

***Gamification in Inspire (AQAP Online Magazine):
Stickiness Approaches and a Gamification Lexicon***

Position paper submitted to
Workshop on Mapping Ideas. San Diego State University, San Diego, CA
August 11-12, 2014

Submitted by
Dr. Edna F. Reid
Intelligence Analysis Program, James Madison University

This research examines an innovative approach for exploring violent extremists' digital artifact, such as al-Qaeda in the Arabian Peninsula (AQAP) *Inspire Magazine*, to analyze how it is capturing the interest of the readers, enabling readers to maximize enjoyment and/or engagement, and inspiring them to continue learning. The approach is an integration of social epidemic and gamification. Gamification is a process for integrating game design elements (i.e., challenges, rules, feedback) into a non-game context to make activities more fun and engaging as well as to influence behavior. An example of gamification is the Nike Plus campaign which is a marketing strategy allowing people to track, store, share, and compare exercise results while earning points (Fiermann, 2014).

We begin by using Gladwell's rules of social epidemic – Stickiness Factor (memorable ideas), Law of Few (influencers), and Power of Context (influencing circumstances) to analyze *Inspire* (Reid, 2013). The rules of social epidemic help to explain how *Inspire* is spreading and capturing the interest of readers. *Inspire* includes colorful sections focusing on news, articles by al-Aulaqi, and discussion questions that can be used for self-radicalization (Brachman, 2010). The magazine also has a section called Open Source Jihad (OSJ) that provides training instructions on assembling a home-made bomb and using encrypted communications software. These types of sophisticated radicalization artifacts are spread via the Internet to motivate individuals to execute attacks not only in their Western homeland but also overseas. For example, investigators revealed how closely the Boston Marathon bombers followed step-by-step bomb making instructions described in the first issue of *Inspire* (Esposito, 2013).

We use a gamification model to explore concepts of enjoyment, engagement, and learning to participate in violent extremist activities. We conclude by designing a framework of game design elements visible in *Inspire*. This framework provides the foundation for our development of a lexicon of gamification to support the identification and monitoring of gamification approaches in digital artifacts (Skillicorn & Reid, 2014). Additionally, we illustrate the potential of the approach for security informatics such as for cyber deception, scenario planning, and red teaming.

References:

- Brachman, J., 2010. *Inspire Magazine*. <http://jarretbrachman.net>
- Esposito, R., 2013. Exclusive: Government Documents Show How Closely Boston Marathon Bombers Followed al-Qaeda Plan. April 16, 2013. <http://investigations.nbcnews.com>
- Fiermann, J., 2014. Successful Gamification Case Studies, January 13, 2014. <http://www.learndash.com/successful-gamification-case-studies>
- Reid, E., 2013, Crowdsourcing and Gamification Techniques in *Inspire* (AQAP Online Magazine). IEEE Conference on Security Informatics, June 2013, Seattle, Washington.
- Skillicorn, D. & Reid, E., 2014. Language Use in the Jihadist Magazines *Inspire* and *Azan*. Social Sciences Research Network (SSRN). <http://ssrn.com>