

Viral Marketing and Reinforcement

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Visit the website
<http://viral.winterstorm.ca/>

Abstract

Viral marketing refers to advertising messages that spread rapidly through social networks, in the same manner that biological viruses spread rapidly during an epidemic. This type of marketing has been a hot topic among advertisers since the late 1990s and several books have been written about it: citing numerous examples of "media viruses".

One mechanism frequently used to explain the epidemic spread of messages is reinforcement of message passing behaviour. If a person is rewarded for repeating a message, the likelihood that they will repeat it in the future will increase. With each new person that receives the message, the number of people exposed the message will grow and message passing can grow to epidemic proportions.

Viral marketing is of interest to psychology as it provides an explanation of how large-scale social phenomena can result from individual behaviour. In this case the reward and the anticipation of reward in individuals may result in the emergence of social trends and fads.

The Ideal Viral Message

The ideal viral message:

- **Attracts attention** by exploiting prior affective conditioning or appealing to appetitive drives.
- Results in the **anticipation of reward** for repeating the message via an explicit offer or reward or by exploiting prior conditioning.
- Results in **reward for repeating the message**: "feeling cool", getting attention, contributing to self-identity
- Message passing results in emergence of an **effective reinforcement schedule**. Reward is not always required.

Fictional Example

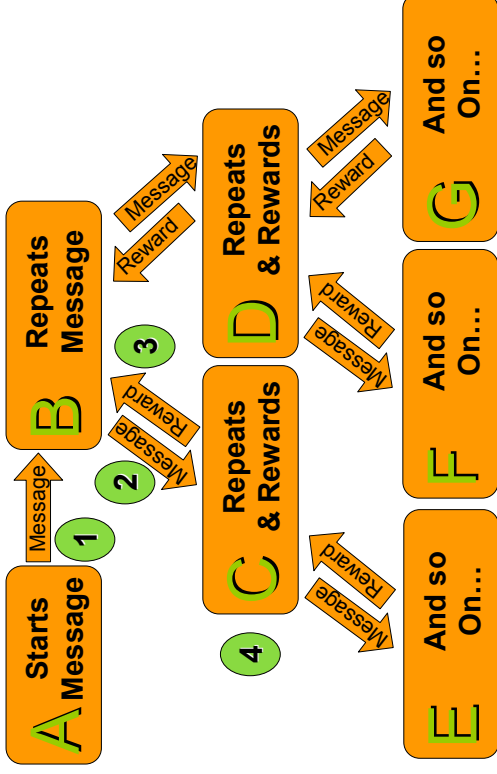
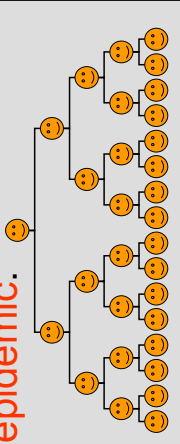
A man walks into a bar. He's out on the town and hopes to attract the attention of a companion. He looks around and makes eye contact with a woman. He tries to think of something clever to say but before he can finish, the woman approaches and introduces herself. He offers to buy her a drink and she requests a drink with an interesting name and insists on a specific brand of rum.

Embarrassed, the man is hoping to come up with something clever to say to impress the woman. The woman starts the conversation and has many clever things to say. She tells him a clever joke that happens to involve the same brand of rum she ordered. Shortly after that, she "spots a friend across the room" and has to leave. The man is crestfallen but starts over, looking around the room for someone else to talk to.

But this time he is armed with several clever things to say. He will repeat the joke he was told over and over as long as it helps him get attention and as long as it helps him avoid negative feelings of awkwardness, worry, and embarrassment. Others are likely to respond the same way to the message, and the message (joke containing brand) will spread.

The Epidemic Spread of a Media Virus

A **viral message** can spread through a **social network** like a biological virus spreads during an **epidemic**.



Step 1: The Message

- Person A passes the **viral message** to Person B.
- The message may exploit **Affective Classical Conditioning** to evoke some response from Person B.
- Message may cause B to **anticipate reward** for repeating the message.

Step 3: Reinforcement

- Person B is **rewarded** for passing the message to Person C.
 - reward may come from Person C
 - or from another source
- The message passing **behaviour is reinforced** and Person B is now more likely to repeat the message again.

Step 2: Message Is Repeated

- Person B **repeats the message** to Person C.
- Person C may also be **affected** by the message just as Person B was.
 - Person C may repeat the message.
 - Person C may simply receive the message.
 - Person C may reward Person B.

Step 4: Epidemic

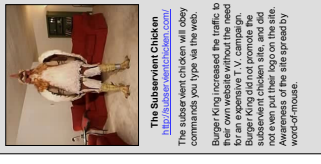
- Person B continues to **spread the message** (to Person D & others).
- Other recipients anticipate reward, repeat the message, are rewarded, and continue to **spread the message**.
- The message **spreads like an epidemic**.

Real-world Example

The Subservient Chicken Website

- Link was initially spread anonymously with no mention of any sponsor
- Visitors forwarded the link to this **cool** site to their friends, who also forwarded it, and so on...
- The Subservient Chicken site linked back to Burger King's site (www.bk.com) which saw increased traffic as a side-effect.

More examples are available at <http://viral.winterstorm.ca/>



The Subservient Chicken
The subservient chicken will obey commands you type via the web. Burger King released the turtle to their own website without the need for an expensive T.V. campaign. Subservient Chicken was the first subservient chicken site and did not even put their logo on the site. Awareness of the site spread by word-of-mouth.

Discussion

While advertisers put a distinctive emphasis on providing incentives for spreading advertisements (so-called "incentivized" ads), frequently such ads do not possess an incentive that could be considered a reinforcer as intended under instrumental learning. In such cases, the incentivized-viral ad acts as nothing more than an inexpensive and *ineffective* form of broadcast advertising. Advertisers could benefit greatly from paying attention to existing theory in behaviour and learning.

Specifically, the reinforcer used should be a natural consequence of message passing. Relying on external rewards (e.g. "tell your friends and win a free iPod") may fail because the timing and nature of the reward fails to setup a reinforcement contingency. Thus, message passing is not consistently rewarded, the behaviour is not reinforced, and the probability of message passing does not increase. Furthermore, a variable schedule of reinforcement may result in more message passing behaviour. That is, consistent but infrequent reward for message passing may result in individuals spreading the message more often.

Viral ads do not always "take off" immediately, and a person may need to be exposed to the message several times before the anticipation of reward becomes high enough to warrant repeating it. Messages that naturally lead to an anticipation of reward may be more effective. It may be that some classical conditioning mechanism (i.e. the repeated presentation of the message in a particular context) may result in the building of such anticipation.

Finally, viral ads are not successful until they reach a critical "tipping point" and this may be due to the way that they exploit social networks. The tipping point phenomena may be due to the use of non-appetitive stimuli in the ad, making it rely on second-order affective conditioning and possibly requiring repeated presentation before a person is motivated to repeat the message. The role of anticipation of reward and the properties possessed by messages that evoke such anticipation would be interesting to examine.