

Businesses around the world are innovating by playing games—does NATO need to get in on the game?

In the summer of 2011, almost one thousand people from around the world logged on to the internet and began playing a new online computer game that centred around a fast-paced, geopolitical situation off the coast of Somalia. Players had to create action plans to respond to piracy in international waters, and not only via military means. The gamers were also special: political, military, legal, technical and security experts from a wide range of fields.

This was the first run of the Massive Multiplayer Online Wargame Leveraging the Internet (MMOWGLI), run by the United States Office for Naval Research (ONR) and the Naval Postgraduate School (NPS). This was a "gamification". With the help of multimedia and web 2.0 technologies, MMOWGLI creates a future environment where players are asked to share new ideas and collaborate to earn innovation points and win the game.

What is Gamification?

Gamification is the process of using game mechanics and crowdsourcing (the distribution of tasks to a large group of people over the Internet) to solve problems, engage and educate people. Many companies already gamify to improve revenue, market products, and increase customer engagement and loyalty. From gaining frequent flier miles and product reviewer badges, to crowd-sourcing the analysis of geological data to find gold, gamification is changing the way companies do business. Now, businesses, governments, and NATO are looking beyond educational purposes at how gamification can be put to work to solve complex real world problems.

Gamification goes beyond traditional gaming technologies by harnessing the power of crowdsourcing and the human tendency to compete and problem solve.

Gamification involves harnessing the power of games to allow the desire for rewards, status, competition, and collaboration to be satisfied, while simultaneously achieving a benefit for a company, organisation or cause.

How Does it Work?

An example of gamification occurs when a friend "likes" an interesting article you share via social media; you receive a subtle psychological reward that incentivises you to share similar content again.

While the example of "likes" is a simple example of gamification, businesses and governments are looking at gamification to improve complex areas: collaborative problems solving and processes optimisation. "Serious Gaming", as IBM calls it, integrates real world data, process models, and game mechanics. By developing an abstraction of a real world problem in a fun, challenging and rewarding game, analysis of the problem can be crowdsourced either within an organisation or freely to the public.

A sophisticated example of gamification is MMOWGLI; a direct response to the compartmentalisation of approaches by various organisations. The idea originated from the ONR, who were investigating ways to improve strategy for counterpiracy and found that the international response to the piracy problem was hampered by several challenges. The various organisations involved had compartmentalised their responses into diplomatic, military, legal, and insurance approaches, and consequently had neither a coherent set of goals and objectives, nor an agreed measure of effectiveness to determine the success of maritime security policies. As a result, barriers were broken down between organisations and fostered gamified collaborative brainstorming.



How Might Gamification be Put to Use in NATO?

First, gamification is an innovative way to support concept development. The key benefit is the opportunity to engage with a diverse range of people and brainstorm different ideas. Games could allow 100s of participants and increase the opportunities for analysis by capturing data about the process and outcomes of brainstorming.

Gamification: Why NATO Needs to Play the Game - ACT

Written by By Mr. Andy Williams and Mr. Julian Giessing, Operations Analysis Branch, ACT Capability Engineering

Second, games are a novel way to conduct analysis and experimentation. In the future, we might see massively distributed experiments over 100s or even 1,000s of players, allowing an increase in data collection than is possible with the current approach of one or several events. Experiments could be run multiple times with different parameters, scenarios and solution options. Richer and deeper analysis would be possible with the vast amount of data captured by online software.

Third, applications can capitalize on past successful gamification efforts such as the US predeployment training where military simulations are combined with cultural learning. Training for operations planning, intelligence, analysis, C2 and logistics planning could all be enhanced by the inclusion of online practice games where trainees had realistic examples to test their skills outside of the classroom.

Finally, NATO might enhance its public communication through gamification by putting players in the position of a senior leader to understand the challenges of NATO's operating environment. The wider public could engage in a gamification application by participating in a serious game on a topic relevant to NATO. This would help strengthen support in the member nations, create an opportunity to convey NATO's mission and garner understanding for the important role NATO plays in international security.

Further Reading

- Reality is broken: Why games make us better and how they can change the world. Jane McGonigal, 2011, Penguin Press.
- All the latest on Gamification: gamification.org
- Try playing FoldIt: fold.it/portal/
- IBM's Business Process Game: www-01.ibm.com/software/solutions/soa/innov8/index.html

[Back to Cover](#) [Next Article](#)