The Impact of Intergration HCI in Software Processing Models

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Abstract — Users' dissatisfaction with the software used will impact the efficiency. Moreover, the lack of knowledge of users' involvement in the development of the software will cause issues to the user's later on. In the case of human-computer Interaction (HCI),it has been suggested that a user's participation and HCI concern in the application growth life-cycle (SDLC) as an important procedure for a successful program execution. However, it is still not sure to what extend user participation is important and HCI problem has been settled by system professionals. The result which is mentioned in this paper and the review opinions from the experts' point of view are taken from analysis on the value of HCI in SDLC. The objectives of the analysis are to identify the condition of the users' contribution in SDLC and to identify the HCI elements that have been settled. Results show that many of the experts have engaged the customers in SDLC, but the majority only during the need research stage. The conclusions have also shown that HCI components on performance are well resolved. However, the non-functional components such as social, environmental issues have not been highlighted by experts. This paper indicates with recommendations to further analyze the users' interest on the value of the users' contribution in the program development.

Index Terms— Human Computer Interaction, Software Process Models, Human Computer Interaction, SDLC

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1 INTRODUCTION

The disappointment of the application software used to affect efficiency. The performance of application software based work and the face of the program. Research shows that there is a debate on the use of software that allows users frustrated [4, 8, 9] frustrated user is suggested due to the decline in the value of the consideration HCI in technical growth. system In some cases, a person is not included. But only the chosen of the process of growing commercial software of HCI in software development can not be ignored, and the lack of knowledge about the involvement of users in software development continues to be a problem with customers in the [12] program, especially the disappointment of the software affects the performance of the Office of the Public and the overall well-being [13] Among the techniques developed many software development cycle. life (SDLC) is a methodology that has been approved by the General to explain the process and issues involved in the development of [1] on developing applications with data (IS), SDLC strategy focusing on the application [. 2], but recently concerns have been adjusted to the user experience [3] The dispute related to HCI in SDLC is essential. However, it does not get enough attention to the experts, it was announced that the SDLC new strategic focus of human-centered, it is necessary to confront the compliment ', they recommended SDLC called new circuits of human-centered development. [4].n 7 concludes the paper. modify the header or footer on subsequent pages. Prior to HCI research, targeting the needs of the user. HCI is seen to be constructed from the user's perspective and not from the point of view of Research on the value of HCI concerns from the perspective of the operator is still common in the software industry [5,6,7] The purpose of this paper is to analyze the effects of HCI in SDLC from analysis expertise. identify the situation of users in SDLC and evaluating the HCI elements that have been made in the SDLC.

2 RELATED WORK

2.1 HCI APPROACHES

The strategy focuses on HCI and human relations and partnerships, describes what the program should do it from the perspective of the users of the restrictions, such as physical, intellectual and behavioral success. In addition, the results of which have contributed towards the growth of the program and use must also be considered. Growth between HCI 'obligations and commitments between the use of the interface and how users can interact with the program.

By Hoffer et al, [1], the SDLC current strategy focuses more information about the features and specifications of the system to meet business needs. Incredible HCI is concerned with methods and techniques to fit the needs of active lifestyles and well-being. To build information systems that meet business and personal needs and concerns HCI should be included in the strategy, especially for the development of this reason, Zhang et al [4] introduced a strategy perspective concerns HCI. The particular case of the evaluation results.

HCI containing information about the four elements which are physical, intellectual, emotional and behavior together with examples of their listing. These issues are not HCI research specifications of software development.

2.2 ROLE OF HCI IN SDLC

Zhang et al, [4] disputes related to HCI in SDLC is essential. However, this has not been emphasized by application experts. They argue that the SDLC new focus on human-centered strategies need to be concerned about the user experience compliments. So that tactical human-centered they recommend SDLC new system called the human-centered lifestyle (HCSDLC) Set 1 features the popular HCSDLC four steps have been regarded as an alternative investment and. Preparing the research design and the implementation is proven in Figure 1, this structure will focus on the HCI concerns, unlike the SDLC is considered. Collaboration between perspectives SDLC and HCI programs to ensure growth is achieved. However, the current SDLC too many business needs. (Functionalist) rather than individual needs. (The physical and the intellectual, the psychological character and situational factors) to each regarded much in the SDLC so often happens in the gap between the needs of business and the needs of each

2.3 USER PREVENTATIONS

As defined by Lawson [4], Disappoint the software is used. "The emergence of barriers that would prevent the need to satisfy the" recent reports about the disappointment of the problem behind the screen [4] and the problem of using a business website [8]. These problems arise when the software has been successfully delivered to customers and [17] Recent reports on the disappointment of a problem with the screen, and the problem of the business website. These problems arise when the software has achieved and delivered to customers.

Research more disappointed by the Besserie et al, [10] described the frustrations of using the computer to have knowledge of the client during the execution of their daily lives. The results of their research showed that one-third to one-half of the time invested prior to the application of the system is due to the use of a disappointment. Frustration can affect the performance level of compliance and the public well-being.

3 METHODS

Analysis of the primary means to select a set of questions, and chosen. A series of questions were designed based on the structure of the HCI HCSDLC [4] mentioned in the previous Participation in the study was the use of the College Student Information System (ISIS) and the performance of UTP, Malaysia.

Interviews were among the end-user program in ISIS analysis of the disappointment in the program. Which included five professors and five students who are definitely used. Study on the HCI in SDLC is performed among participants 32 to a developer application and professional growth of applications such as IT, professional design, web development application, professional IT. support and systems analysts.

4 Analysis

4.1 VIEWS OF THE SYSTEM

The conclusions from the appointment show that the participants are not fulfilled with the use of the program. Participant decided that the writing and number is readable. However, the results showed that 67% of participants were puzzled about how the data is structured. Application performance is not enough, and 89% of the participants said that the mistake was not on the program. Overall response of respondents to the program is awesome and exciting. The experts suggest that to improve the design and efficiency. Aware of this and rectifies the involvement of users as to be considered during the whole application life cycle was introduced by Bryant [17].

4.2 USER INVOVLMENT

Show that 96.7% of experts decide whether a client should be involved in the SDLC and 90.4% decided that the participation of users is very important. However, most of the reactions that they engage with customers in SDLC, results have indicated that some level of participation of users is very low, only 16.13% of a customer between growth on other hand, 77.42% of the experts were engaged customers during the research necessary to (77.42%) Further research to understand user participation has proven to be 80.7% of the participants decide that. use 'Deficit of knowledge is limited due to their relationship with customers, especially in the design and growth. These findings show that there is no need for customers to have sufficient understanding. This research has exposed serious problem than the deficit on the possibility of the involvement and the participation of users in the software life cycle.

4.2 HCI CONSIDERATIONS

Two were found to be significantly related to the level of what has been fixed in the SDLC component among HCI professionals. In this study, three groups of the HCI components which are suggested by Zhang et al [4] used these groups with the purpose of the purchase and focus on the details of each. The results proved that the HCI with regards to the objectives have been resolved except for "Safe for use" Table 2 shows the specific HCI concerns, depending on the target.

Table 2. HCI Deliberation Based on Usability Goal

HCI elements	%	Sum
Effective to use	74.19	23
Efficient to use	74.19	23
Safe to use	32.36	10
Easy to learn	64.52	20
Easy to remember how to use	51.61	16

The results show that significant performance and operational performance. But very little protection. Results of the concerns HCI, depending on the user experience are given in Table 3 is proved in Table 3 was (77.4%), response (67.7%) and friendly (51.6%) were resolved by Internet experts. But the fun does not have a profile (0%) and emotional responses (0%), indicating

that this component in the joint success principles are not being addressed well.

Table 3. Descriptive Statistics of Users' Experience

HCI elements	%	Sum
Satisfying	67.7	21
Helpful	77.4	24
Fun	0	0
Friendly	51.6	16
Emotionally fulfilling	0	0
Entertaining	3.2	1

That the HCI is based on the important details of each style are shown in Table 4, most of the experts prefer to identify their focus on each profile style of each individual in the system depends on the skill (. 67.7%), knowledge (61.3%) and to work (51.6%) percent of the very few to have a look at the background of social (9.7%) and sexual problems (3.2%), it is clear that the aim focus on the details of each style is highlighted in terms of the two groups.

Table 4. Target User Model Profile

HCI elements	%	Sum
Gender	3.2	1
Computer training	61.3	19
Experience with similar systems	67.7	21
Occupation	51.6	16
Cultural background	9.7	3

The analysis shows that in the world of real problem is the focus of HCI in SDLC needs efficiently and very few non functional requirements such as security, performance, and public issues.

4 Conclusion

From the research, it reveals that the customer's disappointment with the system has impacted users' performance and group well-being. The outcome indicates that there are problems in the style such as information company and unhelpful mistake concept. Such style problems may have took place due to the unquestionable confirmed truth that the customers were not being engaged in the whole content management procedure. This can be confirmed by the outcome from the research on users' participation which reveals that the customers were only being engaged at the beginning on to be able to collect system need and at the later level of program development procedure as to confirm and confirm their need.The outcomes have confirmed that all associates have had engaged customers in their SDLC. However, the users' participation is mainly targeted on the need research level, and only a few have had engaged customers in the style and development level. The outcome also indicates that due to the users' lackof particular understanding in SDLC may have described why users' participation is still little particularly during the style and development level. The outcomes on HCI problem have exposed that the non-functional specifications such as group

and efficient problems have not been given enough concentrate by experts. From these outcomes it is suggested to further evaluate the users' participation and its importance in the content management.

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