

Gamification in e-governance: Development of an online gamified system to enhance government entities services delivery and promote public's awareness

Alloghani M., Hussain A., Al-Jumeily D., Aljaaf A., Mustafina J.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2017 ACM. Electronic Governance (e-Governance) is the application of the Information and Communication Technology (ICT) with the aim to simplify and support the governance across different parties including public government organizations, business and citizens. Through the adoption and use of Information and Communication technology which will connect all of these three together to support the overall government's processes and operations. It's anticipated that eGovernance shall bring boundless improvements towards strategic planning, proper monitoring of government programs, investments, projects and activities. The eGovernance will provide easy access and delivery of government services to the citizens and reduce associated costs of transactions that occur across government entities. In the recent years, some of the new technological advancement concepts that include Gamification becomes one of the solutions that can be attached with the e-Governance implementation to sustain the effective adoption of government services delivery. Gamification is an evolution that supports people interactions with implemented government electronic services. It can be widely used within public organizations for training of new hires at workplaces, help employees to perform certain tasks and carry their day-to-day activities more efficiently by using Gamification tools which government entities has to offer in order to facilitate eGovernance implementation and services adoption by publics. The developed mobile application is based on a Gamification platform for employees at public government organizations for the purpose of training and learning. In this research, different variables were measured including productivity, motivational engagement, performance, training, support and services, collaboration, innovation, skills development, personal development and behavior changes.

<http://dx.doi.org/10.1145/3029387.3029388>

Keywords

E-Governance, G2C, SOA, Gamification, ICT

References

- [1] ITU, "E-Governance and Developing Countries," 2008.[Online] Available: <https://www.itu.int/ITU-D>
- [2] A Fath-Allah, L. Cheikhi, Rafa E., Al-Qutaish, and A. Idri, "E-government maturity models: a comparative study," *International Journal of Software Engineering & Apps*. Vol.5, No.3, 2014.

- [3] S. Deterding, D. Dixon, R. Khaled, L. Nacke, "From game design elements to gamefulness: defining "gamification", Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future, 2011.
- [4] M. Delaney, "How Gamification Helps Local Governments Engage Employees and Citizens, 2013. [Online] Available: <http://www.statetechmagazine.com2013/09/>
- [5] X.-t. Guo et al., "Understanding the acceptance of mobile health services: A Service participant's analysis, Management Science and Engineering," Int. Conference, pp. 1868-1873, 2012.
- [6] Deterding, S. et al., "Gamification: Using Game-design Elements in Nongaming Contexts. In CHI '11 Extended Abst. on Human Factors in Computing Sys., NY, 2425-2428.
- [7] Yoav Vilner, "Gamified' Employee Training Works Brilliantly but Is Loved Little," 2015. [Online] Available: <https://www.entrepreneur.com/article/249244>
- [8] Bunchball, Gamification for Training, Learning and Employee Development," 2016. [Online] Available: <http://www.bunchball.com/solutions/>
- [9] Chourney, A., "Taking the Game Out Of Gamification," Dalhousie Journal of Interdisciplinary Management, 2012.
- [10] Groh, F., "Gamification: State of the Art Definition and Utilization," 4th Seminar on RTMI, 2012.
- [11] J. Chambers, "Gamification: When governments up their game," 2015. [Online] Available: <http://www.civilserviceworld.com/articles/feature/>
- [12] L. Stagliano, "Designing Enterprise Gamification Architectures," 2013. [Online] Available: <https://www.politesi.polimi.it/bitstream/10589>
- [13] Glover, I., Campbell, A., Latif, F., Norris, L., Toner, J., & Tse, C. "A Tale of One City: Intra-institutional Variations in Migrating VLE Platform," Research in Learning Technology, 2012.