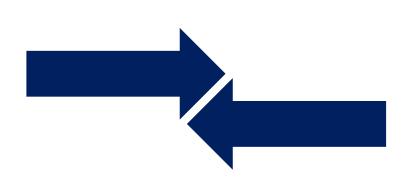


BESTFIT: Priming and Flow to Maximize Conversion



22 December 2021

Proprietary & Confidential Copyright 2021 BestFiT Ltd.



PRIMING

The priming effect has a long history in psychological literature. Since the early 1980s, researchers have studied priming by considering how the exposure to certain types of information can influence how we behave and think. The earliest work on priming focused on how exposure to specific primes altered social impressions, as well as how they affected emotions and other mental processes. Among the earliest researchers to approach the topic of priming were Bargh and Pietromonaco in 1982, Fazio et al. in 1983, and Smith and Branscomb in 1987.

The results of these initial studies demonstrated that we do, in fact, appear to utilize specific social knowledge in our judgments, even when this arises from unrelated and irrelevant sources. A great deal of the focus from early priming research remained concentrated on examining the processes by which priming effects on social impressions occurred. Research began to change over time as the scope of relevant priming stimuli broadened. In the present day, priming effects in psychological research encompass a highly diverse set of phenomena and processes whose boundaries continue to be explored.

Priming effect is a psychological and powerful tool that occur when the perception of one or more stimuli is affected and influenced by a chosen stimulus called "prime". Priming is another word for "first impression." What we see first we set, or anchor, as the standard for everything that follows.

In a typical sequential priming study, participants are presented with a series of trials, each of which consists of the presentation of a prime stimulus followed by a target stimulus. Crucially, the relationship between the prime stimulus and the target stimulus is manipulated: On some trials both stimuli are somehow related whereas both stimuli are unrelated on other trials. What is typically found is an improvement in speed and/or accuracy to respond to the target stimulus when it is preceded by a related prime stimulus relative to when it is preceded by an unrelated prime stimulus (Glaser & Banaji, 1999). Priming can influence consumer decision and something product managers can use to get great effect when looking for new clients.

What bring us to think about the sky when we see the word BLUE? Why is it that when someone say APPLE we can think about the PHONE or a FRUIT? The answer is that we are constantly primed. Every day, we are exposed to stimulus that influences our reactions and our decision by introducing different stimuli or intervention prior the decision. Everyone is more likely to



associate the subject BANANA to the YELLOW color, as both are congruent the action that link the two is fast. The whole process take place without conscious awareness. Priming is popular even for its undoubtedly flexibility, in fact it is not only visual, but it can be elicited by auditory or sensory media prime and stimuli.

After watching a horror movie on TV late at night, we are more likely to jump up at all the creaks and noises in the house than if you'd watched a comedy. And studies have shown that when someone hear a word such as "kindness", they tend to later judge others as more kind; if they feel the scent of a cleaner they recall more cleaning-related activities and are even less messy while eating a crumbly cracker.

Priming has been extensively studied in cognitive and social psychology and the examples are pervasive in almost all aspects of everyday life. Priming can shape behavior, reaction and action to the environment and is an easy shortcut to take quick decision. It's also an efficient persuasion tool widely used in marketing and advertisement.

FLOW

Flow is a construct worthy to be considered to understand and improve the online relationship between customer and environments. Many researchers have studied flow in different contexts (Agarwal and Venkatesh, 2000; Chen et al., 1999.

Chen, 2000, 2006; Csikszentmihalyi, 1975, 1988, 1989, 1990, 1992, 2000, 2004, 2005; Hoffman et al., 1996; Huang, 2003; Koufaris, 2002; Novak et al., 2000, 2003; Trevino et al., 1992; Webster et al., 1992) such as sports (Jackson, 1996), reading (McCuillan and Conde, 1996) or in work environments (Allison et al., 1988) recognizing its importance for explaining online consumer behavior (Hoffman et. al., 1996; Koufaris, 2002). What is flow?

Csikszentimihalyi (1977) describes it as an "holistic sensation that people feel when they act with total involvement", is a "crucial component of enjoyment. In a flow state, the consumers perceive an effortless action, loss of time and a sense that the experience stands out as being exceptional compared with daily activities. It is a



continuous variable that has different levels ranging from none to intense (or complete) state (Csikszentmihalyi and Csikszentmihalyi, 1988). The research to dates studied flow experience as an independent variable, as a dependent variable, and lately, as a mediator variable.

In general, the models and other empirical flow studies seem to suggest three stages as a flow framework: flow antecedents, flow experience, and flow consequences (Chen, 2000; Ghani, 1995; Ghani and Deshpande, 1994; Trevino and Webster, 1992).

From the marketing point of view the consequences (outcomes) of online flow are:

- LEARNING

During Web usage consumers who experienced flow, are more likely to retain more of what they are watching to so effectiveness and marketing communication are the implication. Flow increase learning and it change the attitude and behavior of the consumer (Skadberg and Kimmel, 2004; Choi, Kim, and Kim 2007; Hoffman and Novak, 2009; Ho and Kuo, 2010).

ATTITUDES, BEHAVIORAL INTENTIONS AND BEHAVIOR

in some studies flow has been found to influence attitude toward online purchasing (Korzaan, 2003), attitude toward e-learning (Choi, Kim, and Kim, 2007), brand attitudes (Mathwick and Rigdon, 2004; Sanchez-Franco, 2006). Also, Hsu and Lu (2004) concluded that flow influence attitude toward Web and brand. Luna,

Peracchio, and de Juan (2003 found that attitude toward a Web site influenced flow. Hoffman and Novak (1996) found positive subjective experience to be an outcome of online flow. Reid (2004) showed that flow influence user satisfaction and creativity

- EXPLORATORY BEHAVIOR

Agarwal and Karahanna (2000) defined flow as a higher-order factor and found that

the curiosity contributed to flow; Chou and Ting (2003) found that discovery contributed to flow.

- CONTROL



Perceived behavioral control was an outcome of flow (Hoffman and Novak, 1996), or

as contributing to a higher-order flow construct (Agarwal and Karahanna, 2000; Huang, 2006).

MAXIMIZE CONVERSION AND MARKETING PROCESS

Online environments evolve quickly since 1990. The number of people around the world using the internet has grown to 4.54 billion, an increase of 7 percent (298 million new users) compared to January 2019. Worldwide, there are 3.80 billion social media users in January 2020, with this number increasing by more than 9 percent (321 million new users) since this time last year. Globally, more than 5.19 billion people now use mobile phones, with user numbers up by 124 million (2.4 percent) over the past year. Therefore, understanding the consumer's online behavior is extremely relevant in today's economy to create effective online marketing strategies. Flow theory has been found useful in finding the factors which enhance compelling online experiences for the customers.

The marketing outcomes of flow experience proved to be prominent for understanding the online consumer's behavior. The accelerated pace of Web evolution requires a continuous study in time to see effective internal and external changes in online consumer experiences. Flow experience has been proven to influence learning, attitudes, computer use, positive experiences, behavioral intentions, and customer's behavior. The researchers had the vision to use flow theory to understand consumers behavior in online environments, and thus to help marketers to create efficient and effective marketing strategies.

Another significant modality to influence and drive consumer's behavior is the priming technique, described above. In 1999, researchers conducted a study, 'The influence of in-store music on wine selections' to reveal the effects of music on decision-making in a grocery store. A simple, auditory prime had an unconscious but profound effect on customers' buying behavior. In 2012, McCain released mouth-wateringly good, jacket potato scents at 10 bus stops around the country to accompany their outdoor advertising. In May

B-**I**BESTFIT

2018, Beefeater London Dry Gin took Oxford Circus underground station from drab commuter route to sweet-scented haven. Launching their new strawberry flavoured gin, the brand decked the walls with strawberry-scented posters in a saccharine pastel pink shade. Coca-Cola took on priming in their "Open the happy can" campaign launched in Italy inspired by a study focused on the impact of subliminal facial expressions, that found that people who were presented with a happy face drank more Koolaid than people presented with an angry or neutral face. A study by Chartrand et al. provides that brands' goals can be activated by situational cues that lead consumers to make decisions unconsciously. Indeed, the study therefore challenges the notion that mental functioning is and needs to be conscious by presenting a case where the priming effect leads our mental functioning to occur through unconscious processing. It's generally acknowledged that consumers suddenly perceive lemonade as sweeter when the logo of the drink is more saturated towards yellow. The subtlety of visual stimuli makes it a powerful tool to use. Visual information can be processed 60,000 times faster than text and is easier to remember.

In modern times, marketing and product teams have used priming to maximum effect. Specifically, product teams prime users to influence and incentivize a desired action. The implications are clear and combining priming with flow experience could maximize and give more information about consumers' behavior in online environments targeting better the marketing techniques.



REFERENCES

Bargh, J. A., & Pietromonaco, P. (1982). Automatic information processing and social perception: the influence of trait information presented outside of conscious awareness on impression formation. *Journal of personality and Social psychology*, *43*(3), 437.

Herr, P. M., Sherman, S. J., & Fazio, R. H. (1983). On the consequences of priming: Assimilation and contrast effects. *Journal of experimental social psychology*, *19*(4), 323-340.

Brosius, H. B. (1993). The effects of emotional pictures in television news. Communication Research, 20(1), 105-124

Agarwal, R.; Karahanna, E. (2000) Time Flies When You're Having Fun: Cognitive Absorption and Beliefs About Information Technology Usage, MIS Quarterly, 24(4), p. 665-694.

Bridges, E.; Florsheim, R. (2008) Hedonic and Utilitarian Shopping Goals: The Online Experience, Journal of Business Research, 61 (April), p. 309– 314.

Chen, H.; Wigand, R.; Nilan, M. (1999) Optimal experience of web activities, Computers in Human Behavior, 15(5), p. 585-608.

Chen, H. (2000) Exploring Web Users' On-line Optimal Flow Experiences, Unpublished PhD Dissertation, School of Information Studies, Syracuse, NY: Syracuse University.

Chen, H. (2006) Flow on the net-detecting Web users' positive affects and their flow states, Computers in Human Behavior, 22(2), p. 221-233. Choi, B.; Lee, I.; Choi, D.; Kim, J. (2007) Collaborate and Share: An Experimental Study of the Effects of Task and Reward Interdependencies in Online Games, CyberPsychology & Behavior.

Chou, T. J.; Ting, C. C. (2003) The role of flow experience in cyber-game addiction, CyberPsychology & Behavior, 6, p. 663-675

Csikszentmihalyi, M. (1975) Play and Intrinsic Rewards, Humanistic Psychology, 15(3), 1975, p. 41-63.

Csikszentmihalyi, M. (1977) Beyond Boredom and Anxiety, second printing, San Francisco: Jossey-Bass.

Csikszentmihalyi, M.; Larson, R. (1984), Being adolescent: Conflict and growth in the teenage years, New York: Basic Books.



Csikszentmihalyi, M.; Larson, R. (1987) Validity and reliability of the Experience Sampling Method, Journal of Nervous and Mental Disease, 175, p. 526–536.

Csikszentmihalyi, M.; Csikszentmihalyi, I. S. (1988) Optimal Experience: Psychological Studies of Flow in Consciousness, Cambridge: Cambridge University Press, 1988.

Csikszentmihalyi, M.; LeFevre, J. (1989) Optimal Experience in Work and Leisure, Journal of Personality and Social Psychology, 56 (5), p. 815-822.

Csikszentmihalyi, M. (1990) Flow: The Psychology of Optimal Experience, New York: Harpers Perennial.

Csikszentmihalyi, M.; Larson, R. (1992) Validity and Reliability of the Experience Sampling Method, in Vries, M.W.(Ed.), The Experience of Psychopathology: Investigating Mental Disorders in their Natural Settings, New York: Cambridge University Press, p. 43-57.

Csikszentmihalyi, M.; Rathunde, K. R.; Whalen, S. (1993) Talented teenagers: The roots of success and failure, New York: Cambridge University Press.

Csikszentmihalyi, M. (1997) Finding Flow: The Psychology of Engagement with Everyday life, Basic Books, New York.

Csikszentmihalyi, M. (2004) Materialism and the evolution of consciousness, In: T. Kasser & A. D. Kanner (Eds.), Psychology and consumer culture: The struggle for a good life in a materialistic world (p. 91–106). Washington, DC: American Psychological Association.

Csikszentmihalyi, M.; Abuhamdeh, S.; Nakamura, J. (2005) Flow. În A. Elliot & C. S. Dweck (Eds.), Handbook of competence and motivation (p. 598–608), New York: Guilford Press.

Hoffman, D.L.; Novak, T.P. (1996) Marketing and hypermedia computermediated environments: conceptual foundations, Journal of Marketing, 60(3), p. 50-68.

Hoffman, D. L.; Novak, T. P. (2009) Flow Online: Lessons Learned and Future Prospects, Journal of Interactive Marketing 23(1), p. 23-34. Ho, L. A.; Kuo, T. H. (2010) How can one amplify the effect of e-learning? An examination of high-tech employees' computer attitude and flow experience, Computers in Human Behavior, 26(1), p. 23-31.

Jackson, S.A., (1996) Toward a conceptual understanding of the flow experience in elite athletes, Research Quarterlyfor Exercise and Sport 67 (1), p. 76–90.



Korzaan, M. (2003) Going with the flow: Predicting online purchase intentions, Journal of Computer Information Systems, 43(4), p. 25–31.

Koufaris, M., (2002) Applying the technology acceptance model and flow theory to online consumer behavior, Information Systems Research 13 (2), p. 205–223.

Luna, D.; Peracchio, L. A.; de Juan, M. D. (2002) Cross-cultural and cognitive aspects of web site navigation, Journal of the Academy of Marketing Science, 30, p. 397–410.

North, A. C., Hargreaves, D. J., & McKendrick, J. (1999). The influence of in-store music on wine selections. *Journal of Applied Psychology*, *84*(2), 271 276. https://doi.org/10.1037/0021-9010.84.2.271

Chartrand, T. L., Huber, J., Shiv, B., & Tanner, R. J. (2008). Nonconscious goals and consumer choice. *Journal of Consumer Research*, *35*(2), 189 201. <u>https://doi.org/10.1086/588685</u>.

Vohs, K. D., Mead, N. L., & Goode, M. R. (2006). The psychological consequences of money. *Science*, *314*(5802), 1154–1156.

Mathwick, C.; Rigdon, E. (2004) Play, Flow, and the Online Search Experience, Journal of Consumer Research, 31 (September), p. 324–332.

Novak, T. P.; Hoffman, D. L.; Yung, Y. F. (2000) Measuring the Customer Experience in Online Environments: A Structural Modeling Approach, Marketing Science, 19(1), p. 22-42.

Novak, T.P.; Hoffman, D.L.; Duhachek, A. (2003) The Influence of Goal-Directed and Experiential Activities on Online Flow Experiences, Journal of Consumer Psychology 13(1/2), p. 3-16.

Privette, G. (1983) Peak experience, peak performance, and flow: a comparative analysis of positive human experiences, Journal of Personality and Social Psychology 45(6), p. 1361–1368.

Privette, G.; Bundrick, Ch. M. (1987) Measurement of Experience: Construct and Content Validity of the Experience Questionnaire, Perceptual and Motor Skills, 65, p. 315-332.

Richard, M.-O.; Chandra, R. (2005) A model of consumer web navigational behavior: conceptual development and application, Journal of Business Research, Vol. 58, p. 1019-1029.

Sanchez-Franco, M. J. (2006) Exploring the Influence of Gender on Web Usage Via Partial Least Squares, Behavior and Information Technology, 25(1), p. 19–36.



Siekpe, J. S.(2005) An Examination of the Multidimensionality of Flow Construct in a Computer-Mediated environment, Journal of Electronic Commerce Research, 6(1), p. 31-43.

Skadberg, Y.X.; Kimmel, J.R. (2004) Visitors' flow experience while browsing a web site: its measurement, contributing factors and consequences, Computers in Human Behavior, 20(3), p. 403-422.

Steuer, J. (1991) Defining Virtual Reality: Dimensions Determining Telepresence, Journal of Communication (42)4, p. 73-93.

Trevino, L. K.; Webster, J.; Ryan, L. (1993) The Dimensionality and Correlates of Flow in Human Computer Interactions, Computers in Human Behavior, 9(4), Winter, p. 411-426.

Walker, G.J.; Hull, R.B.; Roggenbuck, J.W. (1998) On-site optimal experiences and their relationship to off-site benefits, Journal of Leisure Research 30(4), p. 453–471.

Webster, J.; Martocchio, J.J. (1992) Microcomputer Playfulness: Development of a Measure With Workplace Implications, MIS Quarterly, 16 (June), p. 201-226.