

Human Intangible Asset Evaluation: The Master Goldsmith's figure

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Abstract

The aim of this research is to analyze and to evaluate, the Master goldsmith's role in the jewelry sector; a figure that has undergone a considerable change over the time.

This figure can contribute to value creation and also to the success of a firm; this is the reason why we tried to attribute an economic value to the Master Goldsmith through the creation of an evaluation model. An analysis of all available evaluation methods in literature (Borgogni, 2018) shows that they were not applicable to the economic evaluation of the professional figure analyzed. For this reason, a Master Goldsmith evaluation model (Molina and Manenti, 1994) has been created with the purpose to outline the figure in terms of experiences, abilities and knowledge. Furthermore, the abovementioned evaluation form will be used for an objective evaluation, that can become a useful tool to solve the problem related to the wrong professional classification inside the company personnel, especially if matched with remuneration.

Keywords: Intangible Asset Evaluation, Master Goldsmith, Human Intangible Asset evaluation, Jewelry sector.

1. Introduction

One of the excellences of the "Made in Italy" is represented by the goldsmith's art: a combination of past and modernity, a synthesis of love for beauty and handmade knowledge, which has allowed Italy to be a global leader in jewelry manufacturing (Bertero *et al.* 1995).

The key element of all goldsmith firms is represented by the Master goldsmith's know-how (Illario, 1959); this figure has now become increasingly valuable in almost all companies, alongside the new technologies (Carcano *et al.* 2002). This figure is part of the firm intangible asset which could make the difference from a company to another in the jewelry sector.

The research carried out had several objectives: to check the existence of an economic evaluation method, to analyze Master goldsmith's skills and abilities and, finally, to provide a useful tool for the measurement and the evaluation of soft skills. After a careful analysis of the numerous methods available in literature (Auteri, 2004), they all resulted to be unsuitable for evaluation. For this reason, an evaluation form of the Master goldsmith has been created, still inexistent in the sector. This aims at profiling the figure and clearly identifying what his qualities, competencies and knowledges are in order to carry out an objective evaluation.

2. The evolution of the Master Goldsmith's figure

The Master Goldsmith realizes jewelry processing materials and precious metals such as gold, silver, platinum, steel, precious stones (diamonds, rubies, sapphires and emeralds), pearls and other materials such as coral, wood, plastic materials.

The figure of the Master Goldsmith suffered a big change over time (Tamburrino, 2019).

In the past the Master Goldsmith was a modeler, who created a model of the object. He was upstream of the productive process, so he followed all stages of processing from fusion to finishing of the object (Garofoli, 2004). Today, however, the fusion is committed to specialized external centers, so the Master Goldsmith no longer follows this stage himself. With the advent of technology, there are more and more softwares and programs, such as 3D printers and CAD 3D which support the figure of the Master goldsmith (Micelli, 2011).

In the past, the Master goldsmith's main skill was related to overcoming the problem of reproducing the aesthetic design in a realized design, giving correct measurements in order to maintain the finished object's volume and taking into account any production drops. Today, the main skill consists in assembling the individual components of the object, correcting and maintaining the shape and finishing the final product.

3. Overview of literature

Evaluation is an important element in order to make decisions concerning Human Resources management, growth and enhancement, as it is at the bases of the explanation and the quantification of value relevant to its characteristics, role, behaviors, position held, and achieved results. Evaluation is a delicate moment both in terms of theoretical framework and of practical implementation (Boldizzoni, 2003). It is, therefore, important to analyze the problem of evaluation, identifying the complexity and the facets, by adopting the suitable multidimensional approach. In this way the position, the performance, the potential and their relationship between them, which are three of the most important elements in evaluation, must be taken into account. New methods of evaluation are introduced when there is an increase in company size, a higher complexity of functions to carry out and the occurrence of different behaviors. The procedures of evaluation aim at reducing these problems.

Today in a context which is more and more competitive, characterized by uncertainty, technological development and different needs, the human intangible asset has become a critical factor for company competitiveness. The human capital is part of the intangible asset, therefore, a critical factor of success for a firm (in term of skills) which is capable of influencing the achievement of company purposes (Fertonani e Fertonani, 2005); for this reason, it is necessary an appropriate personnel planning. This means considering a series of articulated factors (regulatory constraints, internal/external labor market, motivation, incentives, etc.) that influence the human capital development with the aim of leading them, with proper actions, towards a more coherent configuration with the business context (Boldizzoni, 2003). It is not possible to identify a definitive configuration as the internal and external business context is complex and variable. The planning has to occur using flexible methods and tools, that allow a continuous adjustment between Human Resources and corporate purposes. As human capital is considered an intangible asset of a firm, which represents a key element that could contribute significantly to the success of the company. Elements such as skills, knowledge, experiences and abilities of the personnel can contribute to increasing the value of the firm. Intangible assets generate shareholder value and corporate growth (Kumar, 2016). As part of the intangible assets, there is therefore a need to evaluate them appropriately.

4. Inapplicability of existing evaluation methods

The main human resource evaluation methods, such as position evaluation, performance evaluation, or knowledge evaluation, are useful in order to assess and identify elements such as:

- Personal requisites (age, educational, years of experience, etc.) through the position evaluation;
- Tasks to carry out, performance characteristic and individual capabilities of the person through a performance evaluation;
- Required behaviors, capabilities and distinctive features of the person analyzed through potential and knowledge evaluation.

They are not sufficient to identify a monetary value of know – know, soft skills, personal capabilities owned or that the position holder should own. These methods are based, mainly, on evaluation of goals achieved and are useful in order to plan training activities, career development, remuneration system and so on.

There are further measurement methods of the human resource, but they are inappropriate for the analysis carried out, because they do not express the true value of the human intangible asset. These methods are used for administrative purposes only in the context of accounting records and are based on determinable costs, such as acquisition costs of an employee, future earnings or standard cost fixed for categories of employees. They do not consider all those subjective and barely quantifiable elements that actually make up skills and abilities of an individual.

The Master Goldsmith's position is a complex figure, difficult to evaluate with the traditional methodologies especially if the aim is to evaluate the human intangible asset which it represents. For these reasons we have proposed the specific asset evaluation model for the professional figure Master Goldsmith (see par. 5).

5. Master goldsmith: proposed human intangible asset evaluation model

As said before, due to the complexity of the professional figure of Master Goldsmith and the strong presence of personal soft skills, the various evaluation methods available in literature, seems not fitting in order to evaluate the human intangible asset.

In order to deepen the knowledge of the role and activities of the Master Goldsmith, in particular from the Valenza jewelry district, it was possible to carry out several meetings with the professionals of the goldsmith sector, using for this purpose a questionnaire with which it was possible to identify several useful information for the construction of the following model.

Table 1: Master Goldsmith - proposed human intangible asset evaluation model.

EVALUATION FORM									
Surname				Name					
A	B	C	D	E	F	G			
Areas of evaluation	%	Indicators	Weight	Evaluation factors 1 2 3 4 5	Objective points	Weighted score (B*D)*E*100	Ideal Weighted score (B*D)*F*100	Weighted score sums	Ideal Weighted score sums
Experience	25%	Number of working years	X						
		Work done for high prestige company abroad / in Italy	X						
Education	25%	School Education	X						
		Field training	X						
Manufacturing techniques learned	35%	ABC	X						
		Further knowledge	X						
Characteristics of the individual	15%	Managerial skills	X						
		Problem solving skills	X						
		Creativity	X						
Total score	100%								

Source: Authors' own elaboration

The evaluation model is divided in areas of evaluation, with several indicators and their weights. All these aspects will be analyzed in the following sub-paragraphs.

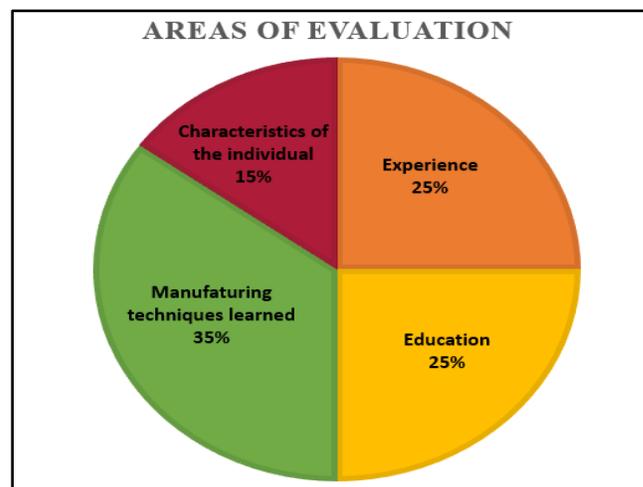
5.1 Areas of evaluation

The areas of evaluation considered are:

- *Experience*: it refers to both the numbers of working years the person has been employed by a goldsmith company or goldsmith laboratory and any experiences made for a prestigious national and/or international goldsmith company.
- *Education*: it mainly concerns school attendance of vocational training school, specific goldsmith schools, masters (a master here means courses for people who are not in the field), or on the job training, on work bench with the support of qualified personnel.
- *Manufacturing techniques*: these are all the manufacturing techniques learned during the Master goldsmith career. As for knowledge management within the activities carried out by the Master goldsmith, this knowledge can be divided into two relevant categories: the basic knowledge (starter pack) sufficient to carry out initial and minimal activities and the set of further knowledge that allows the Master goldsmith to carry out more complex work independently.

- *The Characteristics of the individual* are divided in:
 - *Managerial skills*: it means owning conceptual, technical capabilities and managerial abilities useful to manage human relationship. For examples skills such as communication competences, listening and speaking skills, empathy at interpersonal and group level, leadership, ability to analyze the situation, managing working groups.
 - *Problem solving skills and creativity*: problem solving skill is the ability to identify, recognize and solve any problem that may arise during working activity. An expert goldsmith can recognize problems and try to correct them both during the design phase and the manufacturing process. Creativity is to be intended as the choice of techniques, technologies and analysis of materials used. It is the research of the suitable process which is able to adjust the initial idea of goldsmith to match the project to be realized. It considers both the technical and the most emotional aspect originating from the sensation the precious object will emanate. Creativity in its true meaning is not part of the nowadays Master goldsmith's cultural baggage.

Figure 1: The evaluation areas: weights.



Source: Authors' own elaboration

For a correct assessment of knowledge, it has been decided to give more weight to the technical capabilities of the processes learned in order to give a higher rating.

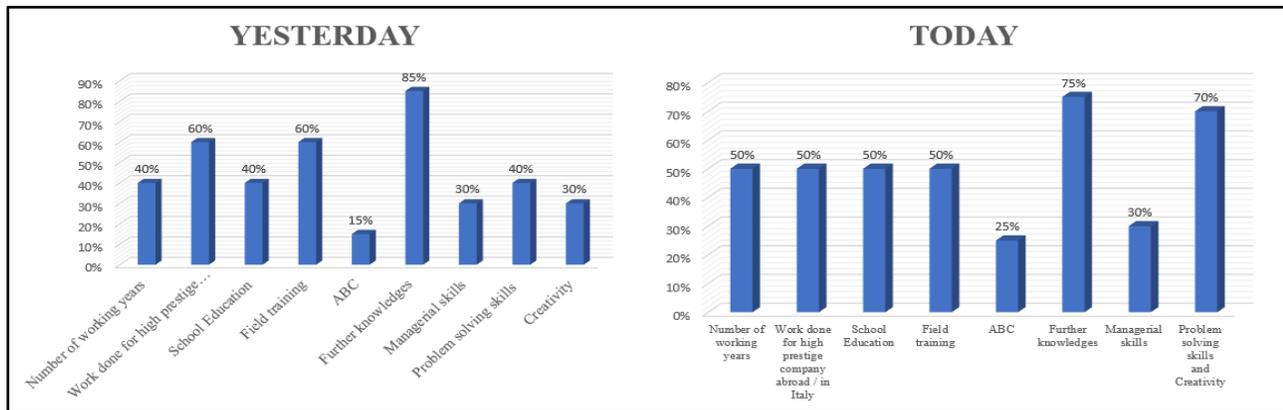
Also, the knowledge of the additional skills added to the basic skills also resulted in a higher evaluation than the subject with only the starter pack.

Equal weight has been given to experience and education as they are an essential element for an expert in goldsmith field.

The residual part is represented by the characteristics of the individual.

5.2 Indicators and their weights

As the figure of the Master Goldsmith has changed a lot over time, it is not possible to use just one model/form in order to evaluate the role; due to this evolution, the indicator's weight have to be changed. For this reason, it is necessary to create two evaluation forms/models: one for today's Master goldsmith and another for the yesterday's Master goldsmith because two different ages are taken into account. Considering the yesterday's Master goldsmith role, after Secondary School, he immediately began to learn the profession within a goldsmith company, in which had the advantage and opportunity, compared to today's Master goldsmith, of seeing the whole production process. Today, instead, with the introduction in 2006, of the law that makes the education compulsory up to the age of 16, the today's Master goldsmith has to attend a preliminary phase of schooling lasting at least three years. At the end of this preliminary education phase and after an internship, he is involved within the production process with initially easy tasks.

Figure 2: Weight evolution over time.

Source: Authors' own elaboration

The following sub-paragraphs will examine the evolution of the indicator's weight over time.

5.2.1 Experience indicator

Yesterday

The 60% of the weight has been given to the work done for high prestige company, while 40% of the weight has been given to the number of working years. It is believed that a Master goldsmith with an experience gained from a high prestige company can achieve a higher score compared to the one who has continued his working experience in a goldsmith company in Valenza that did not manage orders for the big brands.

Today

The same weight has been attributed to both the work done for high prestige company (50%) and the number of working years (50%), since nowadays they have the same importance for both the market needs and the product standardization.

5.2.2 Education

Yesterday

More weight was given to training experience directly at work (60%) than to schooling (40%) because yesterday's Master goldsmith only learned the art through direct experience, since, as mentioned above, he did not continue his studies after finishing secondary school.

Today

The same weight was given to both on-the-job training (50%) and schooling (50%) because today's Master goldsmith has a higher cultural background than yesterday's. With schooling, we do not mean general training, but specific knowledge of machining processes that have changed and use new techniques and technologies. School training does not mean general training, but specific knowledge of working processes that have changed and use new techniques and new technologies. These are learned at school and not on the job. It is important to know them from a theoretical point of view in order to deepen them on the job. Among today's skills, it is important for a Master goldsmith to be able to draw up and explain a report and a project, in which he demonstrates his knowledge of the materials chosen, the techniques used and the technologies adopted. These issues were unthinkable only a few years ago, but technology and the specialization of work have necessarily increased the ability and knowledge of the Master goldsmith also related to design.

5.2.3 Manufacturing techniques

Yesterday

The weight attributed to the further knowledge was 85% against 15% for the basic techniques. This is because the real and good Master goldsmith knows how to create the precious object from the draft to the finished product, so he does

not know only the basic techniques, but he knows how to put into practice techniques of other professional figures such as the cleaner, the cutter or the setter. Conversely, a goldsmith who only knows basic techniques is less valuable than the first one.

Today

The weight given to further knowledge has been 75% against 25% given to basic techniques. This is because the ABC is essential from both a theoretical and practical point of view, as it allows to know the intrinsic characteristics of materials and their adaptive properties for processing. Thanks to a thorough knowledge of ABC, it is possible to stratify this basic knowledge with further techniques and knowledge that will allow the Master goldsmith to apply the knowledge acquired directly on the product.

5.2.4 Characteristics of the individual

Yesterday

A weight of 70% was given to problem solving skills and creativity and 30% to managerial skills, because he must still be able to identify and recognize possible problems and solve them.

Today

The weight of 70% has been attributed to problem solving and creativity and 30% to managerial skills. Problem solving skill is the ability to identify, recognize and solve any problem that may arise during working activity.

An expert Master Goldsmith can recognize problems and try to correct them both during design phase and manufacturing process. Creativity is to be intended as the choice of techniques, technologies and analysis of materials used. It is the research of the suitable process which is able to adjust the initial idea of goldsmith to match the project to be realized. It considers both the technical and the most emotional aspect originating from the sensation the precious object will emanate. Creativity in its true meaning is not part of the nowadays Master goldsmith's cultural baggage.

5.3 Evaluation judgment

The areas of evaluation emerged from interviews; secondly, the indicators to be evaluated were created.

According to Longo 2007, evaluation is done by scoring from 1 to 5:

Level 1 = the matter is unknown;

Level 2 = basic, the matter is known, but you cannot apply it, if not partially;

Level 3 = intermediate, the matter is known, and you can apply it independently, but in not very complex conditions;

Level 4 = good, you are expert in the matter, and you can explain and transfer it to others;

Level 5 = excellent, you are specialized in the matter and the level of knowledge possessed also allows its development.

The levels of each indicator have been specifically detailed in the analysis.

Finally, in order to give a total score to the human intangible asset, a weighting is made between the weights of the evaluation areas, the weights of the indicators and the evaluation of the indicators. The sum of all the weighted scores of the indicators gives the total score.

6. Human intangible asset evaluation model: practical application

As said in the previous paragraphs, due to the evolution of the Master goldsmith figure (and also indicators weights have evolved over the time), two separate evaluation models/forms have been created. Below, the Master Goldsmith's evaluation model will be shown, structured with both past and current parameters. In order to apply our evaluation model, we have interviewed a quite famous Master goldsmith of Valenza and we have applied both parameters A (previous parameters – yesterday) and B (current parameters, today) in order to demonstrate the changes over time due to the different profile of the Master goldsmith.

The profile of the person interviewed is explained below:

- An experience of 52 years.

- Employed at local firm Crova S.p.A. and the proposal, later rejected, at the prestigious Van Cleef& Arpels in Paris.
- Scarce school education because at the end of Secondary School the Master started his education in a well – known goldsmith firm at that time (F.lliRobotti of Valenza), where he was directly trained by the firm’s owner Giuseppe Ponzone.
- From a knowledge point of view, he owns excellent basic techniques, but he lacks in the further knowledge that would allow him to complete all stages to realize the finished item. This has been his professional choice that led him to specialize in the goldsmith field rather than jewelry.
- He does not have managerial skills.
- He has excellent problem-solving skills because the Master goldsmith ability also lies in the ability to consider all the problems met in the working process, even before starting the process.
- From a creative point of view, the capabilities to design and create different objects independently have been noticed, together with a strong ability of abstraction in the imagination of the finished product from the initial stage of the working process.

Figure 3 shown the two different evaluation model/form considering previous and current parameters.

Figure 3: Evaluation model/forms - Yesterday and Today.

A) *Yesterday Evaluation: previous parameters*

B) *Today Evaluation: current parameters*

EVALUATION FORM					EVALUATION FORM				
Master goldsmith with the previous parameters					Master goldsmith with the current parameters				
Areas of evaluation	%	indicators	Weight	Weighted score	Areas of evaluation	%	indicators	Weight	Weighted score
Experience	25%	Number of working years	40%	40	Experience	25%	Number of working years	50%	50
		Work done for high prestige company abroad / in Italy	60%	75			Work done for high prestige company abroad / in Italy	50%	62,5
Education	25%	School Education	40%	10	Education	25%	School Education	50%	12,5
		Field training	60%	60			Field training	50%	50
Manufacturing techniques learned	35%	ABC	15%	26,25	Manufacturing techniques learned	35%	ABC	25%	43,75
		Further knowledges	85%	29,75			Further knowledges	75%	26,25
Characteristics of the individual	15%	Managerial skills	30%	18	Characteristics of the individual	15%	Managerial skills	30%	9
		Problem solving skills	40%	24			Problem solving skills and Creativity	70%	31,5
		Creativity	30%	18					
Total score	100%			301	Total score	100%			285,5

Source: Authors’ own elaboration

Analyzing the scores of the Yesterday evaluation form (A) it is possible to see a total of 301 points.

The law no. 296 of 27 December 2006, article 1 subsection 622, which makes school attendance compulsory until the age 16 has led to a change in the evaluation parameters; in addition, the yesterday’s Master goldsmith has different knowledge and skills compared to the current Master goldsmith, that in today’s context are no longer required by the labor market.

Adopting the same evaluation method, but adjusting it to today's parameters (evaluation model B), the score obtained is 285,5 points, which is decreasing compared to the evaluation carried out with the previous parameters. This is because the weights related to the experience, the education and the techniques learned have changed. The following table 2, stress the changes related to parameters through the time.

Table 2: Parameter's evolution.

		<i>YESTERDAY</i>	<i>TODAY</i>
<i>Experience</i>	<i>Numbers of workingyears</i>	40%	50%
	<i>Work done for a high prestige company abroad /in Italy</i>	60%	50%
<i>Education</i>	<i>School Education</i>	40%	50%
	<i>Field training</i>	60%	50%
<i>Manufacturing techniques learned</i>	<i>ABC</i>	15%	25%
	<i>Further knowledge</i>	85%	75%

Source: Authors' own elaboration

Today both the experience and the education have the same weights for their indicators compared to the past. This is due to the fact that school education is compulsory up to the age of 16, which previously was only up to the age of 13.

Also, weights related to the manufacturing techniques have changed: this is due to the fact that, as said before, today education is more important than in the past, as school education allows to acquire better knowledge compared to what could once be acquired on the job.

Moreover, the Master goldsmith of the past had to be creative too. Today, instead, creativity is considered as the capability of choosing the correct materials, the techniques and the technologies useful for production. For this reason, creativity in its true meaning is not requested any more, and the importance of problem-solving skills has increased.

7. Conclusion

The aim of this research is to analyze and to evaluate, the Master goldsmith's role in the jewelry sector; a figure that can contribute to value creation and also to the success of a firm; this figure is part of the firm intangible asset which could make the difference from a company to another in the jewelry sector. Due to the essential and central role of the Master Goldsmith in the jewelry industries, it has been thought necessary to better evaluate and express the value of this figure.

Considering all the studies of the current literature about this argument and the several evaluation methods available, it emerged that a specific evaluation method applicable to the Master Goldsmith's figure was not available. Position evaluation means identifying and evaluating the individual activities covered in a determinate position and comparing them both among themselves and on similar positions to highlight analogies or differences. This type of evaluation focuses only on the roles assumed in the organization and not on the individuals who fill them.

Our analysis is focused on the evaluation of the single person as part of the firm intangible asset through interviews and questionnaires submitted directly to the operators involved in the jewelry sector. This model is useful in order to highlight the knowledge, competences, skills, ability possessed and responsibilities related with each position, regardless the performance and timing that these artisans can achieve during the different work phases. In order to make a complete and detailed evaluation we have create a specific evaluation form/model. The complexity of the

model is a consequence of the object analyzed: human intangible asset. This asset involved elements such as experience, knowledge and competences, personal skills, attitude, creativity, employee's character elements. For this reason, it seems to be a great challenge for operators inside and outside the company to express, in monetary terms, the different dimensions analyzed, to give an economic evaluation that will be reflected on the salary aspect of the various employees.

The available literature has carried out an in-depth study and evaluation of the roles within the organization, but it gives back little information regarding the method of analyzing the value, in monetary and economic terms, of human capital intended as the sum of skills, abilities, experiences, creativity and personality within the production process. For this reason, we have proposed our intangible asset evaluation model for the Master Goldsmith; an evaluation model that did not yet exist in the goldsmith sector.

This type of evaluation makes it possible to attribute an economic value to the resource examined thanks to the mapping of individual characteristics divided into macro - classes such as experience, education, manufacturing techniques and characteristics of the individual. This allows to obtain a complete evaluation of the person not only focusing on what he can do, but also on the skills, individual character elements, attitude, knowledge, abilities and experience that he really possesses, in other words considering the complex and multifaceted nature of human intangible asset. The attribution of scores to intrinsic personal characteristics brings out the components of the analysis and it allows to make a much more precise evaluation from which a much more representative value of the person compared to the remuneration by category derives.

With regard to the figure of the Master Goldsmith, the evaluation model/form proposed, is a sort of an additional evaluation tool, which allows for a better, deeper and more rational knowledge of people both in case of recruitment and in the case of company's personnel already employed.

This model is useful for assessing the person in all his aspects and then identifying the correct remuneration.

This tool profiles the figure in terms of skills, knowledge and competences, and more generally identifies the intangible elements possessed by HR, as it has been found that it is possible to have two individuals holding the same job position, doing the same work and having different assessments. This will obviously have an impact on salaries, which will be different.

From the results of the analysis, it emerged a substantial evolution of the Master Goldsmith's figure over time, through the comparison of the two evaluation forms related to the same subject, applying different parameters. The results of this approach returned two different scores. Using the parameters of the past, the Master Goldsmith analyzed obtained a higher score compared to the evaluation obtained by recalculating the score with the current parameters. Because of this mismatch in the results, it was not impossible to compare the two different eras, as generational, cultural, educational discrepancies emerged. Moreover, the analysis underlined how some of the yesterday's Master goldsmith skills, today, are no longer required by the labor market. In conclusion, the figure of the Master Goldsmith has become considerably impoverished over time until to his disappearance today.

In conclusion, it is possible to consider that employee's soft skills are not company physical assets included among the tangible assets, but are human intangible assets owned by the employees. These, if not properly evaluated and remunerated, lead the person to leave the company with the expectation to find a better job with adequately rewarded based on their actual knowledge, skills and abilities. As a result of the loss of skilled workforce, the company's value decreases.

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