

Guidance and Counseling Services Management System

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Abstract: - This paper is aimed at identifying solution regarding counseling management of employees' life problem including personal and work place problem. This paper involved the design, development and evaluation of Employee Needs Assessment Inventory (ENAI) functionality and usability among employees . This project used a quantitative approach called case study in the process of collecting data. In general, this project was divided into three phase: system requirement analysis, system design and development, and formative evaluation. This result from of ENAI formative evaluation had proven that the system could be able to record employees' life problem(health, family, financial, spiritual, work issue, career, interpersonal relationship and work environment). Besides, the system can be used by three tiers(employer and counselor)to access the counseling information, provide communication networking facility for a diversity user, and assist in the generation of reports and analysis, and also to support counseling management for the three tiers.

Key words: ENAI; Usable online counseling, web-based applications.

1.INTRODUCTION

Through the organization of counseling services, it is must take into account the personal problems with assumptions if these problems can be solved to improve performance [1]. Furthermore, The World Health Organization (WHO) emphasizes that most major health problem leading to the inability to work is depression [2]. Depression includes mixing a variety of feelings and behaviors can lead to loss of self - confidence [3]. When a person is suffering from depression, he/she may lose interest in work and stay away from the family. There is a need to can be made. Accordingly, the use of ICT in healthcare personnel is seen as a higher demanding for innovative methods and new approaches in counseling services. Therefore, the development of online inventory for counseling management is needed and this project has focused on a system development for employees in organization called Employee Needs Assessment Inventory (ENAI). The system can provide useful information to the employees, counselors and employer where this system is able to provide a counseling service that is comprehensive and effective to these three tiers. ENAI is a management system which consists of three tiers counseling programs that allow workers, counselors and employers to access services related to personal life challenges and improves performance and production at work. Initially, ENAI was established in 2007 and was used manually using the typed and printed questionnaires, distributed to the respondents. In 2011, the system was upgraded to local hosting. Enai system at that time could only be accessed in the computer only. Subsequently, in 2011 the system was changed to a system Enai online. The system provides a solution counseling awareness that prevention is better than cure to government agencies and organizations in Malaysia. This application has the ability to analyze the needs of the employee according employee profile that includes personal problems and work problems. Employee problems at work can be divided into two categories: personal problems and work problems [4]. Personal problems are health, finances, family and work issues including spirituality and work, career, interpersonal relationships and work environment. Study shows problems experienced by employees in organizations can influence their performance and job satisfaction, and organizational influences on the production rate.

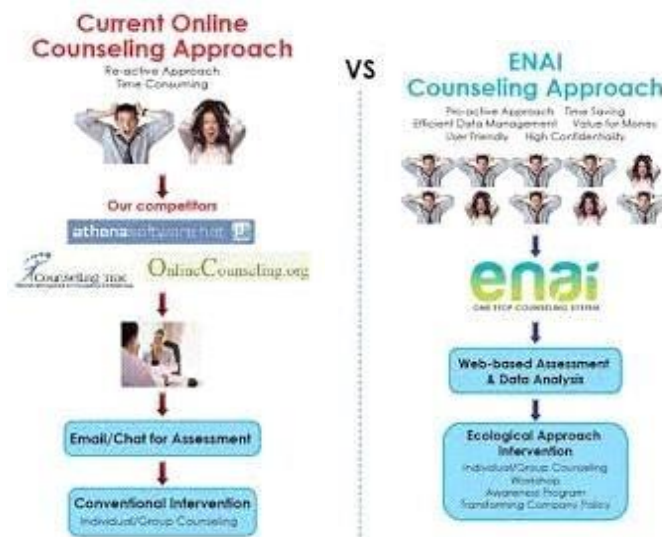


fig 1.ENAI vs other online counseling system

ENAI has its own unique characteristics which give uniqueness to the system. Figure 1 illustrates the differences between ENAI and other online counseling system. ENAI provides facilities for user especially employees to share their life problems where they are able to key in all data problems that they experienced. The data will be sent to the counselor and administrator. These data will be treated as private and confidential by the counselor and not to be tried out. This system can only be accessed by the counselor and the coordinator only which means that other employees or employers do not have an access to relevant information with colleagues. Problem of missing information or data loss can be avoided as ENAI integrated with a large database to store all information. ENAI not only systematic but also saves time. counselors do not have to write all information of employees' life problems because all the information has been captured and stored in the system. The information sharing process between counselors and employers and also with other coordinators can be done quickly. Any information provided by the employee will be filtered by the system whether the employee is eligible for intervention services or not. The system also will indicate to the counselor and administrator the employee decision whether he/she wants to seek further intervention and treatment. The system also can automatically analyze all data by changing the form of the percentage of employees who are suffering in life problem and need further intervention and treatment. There are many methods of intervention that can be done such as an individual counseling workshop, group counseling workshops, awareness programs and policies to transform the company.

2. Web-Based Application

Web applications are popular due to the ubiquity of the browser as a client [5]. The ability to update and maintain web applications without distributing and installing software on potentially thousands of clients' computers is a key for their popularity [6]. Some of this motivations that contribute to the development of many web-based systems nowadays are because of its efficiency in handling rapid access of documents and its ability in supporting multi-users simultaneously, thus saving a lot of time and hassle free [7],[8]. Hence, ENAI is using open source web-based technology that can be accessed through a variety of platforms. Client side installation is not required for all application source code is on the server that is accessible 24 x 7 in any man alone. This system is easy to use interface without requiring long training.

3. Materials and Methods

This project used a quantitative approach called case study in the process of collecting data. In general, this project was divided into three phases. The first involved implementing system requirements analysis and identifying problems in the counseling management of personal life in public and private organizations. Phase two involved ENAI design and development process that

was based on the findings from previous phase. Formative evaluation was conducted which involved users from Royal Malaysian Police, Royal Malaysian Army and Fire and Rescue Department. As this paper is written, ENAI is going to enter the final stage which summative evaluation will be carried out in order to meet the user requirements and release as a final version product of this project.

4. Design and Development of ENAI

The project involved the development of ENAI through a usage of System Development Life Cycle (SDLC) and the draft of the theoretical analysis has been divided into three major phases of SDLC. Phase one is the process of gathering information regarding the problems and issues encountered in the current counseling system in organization. Some of the issues found are difficulties in information sharing among employer and their employees; employees' reluctance due to mistrust and anxiousness in giving a private and confidential information to a counselor or employer; counselor is not pro-active; loss of data and monitoring difficulties. The phase two is the development of ENAI which is a dynamic web-based application of type client- server and implemented in a LINUX-Apache-MySQL-PHP platform. Therefore the application is installed once in the server and the clients. Researcher developed the system through a design and development stage of SDLC, and the technology usage of Human Computer Interaction (HCI) will be adapted into the development system phase. The following figures are the two screenshots from ENAI system where Figure 2 (a) is a interface for user login and Figure 2(b) is a interface for main menu of ENAI.

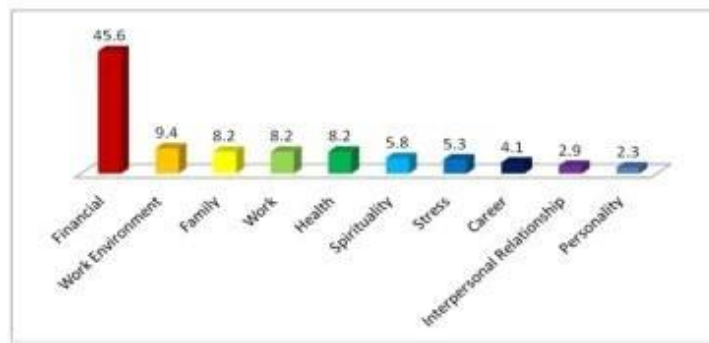


Figure 2.(a) Login screen



Figure 2.(b) Main menu screen

The third phase is the evaluation of ENAI and this phase will evaluate the well-built prototype system. Evaluation will be done in order to obtain data about user acceptance and satisfaction of the system functional, ability in management effectively and efficiency. The results from formative evaluation showed that ENAI could be able to help employer and counselor to encounter and to manage personal life issues among employees. It can also be used to access information which can save time and energy, the information sharing can be done very quickly, the confidentiality of information can be ensured and data loss can be avoided. Figure 3 shows an example of generated report in a bar graph captured from data that has been keyed in by employees using ENAI. From this report, counselor and employer can identify the majority personal life problems occurred among employees and the confidentiality of information can be ensured and data loss can be avoided. Figure 3 shows an example of generated report in a bar graph captured from data that has been keyed in by employees using ENAI. From this report, counselor and employer can identify the majority personal life problems occurred among employees and provide further treatment or prevention.



In terms of user acceptance and satisfaction, Figure 4 shows that users were very positive regarding the online counseling system application as part of their support system and most of them think the system is very useful in order to improve performance and also as a channel to detect and identify their life problems so that they can be helped.

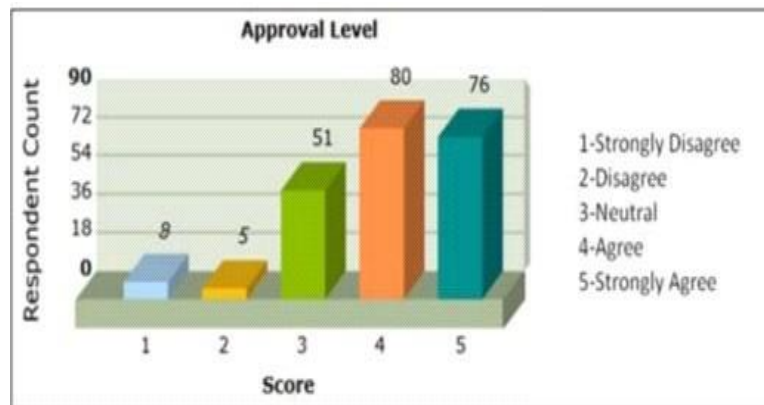
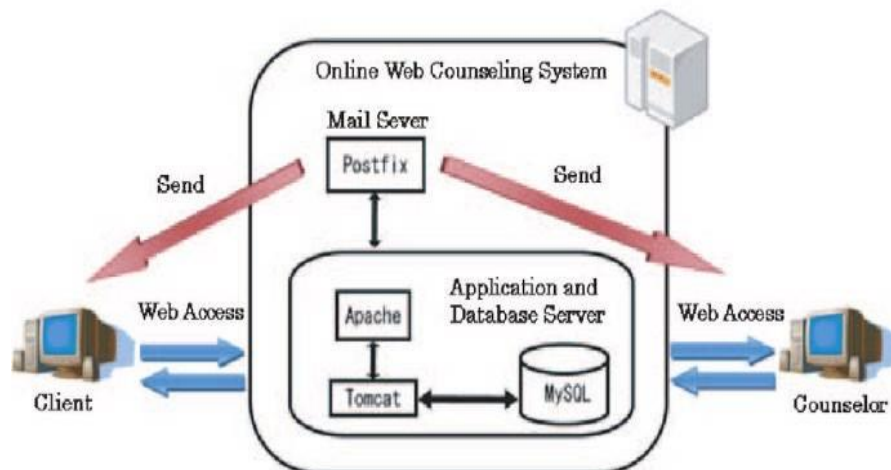


Figure 4. Example of user satisfaction results



5. Conclusion

This project has identified the themes of personal life counseling management in the state public and private sectors in Malaysia. In this project, ENAI has been developed to strengthen the existing system and has gone through the formative and summative evaluations. The results of ENAI evaluation showed that the system would be able to provide convenience to the three tiers (employer, employees and counselor) in the counseling management of personal life in public and private organization in Malaysia.

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