# Making the Online World Less Addictive – and More Popular

**How companies can use five levers to regulate online user engagement over time.**

In June 2018, the World Health Organisation added gaming addiction to its International Classification of Diseases. That the WHO would place video games alongside alcohol, gambling and illegal drugs reflects a rising social concern over their impact, specifically as regards boys and young men (the majority of so-called "core gamers" – those for whom gaming is more than a casual pastime – are males under 35).

Why now? Video games have been around for decades, but experts say the new breed is precision-tooled (often with the help of psychology experts) to encourage compulsive use. Social media operates in much the same dopamine-driven fashion, drip-feeding enthralled users doses of digital happiness in the form of likes and retweets. Today's games are also much more technologically sophisticated than their 20th-century forebears, offering an entryway into a vividly detailed, immersive universe from virtually any internet-enabled device.

The increasing public concern has not gone unnoticed by government regulators. For example, in China, the world's largest gaming market, the licensing authority suspended the release of new games for nine months last year, amid concerns about children's health and the "violent" and "addictive" content of some games.

Video game makers – and other online firms

(Facebook, etc.) believed to pull an inordinate amount of people's attention away from the real world – may soon be forced to either curb their own products' addictive properties or face government intervention. But little is currently known about how to combat compulsive gaming, outside of placing sweeping limits on play. Recently, China's government has been successfully pressuring game-makers, including global industry leader Tencent, to **adopt a two-hour daily limit** for players under the age of 18. South Korea prohibits youths under the age of 16 from playing online games between midnight and 6.00 am.

Our research – which has spawned a working paper and an article for **_Journal of Marketing Research_** – can help online companies develop a more nuanced method of conducting and moderating the flow of user activity. It may be of particular interest for those with subscription-based business models, because their priority is to extend the time horizon of user engagement so as to collect more fees. As **streaming services continue to gain in popularity** among gamers, prolonging subscription duration is likely to become an even more central issue for the industry.

**Modelling gameplay**

We used a consumer-choice model that was empirically tested against actual player activity for

*World of Warcraft (WoW)*, the **most successful multiplayer online game** in history. Calibrated by means of a dataset encompassing several years of real-time gameplay, the model describes how actions taken by Blizzard Entertainment, *WoW*'s parent company, affected player engagement. Also, we trace how differences between players – primarily, their experience level and extent of social interaction within the game – help explain their various responses to changes.

We focus on five specific aspects of gameplay:

*Timing of innovation* – In the *WoW* context, innovation translates to the release of fresh game content, such as new adventures, characters and storylines that add depth to the fantasy universe. We find that delaying innovation can be an effective lever for controlling engagement, especially among more experienced user segments. Postponing updates by two months can depress overall participation by about 2 percent. However, participation rebounds soon after the new content is released, suggesting that strategically timed delays need not result in a loss of net engagement.

*Difficulty of content* – On the whole, increasing the difficulty of the game had no impact on participation among less-skilled *WoW* players. For more adept players, the extent of engagement with the game was roughly inversely proportional to the level of difficulty – except for veteran players, who tended to lose interest as the game became less challenging.

*Social interactions* – *WoW* gamers can choose to either fly solo or play collaboratively as part of a community (a "guild" in *WoW* parlance). We found that community membership had a significant positive impact upon engagement. Compared to unaffiliated peers, long-term players who were part of a group were up to 20 percent more active. Additionally, guild members consume 10 percent more content on the whole, because in *WoW* and similar games more can be achieved when working as a team than by going it alone.

*Reward scheduling* – As *WoW* players accrue more playing hours, they attain higher experience levels and win rewards such as elite weaponry and special privileges. By delaying the arrival of these prizes – essentially requiring that gamers play longer in order to earn them – companies can not only increase the duration of user subscriptions but also attenuate the "habituated state" of heavy gameplay, which is when the potential to become addicted is at its height.

*Time limits* – Our model tests the probable impact of a two-hour per day, per person time limit on gaming. Similar in impact to slower reward

distribution, the ban reduces time spent in the "habituated state," shortens gaming sessions and increases the average subscription length – meaning subscribers play more moderately over a longer period of time.

We modelled another intervention intended to discourage obsessive play: *notifications*. These would sporadically tell users how long they had been playing and offer them the option to take a break from the game. The notifications were found to extend subscription duration, which would be good for companies. However, we found that interrupting the game abruptly – like shaking a sleeper out of their nap – would leave players unsatisfied, resulting in longer sessions of intensive or "habituated" play.

Not all online products and services will yield the exact same results. Managers can experiment with these levers to achieve the optimal balance of short-term and long-term engagement.

**_Paulo Albuquerque_** *is an Associate Professor of Marketing at INSEAD.*

**_Yulia Nevskaya_** *is an Assistant Professor of Marketing at Olin Business School at Washington University.*

*Found this article useful?* **Subscribe** *to our weekly newsletter.*

**Find article at**
https://knowledge.insead.edu/strategy/making-the-online-world-less-addictive-and-more-popular-12271

**Download the Knowledge app for free**

Download on the App Store

GET IT ON Google play