Getting Consumers to Stay with Your Brand: Reinforcement Learning

The above video went viral—already at 500,000+ views—and counting. Some are captivated by the cute cats, others are intrigued and in awe of the learned behavior to get a treat. At Ability to Engage, it made us think of a theory in psychology called reinforcement learning.

Reinforcement learning has its origin in behavioral psychology—it is one type of operant (a modification of behavior) conditioning. Operant conditioning is a method of behavioral learning that occurs through positive reinforcements (something is introduced) and negative reinforcements (something is removed). Through operant conditioning, an association is made between a behavior and a consequence for that behavior. For example, an experiment testing reinforcement learning may include a lab rat and positive reinforcement for pushing a blue button (food pellet) and negative reinforcement for pushing a red button (mild shock). As a result, the rat learns to press the blue button and avoid the red button.¹

¹ [https://mobile.twitter.com/dorseyshaw/status/847563000869523458/video/1](https://mobile.twitter.com/dorseyshaw/status/847563000869523458/video/1)
Reinforcement strengthens a *future* behavior whenever that behavior is preceded by a *specific* antecedent stimulus. Positive reinforcement, where something is introduced, involves adding something to increase a response, such as giving candy to a child after he/she cleans up the room. On the other hand, negative reinforcement, where something is removed, can also be used to create a desired response. For example, canceling a quiz (aversive stimulus) if students turn in all their homework for the week can increase the desired behavior (completing all homework).

Now, you may be wondering, *how do we use the understanding of reward and reinforcement psychology to help us interpret consumer decision-making?* An everyday example of reinforcement learning in consumer decision-making, which we may not realize, is consumer loyalty programs. Are you a loyal Starbucks Gold Card user? Reinforcement learning of positive reinforcement via the introduction of stimulus (free drink when you get 125 points), increases the change of behavior reoccurrence for one to continue to make purchases at Starbucks. Loyal CVS goer? The CVS ExtraCare rewards program gives 2% back on the purchases one makes, and there are occasional

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gifts for ExtraCare card holders. This is a “positive reinforcement category” in reinforcement theory. Every time consumers spend at CVS—and use their reward cards—they accumulate money “savings” towards CVS Reward Bucks/cash back. This adds positive reinforcement so that a consumer may chose CVS over another drug store, due to longitudinal accumulated rewards. Over time, this behavior is strengthened, as more shopping leads to more rewards, which leads to more shopping, which leads to more rewards. Conversely, a brand may also use negative reinforcement to increase consumer loyalty. The CVS ExtraCare program also provides consumers with the opportunity to buy products at a discounted price. Reinforcement learning is triggered via the removal of a “negative” component (paying additional dollars for the same product). In this way, CVS’s ExtraCare program has integrated two reinforcement responses (both positive and negative reinforcement) via stimulus introduction and stimulus removal to increase their intended behavior of shopping reoccurrence at CVS.

Reinforcement learning provides a different vantage point when considering brand rewards and the consumer behaviors influenced by those rewards. By understanding the category, consumer target, and brand strategy, marketing teams can use reinforcement learning to leverage positive and/or negative reinforcements and build greater consumer loyalty.

We love when cat videos gone viral lead to better reward systems and stronger loyalty!

Want to develop insights that lead to increased brand loyalty? Contact us at info@abilitytoengage.com or follow us on Twitter @AbilityToEngage

References: