago the employees were 70 and now are 127, with a probable further increase also in the next years, since the production is expected to grow considerably. Of the current 127 employees, 93 are blue collars assigned to production, maintenance or logistics, while the others are divided between management and R&D department.

When in an organization the number of employees grows so fast, and is expected to raise even more, the company needs some tools to organise them and to allow them to perform at best, to ensure that there are always the best conditions to achieve the fixed strategical objective in the most effective and efficient possible way.

Another situation that the HR managers consider critical is the large presence of foreign blue collars: there are several workers from East Europe, Africa and some from China. It is source

of concerns because in an environment where is required to work in team to accomplish difficult task from the physical point of view, with the necessity to be fast and precise, not being of the same country and therefore with different culture, habits, ideas, and values can be cause of discontent and argues between the workers.

Continuing to describe the actual situation in HRM, a challenge that va. B. W. Fileur is facing its worker's commitment to the company: according to an internal survey the level of firm's identification and sense of belonging is very low; this may conduct to a smaller engagement in daily activities, less passion in the operations and smaller sense of attachment toward the company, with possible lower performances results in the long period. This situation can happen easily when an organization grows very fast without succeeding in passing to the new arrivals the values and identifying elements that contradistinguish the company, moreover if the firm has recently changed the ownership and it comes from a different country, with another language and culture.

Another situation that the HR managers highlight as "critical" is that some key figures in the production department are at the moment irreplaceable since no one else is able to substitute them in their daily tasks. Currently, there is only one key figure that manages all the production (the head of the production) and, furthermore, there are no plans or ideas to substitute the head of packaging that is going to retire in 2020. This is a problem because the operations are affected in case of their absence and there is the necessity to plan in advance the future handover, in order to permit an effective passage of knowledge; there is, therefore, the necessity of the implementation of a succession plan.

Although they have clear instructions on the strategic objectives and on the production targets, Va. B. W. Fileur has total autonomy toward the parent company in the management of human resources: managers can decide independently how to structure the recruitment and the employees to be hired, as also the succession plan and the internal management of all the employees. Therefore, they have the possibility to look for the best solution of their critical situation autonomously, having the possibility to suit better as possible the selected resolutions.

4.3 – The implementation of a Competency Model

After a deep analysis of all these "critical situations" that regard the human resources management of the production sector, the idea of the HR managers of va. B. W. Fileur's has been to implement an HR model based on competencies, hoping that making competencies the "core" of the HRM would benefit all its functions. The idea and need expressed by va. B.

W. Fileur is, therefore, to try to understand which competencies may be needed by their employees to overcome the difficult situations presented and to help them in achieving better performances; this could be the starting point to build a competency model that can guide HR managers in their daily activities.

A work done efficiently and effectively would bring great benefits in the long run in organizing the personnel through the big production growth, in handling multiculturality, in improving worker's commitment and in implementing the succession plans. This model could become the "center" around which to structure also new employees' selection, training, performance management, outplacement, and all the other HR functions.

This is the task that the HR managers and the Head of the production (the persons in charge of the project, from the company side) have asked to realize to Professor Gianecchini and to the student; they decided to build a portfolio of the competencies considered essential to the future development and growth of the company, examine which competencies are already owned by the blue collars and in which level (for the administration is already present a similar project), and based on the results to build projects of training and talent management. It will take a lot of time to understand if this project has been successful but, if so, it could guarantee to the company all the abilities necessary to carry out its strategy, making the workers and their competencies fundamental elements to build the competitive advantage.

Table 4.1 shows a small description of the phases that have been necessary to the creation of the portfolio and to suggest how to structure properly the talent management process in the future.

Phase	Aim and output	Actors	Time and dates
Preliminary meeting	Presentation of the	HR, Managing	12 June – 2 hours
	case, discussion	director, Professor	
	about the necessities	Gianecchini, Student	
	of va. B. W. Fileur		
Formalization of the	Decision on the main	HR, Professor	19 July - via e-mail
thesis project	future phases of the	Gianecchini, Student	
	project		
Decision on the main	Understanding how	HR, Production	31 August – 3 hours
characteristics of the	the student will	Manager, Student	

Design of the questionnaire	design the questionnaires, according to the desired output. The questionnaire is prepared taking into consideration the needs of the company	HR, Professor Gianecchini, Student	
	and the consistency with the literature		
Formalization of the	The questionnaire	HR, Production	3 October – via e-
questionnaire	that will be	Manager, Professor	mail
	distributed to the workers is formalized	Gianecchini, Student	
Distribution and	The questionnaires	HR, Production	
answer to the	are distributed to the	Manager, Blue	
questionnaires	selected blue collars,	collars	
	they answer and		
	return it		
Withdrawal of	Withdrawal of all the	HR, Student	22 October – 2 hours
completed	questionnaires,		
questionnaires	exchange of views		
	regarding the oral		
	feedback received		
	from the blue collars		
Analysis of the	Production of some	Student	
questionnaires	reliable data coming		
	from the analysis of		
	the questionnaire		
Presentation of the	Presentation of the	HR, Production	29 October
results of the	list of transversal	Manager, Professor	
questionnaire's	competencies to be		

analysis	inserted in the portfolio	Gianecchini, Student	
Preparation of the	Understanding how	Professor	
proposals to do to the	to conciliate the data	Gianecchini, Student	
company	coming from the		
	questionnaires with		
	the literature		
Officialization	Final choice of the	HR, Production	14 November
portfolio and	competencies to be	Manager, Professor	
proposals for the	inserted in the	Gianecchini, Student	
future of the project	portfolio,		
	presentation of the		
	suggestions about		
	how to structure the		
	future of the project		

Table 4.1: Timetable of the project

4.4 - The construction of the portfolio

According to the literature, in the construction of a competency model, the first step would be the implementation of a job analysis to understand the "real nature" of the job taken in consideration (job analysis has been discussed in Chapter 1). This would allow starting the project of the competency model with several useful information about the workers, their duties, their expected performances and the general characteristics of the environment in which they work.

In the case of va. B. W. Fileur, a job analysis has been processed last year by the HR managers and the head of the production, exempting us from this heavy task.

Therefore, to start the project of implementation of the competency model, in our case, the first step has been directed to understand how to build the portfolio of competencies.

The portfolio is the "selection of competencies" that have been identified as those that can bring the employees, to which the model refers, to an outperforming performance in the future, considering them in their role and in that specific company. This concept is very

relevant: building a competency model is not a theoretical exercise, it starts from the theory to construct something that must have a practical utilization for some specific workers, in their specific role and exactly in that specific company.

As stated in the chapter that deals with competencies, to build a well-done portfolio is not an easy task since it is possible to use different techniques and there are various elements to which pay attention during this phase: the number of competencies selected, the choice between distinctive or threshold competencies, the feasibility of maintaining this project in the future and many others.

Therefore, the start of the project has been to try to understand which competencies could be those that can bring the blue collars to a better performance in the future and, consequently, to a competitive advantage for all the company.

The first important decision taken has been not to differentiate workers based on the line in which they operate: even though according to the different lines the competencies required could be different, for the HR managers and the head of the production it is important that all the workers have the same competencies and can operate equally with all the machines, even though they are specialized in some technical line. Nevertheless, they have expressed the interest in trying to investigate how much the competencies required can vary in base of the different machines used.

After some valuations, it has been decided to insert in the portfolio 4 macro-categories of competencies around which to build the competency model and in which to evaluate the workers: technical, digital, linguistic and transversal.

The project of this thesis deals only with the transversal competencies of the workers of va. B. W. Fileur, in particular the objective is their individuation and a proposal about how to improve and take advantage of them.

The other 3 categories are managed directly from the employees of the company since technical, digital and linguistic competencies are in this context strictly connected with the company's strategy and with some decisions that cannot be evaluated and taken by someone external to the firm. Anyway, here is presented a little analysis of also the competencies different from the transversal ones.

- *Technical competencies*: in the portfolio of competencies of a production worker, certainly, technical competencies can't miss since constitute most of the abilities necessary to their daily activities.

In this context, for "technical competencies" we mean the practical skills, knowledges and abilities needed to use correctly the machineries, the physical force necessary to their usage

and to support certain physical demanding tasks, the certificate of attendance to some specific courses (job security, antifire...) or some special patents (forklift, lifter, tower crane...).

- *Digital competencies:* the choice to insert these categories of competencies in the portfolio comes directly from the objectives pursued by the company's strategy.

To keep up with the times and to improve the efficiency of the production path, va. B. W. Fileur is going to start soon a process of digitalization and the first step will be the introduction of a new software that manages all the production. To make this project work is essential that the workers can use the instruments that will be indispensable in all their daily activities, we are speaking mostly about tablets. That is the reason why is been decided that for the future development of the company the digital competencies will be present in the portfolio of competencies.

- *Linguistic competencies:* Some years ago, the firm was bought by an Austrian multinational; the workers of the holding don't speak Italian, and this makes more difficult all the communications between the property and va. B. W. Fileur. That's why the possibility to speak English is considered central in future development: it would improve the number and the quality of the relationships, giving the possibility to make them more effective and important.

The possibility to communicate without translators with the workers of the holding could also help in the difficult task of implementing the employee's commitment toward their company (problem highlighted before): the creation of new relationships could help with the construction of a "company identity" in which to recognize oneself, with the possibility to share ideas and values.

These are the reasons why linguistic competencies are going to be present in the portfolio.

4.5 - The identification of transversal competencies

If it is difficult to find a definition of "competency" accepted unanimously, seems even more complicated to reach one about "transversal competencies".

Nevertheless, a definition exhaustive and precise is the one given by the Italian Ministry of Education on its website: they define transversal competencies as a set of personal characteristics of the person, that are involved in different kinds of work tasks, from the most complex to the most basic, and performed in various work activities. They refer to broad-spectrum competencies connected with procedures and cognition, with the ways of behavior in work and social contexts, to abilities to reflect and to put into practice self-correction and learning strategies.

The criterion used in this project to choose the competencies to inserted in the portfolio was to understand which competencies can distinguish an "outstanding worker" from an "average worker" in the specific case of va. B. W. Fileur.

In the chapter 2, the one that analyses competencies, is told how the classical method suggests to face this step: McClelland proposes to divide the workers of the company into two groups, one composed of those with better performances and the other made of "average" performers; the purpose of the division is to analyze them separately with the Behavioural Event Interview technique and to codify which competencies contradistinguish the members of one group with respect to the other.

The use of the BEI technique usually guarantees high results but requests high experience, time and resources and for these reasons it has been decided in this case not to use it, considering that the time available was not much and none of the people involved in this project had direct experience in the administration of BEI.

Therefore, the method selected to identify the transversal competencies to be included in the portfolio has been a questionnaire that permits the combination of various techniques and the involvement of several people with different roles. In this way, the time necessary has been smaller and has been solved the absence of experience in BEI (in appendix 1 you can find attached the questionnaire in Italian).

4.5.1 - The questionnaires

The main purpose of the questionnaire was to ask for the opinion of some employees to understand, according to them, which transversal competencies of the blue collars should be inserted in the portfolio. To reach these goals have been selected 39 respondents that play different roles:

- 15 workers with superior performances
- 15 workers with average performances
- 1 head of production
- 2 Human Resources managers
- 4 head of shifts
- 2 coordinators

Since the aim of the project is centered only on the competencies of the blue collars and not on those of all the workers of the company, two different versions of the questionnaire have been made: one addressed to the blue collars that ask about them, and the other for all the other roles but that refers to the blue collars. The structure and the questions were identical, the only change was the person to whom they referred.

The sample and division between workers with "superior" and "average" performances have been made by the head of the production in collaboration with the HR managers; it takes inspiration from the classical method proposed by McClelland and in this way we wanted to understand if the two different samples of workers have clearly different opinions about the competencies that are relevant in their work. If according to this sample the results of the two categories of workers were very different, we would assume that the "superior workers" see their work differently from the "average" and, probably, this different perception could be the cause of the differences in performances. In this way, we could "give more relevance" to the answers given by the "superior workers" since we assume that the competencies they evaluate more relevant are really those that bring to greater performance results.

The questionnaire (See Appendix 1)was composed of five questions and has been designed with the forecast of around 10 minutes needed to respond. To prevent some linguistic and cultural biases the language used has been as simple as possible and rich in practical examples of daily work.

Different types of questions have been used: open, ranking, checklist and Likert scale; it has been done to get different kind of information and to analyze competencies under different perspectives, in this way we tried to differentiate as much as possible the results in order to analyze deeper the results.

All the questions asked explicitly to answer thinking about va. B. W. Fileur and not in general, in this way we wanted that the employees focus really on them and on their actual situation.

At the beginning of the questionnaire

The questionnaires were anonymous but at the beginning was asked to indicate the main line in which the respondent works (or their role if they were not blue collars) and since when he was an employee of va. B. W. Fileur. The aim of these specifications was to try to understand if it may exist some correlations between the line and/or the seniority and some other results of the questionnaire.

To try to get the best possible responses, before the questions have been inserted some phrases to explain to the respondents the purpose of the questionnaire, to highlight our need of good answers and to communicate that also them could beneficiate from it. The hope was that trying to make them a central part of the project could help in achieving better and most accurate answers, and to improve their commitment toward the whole project.

First and second questions

The first two questions were very similar to each other and have been designed to be "explorative questions": they were two open questions with the aim to understand what the respondents think, about this topic generally speaking. They were placed voluntarily before the close questions not to influence the workers with some of the possible option suggested between which to choose; in our opinion, these answers should represent exactly the ideas of the employees about the topic.

The only difference between the two questions was that the first was referred to the whole productive department, while the second only to the specific line in which they operate most; in this way, even though the will was to evaluate all the workers with the same competencies, we wanted to understand if in the opinion of the workers are necessary different competencies according to the specific line.

Being open question, their results can't be quantitative, but they permit to get some relevant information about the respondent thought and anyhow they permit to extract a list of transversal competencies, measuring the frequency with which they are named. The difficult step in collecting the results of these questions is to transform the phrases used by the respondents in competencies, trying to be balanced between not reduce the variety of the answer given thanks to the open question, but allowing to convert the thoughts expressed in specific competencies.

Third question

Unlike the first two questions, this one was quantitative, and the purpose was to get a ranking of 6 macro-categories of competencies. We asked to order and not to give a score because in this way the respondents are obliged to decide which categories are less or more relevant in their opinion as it is impossible to give a draw, therefore the workers were forced to make a clear statement about their ideas of the importance of competencies, without having the possibility to give a "neutral and average score" that doesn't give clear information.

The six macro-categories selected were those indicated in 1993 by L. Spencer and S. Spencer in "Competence at Work": Operative and realization competencies, Service and assistance competencies, Influence competencies, Managerial competencies, Cognitive competencies, Personal effectiveness competencies. These categories are those that collect the 20 transversal competencies that according to the authors are the most relevant and recurrent considering the majority of the works.

To explain better the meaning of every category, all were supported by examples of possible tasks that could happen daily to them. Just to give an example under "Operative and

realization competencies" was stated "correct use of machinery, do not make mistakes, know how to use many machines ..." or under "Service and assistance competencies" was specified "understand when a colleague needs help, know how to help a colleague in need"; the examples for the other categories of competencies were similar.

Fourth question

The format of this question is a checklist of 22 transversal competencies between which the respondents must choose 10 of them. In this case, is measured the frequency with which each competency is appointed, and the answers lead to a ranking of the most relevant characteristics of the ideal worker in va B. W. Fileur.

The competencies have been chosen by the HR managers and the head of the production according to their experience in the company, are therefore strictly related to the reality of the company.

The 22 transversal competencies selected are: self-control and stress management, autonomy in work, good moon, adaptability, analytical skills, communication skills, ability to execute orders from superiors, ability to generate new ideas, time management skills, ability to work in a group, organisation skills, communication with superiors, be competitive, trust in others, flexibility, result orientation, precision, gather information, troubleshooting, sense of belonging, sense of responsibility and desire to learn and improve.

Fifth question

The main interest is, in this question, on what the workers really do daily and not, as in the previous ones, about what they think the perfect blue collar should do or how should be. Here the respondents are obliged to think about their routine, to what they really do and not about some hypothetical thoughts; it aims to be a "photograph" of the competencies really used.

The competencies analyzed here are 20 and are the competencies that, according to L. Spencer and S. Spencer, compose the macro-categories of the third question.

We structured the question in this way since we hoped that, comparing the results with those of the other questions, it could permit us to evaluate if the perception of the workers about the competencies they need daily and those that they consider essential for the perfect worker are coherent.

Furthermore, this question gives us the possibility to understand which aspects of the 6 macro-categories of the third question are evaluated as more relevant and if there are some incongruences (i.e. someone that evaluates with high grades a category but then considers not important all the competencies that compose it), therefore it can be also considered as a specification of the third question.

This Likert scale question gives 6 possibilities between which to choose and not an odd number since in this way the respondents must expose themselves and cannot give a value that lays exactly in the middle of the scale, if they want to give an answer close to the central value, they have to decide if it is slightly smaller or slightly bigger the half, it forces them to make a choice and to express a judge.

Here are reported the 20 competencies: Achievement orientation; Concern for order, quality and accuracy; Initiative; Information seeking; Interpersonal understandings; Customer service orientation; Impact and influence; Organisational awareness; Relationship building; Developing others; Directiveness: Assertiveness and use of positional power; Teamwork and cooperation; Team leadership; Analytical thinking; Conceptual thinking; Technical/Professional/Managerial expertise; Self-control; Self-confidence; Flexibility and Organisational commitment.

4.5.2 - The delivery and collection of the questionnaires

The HR manager and the head of the production of va. B. W. Fileur were assigned of the task of delivering the questionnaires to the selected employees. We programmed together a little "introduction speech" to make with the physical delivery, its scope was to explain in person the reason of the questionnaire, to try to improve the commitment through this project and to ask if there were doubts or questions about it.

To try to ease the compilation of the questionnaires has been given the possibility to the workers to complete the questionnaire at home, in this way we hoped also that they could complete it in tranquillity without the pressures of their incumbent work activities. This was possible because the aim of the questionnaire was to ask for employees' opinions and not to evaluate them, in case of an "evaluation questionnaire" the possibility to take it at home would have conditioned the results.

With the HR manager we agreed that the time necessary to deliver the questionnaires and recollect them completed was two weeks, the main reason has been the need to meet all the selected workers, both in the delivering and in the recollecting, taking into account that they work in shifts and also at night.

Has been established also that to keep the maximum anonymity the collection would have been done through some designed boxes.

Differently from what has been established, have been collected 37 filled questionnaires (instead of 39):

- 11 workers with superior performances (instead of 15)
- 17 workers with average performances (instead of 15)
- 1 head of production
- 2 Human Resources managers
- 4 head of shifts
- 2 coordinators

If have been gathered 2 questionnaires more for the "average workers", for the "high performers" have been collected 4 less than the expectations, the reason of this is that have been erroneously considered in this category also the 4 head of shifts. Anyway, this incongruence didn't affect the continuation of the project.

Interesting has been the different reactions of the employees at the delivery of the questionnaire. Generally speaking, seems that the response has been positive and that the workers accepted to do it without any complaints or bad "facial expression".

There have been also some interesting reactions that, anyway, belong to the expected reactions to a similar request. For example, one employee said to the HR manager that this kind of projects is useless and that is too much "theoretical", he continued stating that he would prefer some more practical actions directed to improve their "real manual work". Another worker instead seemed very happy about this project saying that "finally the head of the production listened to his requests and suggestion".

These reactions testify as these kinds of projects can find different attitudes, they can vary from extremely positive to extremely negative. It is a good fact that in our cases were not present "extreme reactions", both in one and in the other direction, since this can bring to some distortions. Nevertheless, the environment of va. B. W. Fileur seemed suitable for the implementation of the project.

4.5.3 - The results of the questionnaires

After collecting the questionnaires, the time has come to analyze the data collected. At the beginning there was the necessity to organize the results in a way that would permit us to get as much information as the possible, trying to harmonize different kind of data coming from different types of questions; otherwise, it would have been impossible to compare and combine results coming from different questions.

The way in which has been decided to describe the results obtained is organizing them in tables that present the competencies in rows and the roles of the interviewees in columns. In

this way, it is possible to understand the evaluation that each role has given to the specific competency.

For the entire analysis consider that "Average W." refers to the workers who have been selected has average performers, "Outperformer W." stands for outperformers workers, "HR" means HR manager, while "H. production" and "H. shift" indicate the head of production and heads of shift, to conclude "Coordinator" clearly refers for the coordinators (role a between the head of shift and the normal workers).

The first and most evident result that the analysis produced is that 19 out of 37 questionnaires were answered in an incomplete or incorrect way: more of 50% had some lacks or errors in the answers.

Some answers were not answered at all, others were only partial. In response 3, many respondents did not order the 6 options, but simply gave non-ordered scores. In answer 4 was asked to select only 10 competencies, but some respondents indicated more than 10.

The causes of this very high number of "non-compliant" answers can be many: it is possible that some respondents didn't understand the text of question 3, so it probably could have been clearer. Anyway, the main reason may be the low commitment of employees toward this questionnaire: it was an extra-task for them and maybe they did not see it as an opportunity to improve their work and their company, it didn't capture their attention; the low interest and the lack of attention led the respondents to make many errors.

When an analysis like this is proposed, it is likely that not all the questionnaires are well answered, but it is necessary to try to understand what the causes might be, not to make the same mistakes in the future.

The analysis of the first two questions has been very different from that of the other three since the question 1 and 2 are open while the 3, 4 and 5 are closed; this means that for the latest it was possible to conduct quantitative analysis immediately, while for the first two some rearrangements were necessary.

Here the analysis of the data considered for question will be briefly presented.

Question 1 (which characteristics should have, in your opinion, the perfect worker in va. B. W. Fileur?): this question was open and explorative; the aim was to know everything that "goes through the head" of the employees about the topic, without having any influence or tips from the closed questions.

Being an open question has been difficult to get some quantitative data. It has been necessary to convert the phrases that formed the answers into competencies, trying to give the best possible interpretation. The idea was to convert the answers into frequencies that permit to

create a rank of competencies. Sometimes it has been easy since the answers were synthetic and schematic with the competencies clearly stated or listed; in other cases, the answers were sentences long and articulated with more than one concept expressed, it was, therefore, necessary a longer work of interpretation.

Generally speaking, it has been difficult to translate the sentences used by the respondents into competencies: we had to be balanced between not reducing too much the variety of the answers and allowing to convert the thoughts expressed in precise competencies, to permit us to measure the frequencies.

Another crucial point has been to understand if and how to merge some "sub-competency" in "macro-competency". An example can help explain: it has been decided to group some competencies as "respect for others", "good education", "availability towards colleagues", "patience", "to help colleagues" and "sociability" in one unique competency called "Teamwork"; we have done this in order to have less but substantial competencies instead of having a lot of competencies but too precise or too specific: the aim was to have competencies more manageable in some following steps of the talent management process, as for example the training or the future repetition of the evaluation; paying obvious attention to be consistent in our grouping activity.

It has been presented the example of "Teamwork" because it is the most glaring, but the same passage has been done also for the other competencies.

Passing now to the results that emerged after the interpretation and the grouping: table 4.1 shows the 11 competencies more named, ordered considering all the respondents.

As it is possible to notice, the two competencies more indicted as those essential for the workers of va. B W. Fileur are "Teamwork" and "Desire to learn and improve"; their result is remarkable since they have been named respectively 17 and 16 times, while the third competency in the rank is "Motivation/Passion" with 8 nominations, it is a considerable difference.

It is curious to notice as "Teamwork" received 2 votes from HR and 0 from H. production, H. shift, and Coordinators, while "Desire to learn and improve" received 0 points form HR but 4 from H. production, H. shift, and Coordinators; it can help in understanding how the different point of view, role, and relationship with the workers influence the opinion on the characteristics of the perfect workers.

About this, it can be noticed as the competency "Flexibility" (may be considered also as adaptability) has received 6 nominations but even 5 from HR, H. production and H. shift and only 1 from the workers.

Considering the difference in the number of respondents does not seems to be much difference between the opinion of the Average Workers and the Outperformers one. The frequencies are more or less the same. However, it can be noted how 3 Average W. named "Humility" while none of the Outperformers expressed this opinion.

RANK	COMPETENCIES QUESTION 1	TOT	Average W.	Outperformer W.	HR	H. production	H. shift	Coordinator
1	Team work	17	10	5	2			
2	Desire to learn and improve	16	9	3		1	2	1
3	Motivation/Passion	8	4	3				1
4	Commitment to the company	7	4	2				1
5	Flessibility	6	1		1	1	3	
6	Humility	6	3				2	1
7	Know how to listen	5	3	2				
8	Problem solving	5	1	2	1		1	
9	Technical skills	5	1	2			1	1
10	Attention to quality/Precision	4	2				1	1
11	Knowledge of Italian	4	1	1			1	1
	тот	83	39	20	4	2	11	7
	(number of respondents)		17	11	2	1	4	2

Table 4.2: Results question 1 by competency

Question 2 (which characteristics should have, in your opinion, the perfect worker in the line in which you work most?): this question is very similar to the first one, the only difference is that here the focus is on the line of belonging of the workers. For this reason, the answers of the HR, H. production, H. shift, and Coordinator will be not taken into account (even though they are indicated) since they don't work on a line.

The process of reading, interpreting and grouping are the same as the one described for question 1. Therefore, now will only be described the main results.

Table 4.2 shows the 11 competencies more named. The first big difference between the results of question 1 is the presence, and the fact that it is the first ranked, of the competency "Care for cleaning and order". It is interesting to notice as while speaking of the whole company, no one seems much interested in cleaning and order, but when the focus is on the line in which they work, cleaning and order is the competency more important. The same can be said about the competence "Attention and respect toward the work of others", even though it had less nomination.

"Teamwork" and "Desire to learn and improve" are still considered very important, while it is curious as "Motivation/Passion" are not named anymore.

A separate speech should be done for the "Technical skills": they are not transversal competencies and therefore are not considered in the results, but since they have been named often, it has been decided to put them equally in the tables.

RANK	COMPETENCIES QUESTION 2	тот	Average W.	Outperformer W.	HR	H. production	H. shift	Coordinator
1	Care for cleaning and order	8	4	4				
2	Team work	7	2	4		1		
3	Technical skills	6	3	1			2	
4	Desire to learn and improve	6	3	3				
5	Attention and respect towards the work of others	6	2	4				
6	Organisational capabilities	5	2	2		1		
7	Attention to quality/Precision	5	4	1				
8	Attention to the result of own work	4	1	3				
9	Commitment towards the company	3	1	2				
10	Problem solving	3	1	1	1			
11	Communication capabilities/Dialogue	3	2		1			
	тот	56	25	25	2	2	2	0
	(number of respondents)		17	11	2	1	4	2

Table 4.3: Results question 2 by competency

Question 3 (order, from the most important to the least, the following categories of competencies based on their importance in your daily work. To do this, use the numbers 1 to 6, where 1 means "more important" while 6 means "less important"): since this question required from the respondents a quantitative judgment on competencies, the analysis is more intuitive respect to the previous, and it depends less on personal interpretation.

Table 4.3 presents the average of the answers received, both considering all the interviewees together (it is an unweighted average) and then taking into account separately the different roles. We asked to classify with "1" the competency that they rate as most important and with "6" the one least important, therefore the competency that has the lowest average is the one deemed more important. The table presents the competencies ordered from the "most important for the daily work of the employees" to the one considered least important.

As it is possible to notice, in the first place there is a tie between "Technical, Operational and Manufacturing capabilities" and "Ability to understand and analyze situations", with similar outcomes also considering the results by role. Just to remember: the technical competencies are not considered transversal and therefore will not be part of the portfolio, but it is interesting to understand how they are taken into consideration by the employees.

"Ability to influence and persuade others" and "Ability to drag and lead others" have been ranked as the latest, and that may confirm as it is not requested to the workers to be leaders, but mainly to accomplish their manual tasks. According to these results, leadership tasks seems to be a duty of other roles, so probably of the H. production, H. shift, and Coordinators. Can be interesting to notice as Average W. and Outperformer W. rank quite differently the macro-competencies "Self-confidence, Self-control, Flexibility", "Attention and support toward other" and "Ability to drag and lead others": Outperformers give much more

importance to the abilities of working together, supporting others and leading colleagues compared with the Average W.; while the attention to the own personality (self-confidence, self-control, and flexibility) is really much more significant for the Average W., with more than one point of difference with the average of the Outperformers.

It is difficult to understand, only from these results, if this difference in the opinion of what is really considered important for the daily work, can be the cause of the actual difference in performance. But it may be a good insight on which to do some further analysis and considerations.

The results of HR, H. production, H. shift, and coordinators seem to be more or less consistent (considering that the respondents were many less, and therefore one "discordant" vote causes a bigger change in the averages). Anyway, it could be curious the average "1" given by the Coordinators to the macro-competency "Self-confidence, Self-control, Flexibility".

RANK	COMPETENCIES QUESTION 3	TOT	Average W.	Outperformer W.	HR	H. production	H. shift	Coordinator
1	Technical, Operational and Manufacturing capabilities	2,33	2,50	2,38	2,50	2,00	1,33	3,00
2	Ability to understand and analyze situations	2,33	2,25	2,88	2,50	1,00	1,67	2,00
3	Self-confidence, Self-control, Flexibility	2,83	2,38	3,75	2,00	3,00	3,33	1,00
4	Attention and support towards others	4,04	4,25	3,50	4,00	4,00	4,67	4,50
5	Ability to drag and lead others	4,17	4,13	3,50	5,00	5,00	4,33	5,50
6	Ability to influence and persuade others	5,29	5,50	5,00	5,00	6,00	5,67	5,00

Table 4.4: Results question 3 by competency

Question 4 (mark with an "X" on the dot, the 10 transversal competencies that you think are most important to carry out your daily work): the results of this question are quite clear since they simply communicate for how many people each competency is important. The values on table 4.4 are the sum of the "X" on each of the 22 competencies proposed.

For sure, the result more evident is that 32 out 37 respondents indicated that "Desire to learn and improve" is important in the daily work of the employees; considering that the second competency more selected ("Teamwork") has received 5 nominations less, it is an outstanding result, moreover because it is shared among all the roles.

In general, the competencies that are better classified are "Desire to learn and improve", "Teamwork", "Precision" and "Problem-solving"; while the worst are "Gather information", Sense of belonging" and "To be competitive".

It can be seen how the competencies that refer to the own personality as "Autonomy", "Good mood", "Self-control and management of stress", received also in this case much higher attention from the Average W. compared to the Outperformers; this result is consistent with

what has been highlighted for question 3, and maybe it is possible to give more relevance to this indications.

Considering the roles HR, H. production, H. shift and Coordinator, the competencies deemed more important, besides the 4 previously named, are "Flexibility" (second only to "Desire to learn and improve"), "Sense of responsibility" and "Analytical skills". It may be interesting to notice as "Sense of belonging" is important for both the HR managers and the Head of Production, but for none of the H. of shift and Coordinators.

RANK	COMPETENCIES QUESTION 4	тот	Average W.	Outperformer W.	HR	H. production	H. shift	Coordinator
1	Desire to learn and improve	32	14	10	1	1	4	2
2	Team work	27	12	9	2	1	2	1
3	Precision	26	12	9	1		3	1
4	Problem solving	24	13	5			4	2
5	Sense of responsibility	22	12	3	2	1	2	2
6	Ability to execute orders from superiors	22	11	7	1		2	1
7	Organisational capabilities	21	9	8		1	3	
8	Communication capabilities	21	9	7	2	1	2	
9	Communication with superiors	20	9	7	1		2	1
10	Autonomy in work	20	10	5			3	2
11	Good mood	19	10	5	1		1	2
12	Self control and management of stress	19	11	4	1		2	1
13	Analytical skills	16	6	3	1	1	3	2
14	Trust in others	16	9	5	2			
15	Flexibility	15	8		1	1	4	1
16	Result orientation	14	6	4	1	1	1	1
17	Adaptability (Flexibility)	13	7	4			1	1
18	Ability in generating new ideas	12	4	4	1	1	2	
19	Abilities in managing time	10	5	5				
20	To be competitive	8	5	2			1	
21	Sense of belonging	7	3	1	2	1		
22	Gather information	6	3	3				
	(number of respondents)	37	17	11	2	1	4	2

Table 4.5: Results question 4 by competency

Question 5 (indicate how often you use the following skills to do your daily work. To answer consider that: 1 = Never, 2 = Rarely, 3 = Often, 5 = Very often, 6 = Always): The focus of this question was on the real daily utilization of the competencies by the workers. Table 4.5 presents the averages of the scores received by the questionnaires.

The bottom line makes an "average of the averages": it shows that the score of the A. W. is on average higher, and this means that they think to use more competencies in their daily work respect to the Outperformers; more also of the competencies that the other roles think that the workers use. This data has been highlighted because it is interesting to find that the workers considered Average (cause of their real work performances) think to apply more

competencies to their daily activities than the Outperformers, it can give interesting insights into how the self-perception can be different from the results obtained, and it probably testifies how important is to relate competencies to the real outcomes of the employees' work. Therefore, comparing the results of A. W. and O. W. should be kept in mind that the sores of the A. W. are generally higher.

According to the results, the competencies more used are "Commitment towards the company" and "Attention to the result of own work". "Influence toward others" and "Leadership" occupy the latest positions and that is consistent with the data coming from the other questions.

It is possible to notice that also in this case, the Outperformers think to use more "Teamwork and Cooperation" that the A. W.

The Head of the production generally gave a much lower score to all the other roles, he did not give any 6, and he gave a score of 5 only to 3 competencies: "Attention to the results of own work", "Self-control" and "Recognize roles in a group"

RANK	COMPETENCIES QUESTION 5	TOT	Average W.	Outperformer W.	HR	H. production	H. shift	Coordinator
1	Commitment towards the company	5,42	5,88	5,18	5,00	4,00	4,75	5,00
2	Attention to the result of own work	5,19	5,65	5,18	4,00	5,00	4,25	4,50
3	Self confidence	5,17	5,41	5,18	4,00	4,00	4,75	5,00
4	Attention to quality	5,03	5,65	4,91	4,50	3,00	3,75	4,50
5	have technical knowledge and apply them	4,83	5,06	4,82	5,00	4,00	4,33	4,00
6	Self-control	4,72	5,18	4,18	4,00	5,00	4,50	4,50
7	Ability to analyse situations	4,64	4,94	4,73	5,00	3,00	4,00	3,50
8	Flexibility	4,54	5,06	4,10	5,00	4,00	3,75	4,00
9	Professional and technical skills	4,44	4,65	4,27	5,00	4,00	4,25	4,00
10	Team work and cooperation	4,42	4,53	4,73	5,00	3,00	3,50	4,00
11	Building relationships	4,33	4,29	4,27	5,00	4,00	4,25	5,00
12	Help others to improve	4,33	4,41	4,18	5,00	3,00	4,25	5,00
13	Recognize roles in a group	4,33	4,65	3,73	6,00	5,00	4,00	4,50
14	Search for inforation	4,28	4,65	4,55	3,00	3,00	3,33	3,00
15	Availability to te customers	4,26	4,63	3,90	2,50	3,00	4,25	5,50
16	Initiative	4,08	4,29	4,55	3,00	3,00	3,00	3,00
17	Authoritativeness and ability to be heard	3,94	4,12	3,91	3,00	3,00	3,75	4,00
18	Sensitivity toward others	3,92	4,00	4,18	3,00	2,00	3,50	4,50
19	Leadership	3,38	3,56	3,09	2,00	3,00	4,00	3,50
20	Influence toward others	3,29	2,81	3,50	3,00	3,00	4,25	4,50
	Average	4,43	4,67	4,36	4,10	3,55	4,02	4,28

Table 4.6: Results question 5 by competency

4.5.4 - How to convert the results of the questionnaires into a portfolio of competencies

To resume the thread of the project: the purpose of the questionnaires was to gather as much information as possible to build a portfolio of competencies. The competencies to be selected should have been those that contradistinguish high-performance workers from the workers with average performances. The portfolio was aimed to be the base on which to structure a talent management project to favor the growth of the employees, in order to face the actual and future critical situations presented at the beginning of this chapter. The final objective is to ensure all the human resources necessary, in terms of number and competencies, to permit to va. B. W. Fileur to achieve the objectives of its strategy.

But how to convert the gathered information in a reliable portfolio of competencies?

The answer to this query is not so easy in this case: the questionnaires were structured in order to collect as much information as possible and, for this, the questions have been designed in many different ways (open, close, frequency, checklist, to order), the demands have been asked to different roles and were referred to different aspect of the topic "competencies" (ideal worker, real daily activities, specificities of the lines...). Therefore, it has been necessary to find a reliable and effective way to harmonize all this different information in a single valuable portfolio.

Must be specified that the task of this thesis was to present the analysis of the results of the questionnaires and to propose some ideas in how to structure the portfolio, but that the final decision on which competencies to include (and on which to structure all the talent management project) was up to the Head of Production and the HR manager responsible for the project, the reason is the firm-specificity of the project that has been treated before.

Hence, our task was to prepare a list of about ten competencies, motivated by the results of the questionnaires, to present to the company and around which they could make their choices.

How to transfer the results of the tables into a consistent list was, therefore, the next step.

Since the format in which the questions were structured was very different, a simple quantitative analysis (like a sum or an average) of the scores seemed not appropriate: to sum a frequency (question 4), an average where the most valuable score was the higher one (question 5), an average where the most valuable score was the smaller one (question 3), and two open questions translated into "nominations" (question 1 and 2) was not suggested and would have brought to misleading results. For example, a difference of 0.3 between two competencies in question 3 would not have had the same value in question 5; and how to

compare the differences of 0.3 between two competencies in question 3 with a difference of 2 in question 4? The final result would have had little meaning.

Therefore, the idea has been to give value to the ranking (positioning) that each competency achieved in each question: in this way it was possible not to take into consideration the scoring, and to compare all the positioning that the single competency obtained in all the questions.

The ranking is a really valuable indicator: it gives a clear indication about the preferences expressed by the respondents and it permits immediate insights about the comparison of the competencies; using the positioning and not the scores allowed us to compare the same value achieved by the competencies in the 5 different questions.

When we decided who should have answered to the questionnaires, the idea was to give a different value to the responses according to the roles of the interviewed and, therefore, to weight them differently. Also considering the roles it has been decided to take into consideration the rank of the competencies and not the absolute value. Therefore, in the comparison between competencies, has been considered more important the ranking of the roles "non-workers" respect to the workers, and the fact to have had a better position for the O. W. has been considered more valuable than the one of the A. W.

Another factor considered important in the preparation of the list of competencies to be given to the company has been the first two questions: while comparing two competencies we deemed more valuable the ranking achieved on question 1 or 2 since these answers came directly from "the mind of the employee" and were not suggested as options in a closed question.

Not all competencies were present among the options of all the three closed question, if a competency had great results in one or more question, but then was not between the possible choices of the others, we supposed that it would have achieved similar results also in the other questions; the same is valid for the competencies named by the employees in the open questions, but that were not a possible option in the closed one.

Here follows the list of competencies that have been made by analyzing the results of the questionnaires, it has been presented to the Head of Production and to the HR manager in charge of the project.

Only some clarifications: while analyzing the results of the first and second questions, "nominations" means how many times the sentences of the respondents have been interpreted as referring to that specific competency. The term "choice" used in the analysis of the fourth question states for how many people indicated it as important.

- 1- TEAMWORK (as explained before, for the open questions have been considered part of this macro-competency "respect for others", "education", "availability towards colleges", "patience", "knowing how to help colleagues", "sociability"):
 - First question: 1st ranked with 17 "nominations" (the third had 8)
 - Second question: 2nd ranked with 7 "nominations"
 - Third question: 4th ranked but 3rd considering the Outperformers
 - Fourth question: 2nd ranked, with 27 up to 37 respondents indicating it as important, included also the roles "non-workers"
 - Fifth question: 10th/11th/13th ranked (teamwork cooperation, building relationships and recognize roles in a group) but 7th/11th/13th for the O. W.
- 2- DESIRE TO LEARN AND IMPROVE (it would have been possible to consider under this competency also "motivation/passion" that is the third competency more nominated in the first question, but it was not a possibility between the choices of the closed question; it hasn't been done, but it would confirm the value of this competency):
 - First question: 2nd ranked with 16 "nominations" (the third had 8)
 - Second question: 4th ranked with 6 "nominations"
 - Third question: it was not present as a choice between the macro-categories
 - Fourth question: 1st ranked with 32 up to 37 respondents indicating it as important, included also the roles "non-workers"; the 3rd has 22 "choices"
 - Fifth question: it was not present as a choice between the options
- 3- FLEXIBILITY/ADAPTABILITY (Considered as the ability to work in more than one line and to use as many machineries as possible):
 - First question: 5th ranked with 6 nominations but indicated by all the roles "non-workers"
 - Second question: it was not possible to appoint it as an option since the question was specific of the line in which works the respondent
 - Third question: 3rd ranked with more than one point on the 4th, great rankings for all the roles "non-workers", except for the O. W. (as presented while describing all the results by question)
 - Fourth question:15th and 17th ranked ("flexibility", "adaptability"); but flexibility had the 2nd best ranked for all the roles "non-workers", except for the O. W.
 - Fifth question: 8th ranked

- 4- RESULT ORIENTATION AND QUALITY ORIENTATION (combined because in the answers given to the open question they seemed to be considered as if one was the consequence of the other):
 - First question: 10th ranked
 - Second question: 7th and 8th ranked
 - Third question: it was not present as a choice between the macro-categories
 - Fourth question: 3rd and 16th (precision, result orientation) ranked with good results among the roles "non-workers"
 - Fifth question: 2nd ranked

5- CAPACITY OF ANALYSIS:

- First question: not nominated
- Second question: not nominated
- Third question: 1st ranked between the transversal competencies
- Fourth question: 13th ranked but with good results among the roles "non-workers"
- Fifth question: 7th ranked
- 6- COMMITMENT TO THE COMPANY / SENSE OF BELONGING (combined because in the answers given to the open question they seemed to strictly related):
 - First question: 4th more nominated
 - Second question: 9th more nominated
 - Third question: it was not present as a choice between the macro-categories
 - Fourth question: 21th ranked but indicated by both the HR managers and by the Head of Production
 - Fifth question: 1th ranked with a great advantage on the 2nd

7- SELF-CONTROL / SELF-CONFIDENCE:

- First question: not nominated
- Second question: not nominated
- Third question: 3rd ranked (considered in the same macro-category)
- Fourth question: 11th ranked (self-control)
- Fifth question: 3rd and 6th ranked (self-confidence, self-control)

8- PROBLEM-SOLVING:

- First question: 8th ranked
- Second question: 10th ranked
- Third question: it was not present as a choice between the macro-categories
- Fourth question: 4th ranked and indicated by all the Heads of Shift and Coordinators
- Fifth question: it was not present as a choice between the options
- 9- COMMUNICATION SKILLS (have been considered part of this competency also "Knowledge of Italian", "Be able to listen" and "Communication with superiors"):
 - First question: 11th ranked ("Knowledge of Italian")
 - Second question: 11th ranked
 - Third question: it was not present as a choice between the macro-categories
 - Fourth question: 8th and 9th ranked ("Communication skills", "Communication with superiors")
 - Fifth question: not present between the possible choices

10- ORGANISATIONAL CAPABILITIES:

- First question: not nominated
- Second question: 6th ranked
- Third question: it was not present as a choice between the macro-categories
- Fourth question: 7th ranked and indicated by the Head of Production and by 3 out of 4
 Heads of Shifts
- Fifth question: it was not present as a choice between the options
- 11 CARE FOR CLEANING AND ORDER: really important while asking the workers about their line, never nominated when speaking about all the company and never present among the options of the closed questions.

This is the list of competencies that have been presented to va. B. W. Fileur.

Probably, if we had structured all the questions in a way that would have allowed a final general quantitative analysis of the results, with a combination of the data of all the questions, the ending outcome (the list) would have been more intuitive and precise. But, in our opinion, this "ranking" solution gives the possibility to take into consideration more aspects, for a wider and more complete evaluation.

The only consideration we want to take on the list is that the first four competencies ("Teamwork", "Desire to learn and improve", "Flexibility/Adaptability" and "Result orientation and quality orientation") seem to be considered as the most important: they have been named a lot in the open question, have been selected by the roles "non-workers" and achieved great results in all the questions. Therefore, maybe they could be considered as those distinguishing the outperformers workers.

4.6 - The implementation of the talent management process

The "practical tasks" of this thesis have come to an end with the presentation of the list of the competencies to the HR manager and to Head of Production. However, during the last meeting, there has been the possibility to give to va. B. W. Fileur some advice on how to use the information in the list in order to implement their process of talent management to the best.

This advice has been inspired by the literature consulted and presented in the previous chapters, by the information collected thanks to the possibility of listening to their actual situation, their future desired developments and the opinions of their managers, and by writing, reading and analyzing all the questionnaires and the responses given by workers.

The ideas suggested to va. B. W. Fileur are in line with the talent management process presented in the third chapter and agreed with them at the beginning of the project; to recap, its ideal phases would be:

- Analysis of the strategical object of the company,
- Individuation of the job position critical to the achievement of these objectives,
- Evaluation of the employees that occupy that position,
- Planning and administration of training courses
- Growth of the employees
- Achievement of the objectives

It can be interesting and admirable to notice as va. B. W. Fileur considers its production workers as employees that occupy a strategic position inside the organization. To implement a talent management process on production workers is not a common decision: usually, companies believe that the expected benefits coming from the growth of the workers are not worth the expected costs, and therefore they invest mainly on the development of those employees that occupy a certain position as managers, R&D, administration... since their positions are retained more strategic.

We analyzed previously all the positive results that can be achieved in the long run thanks to a talent management process and we will not repeat them again, but it is worth to underline as va. B. W. Fileur is one of the few companies that retain the role of its blue collars strategic, and that decided to implement a talent management process focused exclusively on them.

Even though we presented some ideas to the company, obviously, the final decisions in how to implement the process will be up to them; it will depend on their satisfaction about the proposals presented, on their availability of resources and on their willingness in investing in this project.

Our list of competencies can be considered as the first part of the phase "Evaluation of the employees that occupy that position", and therefore the tips given to the company are related to the following phases of the talent management process.

Here follow the suggestions given to va. B. W. Fileur to the continuation of the project.

Evaluation phase

To proceed with the evaluation phase, the first decision that the company had to take has been how many competencies to insert in the portfolio. As explained in the theoretical chapters, this decision must be taken keeping into consideration how many time and resources to invest while evaluating the competencies, both the first time but also all the other future times (since the maintenance of the project is as important as the implementation). The more skills there are in the portfolio, the more will cost to evaluate them.

Considering that their project of evaluation, besides the transversal competencies, concerns also technical, digital, linguistic and security competencies, our suggestion has been to select between five and nine competencies. Another tip given has been to consider the first four competencies of the list since according to the questionnaires they are considered as those that really distinguish an outperformer worker.

The HR manager and the Head of Production decided to insert in their portfolio six transversal competencies: the first four plus other two that according to them are essential in order to achieve the desired strategic objective. Therefore, the portfolio of the transversal competencies of va. B. W. Fileur will be composed by: "Teamwork", "Desire to learn and improve", "Flexibility/Adaptability", "Result orientation and quality orientation", "Commitment to the company / Sense of belonging", "Self-control / Self-confidence".

After having decided definitively which competencies to asses, we communicated to them our opinion about how to really evaluate them.

Since competencies, to be considered as such, must be the cause of concrete behaviors linked with higher work performances (Boyatzis 1982), a tool assessing competencies must evaluate the real behaviors of the employees; furthermore, it is necessary that these behaviors are contextualized within that exact organization. This is the only way to have an effective evaluation.

Therefore, we suggested to va. B. W. Fileur a tool similar to the one presented in table 4.6. The first column presents only the names of the selected competencies. The second column contains the definition that exact organization gives to the competency, it should help to understand which are the behaviors expected and the real meaning they have inside that company. The third and last column contains the grid of behavior indicators through which to evaluate the employees; it should contain all the possible scale: from the behavior that should guarantee the best performance possible to the behavior that is cause of a disastrous performance (the grid can be composed by 4, 5 or 6 behaviors, it depends by the necessities of the company).

For example, the grid of behavior indicators of the competency "Teamwork" could be:

- a) He is totally able to work with others, his team always achieves amazing results and he is really appreciated by all the colleagues.
- b) He is usually able to work with others, he is appreciated by most of the colleagues and his team usually achieves good results.
- c) Normally he is able to work with others, he is able to relate positively with some of the colleagues, sometimes his team achieves good results.
- d) He presents some difficulties in working with others, he sometimes argues with the colleagues, his team struggles to produce results.
- e) He is not able to work with others, he constantly argues with the colleagues, his team never achieves good results.

Each employee should, therefore, be evaluated by selecting the behaviors that he usually keeps.

Since they decided to include six competencies in their portfolio, in their case this table would have six rows.

This tool would permit an evaluation quite fast, repeatable over time, usable by different roles, intuitive, editable if necessary and that should give simple results on which to do an easy analysis.

Competency	Definition given by va. B. W. Fileur	Behavioral indicators
Competency 1	In va. B. W. Fileur, this competency is	a) behavior expressed by those
	intended as	that possess the maximum level
		of the selected competency
		b)
		c)
		d)
		e) behavior expressed by those
		that possess the minimum level
		of the selected competency
Competency 2	In va. B. W. Fileur, this competency is	a) behavior expressed by those
	intended as	that possess the maximum level
		of the selected competency
		b)
		c)
		d)
		e) behavior expressed by those
		that possess the minimum level
		of the selected competency

Table 4.7: Tool for evaluation competencies

It would be appropriate for each employee to be evaluated by more than one person, in this way it would be possible to avoid biases coming from the relationship between evaluator and worker evaluated. This is why we have proposed to have each employee assessed by the Head of Production and all the Heads of the shift, to get more reliable and accurate evaluations. The final evaluation of each employee would be the average of all the different assessments.

Moreover, we suggested to va. B. W. Fileur to also exploit self-assessment: it is an amazing tool to make the employees understand what is important for the company. This could bring them to start working autonomously on the selected competencies, and it should favor the following possible training.

Training phase

The training courses will be structured by taking inspiration from the results of the competency evaluations: will be highlighted the competencies that need to be improved and those that are already present with an acceptable level.

The choices about which courses to activate, and how to structure them, will be highly influenced by the available resources.

Since these topics are not firm-specific, it would be suggested to rely on external experts: they do these activities for work and therefore it is more probable to achieve the desired results; it may be also useful in underlying the importance that va. B. W. Fileur gives to the project.

Growth phase

The results of the evaluations are the starting point on which to base also the growth of the employees. For growth we mean the implementation of all these tools that can contribute to the development of the workers and from which both the workers and the company may benefit; all these tools have been presented previously, but the case of va. B. W. Fileur we are referring to succession planning, internal mobility, and retribution policies, but it must be taken in consideration that, thanks to the talent management, also the selection process can be seen as the first step of the growth of the employee.

We suggested to va. B. W. Fileur two possible different strategies by which to plan employees growth: it is possible to consider the absolute value that every employee achieved in one single evaluation, or alternatively the improvement that occurred between two following evaluations. The first proposes to take more into consideration the workers based on the real and actual value of the competency possessed, and therefore rewards the best employees in absolute values, while the second rewards and takes more in consideration the improvement and the commitment that the employee had in that period.

General suggestions

It has been underlined to va. B. W Fileur the importance of having a person in charge of the maintenance of the talent management process: for the good success of the project it is essential to repeat periodically the evaluations since they are the sources of the collection of the information. Only in this way, it is possible to control the development of the workers, to implement the previously described tools and to check if the training is bringing the desired

results; practically it allows to check if it is worthwhile to continue to invest huge resources or if something should be changed.

Another aspect that we highlighted has been the need for an initial effective presentation of the project made to the employees. We proposed a general meeting in which to introduce the talent management process in order to improve the commitment of the employees and to give an "official status" and importance. During this phase it is fundamental to underline as it is not an instrument aimed to the control of the employees, but that the employees can gain a lot of benefits and that it is an amazing way through which the employees and the company can grow together.

4.7 - Chapter summary

This chapter tells how the theoretical knowledge presented in the previous chapters can be applied to a real case. It does it thanks to the possibility given to us by va. B. W. Fileur.

Voestalpine Böhler Welding Fileur is a manufacturing company situated in Cittadella that produces seamless cored wires and that is living a period of deep change. This company is facing some critical situations concerning the Human Resources Management such as the rapid increase of the number of employees from 70 to 127, the low commitment of workers toward the company, the presence of several workers from foreign countries and the need to improve the digital and linguistic competencies of the employees.

They thought that a good method to manage all these situations would have been the implementation of a talent management process that regards the blue collars. They, therefore, decided to build this talent management project based on technical, transversal, digital, linguistic and security competencies.

The aim of the project was to evaluate the competencies of the workers, to build some training courses based on the results of the evaluation and then to project the growth of the employees and consequently of all the company.

The aim of this thesis was to understand which transversal competencies to include in the portfolio, and to decide with them how to build the whole talent management process.

In order to select which competencies should have been included in the portfolio, we decided to base our work on the theories of D. McClelland, and to try to understand which transversal competencies distinguish a worker with outstanding performances with the workers with average performances.

We did it through a questionnaire addressed to a selection of Outstanding Workers, a selection of Average workers, the HR managers, the Head of Production, the Heads of Shift and the Coordinators. The questionnaire was made of five questions: two open questions, one that asked to order some macro-categories of competencies, a checklist, and a Likert scale.

The analysis of the questionnaire produced a list of 11 transversal competencies that resulted important for the blue collars of va. B. W. Fileur. Those competencies are "teamwork", "Desire to learn and improve", "Flexibility/adaptability", "Result orientation and quality orientation", "Capacity of analysis", "Commitment to the company / sense of belonging", "Self-control / self-confidence", "Problem solving", "Communication skills", "Organisational capabilities" and "Care for cleaning and order".

The "practical tasks" of this thesis have come to an end with the presentation of the list of the competencies to the HR manager and to Head of Production. However, during the last meeting, there has been the possibility to give to va. B. W. Fileur some advice on how to use the information in the list in order to implement their process of talent management to the best.

We gave some suggestions on how to choose the competencies to insert definitively into the portfolio and they decided 6 of the 11 previously presented.

Then we proposed a table that allows evaluating the selected competencies by analyzing the real and concrete behaviors kept daily by the employees. The other suggestions given to va. B. W. Fileur concerned the maintaining of the project through the years, how to structure the training course, how to follow the development of the employees and how to introduce to the workers the whole project, to try to get as much commitment a possible.

CONCLUSIONS

The purpose of this thesis was to try to understand how to build a talent management process able to favor the achievement of a sustainable competitive advantage by enhancing the competencies of employees.

To do that, it has been discussed how information is essential while building any HR project, how it is possible to make competencies the "core" around which every HR activity is build, and how to manage the long-term project of ensuring that every critical position inside an organization is occupied by a "talent". Then, it has been presented how the acquired knowledge has been applied to the real case of va. B. W. Fileur and, more precisely, into the implementation of a new talent management process for the workers.

As a student and a future worker, the main lessons that I could learn from the studied literature are that the competencies are not an abstract entity and that they need to have a concrete influence on the behavior of the workers; they can, therefore, be one of the causes that distinguish the workers with superior performances from those with average ones; but also how organizational environment affects the effective performances of the workers, and therefore the need to have a firm-specific project with firm-specific tools.

Even though the outputs of the work done with va. B. W. Fileur have been presented in the fourth chapter, it can be interesting to underline how we tried to apply the literature into the practical case; the most evident aspect has been the attempt to analyse the real behaviours of the workers in order to evaluate the competencies, both in the preparation of the questionnaires and in the preparation of the tool suggested for the continuation of the project, and the attention given to the fact that these behaviors had to be specific of the workers of va. B. W. Fileur, and not of a general manufacturing company.

It is difficult to say if this study will demonstrate some effective managerial implications: only in the long run we may know if the transversal competencies presented to va. B. W. Fileur are really those that cause the difference in performances between the outstanding and the average workers, and only in the long run we may be able to understand whether the talent management process we helped to structure will guarantee the presence of talents in the strategic positions within the company. Moreover, the positive or negative results of the project will depend on many factors, not only directly connected with the talent management process, and probably it will be difficult to attribute them to this project.

Nevertheless, from a practical point of view, what this thesis have highlighted is the need of an organisational culture that comprehends the value and the positive effects of investing in their employees and in their competencies, and have tried give some indications and insights in how to structure all the phases of a talent management process by mean of practical tools.

Compared to the traditional literature and case studies, the step forward that this work presented is the desire and attempt of va. B. W. Fileur to build their talent management process on the blue collars and not, as it is usually done, on the white collars, managers or R&D department. Indeed, until now, it has been unusual to invest in the competencies of blue collars since the expected final benefits that the organizations thought to obtain have been considered not worth the costs; instead, the improvement of the competencies of the "higher level" worker have been considered to bring higher benefits to the whole company with respect to the incurred costs.

But, in our historical context, the economic and industrial environments are quickly changing: technology, competition, and culture are remodeling the ways in which manufacturing is conceived and done and, as reported in the introduction, there is an urgent necessity that workers change in a harmonized and consistent way with the organizations.

Since manufacturing is changing, companies need, and will always need more, a workforce different from the actual, and blue collars are becoming strategic figures inside the companies. There is the necessity to have not only competent managers (remembering the lessons of Boyatzis) but also to have competent workers that move next to their organization through this period of change. And those organizations that will be able to have talents in their critical positions, will be consequently able to gain a remarkable competitive advantage. That is why the new way in which va. B. W. Fileur is trying to implement talent management is to be studied and analyzed.

Therefore, from both the managerial and theoretical point of view, must try to understand how to accompany organizations and workforce through this critical period of change, to ensure that the competencies of the workers are harmonized, in sync, and consistent with the needs of the organizations.

It has been worthful to have the opportunity to transfer the theoretical knowledge learned into a real case. Obviously, the hope is that the work done and the suggestion given will be helpful and valuable for va. B.W. Fileur; but, anyhow, there is the awareness of having analyzed a critical and actual topic, and the thought of the necessity to feel part of the change we are living.

$\begin{array}{l} \textbf{APPENDIX 1-Questionnaire addressed to the blue collars} \\ \textbf{(in Italian)} \end{array}$

QUESTIONARIO	PER	L'INDIVIDUAZIONE	DELLE	COMPETENZE	"TRASVERSALI"	DEGL
ΟΡΕΚΔΤΩΚΙ						

LINEA DI APPARTENENZA
DA QUANTI ANNI LAVORA IN va. B. W. FILEUR?
Al giorno d'oggi, in una realtà industriale sempre più globalizzata, specializzata e competitiva, anche per gli operatori non basta più semplicemente saper utilizzare un macchinario cercando di fare mene errori possibile ma è sempre più importante saper dare "qualcosa in più" al proprio ruolo. D'ora in
poi chiameremo questo "qualcosa in più" con il nome di competenze "trasversali ". Questo è il motivo di questo questionario: va B. W. Fileur si sta interrogando su quali siano i comportamenti e le competenze "trasversali" che possono aiutare un lavoratore a migliorare le proprie attività. Per capirlo ha deciso di partire da voi, che vivete in prima persona le attività operative aziendali. Vi chiediamo dunque di compilare questo questionario in base alla vostra esperienza: non ci sono risposte giuste o sbagliate! La compilazione vi richiederà circa 10 minuti.
Grazie per la collaborazione!
1. Che caratteristiche dovrebbe avere, secondo te, l'operatore ideale in va. B. W. Fileur? (Pensa ad esempio a un tuo collega molto bravo, ad alcune tue competenze che trovi ti rendano un buon operatore, cosa invece ti piacerebbe imparare)
 Che caratteristiche dovrebbe avere, secondo te, l'operatore ideale nella linea in cui maggiormente operi? (Pensa ad esempio a un tuo collega molto bravo, ad alcune tue competenze che trovi ti rendano un buon operatore, a cosa invece ti piacerebbe imparare)

ordina, dalla più importante alla meno importante, le seguenti categorie di competenze in
ase alla loro importanza nel tuo lavoro quotidiano.
er farlo utilizza i numeri da 1 a 6, dove 1 significa "più importante" mentre 6 significa "meno mportante".
Capacità tecniche, di realizzazione e operative
(Es: utilizzo corretto macchinari, non commettere errori, saper usare tanti macchinari)
Attenzione e supporto verso gli altri
(Es: capire quando un collega ha bisogno di aiuto, saper aiutare un collega in difficoltà)
Capacità di influenzare e persuadere gli altri
(Es: convincere un collega a fare ciò che si ritiene migliore, discutere con un capo cosa è più opportuno)
Capacità di trascinare e guidare gli altri
(Es: saper lavorare in gruppo, essere interessati alla crescita dei colleghi, essere un leader per i colleghi)
Capire e analizzare le situazioni
(Es: saper capire e analizzare i numeri, capire le priorità aziendali, sapere
sempre cosa fare senza bisogno di troppe indicazioni)
Fiducia in sé stessi, autocontrollo, flessibilità
(Es: conoscere i propri punti di forza e di debolezza, sapersi controllare anche nei momenti più difficili, adattarsi alla situazione)
b P

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- 4. Segna, con una X sul pallino, le 10 competenze "trasversali" che ritieni più importanti per svolgere il tuo lavoro quotidiano.
 - Autocontrollo e gestione dello stress
 - Autonomia nel lavoro
 - o Buon umore
 - o Capacità di adattamento
 - Capacità di analisi
 - o Capacità comunicative
 - Capacità di eseguire gli ordini dei
 - superiori
 - o Capacità di generare nuove idee
 - o Capacità di gestione del tempo
 - Capacità di lavorare in gruppo
 - Capacità organizzative

- o Comunicazione con i superiori
- Essere competitivi
- o Fiducia negli altri
- Flessibilità
- o Orientamento al risultato
- Precisione
- Raccogliere informazioni
- Risoluzione dei problemi
- Senso di appartenenza
- o Senso di responsabilità
- o Voglia di imparare e di migliorarsi

5. Indica quanto spesso utilizzi le seguenti competenze per svolgere il tuo lavoro quotidiano.

	Mai	Raramente	A volte	Spesso	Molto spesso	Sempre
Attenzione al risultato del proprio lavoro	1	2	3	4	5	6
Attenzione alla qualità	1	2	3	4	5	6
Spirito di iniziativa	1	2	3	4	5	6
Ricerca delle informazioni	1	2	3	4	5	6
Sensibilità verso gli altri	1	2	3	4	5	6
Disponibilità verso il cliente	1	2	3	4	5	6
Influenza sugli altri	1	2	3	4	5	6
Capacità di riconoscere i ruoli all'interno di un gruppo	1	2	3	4	5	6
Costruire relazioni	1	2	3	4	5	6
Aiutare gli altri a migliorare	1	2	3	4	5	6
Autorevolezza e sapersi far ascoltare	1	2	3	4	5	6
Lavoro di gruppo e cooperazione	1	2	3	4	5	6
Capacità di essere leader di un gruppo	1	2	3	4	5	6
Capacità di analizzare una situazione	1	2	3	4	5	6
Avere conoscenze teoriche e applicarle	1	2	3	4	5	6
Capacità tecnico/professionali	1	$\boxed{2}$	3	4	5	6

Autocontrollo	1	2	3	4	5	6
Fiducia in sé	1	2	3	4	5	6
Flessibilità	1	2	3	4	5	6
Impegno verso l'azienda	1	2	3	4	5	6

Questa ricerca fa parte di una tesi di Laurea Magistrale in Business Administration, è curata da Marco Sabbadin in collaborazione con voestalpine Böhler Welding Fileur S.r.l. per supportare una migliore analisi delle competenze trasversali necessarie in azienda.

APPENDIX 2 – Questionnaire addressed to other roles (in Italian)

QUESTIONARIO PER L'INDIVIDUAZIONE DELLE COMPETENZE "TRASVERSALI" ALTRI RUOLI

RUOLO IN v. B. W. FILEUR
DA QUANTI ANNI LAVORA IN va. B. W. FILEUR?
Al giorno d'oggi, in una realtà industriale sempre più globalizzata, specializzata e competitiva, anche per gli operatori non basta più semplicemente saper utilizzare un macchinario cercando di fare meno errori possibile ma è sempre più importante saper dare "qualcosa in più" al proprio ruolo. D'ora in poi chiameremo questo "qualcosa in più" con il nome di competenze "trasversali ".
Questo è il motivo di questo questionario: va. B W. Fileur si sta interrogando su quali siano i comportamenti e le competenze "trasversali" che possono aiutare un lavoratore a migliorare le proprie attività. Per capirlo ha deciso di partire da voi, che quotidianamente gestite, coordinate e organizzate gli operatori nelle loro attività operative. Vi chiediamo dunque di compilare questo questionario in base alla vostra esperienza: non ci sono risposte giuste o sbagliate! La compilazione vi richiederà circa 10 minuti.
Grazie per la collaborazione!
1. Che caratteristiche dovrebbe avere, secondo te, l'operatore ideale in va. B. W. Fileur? (Pensa ad esempio a un operatore molto bravo, ad alcune competenze che lo rendono un buon lavoratore nella vostra specifica azienda, cosa invece ti piacerebbe che imparasse a fare)
2. Gli operatori che lavorano in va. B. W. Fileur dovrebbero avere, secondo te, delle competenze "trasversali" diverse in base alla linea in cui operano?

3.	base alla loro imp	mportante alla meno importante, le seguenti categorie di competenze in ortanza nel lavoro quotidiano degli operatori. numeri da 1 a 6, dove 1 significa "più importante" mentre 6 significa "meno
		Capacità tecniche, di realizzazione e operative (Es: utilizzo corretto macchinari, non commettere errori, saper usare tanti macchinari)
		Attenzione e supporto verso gli altri (Es: capire quando un collega ha bisogno di aiuto, saper aiutare un collega in difficoltà)
		Capacità di influenzare e persuadere gli altri (Es: convincere un collega a fare ciò che si ritiene migliore, discutere con un capo cosa è meglio fare)
		Capacità di trascinare e guidare gli altri (Es: saper lavorare in gruppo, essere interessati alla crescita dei colleghi, essere un leader per i colleghi)
		Capire e analizzare le situazioni (Es: saper capire e analizzare i numeri, capire le priorità aziendali, sapere sempre cosa fare senza bisogno di troppe indicazioni)
		Fiducia in sé stessi, autocontrollo, flessibilità (Es: conoscere i propri punti di forza e di debolezza, sapersi controllare anche nei momenti più difficili, adattarsi alla situazione)

- 4. Segna, con una X sul pallino, le 10 competenze "trasversali" che ritieni siano più importanti per gli operatori per svolgere il loro lavoro quotidiano.
 - Autocontrollo e gestione dello stress
 - Autonomia nel lavoro
 - o Buon umore
 - Capacità di adattamento
 - Capacità di analisi

superiori

- Capacità comunicative
- Capacità di eseguire gli ordini dei
- o Capacità di generare nuove idee
- o Capacità di gestione del tempo
- Capacità di lavorare in gruppo
- Capacità organizzative

- o Comunicazione con i superiori
- o Essere competitivi
- o Fiducia negli altri
- Flessibilità
- o Orientamento al risultato
- o Precisione
- o Raccogliere informazioni
- o Risoluzione dei problemi
- Senso di appartenenza
- Senso di responsabilità
- o Voglia di imparare e migliorarsi

5. Indica quanto spesso, secondo te, gli operatori utilizzano le seguenti competenze per svolgere il loro lavoro quotidiano.

ii ioro iavoro quotidiano.	Mai	Raramente	A volte	Spesso	Molto spesso	Sempre
Attenzione al risultato del proprio lavoro	1	2	3	4	5	6
Attenzione alla qualità	1	2	3	4	5	6
Spirito di iniziativa	1	2	3	4	5	6
Ricerca delle informazioni	1	2	3	4	5	6
Sensibilità verso gli altri	1	2	3	4	5	6
Disponibilità verso il cliente	1	2	3	4	5	6
Influenza sugli altri	1	2	3	4	5	6
Capacità di riconoscere i ruoli all'interno di un gruppo	1	2	3	4	5	6
Costruire relazioni	1	2	3	4	5	6
Aiutare gli altri a migliorare	1	2	3	4	5	6
Autorevolezza e sapersi far ascoltare	1	2	3	4	5	6
Lavoro di gruppo e cooperazione	1	2	3	4	5	6
Capacità di essere leader di un gruppo	1	2	3	4	5	6
Capacità di analizzare una situazione	1	2	3	4	5	6
Avere conoscenze teoriche e applicarle	1	2	3	4	5	6
Capacità tecnico/professionali	1	2	3	4	5	6
Autocontrollo	1	2	3	4	5	6
Fiducia in sé	1	2	3	4	5	6
Flessibilità	1	2	3	4	5	6
Impegno verso l'azienda	1	2	3	4	5	6

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REFERENCES

Barrett G. V., Depinet R. L., (1991), "A reconsideration of testing for competence rather than intelligence", *American Psychologist*, Vol. 46, N. 10, pp. 1012-1024.

Bethke-Langenegger P., Mahler P., Staffelbach B., (2011), "Effectiveness of talent management strategies", *European Journal International Management*, Vol. 5, N. 5, pp. 524-539.

Boyatzis R. E., (1982), *The competent manager: A model for effective performance*, Wiley, New York.

Brannick M. T., Levine E. L., Morgeson. P., (2007), *Job and work analysis, methods, research, and applications for human resource management,* Sage, 2nd edition, Los Angeles.

Camuffo A., (1998), *Piccoli grandi capi: Competenze per la produzione flessibile*, Etas, Milano.

Camuffo A., Gerli F., Gubitta P., (2012), "Competencies matter: modeling effective entrepreneurship in northeast of Italy small firms", *Cross Cultural Management: An international Journal*, Vol 19, N.1, pp. 48-66.

Carretta A., Dalziel M. M., Mitrani A., (1992), *Dalle risorse umane alle competenze*, Franco Angeli, Milano.

Caupin G., Knoepfel H., Koch G., Pannenbäcker K., Pérez-Polo F., Seabury C., (2006), *ICB-IPMA Competence Baseline, Version 3.0.*, International Project Management Association, Nijkerk.

Collings D. G., Mellahi K., (2009), "Strategic Talent Management: A review and research agenda", *Human Resource Management Review*, Vol 19, N.4, pp 304-313.

Comacchio A., (1999), L'ufficio che cambia: Nuove competenze per le professioni impiegatizie, Etas, Milano.

Gallo R., Boerchi D., (2004), *Bilancio di competenze e assessment centre: potenzialità e limiti dell'auto e dell'etero-valutazione delle competenze*, Franco Angeli, Milano.

Guion R., (1991), "Personnel assessment, selection and placement", in Dunnette M., Hough L. (2nd ed), *Handbook of industrial and organisational psychology*, (Second Volume, Chapter 6), Consulting Psychologists Press, Palo Alto.

Harvey R., (1991), "Job analysis", in Dunnette M., Hough L. (2nd ed), *Handbook of industrial and organisational psychology*, (Second Volume, Chapter 1), Consulting Psychologists Press, Palo Alto.

Huselid M. A., Jackson S. E., Schuler S. R., (1997), "Technical and Strategic Human Resource Management Effectiveness as Determinants of Firm Performance", *Academy of Management Journal*, Vol 40, N. 1, pp. 171-188.

International Taskforce on Assessment Center Guidelines, (2015), "Guidelines and ethical considerations for assessment center operations", *Journal of Management*, Vol. 41, No. 4, pp. 1244–1273.

Jubb R., Robotham D., (1997), "Competences in management development: challenging the myths", *Journal of European Industrial Training*, Vol. 21, N. 5, pp.171-175.

Kirkpatrick D., (1959), "Techniques for evaluation training programs", *Journal of the American Society of Training Directors*, Vol 13, pp. 21-26.

Le Boterf G., (1998), "Évaluer les compétences, Quels jugements? Quels critères? Quelles instances?", *Education permanente*, Vol. 135, N.2, pp.143-151.

Levati W., (1991), *L'analisi e la valutazione del potenziale delle risorse umane*, Franco Angeli, Milano.

Lewis R. E., Heckman R. J., (2006), "Talent management: A critical review", *Human Resource Management Review*, Vol. 16, N. 2, pp 139-154.

McClelland D. C., (1973), "Testing for competence rather than for intelligence", *American Psychologist*, Vol.28, N.1, pp. 1-14.

Pearn M., Kandola R., (1988), *L'analisi delle mansioni, dei compiti e dei ruoli*, Franco Angeli, Milano.

Porter M. E., (1996), "What Is Strategy?", Harvard Business Review, Vol. 74, N. 6, pp 61–78.

Prien E. P., Goodstein L. D., Goodstein J., Gamble L. G. Jr, (2009), *A practical guide to job analysis*, Pfeiffer, San Francisco.

Raven J., Stephenson J., (2001), Competence in the Learning Society, Peter Lang Inc, Bern.

Salvemini S., (1977), La progettazione delle mansioni, Isedi, Torino.

Sanghi S., (2016), The handbook of competency mapping, Sage, New Delhi.

Shook E., Knickrehm M., (2018), *Reworking the revolution, are you ready to compete as intelligent technology meets human ingenuity to create the future workforce?*, document of Accenture Strategy. https://www.key4biz.it/wp-content/uploads/2018/01/Accenture-8343-Davos-Future-Workforce-WEB-A4-POV-AW-GG.pdf

Spencer L. M., Spencer S. M., (1993), Competence at work: Models for superior performance, Wiley, Ney York.

Spencer L. M., Spencer S. M., (2017), *Competenza nel lavoro: Modelli per una performance superiore*, FrancoAngeli, Milano.

Vicari S., Troilo G., (1997), "Affrontare il Possibile: le mappe cognitive. Approcci di management in condizioni di incertezza", *Economia e Management*, N. 1, pp. 96-111.

Wellins R. S., Smith A. B., Erker S., (2009), *White paper: Nine best practices for effective talent management*, document of Development Dimensions International. http://www.ddiworld.com/DDI/media/whitepapers/ninebestpracticetalentmanagement_wp_dd i.pdf

https://expert360.com/blog/talent-management-important/