ABSTRACT

Insights Drawn from Development of Web-based Game to Facilitate Discussion of Financial Values

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INTRODUCTION

Financial values shape our basic and fundamental beliefs in guiding and motivating our attitudes or decisions involving financial matters. Medical social workers given the responsibility to exercise discretion in allocation of public financial resources are often left feeling perplexed by the financial decisions that financially needy individuals and their families made in allocating resources for their households, resulting in struggles in making a stand on their assessment. Some assessments are clearly driven by values that are not clear to the medical social workers until an opportunity is given to reflect on their values guiding their discretion. Current learning on values guiding financial assessment conducted by medical social workers in Tan Tock Seng Hospital is done through a tabletop paper exercise that requires participants to be onsite at a common time. A digital game allows flexibility and provides statistics to participants to do peer comparison. Such a game is best developed by medical social workers and a game developer who is not a healthcare professional. Such collaborative partnership requires a project agreement and this presentation throws light on possible barriers and potential facilitators in the process towards signing of the agreement.

METHODOLOGIES

Data for this presentation were drawn from progress reports, past email correspondences and notes taken from multiple discussion among team members. Data were broadly categorized into barriers and facilitators.

RESULTS

POSSIBLE BARRIERS

Considerable time was spent seeking clarification and clearance from offices overseeing digital solutions and the research ethics board before an agreement could be signed. Due to the amount of time needed to navigate the process to gain clearance, a process that was not specified or standardised, there was a need to extend the project duration from 12 to 30 months, resulting in uncertainty on the developer to plan manpower and schedule to finish the project. Below is the sequence of events from receipt of Letter of Award of CAPE Fund to the first working meeting.

Sequence of events from receipt of Letter of Award of Centre for Allied Health and Pharmacy excellence (CAPE) Fund to first working meeting

- 21 May 2021: Received Letter of award of CAPE Fund
- 23 June 2021: Commenced on work on agreement to be signed with Red Hare Studios with advice and inputs from Centre for Medical technologies & Innovations (CMTi) and Clinical Research & Innovation Office (CRIO)
- 01 July 2021: Completion of Satisfactory and Usability Questionnaire for evaluation of project
- 27 July 2021; Advised by CMTi to check for need for Domain Specific Review Board (DSRB) ethics approval
- 29 July 2021: Enquiry on need for DSRB application
- 06 August 2021: Complete checklist on need for DSRB application
- 11 August 2021: Informed by DSRB that project needs DSRB oversight
- 13 September 2021: First submission to DSRB for project to be considered as Exempt study
- 22 September 2021: Advised by CMTi to check if Waiver of Competition is needed given that there is going to be an agreement
- 01 October 2021: First query from DSRB to inform study team that project cannot be considered an Exempt study and needs to be amended as non-Exempt study
- 12 October 2021: Linked up to Digital & Smart Health Office (DSHO) by CMTi as project is digital in nature
- 13 October 2021: Started addressing queries from DSHO
- 20 October 2021: Re-submitted DSRB application after a major amendment to change the application for Exempt study to a non-Exempt study
- 27 October 2021: Received second round of queries from DSRB and responded to all queries before resubmitting the amended application
- 29 October 2021: Informed by DSHO the office does not need to clear this project
- 03 November 2021: Informed by DSHO that there is no need to apply for Waiver of Competition (WoC)
- 26 November 2021: Received third round of queries from DSRB after DSRB re-classified application as an application for Expedited review
- 17 February 2022: Project was granted ethics approval by DSRB Ethics Review Board
- 03 March 2022: Learnt that CAPE Fund is governed by TTSH Community Fund and any project funded by CAPE Fund will be paid out from department cost centre and CAPE Fund will reimburse the department upon completion of project. Also learnt that a Waiver of Competition approved by head of department is needed to facilitate the reimbursement of CAPE Fund back to department cost centre.
- 25 March 2022: Submitted CAPE Project Variation Amendment Form to request for extension of this project to end on 31 December 2023
- 13 April 2022: Received approval from CAPE to extend this project to end on 31 December 2023
- 19 May 2022: Learnt from Tan Tock Seng Hospital (TTSH) Procurement Office that Waiver of Competition is needed before the office allows release of funds from department cost centre for the project
- 23 May 2022: Colleague from DSHO provided assistance and advice to facilitate completion of Waiver of Competition needed by TTSH Procurement Office
- 27 October 2022: Purchase order issued by TTSH Procurement Office
- 17 November 2022: Project agreement was signed
- 16 December 2022: First working meeting

POTENTIAL FACILITATORS

- 1. Open and regular communication to report updates facilitated (1) clarification on issues unfamiliar to either party, (2) course correction on unforeseen limitations, and (3) understanding about rationale behind decisions taken during development. For example, during development of scenarios, medical social workers often share the rationale for proposing scenarios observed from clinical practice and the game developer will share the possibilities and limitations of the web-based game in fulfilling the rationale. This has resulted in deeper appreciation for the value of web-based games among medical social workers and better understanding on challenges faced by medical social workers by game developer.
- 2. Common appreciation of social missions has helped both parties connect through similarity and grow through differences. Red Hare Studios, established in Singapore since 2008, has accumulated a wealth of experience creating games that are relevant to the Singapore context. They have been involved in development of mobile and console games, advergames, game-based learning and gamification. Their mission is to use digital games to engage contemporary social issues in meaningful ways to encourage behavioural change in learning and engagement. This mission has a very good fit with the social purpose of the web-based game to be developed in this collaborative project between Department of Care & Counselling, Tan Tock Seng Hospital, and Red Hare Studios.

CONCLUSION

The long journey that the project team needs to navigate from receipt of a grant to the first working meeting can discourage busy healthcare professionals from embarking on an enriching innovation journey. The uncertainty can also result in hesitation to collaborate with healthcare professionals among external vendors. More importantly, it can result in healthcare sector falling behind the innovation curve. Consistent with observations made among multi-disciplinary, interprofessional and transdisciplinary teams, open and regular communication coupled with a shared mission increase the potential for meaningful cross-learning among project team members.

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