Regulatory experimentation case study

**NSW Productivity and Equality Commission**

# Protecting investors through regulatory experimentation

## Examining the impact of gamification on online trading – Ontario Securities Commission

Level:

**Moderate**

Industry:

**Finance**

Location:

**Canada**

## Overview

The Ontario Securities Commission (OSC) grew concerned about the rise of mobile-friendly investing platforms and the impact of their engagement tactics on investors' behaviour. The OSC devised an experiment to simulate the real-world so they could better understand how investors respond to common engagement techniques, such as gamification.

## Key finding 1

A gamification technique, consisting of points with negligible value, led to an increase of 39% in trading behaviour.

## Key finding 2

Using stock leader boards increased the likelihood that investors would hold these stocks by 14%.

## Outcome

Provided evidence of potential risks of gamification practices to retail investors.

## Evaluation method

Randomised control trial.

# Background

## The Ontario Securities Commission (OSC) wanted to understand the influence of gamification techniques on investing behaviours.

OSC is an independent Crown agency that regulates Ontario's capital markets by making rules that have the force of law and by adopting policies that influence the behaviour of capital markets participants. A wave of digital, mobile-friendly investing platforms has created new options for retail investors in Canada and around the world. While these platforms have expanded market participation, there is growing interest in some of the digital engagement practices that these platforms use. These tactics, sometimes referred to broadly as gamification, use game-related elements (such as badges, points or leaderboards) to influence investor behaviour. OSC was interested in understanding what, if any, implications gamification techniques had on investor protection.

# Intervention and outcome

## OSC found that the use of gamification techniques significantly influenced trading behaviour, increasing trading by 39%.

OSC conducted a randomised control trial using a simulated online trading platform. They examined the impact of two gamification techniques on trading behaviours. The first technique was a system where points were awarded for trades. These points had negligible real world economic value, but nevertheless led to a 39% increase in trading behaviour. The other technique was the use of leader boards that featured the top traded stocks. OSC found that the use of these leader boards increased the likelihood that investors would hold featured stocks by 14%.

Taken together, these findings demonstrate that gamification techniques can increase trading frequency, which is often associated with poorer investor returns. This experiment therefore provides compelling evidence that gamification techniques may impact investor financial wellbeing. OSC continues to explore this area to understand the impacts of gamification and related techniques on investors.

# Key steps for successful experiments

## Partner with a research organisation.

OSC partnered with the Behavioural Insights Team (BIT), an organisation specialising in behavioural insights and rigorous online experiments. OSC's internal behavioural insights team collaborated with BIT to develop a carefully designed experiment, execute it swiftly and generate findings with strong generalisability to real-world online trading.

**Consider collaborating with specialised external organisations to benefit from their expertise in designing and executing experiments.**

## Cultivate a culture of experimentation.

OSC has a strong culture of experimentation and recognises the value of experimental evidence. This helped secure executive support for the trial early on.

**Consider seeking out allies within the organisation who value experimentation, to cultivate an enabling environment for running experiments.**

## Overcoming external validity issues

Online experiments offer significant advantages, including lower costs and faster execution. However, a trade-off is often external validity (how generalisable the results are to the real-world).

By targeting online behaviour (online trading), OSC aimed to reduce the gap between the simulated experimental setting and the real world, thereby improving validity.



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