

Maestría en Gestión e Innovación Tecnológica

Title

Assessing Intellectual Capital Methodology for Small and Medium Enterprise in Mexico

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1. Introduction

Small and Medium Enterprises (SMEs), (Figure 1); are a vital link for the growth of our country and have a major role in the national economy. According to data from National Institute of Statistics and Geography (INEGI) have been identified over 4 million business units, of which 99.8% are SMEs, generating over 70% of employment in the country (PROMEXICO, 2013).

However, in assessing business productivity widely developed specific financial criteria are used and detailed by experts in the field.

Unfortunately, there has been little studied and within the financial structure "there is no method for SMEs that can valuing the knowledge of the staff for making future decisions" (Bontis and Dragonetti, 1999).

Moreover, the value of some variables that integrate existing methodologies is so broad that no one comprising all.

2. Aim

Develop tools and indicators to quantify Intellectual Capital.

3. Method

The methodology aims to be comprehensive, objective, reliable and properly oriented SMEs, so that it is possible to register as an intangible asset in the financial statements, for which there is available a methodology designed according to your particular needs and size, in other words, adjusting to the different cases under study (Figure 2). Detailing can identify several areas:

- Qualitative assessment of general aspects of human capital.
- Definition of indicators relating to intellectual and chords to turn (profile identification of posts) capital.
- Quantitative assessment of human capital through the implementation and development of tools for measuring and determining the average value weighted amount and percentage (identification documents supporting the job profile).
- Determination of indicators and benchmarks (identification of tasks and Indexing).
- Collection, analysis, justification and validation of results (relating indicators with the profits or losses and establish the proportion of intellectual capital).

This methodology is representative of the human and financial factor, so this yields only to develop key indicators, which vary according to sector or company size and thus harmonize concepts.

Starting with these indicators, a series of matrices and a proposed methodology will be developed to measure Intangible Assets. In other words, it tries to determine its value in economic terms.

| Figure 1. Stratification (MSME*) | | | | | | | | |
|----------------------------------|--|---------------------------|---------------------------|---------------------------|--|--|--|--|
| Size | Sector | Trade | Services | Industry | | | | |
| | Range of number of workers | 0 - 10 | 0 - 10 | 0 - 10 | | | | |
| Micro | Rannge amount of annual sales (MDP) | Till \$4 | Till \$4 | Till \$4 | | | | |
| | Maximum ceiling combined | 4.6 | 4.6 | 4.6 | | | | |
| Small | Range of number of workers | 11 -30 | 11 - 50 | 11 -50 | | | | |
| | Rannge amount of annual sales (MDP) | From \$4.01 to \$100 | From \$4.01 to \$100 | From \$4.01 to \$100 | | | | |
| | Maximum ceiling combined | 93 | 95 | 95 | | | | |
| Medium | Range of number of workers | 31 - 100 | 51 - 100 | 51 - 250 | | | | |
| | Rannge amount of annual sales (MDP) | From \$100.01 to \$250 | From \$100.01 to \$250 | From \$100.01 to \$250 | | | | |
| | Maximum ceiling combined | 235 | 235 | 250 | | | | |

^{*}Micro, Small and Medium Enterprises

Source: Own elaborations based on stratification established by the Ministry of Economy and in agreement with Secretariat of Finance and Public Credit.

Figure 2. Proposed Methodology for evaluating Intellectual Capital

Identifying job profile (Defined in the flowchart).

Identification of documents supporting the job profile.

Identification of tasks per job (considered).

Comparison of identifying tasks, job profile and supporting documentation.

Development of indicators for each position based on the comparison made.

Relate the indicators with the profits or losses of the company.

Establish the proportion of Intellectual Capital derived indicators.

Questions to generate consist of various categories including knowledge, application, development, reasons, benefits and investment in human resources.

4. Results

The proposed methodology is preliminary and indicative, applicable to SMEs and is seen as an art fair, measurable and grounded for proper valuation of intellectual capital option.

The above results are partial and focused mainly on the active focus on the human factor, derived from their skills / competencies, understood as the ability to perform specific activities, later to work and develop the remaining proposed indicators, such as: their expertise among others (seen these as a set of analyzable elements in a person).

| Matrix 1. QUALITATIVE ASSESSMENT OF HUMAN CAPITAL (Proposal) | | | | | | | | |
|--|--------|-----------------------|---------------------------|---------|--------|-------------------------------|------------------|--------------|
| INDICATORS | SKILLS | KNOWLEDGE / TALENT | EXPERIENCE / STABILITY | ANTIQUE | SALARY | AGE / MARITAL STATUS / SEX | AVERAGE VALUE | % AVERAGE |
| STAFF | 30% | 30% | 10% | 10% | 10% | 10% | 100% | |
| A | 3 | 2 | 3 | 2 | 4 | 4 | 2.80 | 84% |
| В | 3 | 4 | 3 | 3 | 3 | 3 | 3.30 | 99% |
| C | 3 | 3 | 2 | 3 | 3 | 4 | 3.00 | 90% |
| AVERAGE | 3.00 | 3.00 | 2.67 | 2.67 | 3.33 | 3.67 | 3.03 | 91% |

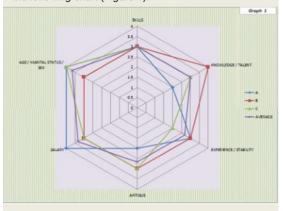
Matrix 1: Proposal and example. Once the factors chosen indicators were identified, which will be collected for the generation of information.

| Figure 3. SCALE FOR VALUATION (Proposal) | | | | |
|--|-------|--|--|--|
| VALUE | SCALE | | | |
| 0 - 2 | 1 | | | |
| 2.1 - 4 | 2 | | | |
| 4.1 - 6 | 3 | | | |
| 6.1 - 8 | 4 | | | |
| 8.1 - 10 | 5 | | | |

Figure 3: Scale for the valuation of the identified factors, where 1 is the minimum and 5 is the maximum value (Prepared on the basis of need and questionnaires administered to managers of SMEs study).

Through statistical techniques were weighted and standardized factors within a matrix, in order to provide objective and quantifiable render recovery. It aims to assess staff by Matrix No.1.

Plotting the values of the data obtained and concentrated in the matrix in radial format as shown in the following chart (Figure 1):



Graph 1: Preliminary results of the questionnaires applied to line management case study

Interestingly, according to this preliminary research study, the changes in a variable relatively insignificant change occur.

5. Conclusion

The proposal considers the accounting generate innovations in the field of Intangible Asset Finance within, so that the acquisition of skills and relevant knowledge can be considered as a good investment.

The valuation of intellectual capital can be a good starting point in including the Financial Statements by SMEs so that the value of its intangible assets and its representation according to the valuation indicators referred to be considered.

It is important to recognize and give value to intangible assets to add information to current and current accounting financial indicators. This will serve to improve decision-making, and thus forging strategies to achieve your goals, boost competitiveness, create value and benefit present and future.

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