IMPROVING PROFESSIONAL TRAINING IN INDONESIA WITH GAMING DATA

PARTNER: KOLABORASI MASYARAKAT DAN PELAYANAN UNTUK KESEJAHTERAAN (KOMPAK)
PROGRAMME AREA: REAL-TIME EVALUATION
TECHNOLOGY READINESS LEVEL: MINIMUM VIABLE PRODUCT (LEVEL 5)

SUMMARY

Pulse Lab Jakarta partnered with Kompak, a partnership of the Governments of Australia and Indonesia to reduce poverty, to create a mobile simulation game to measure the results of training conducted by the Government to village representatives in Indonesia. A total of 1,264 users in 88 districts and 22 provinces in Indonesia played the game, generating data that was used to improve training curricula, targeting and delivery. The game, entitled Sekolah Desa, demonstrated the potential for using gamification as a capacity building and evaluation tool.

BACKGROUND

In 2014, the Government of Indonesia issued the new Village Law to finance development based on local needs and priorities for the country's 74,093 villages. The Law aims to contribute to poverty reduction and make village leadership more accountable, by authorising the direct election of a village head and providing villages with a guaranteed annual transfer and authority over decision-making for participatory village development.

The Directorate General for Village Government, Bina Pemdes, in the Ministry of Home Affairs (MOHA) was mandated to strengthen the capacity of village governments to effectively administer the Village Law. In 2015, Bina Pemdes delivered training to 239,000 representatives from the village apparatus. In 2016, training was piloted for sub-district government officials with support from KOMPAK, an Australia-Indonesia Government partnership working to reduce poverty in Indonesia.

To support the delivery of training to village officials, KOMPAK partnered with Pulse Lab Jakarta on a project to explore alternative and flexible training models. As a result, the project developed a post-training simulation game, called Sekolah Desa, as a creative way to reinforce the training modules, test knowledge and identify learning gaps.

STRENGTHENING VILLAGE LAW KNOWLEDGE THROUGH INTERACTIVE GAMES

The goal of the game is to help participants acquire more knowledge about Village Law processes and requirements. Players take on the role of Kepala Desa ("Village Head") and are required to make a number of decisions mirroring those that they would have to make in real life during the execution of their duties and responsibilities under the Village Law.

Participants are shown their cumulative score at multiple points throughout the game, along with messages about how the particular action they have just taken in the game relates to their responsibilities under the Village Law. The final scores are shown at the end of the game and users have the opportunity to provide anonymous feedback. The game takes about an hour to play.

SEKOLAH DESA SIMULATION

- A web or mobile phone-based game that teaches/tests the knowledge, ability and skillset of village administrations.
- Two primary content areas related to Village Law: (1) Preparation and Planning and (2) Budgeting and Reporting.
- 34 questions: multiple choice, drop down, slider and checkbox.

In November 2015, Bina Pemdes piloted the game with support from KOMPAK as part of the Village Law training workshops taking place across the country. The game was played in 88 districts and 22 provinces. To date, a total of 1,264 people have completed the game, which continues to be available for use by facilitators, sub-district governments, and civil society organisations.

Data from over 40 in-game decisions were collected and instantly aggregated at the country, province and district levels. The results were visualised via dashboard and in reports that showed where

Image 1. Screenshot of the Sekolah Desa game.

knowledge gaps exist in village leadership across the country and in which specific training modules.

Based on lessons generated from the training programme and the Sekolah Desa game, Bina Pemdes implemented a number of follow up activities, including revision of the Village Law training modules, development of stand alone e-learning modules and the redevelopment of the Sekolah Desa game.

INSIGHTS AND OUTCOMES

The project yielded insights related to building and assessing Village Law capacity through gaming technology. Overall, users provided positive feedback on the game and noted it helped increase their knowledge in an engaging manner.

Findings showed that participants scored higher on Budgeting/Reporting compared to Planning/Preparation. Question type also seemed to matter, with participants scoring significantly higher on questions that used a slider and significantly lower on questions that used a checkbox.

The pilot also showed that gamification can encourage more active user engagement with the training topics. Thus, considerations on how to present the training content are as important as the content itself. The interactive nature of the game also enables instant feedback, which allows participants to see their progress in real time as well as areas for improvement.

Based on lessons learned from the pilot phase of Sekolah Desa, Pulse Lab Jakarta is working on enhancing the game's functionalities as a learning tool by including modules that strengthen understanding of the six phases of the Village Law. A new version of the game will be launched in 2017.

*Image 2. Village Heads testing out the Sekolah Desa game on laptops.
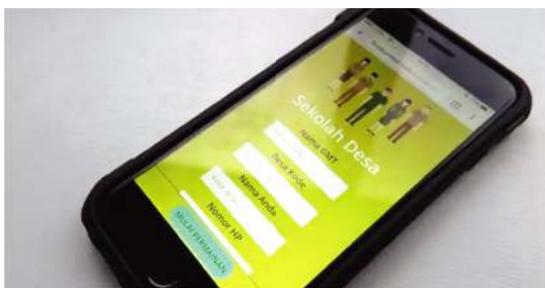(Photo credit: KOMPAK)*

Image 3. Depiction of the Sekolah Desa game on mobile phone.

IMPLICATIONS AND RECOMMENDATIONS

The first iteration of the Sekolah Desa game demonstrated the potential for using gaming technology as a capacity building and evaluation tool.

- **Appeal of gamification**: The pilot version of Sekolah Desa kept things simple in terms of features and proved to be appealing to users as an interesting way to engage with the training content and test knowledge.

- **Value of instant feedback:** Bina Pemdes and KOMPAK benefited from the data generated by the game and players benefited from instant feedback to gauge their progress.

- **Accessibility:** Traditional training approaches are typically one-time events with significant costs for country-wide roll out. The Sekolah Desa game showed the potential for using ICT solutions to reach communities in a more cost-effective and efficient way.

- **Potential for diverse users:** The pilot showed that there is significant demand and interest in this type of tool among a wide range of audiences. The game was used primarily by training participants, however, the methodology can be used to engage a much broader audience and through a variety of forums and channels.

Future projects using gaming technology should consider: (i) having a clearly defined purpose of the game from the outset, (ii) engaging content experts for guidance, (iii) securing developers with the right mix of skills, and (iv) ensuring due consideration to the needs of the end users is given—for example, for village representatives, it is important to consider how to ensure the right balance between the game being engaging without being too complex.