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INDICATORS AND IMPLICATIONS FOR INFORMATION QUALITY MANAGEMENT IMPROVEMENTS

Abstract: *The biggest resources that public institutions have nowadays are knowledge workers together with information. Thus, they should focus on offering information users the best potential quality of information to make sure that knowledge may accomplish goals efficiently and effectively. This article focuses on investigating the degree of information quality management implementation (its maturity) together with the knowledge public servants' perception concerning information product within Pitesti mayoralty. A multi-method approach was used for collecting the data: on the one hand qualitative data, on the other hand quantitative data. The findings reveal indications and implications for information quality management implementation in Pitesti mayoralty, but also difficulties encountered in assessing the degree of information quality maturity level.*

Keywords: *Information quality management, Information management, TQM, Information quality management maturity.*

1. INTRODUCTION

There was much interest generated by Information Quality Management in the past years. Scholars [1] explain various components of IQ assessment among which can be mentioned: IQ dimensions, problems but also methodology. In this article, we will focus on Information Quality Management (IQM) improvements.

Scholars [2] consider that information quality Management Maturity (IQMM) makes reference to instruments that allow institutions to find out their strength and weaknesses. He also points out that, institutions must know their position in the maturity grid, in order to address easier cultural shifts and set up favourable circumstances when implementing quality management principles, processes and

practices to information [2].

Philip Crosby was the initiator of Quality management maturity grid, out of which resulted IQMM. Other scholars [3] consider that Crosby was indeed a great quality motivator for top public management due to his implication in helping them to quest for improvement processes in the public institution. Although simple and easy to comprehend, his approach is considered as a motivation for public management to implement quality improvement in their institutions.

According to Crosby, higher quality in any public institution is always going to lead to cost reduction and increased profits [3].

If we align the stages of maturity to the scope of this article, we are going to be able to observe IQ problems that Pitesti Mayoralty is currently facing and also help

offer them a better comprehension of where the institution stands in the Information Management maturity (IQMM). As English [4] said, no magical trick can be used for improving the quality of information or for bringing immediate success.

Crosby invented an instrument that would help public institutions (in our case) to assess quality management. Other researchers among which we mention English, the pioneer of Information quality management implemented Crosby's principles to his Total Information Quality Management which offer the chance to public institutions to anticipate defects on organization processes and this improve their quality [2, 5].

Despite that contribution to the field of IQM, this research project will adopt the principles of quality management and IQMM characteristics suggested by both Crosby and English among other pioneers to conduct IQM assessment at Pitesti Mayorality. It is simple to use and considering the magnitude and time frame of this research, we cannot take all the steps of IQM measurements. There are five IQMM Measurement Categories:

- 1) *Management Comprehension and attitude*, which analyses the attitude and general knowledge of public managers towards information quality management in the public institution. Its characteristics reveal if the institution knows and its' attitude regarding information problems. The position public management adopts toward information quality is going to be put actions, positive or negative [2];
- 2) *Information Quality Institution Status*, which analyses the information quality institutional maturity of the public institution;
- 3) *Information Quality Problem Handling*, which analyses the maturity of information quality of the public institution with regards to: its position

on, responsibility but also its' attitude in dealing with information problems.

- 4) *Cost of information quality*, which assesses the public institution with the goal of establishing if the public institution is aware of its costs of managing resources.
- 5) *Information quality improvement actions*, which assesses the public institution for establishing if improvement actions as well as initiatives are part of the culture of the institution.

2. PROBLEM STATEMENT

2.1 Basic assumptions

In this research project, the researcher will focus on Information Quality Management (IQM) improvements but also on information product from the point of view of the knowledge worker. The researcher adheres to conduct an IQ Management evaluation at Pitesti Mayorality concerning IQ management implementation together with the perception of knowledge workers as far as the information product is concerned.

For achieving this goal, the researcher agreed upon the adaptation of Information Quality Management Maturity (IQMM) as an instrument meant to measure the degree of IQ Management implementation at Pitesti Mayorality. IQMM represents a comparison instrument allowing an institution to assess its previous and current state but also the direction they want pursue further on. The IQMM evaluation is going to let the researcher acquire a deeper comprehension regarding Pitesti Mayorality state, for instance the researcher will be able to identify negative issues but also indicators and implications for improvements. Additionally, the researcher will look upon the perception of Pitesti Mayorality knowledge workers regarding the information product.

Respectively, information created by information manufacturing systems are valuable enough for enabling knowledge workers do their tasks efficiently and effectively. In this article, knowledge workers represent overall civil servants within the Pitesti Mayoralty that depend or use information as an asset in order to accomplish their tasks. The research plans to answer the following questions:

- 1) What is the degree of information quality management maturity (IQMM) in Pitesti Mayoralty?
- 2) What is the perception of knowledge workers on information product and it's quality?

Therefore, the purpose of this research resides in examining the impact that IQMM on Information quality management (IQM) implementation but also the perception of knowledge workers regarding information as a product at Pitesti Mayoralty.

The impact of IQMM on IQM implementation refers to the degree of maturity in Pitesti Mayoralty as far as the IQ Management implementation is concerned. The examination of the position of Pitesti Mayoralty regarding the maturity model is done in order to offer a braod comprehension of where the institution is now and in the same time, where it aspires to be in the future. More exactly, the maturity model together with IQ Management implementation are going to reveal potential indicators and implications for improvement. Also, the perception of knowledge workers at Pitesti Mayoralty is going to generate a comprehension regarding how information as product is perceived in the public institution.

3. COMPARISON OF QUALITATIVE AND QUANTITATIVE DATA

In this Section, is presented a

comparative perspective of qualitative and quantitative data findings of this analysis. Three important themes are presented in this section: Information Accessibility, Information Quality and Information System.

3.1 Information Accessibility

The findings of this research revealed plenty of data as well as interesting factors. Thus, several of the interview participants, considered that finding the just information was neither easy nor difficult. Although, several interviewees considered that finding the correct information was a very easy thing to do, they however revealed certain dissatisfactions when the accessing of the information from outside of the institution was brought about. In a similar manner, quantitative statistics revealed that 58,8% of the respondents considered that finding the correct information was quite easy, meanwhile 23,5% though it was difficult to find the correct information.

Additionally, statistics prove that there are more knowledge workers who find it difficult to access the right information compared to those who (17,6%) believe as easy to find the right information. Both qualitative and quantitative observations prove that knowledge workers at Pitesti Mayoralty have a strong belief as far as easy access to information is concerned.

Nevertheless, knowledge workers sharing different perspective as far as easy information access is concerned, even if few in number and percentages also prove the necessity for improvement initiatives. Thus, Pitesti Mayoralty has to make sure that every knowledge public servant is satisfied with information accessibility at the institution.

3.2 Information Quality

The findings of the qualitative data gathered revealed that, out of seven

interview participants, six considered that they could rate the information quality to a three. These interviewees answered that the quality of information is quite different from the point of view of quality. Thus, one person stated that information quality regarding safety could be rated with a four, while the information concerning the search and find of other information would be certainly rated with zero.

Also, the biggest part of the participants stated that the communication face-to-face functions well in the institution compared to database system information. The quantitative statistics proves that 76,5% stated information reached high quality and even 5,9% stated the information reached very high quality. Nevertheless, there were 17,6% participants who stated information was reaching low quality. According to these data, knowledge workers have different comprehension regarding the information quality within Pitesti Mayoralty, and in the same time it shows a major difference between the qualitative and the quantitative responses.

Once again, Pitesti Mayoralty must still work on improving actions in order to increase information quality and in the same time must work on trying to move every civil servant comprehending to the same level in order that the institution can attain a higher degree of information quality.

3.3 Information systems

The qualitative data gathered proves that, as far as the information systems and programs used are concerned, Pitesti Mayoralty civil servants encounter several difficulties when using both programs and systems. As they put it, operating on SAP and other similar programs tends to be time consuming and in the same time, work procedure becomes very complicated because of the slow systems. Some interviewees also argue that systems are

far too complex not being user-friendly, this being another reason why searching for the correct information may become at times a complicated duty for the civil servants.

Although the qualitative data findings prove that there are many complaints regarding the slow network from Pitesti Mayoralty, it should be noted that most participants believe that the real issue is not the system itself but it is all about the slow network from Pitesti Mayoralty which represents the root cause of their problems. From the quantitative statistics, at the question whether systems and programs are easy to use and operate it is revealed that 41,1% of civil servants are neither satisfied or dissatisfied, meanwhile 23,5% of the employees were to a certain extent dissatisfied. Also, 29,4% of the civil servants from Pitesti Mayoralty were to a certain degree satisfied and 5,9% were highly satisfied.

According to these findings, there are major differences between employees concerning whether programs and systems are or not, easy to operate. This can prove that some civil servants have a deeper comprehension concerning the root cause of problems, since 29,4% were to a certain point satisfied and other participants considered their slow network represented indeed the root problem. However, it can also prove that some civil servants simply consider systems and programs within Pitesti Mayoralty easy to use and operate. Thus, this is an indication of the fact that Pitesti Mayoralty still has some work to do for increasing the performance of their programs, systems and network so that it's civil servants to easily use and operate it.

4. CONCLUSION

The major goal of this research consisted in investigating and exploring the degree of information quality management implementation at our public

institution. The outcomes obtained after the analysis lead to several indicators and implications for improvement. For offering a clear comprehension, the characteristics of IQMM model were used for the investigation of the degree of information quality management implementation in the Mayoralty. Central to this research was the IQMM model, which reveals the impact of different types of organizational usage of information. The role of information as a strategic instrument between civil servants within the Mayoralty has also been highlighted. The necessity to include knowledge workers perception of information product as well as its quality were analysed in order to answer to the secondary research question.

Research question 1: What is the degree of information quality management maturity (IQMM) in Pitesti Mayoralty?

The first conclusion that needs to be drawn from this research is that Pitesti Mayoralty can be helped by an information quality maturity model in order to discover indicators and implications that exist within the public institution with regards to information quality management implementation. Nevertheless, the use of a linear information quality maturity model does have certain limitations.

Research question 2: What is the perception of knowledge workers on information product and it's quality?

Findings prove that using information product theories is useful in assessing the knowledge workers comprehension of information product and its quality. Secondly, through the use of information product theories a public company could be able to discover the satisfactory level amongst its knowledge workers with regards to information product.

This research discovered the maturity degree of IQMM for the studied public institution. Additionally to the maturity level of information quality, additional activities proved a certain degree of inconsistencies because of the poor system structures and top management. Still, what was clear from the outcomes was that that much improvement and involvement are needed mainly with information systems, problem dealing with, information quality, improvement initiatives but also information culture.

The research points out that having an improved information quality in the public institution is possible, with the condition that Pitesti Mayoralty takes actions to improve its information practices to a higher degree of standards.

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