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Application of PSAV method in interaction steps optimization for user experience design

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ABSTRACT

PSAV method is a relatively young methodology proposed as an agile user experience design method. This paper presents the design experiment conducted on PSAV method to establish its effectiveness in the practical scenario. A set of process optimization exercises were conducted and recorded as a part of this experiment. The information collected from the experiment was further analyzed for its applicability.

Keywords— Process optimization, Human Machine Interaction design, PSAV matrix, user experience, agile methodology, user experience

1. INTRODUCTION

PSAV method is an agile method for the design and development of digital applications. It also enables designers to arrange the design insights into a matrix for correlating them design elements and process steps. This novel method was invented by the author in the year 2018. This paper presents the application of PSAV method for process steps optimization in the design phase.

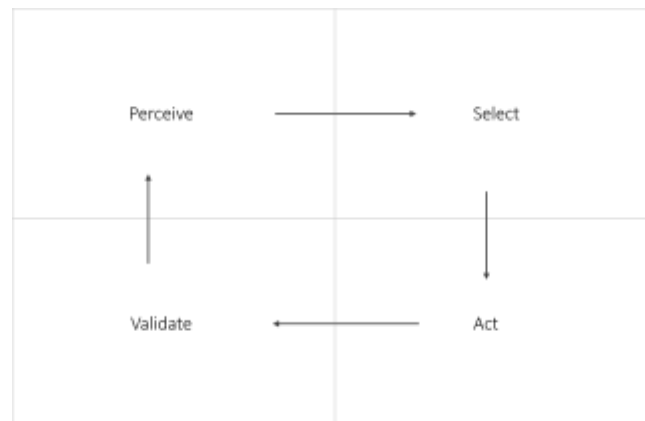


Fig. 1: PSAV model matrix

The PSAV method in this experiment was applied in the conceptualization stage of the user experience design phase. A user journey was selected for mapping the requirements into the PSAV matrix. For the selected journeys a total number of process steps were counted from already existing design. The insights and other key information were processed for the reasoning points as shown in figure 2 and then rearranged in the PSAV Matrix as shown in figure 1.

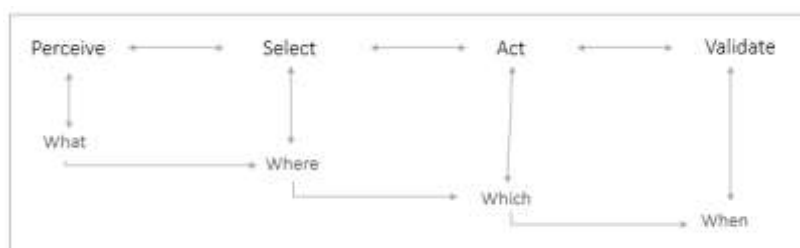


Fig. 2: PSAV process and key reasoning points

2. PSAV METHODOLOGY

The introduced method focuses on bridging the user’s mental model to that of designer’s mental model for any scenario in Human-Machine Interaction design. It is a process of design which helps designers- personalize the user required functions in order to:

- To arrange personalized tasks and functions for users.
- To align the design elements as the primary sensory input for the users.
- To align these objectives to the selection criteria, which provides the switch for action to the user.
- To propagate the flow through action elements in order to proceed towards the process completion.
- To align the perceived information with the final output of the process.

3. EXPERIMENT

For recording the applicability of PSAV method a set of designers were introduced to the method. The participant designers were asked to select the project assignments of their choice in the area of user experience and interaction design. All the process steps were counted for that chosen assignment for initial input. Then the exercise of arranging the design element in the PSAV matrix (as shown in figure 1) was performed.

Table 1: Experiment information table

	Number of process		PSAV optimized interaction
1		Intentional Blinding of data	
2	8		4
3	7		5
4	3		2
5	4		2
6	5		3

Sample details of the experiment are shown in the Table-1 above. An intentional blinding of the data has been done to protect the information about the experiment which is not applicable to this paper.

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4. RESULT AND CONCLUSION

Process optimization is considered one of the pillars of the user experience design. PSAV model methodology was tested for improving the user experience in this set of experiment. As shown in the figure 3 below, it can be observed that a significant reduction in the process steps was achieved through the PSAV model methodology application in the user experience design process.

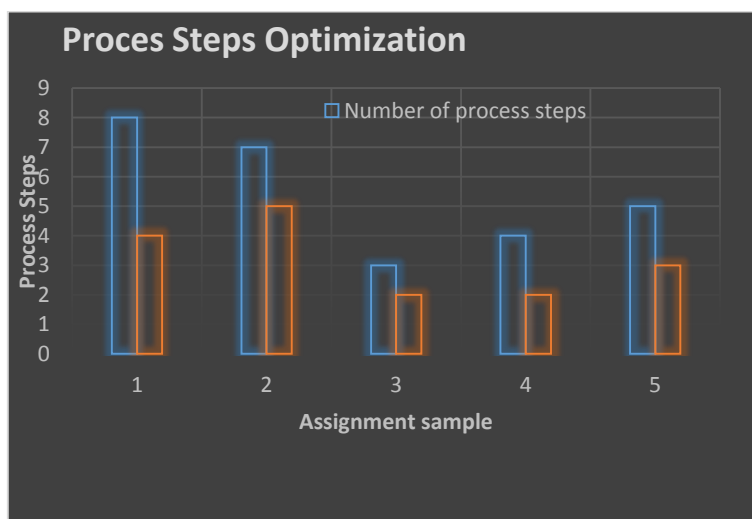


Fig. 3: Result of process optimization exercise

The output of the experiment supports the applicability of PSAV method in the area of user experience design. It shall be noted here that a well-defined problem statement and meaningful insights support the agile implementation of the PSAV method. It was also empirical during the experiment that to apply the PSAV model contextual research or understanding is needed on the designer’s part.

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