THE CRITICALITY OF CONNECTING PEOPLE TO FINANCIAL RESULTS - AN ROI CALCULATION MODEL FOR ROMANIAN FSOs

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Abstract
Organisational culture and employee engagement have been the focus of recent broad-based research efforts. Adding this concern to the revealed importance of performance indicators on human capital, and that their use is getting momentum, in order to attach financial values to knowledge management assets, it becomes more and more critical to measure human capital value. Key for Romanian FSO's managers becomes to consider that both human and financial values have a focus on adding value in every process and function in the organisation, and to perpetuate organisational profitability by the corporate culture, on the one hand, where culture is a powerful factor that helps a company to engage, on the other hand, talented people. There is a substantial concern on using ROI on Learning and Development programmes, but whilst this is still declared, Romanian FSOs do not yet have a consistent method to measure it. This study is showing the criticality of connecting people to financial results and data analysis suggests that ROI calculation has a positive impact on creating and fostering a powerful organisational culture and that employees' awareness of ROI values within their organisation has a powerful effect on their sense of engagement. Our findings have a more practical implication for the analysed industry by shaping a formal ROI measurement mechanisms blueprint, an ROI calculation model for the Romanian FSOs, in the form of a mechanism that could be employed when considering the design of an ROI Methodology for Romanian FSOs.

Keywords: ROI on learning and development programmes, human capital, organisational culture, employee engagement, knowledge management.

JEL Classification: O15, M15, D83, O21.

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Introduction

This study aims to develop a framework of meaningful values in order to measure both tangible and intangible returns on money invested in a business operation, especially within organisations of Romanian Financial and Banking System (in the related literature referred to as Financial System Organizations, FSOs). In the 21st century knowledge era (David, 2015, Clair and Stanley, 2009), it becomes critical for the organisations to substantiate their decisions on knowledge leadership elements in order to create genuine values, both financial and non-financial ones. Introducing the application of ROI (return on investment) into human resources (HR) becomes imperative when an organisation seeks to improve its performance and therefore needs to know in what to invest in order to generate consistent returns. Key for Romanian FSO's managers becomes to consider that both human and financial values have a focus on adding value to every process and function in the organisation, and to perpetuate organisational profitability by the corporate culture, on one hand, where culture is a powerful factor that helps a company to engage, on the other hand, talented people. There is a substantial concern for using ROI on learning programmes, but whilst this is still declared, the Romanian FSOs do not yet have a consistent method to measure it. Considering previous findings that "the use of KPIs on learning and innovation is getting momentum" (Niculescu, 2015A), this study aims to present the influence the ROI calculation has on organisational culture and employee engagement in Romanian FSOs, and especially to collect those essential elements of the culture and employee engagement that are most important in the process of improving organisational performance by ROI measurement. This study provides an answer to the need for a comprehensive model and a way of systematically measuring ROI on Learning and Development programmes in the Romanian FSOs.

1. Literature Review

1.1. Human Capital Value Measurement

In order to measure the value of both tangible and intangible inputs when monitoring benefits within a business, human resource ROI becomes rather difficult to obtain. Martin and Kettner (2009) explain that when it comes to obtain human capital value, both performance accountability and performance measurement become frameworks, the first one a theoretical framework of performance and the second a practical framework of performance. When measuring human capital value, the authors (Martin and Kettner, 2009) bring forward the three essential pieces of information that are captured: information about the efficiency of human resource, information about the quality of human resource, and information about the effectiveness of human capital. Human capital measurement can basically be illustrated in the theoretical account of System Models via a mere representation of inputs and outputs: the programme is taking the input and transforms it in an output, providing a feedback to the process in order to repeat the process with the next input (Martin and Kettner, 2009). In a larger structure, once the connected inputs are allocated to a project, programme or process within a business, we will be able to develop a framework of values in order to measure both tangible and intangible returns. Essential to this larger framework are still the three dimensions of performance measurement, where (1) efficiency is defined as being "the ratio of outputs to inputs", (2) quality is "the number of proportion of outputs that meet a quality standard", and (3) effectiveness becomes "the ratio of outcomes to inputs" (Martin and Kettner, 2009, p. 6). Moreover, Epstein and Buhovac (2014) emphasise the importance of measuring the value of human capital because such a "measurement […] links performance to the principles of sustainability" (p. 122). The same authors (Epstein and Buhovac, 2014) bring forward the criticality of ROI calculation when multiple choices are compared to project options. When referring to the concept of "value" (Epstein and Buhovac, 2014, p. 145), the authors define it as a compound of three elements: use value, option value and existence value. The use value refers to consumptive and non-consumptive value of a project, the option relates to the personal opportunity to use the project or the outcomes offered by the project in the future, and the existence value concerns the importance of the outcomes to others, both in the present and in the future (Epstein and Buhovac, 2014). Clair and Stanley (2009) highlight the idea that within the knowledge era we are living, it becomes imperative to have a knowledge leadership framework in order to create value and establish a value proposition within an organisation and that "the emphasis on organizational effectiveness is requiring renewed attention to the value of knowledge in the workplace" (p.16). Clair and Stanley (2009B) highlight the importance of calculating ROI on human capital, including knowledge assets: "a financial value must be attached to the products and services provided by the knowledge services unit, as well as to the costs of maintaining the function (overhead), simply because operational costs for all functional units determine whether the organization is going to continue as a viable entity or not" (Clair and Stanley, 2009B, p.32).

1.2. ROI Calculation Models

ROI is a financial measure for calculating the profit of a business unit and the efficiency of an investment, a measure that "blends in one number all major ingredients of profitability" (Phillips, 2002). ROI is a key financial metric of the value of investment, being a ratio of net benefits to costs, expressed as a percentage. The formula can be expressed as:

$$[(\text{Monetary Benefits} - \text{Cost}) / \text{Cost}] \times 100 \tag{1}$$

Basically, ROI measures the amount of monetary return on investing in a particular business or a project. Researchers in the field have demonstrated the criticality of introducing the application of ROI into human resources. The Phillips ROI Methodology (Phillips, 1997) offers a practical way to forecast the potential ROI of a proposed management initiative in order for a performance improvement executive to achieve successful results. Phillips's Methodology suggests a 10-Step approach (Phillips, 1997), beginning with the Evaluation Planning, in order to capture the essential business inputs and indicators, and up to converting data to monetary within which Phillips's Methodology adopts clear techniques and rules. These rules are involving guiding principles in order to provide those who conduct an ROI measurement with consistency and credibility. The whole model is conceptualised in the form of a chain of impact: the process model (data collection, analysis and reporting), the rules of the method that provide standardisation and the application of ROI within the business for human resources.

Kirkpatrick's Four-Level Evaluation Model (Kirkpatrick and Kirkpatrick, 2006) was later augmented by Phillips, Kirkpatrick referring to an evaluation model only in four steps: Reaction, Learning, Behaviour and Results. The Kirkpatrick Model, from reaction, to learning, to application/behaviours, to business impact to ROI, provides a comprehensive way to capture the Value Added of a business project (whether it is a Leadership project, or a Training programme, a Learning and Development plan, etc.), and offers a justification of the impact over the business and how it can be a transformational lever for the organisation. On a conceptual level, if an organisation does proper data gathering in all stages, it will be able to tackle a clear and objective view over its performance and over the invested value.

Both Phillips' and Kirkpatrick's measurement models can be standardised as a process so as to become institutionalised and embedded in the organisation's DNA, and therefore to elevate the role of HR and learning models to more strategic levels becomes more valuable.

In the human capital measuring practice history, the only financial variables used were those derived from organisational income statements, showing the Revenue per employee (Fitz-enz, 2009). Fitz-enz (2009) has illustrated another perspective on human capital financial data gathering: he proposed to calculate the HCROI (Human Capital Return on Investment) as a more accurate form to calculate the profitability per employee (Fitz-enz, 2009, p.36):

$$\text{HCROI} = [\text{Revenue} - (\text{Expenses} - \text{Pay and Benefits})] / \text{Pay and Benefits} \qquad (2)$$

The ratio presented above focus on adding value to every process and function in the organisation, then to underpin its success by commitment, and to perpetuate organisational profitability by the corporate culture, where the culture is a powerful factor helping a company attract, motivate and retain talented people. Thus, human capital can be linked to economic value added, productivity, cost-related strategies, and profitability.

In order to link organisational processes and the values drawn from these processes, people first need to know the outcomes in a clear, specific and quantitative way, to grasp the importance of the outcome and to be committed to attaining those outcomes. Fitz-enz (2009) shows the Performance Matrix Process as a basic methodology for process management. Based on this Matrix, companies have to evaluate three basic criteria for value added (Service, Quality and Productivity) against cost, time, quantity, errors and reaction (Fitz-enz, 2009). In order to receive validity of the human capital performance metrics, the organisations have to examine every problem in terms of costs and in terms of human component. Thus, the Performance Matrix (Fitz-enz, 2009) has to be applied to HR activities, namely acquisition, maintenance, development and retention. All these four components calculated against the five above-mentioned components of the Performance Matrix (cost, time, etc.) will help managers measure human resource management programmes.

Calculating ROI for human capital begins with elements of HR management, where companies have to pay close attention to the significant changes that occur in costs, time, volumes, errors or reaction. Organisational focus on measuring the benefit to the project users relates to establishing cost-benefit analysis, the comparison between the costs attached to the project and the benefits drawn from that particular process (Learning and Development programmes, Training programmes, Knowledge Management programmes, etc.).

There is substantial concern on using ROI on Learning and Development programmes, but whilst this is nonetheless acknowledged, the Romanian FSOs do not yet have a systematic and homogenous process to measure it. Thus, human capital measurements tend to converge more on inputs and not on the business outcomes (Niculescu, 2015A). Phillips and Phillips (2012) are demonstrating that measuring ROI in Learning and Development provides comprehensive perception of all aspects of advancing, generating, enforcing, sustaining, and evaluating the human capital of an organisation.

1.3. Creating and Fostering a Powerful Organisational Culture

Edmonds (2014) presents the organisational culture as a powerful engine that drives the organisation ahead and, with the right fuel, people will be able to contribute effectively to achieving the organisational objectives. The "organizational constitution" (Edmonds, 2014, p. 20) is framed by a clear purpose, the right values and behaviours, a powerful strategy, and achievable performance goals. All these are part of a complex process of creating and fostering the organisational culture that drives the success. Moreover, "in a culture where teams are effective and people are working in synergy, the leaders will be capable to build trust between the employees" (Niculescu, 2015B). A recent study shows that within the Romanian Financial and Banking institutions there is an immediate need for accountability and responsibility among the employees, while "an effective clarity in organizational strategy related to job expectation necessarily improves employee performance" (Niculescu, 2015B). Really relevant for an organisation becomes the genuine communication and transparent governance, which will be converted into such business practices that will be able to bring about higher performance (Niculescu, 2015C). Organisations today must invest in their intellectual capital, especially in relationships and transparent actions (Niculescu, 2015C). Niculescu's research shows that in Romanian companies there has to be consistency and transparency of actions and decisions, and clarity of the practices in order to set a value-based society (Niculescu, 2015C). Furthermore, "managers are aware that performance indicators and measurable benefits, different systems and procedures, skills, organisational culture, and the organisational structure can enable and encourage knowledge sharing […]. The organisational culture plays a critical part in understanding and managing organisational knowledge, in terms of various elements, such as decision-making processes, communication, response to members' needs, success attained, the way people and departments help each other and collaborate, the way information circulates within the organisation, the barriers encountered, and management styles" (Niculescu, 2015A).

1.4. Employee Engagement

Goffee and Jones (2015) present an "authentic" organisation that has powerful features to hire its employees, such as: letting employees to be themselves (authentic behaviours), communication with honesty and transparency, creating value for employees by building on their own strengths and interests, increasing the clarity of actions and decisions. Moreover, "in order to establish the key drivers to employee engagement, the organizations should implement a strong culture of accountability and responsibility" (Niculescu, 2015B). In addition, Wakeman (2013) explains how personal accountability aims first of all to allow employees to substantiate their own vision on their work in order to promote responsibility within the organisation. "Designing a culture of high trust between employees and their superiors, colleagues and/or their subordinates, will create an engaged workforce, people committed to their organization's goals and values" (Niculescu, 2015B). In linking performance to employee engagement, Niculescu (2015B) has noticed that "as long as employee motivation and employee engagement are at a moderate level, performance outcomes are also at a moderate level. […] Employees need a strong culture of accountability and responsibility, constant guidance from their leaders, and genuine and effective communication within the organization" (Niculescu, 2015B). Controlling hierarchies and strong bureaucratic management styles are hindering employee engagement. In another research on the Romanian Financial and Banking Institutions, Niculescu (2015D) has found that there is a strong influence between a value-based leadership that fosters engagement and organisational culture, on the one hand, and the knowledge-based society that encourages learning and employee development, on the other hand.

1.5. Statement of Problems

The performance indicators on Learning and Development programmes in the Romanian Financial and Banking Institutions are used mainly for measuring investments that generate business results (input KPI's), but a recent research (Niculescu, 2015A) shows that there is an impending need for measuring rather directly financial and non-financial results generated by the business activities (output KPI's). Thus, performance will be measured against the significant effect that employee's knowledge-based activities have on the future productivity and performance (Niculescu, 2015A). The goal of the study is to continue a previous study on performance indicators (Niculescu, 2015A), which investigated the impact of measuring financial and non-financial results generated by different business activities on knowledge-based activities, especially on Learning and Development activities. These impacts, as shown above, are especially highlighted in the framework of organisational culture and employee engagement, therefore the present paper aims to answer the following questions:

Question 1:

How does ROI calculation affect organisational culture?

Question 2:

How does the awareness of ROI measures affect employee engagement?

From these theoretical findings and questions about perceived ROI calculation, this study can deduce the next two hypotheses:

Hypothesis 1. ROI calculation does not have a positive impact on creating and fostering a powerful organisational culture; and

Hypothesis 2. Employees' awareness of ROI within their organisation has no effect on their sense of engagement.

2. Methodology

2.1. Sampling and Respondents

Romanian FSO's offer a complex context within which ROI calculation mechanisms promote organisational cultural features such as behaviours, believes, values, or assumptions. The research subjects for this study were human resource professionals, R&D employees, Learning and Development members, trainers and mentors from organisations' management and operational levels. In choosing appropriate samples for our study, 80 questionnaires were distributed to relevant professionals of Romanian Financial and Banking Institutions, a total of 52 were filled out, with a rate of return of 65%.

Table no. 1 suggests that most respondents (61,5%) are middle managers indicating that the majority of mid-management individuals (51.9%) have more than 11 years of experience in the field. Moreover, 13.5% have even more than 20 years experience. Most of the respondents were employees aged between 36 and 45.

Table no. 1: Respondent demographic information

Variable	Frequency	Percentage
Staff		
Top management	6	11.5%
Middle management	32	61.5%
Operational	14	26.9%
Experience	52	
<5 years	3	42.9%
5-10 years	15	28.8%
11-20 years	27	51.9%
>20 years	7	13.5%
Age	52	
<35	14	26.4%
36-45	23	43.4%
>45	16	30.2%

2.2 Analysis of Research Questions

Research Question 1. (Q1): How does ROI calculation affect organisational culture?

Organisational culture is related to the decision-making processes within Romanian FSOs, communication, response to members' needs, success attained, the way employees and departments help each other and cooperate to overcome obstacles, the way information flows in the organisation, the barriers encountered, and management styles. Our study aims to tackle the influence ROI calculation would have on all these aspects in the Romanian FSOs, as shown in table no. 2.

Questionnaire items 1, 2 (a, b), and 3 to 8 within Section A (table no. 2) were used to address research issues related to cultural elements within the Romanian FSOs and find whether calculating ROI on knowledge management features, especially on Learning and Development, would influence these elements of organisational culture. As long as decision-making processes, communication, response to members' needs, success attained, collaboration, information flows, overcoming obstacles, and management styles are key tools of strategic development of organisational culture, it becomes critical to ensure that performance measures on acquired and embedded skills and competencies are being implemented into the core practices of a Romanian FSO. The study shows that measuring ROI on human capital would have a strong influence on managers' decision-making processes, with a mean score of 4.08 percent of the respondents. Introducing ROI measurement on Learning and Development programmes would respond to employees' needs on a regular basis (a mean value of 4.17 percent), and would definitely impact internal management styles (a mean value of 4.60 percent). The whole system of measuring the human capital knowledge management (acquiring, implementing and sharing knowledge throughout Learning and Development programmes) would bring about an effective change in organisational culture by often meeting desired behaviours and attitudes (with a mean value of 3.79 percent). The goals and objectives are often achieved, with a mean value of 3.19 percent of the respondents. The study reveals that there are some aspects to be addressed further, because employees believe that measuring ROI on human capital's knowledge contribution would only occasionally help overcome obstacles (with a mean value of 2,92 percent), and influence internal communication (with a mean value of 2.65 percent), or even influence information flows (with a mean value of 2.38 percent). The mean scores show that there is a generally accepted idea of ROI measurement influencing the main aspects of organisational culture: management styles, employee needs, changing the culture, and decision-making.

Table no. 2: Means, standard deviations, and remarks for Q1 items

S/N	**Variable**	**M°**	**SD°°**	**Remarks**
1	Decision-making	4.08	0.7097680882	On a regular basis
2a	Changing the existing culture	4.54	0.5760425659	On a regular basis
2b	Meeting the desired culture	3.79	0.7231884321	Often
3	Goals achieved to date	3.19	0.9296522972	Often
4	Overcoming of obstacles	2.92	0.9041549808	Occasionally
5	ROI influence on internal communication	2.65	0.7378988555	Occasionally
6	ROI would respond to employees' needs	4.17	0.7063064337	On a regular basis
7	ROI would influence information flows	2.38	0.9108032687	Occasionally
8	ROI has an impact on management styles	4.60	0.5335642411	On a regular basis

N= 52
°M = the mean value, average variance extracted
°°SD = standard deviation

The results for Question 1 show that the organisational culture identified by decision-making processes, communication, response to members' needs, success attained, collaboration, information flows, barriers encountered, and management styles is positively impacted by business results on the employees' performance presented in the form of business outcomes.

Research Question 2. (Q2): How does the awareness of ROI measures affect employee engagement?

Table no. 3: Means, standard deviations, and remarks for Q2 items

S/N	Variable	M	SD	Remarks
9	Development Plans based on ROI on L&D Programmes.	4.38	0.3820047144	On a regular basis
10	Authentic behaviours	4.44	0.6075815620	On a regular basis
11	Honesty and transparency	3.96	0.6848941084	Often
12	Building on strengths and interests	3.75	0.6882771899	Often
13	Increasing clarity of actions	4.58	0.4988674957	On a regular basis
14	Accountability and responsibility	4.90	0.2976782962	On a regular basis
15	Boosting confidence	4.37	0.5611209423	On a regular basis

Questionnaire items 9 to 15 in Section B were used to address research issues related to employee engagement within the Romanian FSOs and find whether calculating ROI on knowledge management features, especially on Learning and Development, would influence these elements of employee engagement. High scores of the Mean value for the above items (Table 3) indicate that we can correlate the desire of having an ROI measurement on Learning and Development programmes with a high rate of engagement in the form of employee development plans, authentic behaviours, honesty and transparency, etc. Many organisations in the Financial and Banking Industry are keen to consider making development plans for their employees on a regular basis, considering ROI measurements on Learning and Development programmes, the mean value for this item being 4.38 points. Such a system would increase clarity of actions (a mean value of 4.58), accountability and responsibility (this item receiving the highest score of 4.90 for the mean value), and would also boost confidence (4.37 points for the mean value). With lower scores for the mean value on Building strengths and interests (3,75) or Honesty and Transparency (3.96), respondents indicated that these issues would not have been influenced by ROI calculation such as other items of employee engagement.

2.3 Test of Hypotheses

Hypothesis 1: ROI calculation does not have a positive impact on creating and fostering a powerful organisational culture

Organisational culture measures: The estimated probability of rejecting the null hypotheses is p=.0002553, less than 0.0001, therefore, by conventional criteria, it is considered to be extremely statistically significant. The 95 percent confidence interval of this difference is from 2.12414 to 5.05586 (table no. 4) and as intermediate value used in calculations the value of t is 34.6126.

Table no. 4: Confidence intervals for Hypothesis 1

Confidence Intervals Table		
Confidence	**Range**	**N**
0.6828	2.84210—4.33790	1
0.80	2.63153—4.54847	1.281551565545
0.90	2.35981—4.82019	1.644853626951
0.95	2.12414—5.05586	1.959963984540
0.98	1.85012—5.32988	2.326347874041
0.99	1.66354—5.51646	2.575829303549
995	1.49062—5.68938	2.807033768344
998	1.27882—5.90118	3.090232306168
999	1.12902—6.05098	3.290526731492
0.9999	0.68023—6.49977	3.890591886413
0.99999	0.28640—6.89360	4.417173413469

Thus, the probability of obtaining the observed sample results, when assuming that ROI calculation does not have a positive impact on creating and fostering a powerful organisational culture, was calculated with the p coefficient extremely statistically significant. The first hypothesis alternative is therefore accepted, meaning that ROI calculation has a positive impact on creating and fostering a powerful organisational culture.

Hypothesis 2: Awareness of individuals of ROI within their organisation has no effect on employees' sense of engagement.

Organisational engagement measures: The estimated probability of rejecting the null hypotheses is p=.00000000007591, less than 0.0001, therefore, by conventional criteria, it is considered to be extremely statistically significant. The 95 percent confidence interval of this difference is from 3.35848 to 5.44152 (table no. 5) and as intermediate value used in calculations the value of t is 59.6980.

Table no. 5: Confidence intervals for Hypothesis 2

Confidence Intervals Table		
Confidence	**Range**	**N**
0.6828	3.86860—4.93140	1
0.80	3.71898—5.08102	1.281551565545
0.90	3.52592—5.27408	1.644853626951
0.95	3.35848—5.44152	1.959963984540
0.98	3.16378—5.63622	2.326347874041
0.99	3.03120—5.76880	2.575829303549
995	2.90834—5.89166	2.807033768344
998	2.75785—6.04215	3.090232306168
999	2.65141—6.14859	3.290526731492
0.9999	2.33254—6.46746	3.890591886413
0.99999	2.05271—6.74729	4.417173413469

The probability of obtaining the observed sample results, when assuming that awareness of individuals of ROI within their organisation has no effect on employees' sense of engagement demonstrates, the second hypothesis's alternative, is therefore accepted, meaning that the more aware individuals are of ROI measures for their inputs and investment within their organisation, the higher their sense of engagement will be in Romanian FSOs.

3. Findings and Discussion

The alternative Hypothesis related to Hypothesis 1, stating that ROI calculation has a positive impact on creating and fostering a powerful organisational culture, has been accepted. This shows that measuring ROI on Learning and Development programmes will enhance the organisational culture. Finding the right tools that managers can use to motivate the employees will differentiate the organisational culture from competitors and will bring a less conventional approach. Organisational professionals will be able to own the business processes, and therefore employees within Romanian FSOs will engage in an individual knowledge creation/sharing behaviour. Decision-making processes, response to members' needs, changing culture, and management styles are key tools in the strategic development of organisational culture. Knowledge behaviours within an enhanced organisational culture will have a positive impact on performance. Moreover, the alternative Hypothesis related to Hypothesis 2, stating that the more aware individuals are of ROI within their organisation, the higher their sense of engagement, is also accepted. This means that ROI measurement on Learning and Development programmes is fostering authentic behaviours among the employees, more accountability and responsibility, clarity and transparency of both managers' and employees' actions, thereby boosting confidence in the organisation. Many organisations in the Financial and Banking Industry are keen to consider making development plans for the employees, on a regular basis, taking into account ROI measurements on Learning and Development programmes. As long as there is no consistent method to measure ROI on Learning and Development programmes in the Romanian FSOs, our research has found that such measurement methods to Learning and Development actions would have a positive impact on organisational culture, decision-making processes, changing existing culture, response to members' needs, and improving management styles. In the meantime, ROI calculation would affect employees' sense of engagement, making them more accountable, more authentic in behaviours, clearer in working, and more trustworthy. Thus, measuring ROI on Learning and Development programmes would impact the performance of an FSO organisation by creating meaningful work for employees, by fostering a responsible and accountable use of knowledge resources, and eventually by creating a dynamic, involved and engaged community of knowledge workers. Using ROI measurements in the strategic decision-making processes is becoming critical for Romanian FSOs, while this research is also demonstrating a cause-effect relationship between ROI measurements and organisational performance. Measuring human capital value means that both performance accountability and performance measurement are becoming essential for Romanian FSOs' performance. Moreover, our study has shown that measuring ROI on Learning and Development programmes is strictly linked to efficiency and effectiveness of a programme in the larger framework of organisational culture enhancement and employee engagement. In the 21st Century knowledge era, it becomes critical to have a knowledge leadership framework in order not only to create value, but also to measure the created value in the form of financial and non-financial outcomes (David, 2015, Clair and Stanley, 2009).

Therefore, we have gained a holistic understanding of the key elements that influence organisational performance improvement in the form of ROI measurement. These elements are:

- Being a people-oriented organisation: this study has found that ROI measurements respond to employees' needs;
- Fostering a responsible working environment: ROI measurements are closely related to organisational clarity, authenticity, accountability and responsibility;
- Creating meaningful work for employees: ROI measurements are influencing Learning and Development plans in accordance with current and future needs, thus instilling confidence into employees;
- Being a viable organisation: this study has found that ROI measurements have a positive influence on culture change, therefore organisations must make a viable impact analysis in order to find out how much change occurred and where;
- Partnering with employees: ROI measurements are able to offer effective value analysis by calculating the effects of business outcomes and making employees part of the processes.

In line with the research findings and Kirkpatrick's and Phillips's levels of impact for the ROI model, but at the same time considering Martin and Kettner's (2009) three human capital value measuring principles, efficiency, quality and effectiveness, we are further able to shape a formal ROI measurement mechanisms blueprint, i.e. an ROI calculation model for the Romanian FSOs, in the form of a mechanism that could be pursued when considering the design of an ROI Methodology for Romanian FSOs (figure no. 1):

- Needs analysis (in the form of response to employees' needs);
- Situation analysis (in order to set clarity, authenticity, accountability and responsibility);
- Intervention plan (for setting Learning and Development plans in accordance with current and future needs);
- Impact analysis (an analysis on how much change occurred); and
- Value analysis (calculating the effects of business outcomes in the form of ROI measurement).

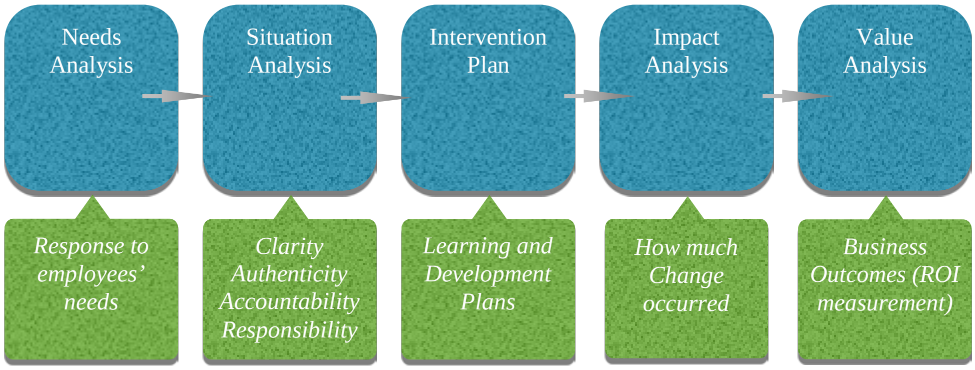

Figure no. 1: A Comprehensive Model for Systematically Measuring ROI on Learning and Development programmes in Romanian FSOs

4. Recommendations

This research has established a comprehensive framework for measuring ROI on Learning and Development programmes, the Romanian FSO leaders and managers being highly concerned about designing an analytical framework of the proposed method. With this focusing on the ROI measurement processes underlying knowledge management, our theories allow us to link employees' ROI measurement to engagement and organisational culture. The important role of ROI measurement, especially on ROI on Learning and Development programmes, has also been highlighted in this study. Therefore, Romanian FSOs managers should strive to increase knowledge management values by establishing mechanisms whereby employees generate greater value for organisations' investments. This study suggests that formal ROI measurement mechanisms are beneficial for the promotion of knowledge behaviour among Learning and Development professionals. An organisation needs to integrate its formal practices with specific knowledge-management initiatives to allow the creation, the use and the share of new knowledge. If Romanian FSO organisations lack sufficient formal practices and structural mechanisms, they may encounter a situation in which knowledge management initiatives add little value.

The Kirkpatrick model, from reaction, to learning, to application/behaviours, to business impact to ROI calculation, provides a framework to capture the Value Added of Learning and Development programmes, and offers a justification of why it matters and how it can be a transformational lever for Romanian FSOs. This study suggests that Romanian FSOs should further gather proper data in all the stages of Kirkpatrick's model and then these data can be standardised as a process so as to become institutionalised and embedded in the organisation's DNA. A comprehensive model for measuring ROI in Romanian Financial and Banking Institutions would be extremely valuable and recognisable by both business and academic communities and would take the role of HR, Learning and Development, and Knowledge Management to more strategic levels.

Future research may consider using data from the present research that suggest practical implications for the analysed industry: needs analysis, situation analysis, intervention plan, impact analysis, and value analysis.

Conclusions

Knowledge management measurement of a new L&D project is critical for an organisation's competitive advantage, and the ROI mechanism is one of the most effective knowledge management drivers. In this paper, we examined the effects of ROI calculation on Learning and Development programmes of knowledge management performance, in the form of culture enhancement and employee engagement in the Romanian FSOs. We were able to identify the most critical items that are influenced by the ROI mechanisms on Learning and Development programmes. Thus, ROI influences organisational culture mostly via decision-making processes, changing existing culture, response to members' needs, and improving management styles. The ROI influences employee engagement especially by helping managers to formulate development plans, then by employees' authentic behaviours, clarity of actions, accountability and responsibility, and confidence. The Romanian FSO leaders and managers recognise the importance of employee engagement and development through measuring the business outcomes of the values invested in them, this type of measurement becoming one of the most valuable tools in boosting organisational culture features and engaging and motivating people.

In line with the research findings and Kirkpatrick's and Phillips's levels of impact for the ROI model, this study further allows shaping a formal ROI measurement mechanisms blueprint, specific to the Romanian FSOs. Such a mechanism would pursue the following plan: needs analysis (in the form of response to employees' needs), situation analysis (in order to establish clarity, authenticity, accountability and responsibility), intervention plan (for setting Learning and Development plans in accordance with current and future needs), impact analysis (an analysis on how much change occurred), and value analysis (calculating the effects of business outcomes in the form of ROI measurement).

This study provides an answer to the need for a comprehensive model and a way of systematically measuring ROI on Learning and Development programmes. The process of measuring ROI on Learning and Development programmes is key to the culture, the engagement within an organisation, and finally to the overall performance of the business.

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