Memo on standardizing the implementation process report

Business, Marketing

I. Purpose

I hereby request the management for the standardization of the implementation process during system development in the sense that the system would operate efficiently and can be used effectively during production. The management have done exceptionally well in making the company a centre of innovation and excellence. Therefore, I believe that the management have the will and the power to make sure that the phase can be standardized as there is enough resources in terms of labour and capital.

II. Summary

In implementation process of a system is essential in avoiding handicaps in a product life cycle. “ The five activities in the process are coding, testing, installation, documentation, and training and are very important in a product life cycle (Elamasri & Navathe, 2007, p. 418)”. Therefore by Standardizing the implementation process through combining the five activities into a defined and repeatable process would ultimately result in reduced variations, aiding in planning of new products, efficient usage of products, and possibility of delegating change abilities.

III. Discussion

The facts are that the phase of implementation is very critical as it builds on the results of prior phases. Similarly, it is also important to the production stage where deficiencies in the implementation process will handicap the initial use of the system. Therefore the main aim of the process should be to implement a system accurately, efficiently, and quickly on a set of

computers, using particular tools and programming languages (Ewusi, 2003). “ The phase is majorly environmental and the performance depends on the specific machine, organization, tools, developers, language compilers, and clients required in converting a design into a working code (Ewusi, 2003)”. The process requires designing efforts which is similar to the designing phase. However, the implementation level design is a unification activity where models that can be executed, performance requirements, delivery schedules, and implementable tools and languages are eventually combined. Designing is done while maintaining correctness, consistence, broadness, sustainability, and related criteria (Elmasri & Navathe, 2007).

Implementation Process Activities

“ The stages of implementation process encompass five major activities which are coding, testing, installation, documentation, and training (Elmasri & Navathe, 2007, p. 418).”

Coding

Is the longest activity in the implementation phase and entails each developer writing their own code and then discussing with others so as to come up with components that work together coherently. Developers during this activity write enough comments inside the code so that anyone who will work on the code in the future can find it easier to understand it. Code guidelines are also clarified by architects or software developers and this can result in companies coming up with software and systems that are efficient and cost effective. Furthermore, the guidelines can reduce costs, improve

productivity, and enable automation that would result in prevention of errors in the product life cycle (Shelly et al., 2010).

Installation

The second activity is where a system or product is set up and made operational to the people who will use in the future. Installation is done by software developers or may be delivered to the customer for integrated. The importance of the activity is in preparing for testing phase. Therefore before installation a good system installation policy should be followed, this may reduce exploitation of the system, and also reduce support costs of the system (Ewusi. 2003).

Testing

The third activity involves testing which is the process of running the installed system intentionally just to find errors. The types of testing systems are pre-implementation and post-implementation testing with the former's aim being to remove defects prior to implementation and the latter as part of system maintenance (Shelly et al., 2010). The importance of testing in the life cycle of a product is that it enhances the integrity of a system by identifying defects in the design and errors in the system. Error prone areas are identified hence prevention of errors in a system are also identified. Furthermore, testing helps in adding value to a product by matching the user requirements (Shelly et al., 2010).

Documentation

The fourth activity and involves coming up with manuals and written texts that accompany the product. The texts explain how the system or product operates and may mean different things to many people working in the organisation. “ Documentation is important as it provides: the foundation of what is implemented; an overview of the product; records of algorithms, codes, interfaces, and API’s; manuals for end-user; and how to market the product (Shelly et al., 2010)”.

Training

The fifth activity in implementation entails recognizing, guaranteeing, and developing certain skills and abilities that employers would require them operate the system (Elmasri & Navathe, 2007). Therefore an both the organisation and staff can save on time and enhance productivity in operating the system. Furthermore, there are higher chances of innovation with the company benefiting from possible increased income.

IV. Conclusion

I therefore propose that the listed activities in the implementation process should be standardized and integrated into defined and repeatable processes. The benefits of the processes are: the possibility of delegating change abilities to an IT administrator while still maintaining efficiency and management control over such changes; reduction of unwanted variations in the system; aid in more efficient use of limited resources; and enable easier planning and initiation of a new product (Elmasri & Navathe, 2007).

References

Elmasri, R., and Navathe, S. (2007). Fundamentals of Database Systems. New York: Pearson/ Addison Wesley. Pp 418-432

Ewusi, M. K. (2003). Software Development Failures: anatomy of abandoned projects. Massachusetts: MIT press. Pp. 58-71

Shelly, G. B., Cashman, T. J., & Rosenblatt, R. J. (2010). System Testing and Design (8th ed.). Ohio: Cengage Learning. Pp. 514-533