Habit Zone

* Brain stores involuntary responses in the basal ganglia area of the brain.
* Habits form when brain takes shortcut and stops deliberating over what to do next.
* Brain relies of previous experience – if a good decision yesterday, it should be today, it becomes routine.
* It is standard to not ask users to spend money in a game until they have become associated with the perks of what will be offered and have already entered a habit state of play. Once the compulsion to play and desire to progress is already in place it is far easier to convert a player into a paying customer.
* [in lifestyle apps, user action starts and gradually slopes downward, but after the habit is formed, will surge upward]
* Habits die hard. Strong player habits will reduce likelihood of swapping to competitor. Google/Bing - only user interface is different, search time through using either search algorithm is imperceptible. Only difference is the new interface requires cognitive effort which people would rather not put in.
* New products will have to be orders of magnitude better to break attachment.
* Getting into the habit zone, users must access frequently and receive a perceived proportional utility.

Trigger

* Actuator of the behaviour – initial spark.
* Could be a prompt, a ‘log-in’ button – ad on coke vending machine (guy offering coke with “Thirsty?”).
* More choices give user multiple options, too many choices or irrelevant choices cause confusion, hesitation or abandonment. Reducing amount of thought required to make choice helps the choice happen subconsciously and become a habit.
* Paid triggers – ads (attract new users)
* Earned triggers – good reviews, sales spikes, viral hit. All unpredictable, hard to maintain.
* Relationship triggers – recommendations and referrals from friends, family, colleagues.
* Owned triggers – emails/notifications/newsletters. Ultimate aim to propel player into habit.
* Internal trigger – when a product becomes attached to a though, emotion or routine.
* Gradually the bonds cement into habits in response to internal triggers.
* The ultimate goal of a habit-forming product is to associate itself with the user’s solution.
* The user will then identify the product as the source of relief.

Actions

* The behaviour done in anticipation of the reward.
* The trigger, driven by internal or external cues, informs the user of what to do next; though, if the user does not take action, the trigger is useless.
* To initiate action, doing must be easier than thinking.
* a habit is a behaviour done with little or no conscious thought. The more effort—either physical or mental—required to perform the desired action, the less likely it is to occur.
* The Fogg Behaviour Model is represented in the formula B = MAT, which represents that a given behaviour will occur when motivation, ability, and a trigger are present at the same time and in sufficient degrees.
* If any component of this formula is missing or inadequate, the user will not cross the “Action Line” and the behaviour will not occur.
* Consider phone call as example. If phone buried in your bag, effort required might seem too large, you may assume caller is telemarketer and ignore it, your phone may be on silent and you are unaware of the call ring—in other words, no trigger was present
* The other two components of the Fogg Behaviour Model: motivation and ability.
* While internal triggers are the frequent, everyday itch experienced by users, the right activators create action by offering the promise of desirable outcomes (i.e., a satisfying scratch). However, even with the right trigger enabled and motivation running high, product designers often find users still don’t behave the way they want them to. What’s missing in this equation? Usability— or rather, the ability of the user to take action easily.
* Accessibility – number of steps to access thing. Literally number of motions to access. What that thing allows you to access, one account for multiple services. Connectivity. Immediate and simple access and display of information
* One jar held ten cookies while the other contained just two. Which cookies would people value more? Although the cookies and jars were identical, participants valued the ones in the near-empty jar more highly.
* The appearance of scarcity affected their perception of value.
* In the second part of their experiment, the researchers wanted to know what would happen to the perception of the value of the cookies if they suddenly became scarce or abundant. Groups of study participants were given jars with either two cookies or ten. The people in the group with ten cookies then suddenly had eight taken away. Conversely, those with only two cookies had eight new ones added to their jars. How would these changes affect the way participants valued the cookies? Results remained consistent with the scarcity heuristic. The group left with only two cookies rated them to be more valuable, while those experiencing sudden abundance by going from two to ten actually valued the cookies less. In fact, they valued the cookies even lower than people who had started with ten cookies to begin with. The study showed that a product can decrease in perceived value if it starts off as scarce and becomes abundant.
* The mind takes shortcuts informed by our surroundings to make quick and sometimes erroneous judgments.
* When Bell performed his concert in the subway station, few stopped to listen. But when framed in the context of a concert hall, he can charge beaucoup bucks.
* People often anchor to one piece of information when making a decision.
* I almost bought the shirts on sale assuming that the one feature differentiating the two brands—the fact that one was on sale and the other was not—was all I needed to consider.
* **“punch card effect”** - **The Endowed Progress Effect**
* Punch cards are often used by retailers to encourage repeat business. With each purchase customers get closer to receiving a free product or service. These cards are typically awarded empty; in effect customers start at 0 percent complete. What would happen if retailers handed customers punch cards with punches already given? Would people be more likely to take action if they had already made some progress? An experiment sought to answer this very question.11 Two groups of customers were given punch cards awarding a free car wash once the cards were fully punched. One group was given a blank punch card with eight squares; the other was given a punch card with ten squares that came with two free punches. Both groups still had to purchase eight car washes to receive a free wash; however, the second group of customers—those that were given two free punches—had a staggering 82 percent higher completion rate.
* The study demonstrates the endowed progress effect, a phenomenon that increases motivation as people believe they are nearing a goal.
* Similar example on linked in **“your profile strength is currently 1/5”** – complete [x] to upgrade.

Variable Reward

* Creates craving – predictable rewards don’t create desire (not necessarily the period or route to the reward but the reward itself – if people knew their facebook feed, would they look).
* Users experience surge of dopamine when anticipating a reward, introducing variability multiplies the effect. This creates a focused state which suppresses the areas of the brain associated with judgement and reason, while activating those associated with wanting and desire.
* Having wanted options mixed with mundane makes the user feel intrigue and desire, the thrill of maybe getting what you want.
* The excitement of anticipating something you might want releases more dopamine making you more focused. Before players know it, they’ve spent an hour chasing the next reward.
* Psychologist B.F.Skinner
* Found that with pigeons’ variable rewards (reward after random amount of interactions) yielded more interactions to obtain reward.
* Variability increases activity in the nucleus accumbens and spikes levels of the neurotransmitter dopamine, driving our hungry search for reward. Experiments involving money and heterosexual human males looking at attractive faces of the opposite sex showed increased dopamine levels in the nucleus accumbens.
* Three variable reward types:
* The tribe: social rewards, our brains have adapted to seek rewards that make us feel accepted, attractive, important and included.
  + On social media the varied stream of (known people’s) posts and validating through likes and comments are sought.
  + On stack overflow and other forums, badges/points are earnt. These are meaningful as they show status and worthiness to others, allowing people to outrank their peers.
  + League of legends: honour points, overwatch: vote for player “performance”. Similar way to stack overflow.
* The hunt: the need to acquire physical objects, such as food and other supplies that aid our survival, is part of our brain’s operating system.
  + Pursuit of prey as early man. Today we pursue money, information. Compelled by same instinct.
  + Variable rewards – where the thrill of the chase is the reward itself. Scrolling through reddit where some posts will be mundane, others relevant. Slot machines, where people throw money away at the slightest chance of the jackpot.
* The self: the rewards of the self are fuelled by “intrinsic motivation” as highlighted by the work of Edward Deci and Richard Ryan. Their self-determination theory espouses that people desire, among other things, to gain a sense of competency. Adding an element of mystery to this goal makes the pursuit more enticing.
  + Personal gratification, completing a puzzle – will cause immense frustration while completing, but the completion is the success, huge pay off.
  + Video games allow players to level-up, master skills, unlocking abilities, fulfil a players desire for competency by showing progress/completions. The constant desire to reach higher level, stronger weapons, better armour, visit new areas, keeps the player motivated to log in.
* Gamification is not a one-size-fits-all. Badges, completion merits must match the user’s intent. If the user’s itch is not scratched by the badges then engagement will be unaffected.
* “but you are free to choose” – reaffirming the individuals freedom to choose inspires a stronger action (more donations etc). “but you are free” disarms our instinctive rejection of being told what to do.
* If the experience does not give the user an itch to scratch, similar will happen.
* Rewards must fit into the narrative of why the product is used and align with the users internal triggers and motivations.
* Social acceptance is something all humans crave – being able to rate user interactions etc.
* Be wary of causing ‘reactance’ (hair trigger response when users feel autonomy is threatened – ability to self-govern). Do not want to force users into making a decision, want users to feel they can do what they want to do.
* Variable rewards are a powerful inducement to repeat actions.

Investment

* Increases odds user will return.
* Through previous spending, investment of their own time, data, effort, social standing (history/rank), users won’t want to abandon these.
* People irrationally add value to a ‘commitment’ as a result of their own efforts.
* [U. S. college students in America were given instructions to assemble an origami crane or frog. After the exercise students were asked to purchase their creation, bidding up to $1. Assemblers were informed that a random number between zero and one hundred was to be drawn. If it exceeded their reservation price in cents, the assemblers would return empty-handed—but if it was equal to or less than their bid, they would pay their bid and keep the origami. Meanwhile, a separate group of students located in another room, unaware of the identity of the assemblers, were asked to bid on their origami using the same procedure. Similarly, a third independent group was asked to bid on expert-made origami under the same criteria. The results showed that those who made their own origami animals valued their creation five times higher than the second group’s valuation, and nearly as high as the expert-made origami values (figure 28). In other words, those who invested labor associated greater value with their paper creations simply because they had worked on them. Ariely calls this the IKEA effect.]
* We Seek to Be Consistent with Our Past Behaviours
* [How much do past behaviours alter our future actions? Studies reveal that our past is an excellent predictor of our future. A team of researchers asked a group of suburban residents to place large, unsightly signs in front of their homes that read DRIVE CAREFULLY.5 Two groups were tested. In the first group only 17 percent of the subjects agreed to the request, while 76 percent of those in the second group agreed to post the ugly yard signs. What was the cause of this huge discrepancy? The groups were identical except for one factor. Those in the second group were approached two weeks prior to the yard sign request and asked to place a much smaller, three-inch sign that read BE A SAFE DRIVER in their windows. Nearly everyone who was asked to place the smaller message agreed to this. When the researchers returned two weeks later, a whopping majority of these residents willingly replaced the small sign with the large one on their front lawns. The homeowners’ greater willingness to place the large, obtrusive sign on their lawns after agreeing to the smaller one demonstrates the impact of our predilection for consistency with our past behaviors. Little investments, such as placing a tiny sign in a window, can lead to big changes in future behaviours.]
* Cognitive dissonance – learning to tolerate, like something through repeat exposure. (eg. Spicy food)
* Together, the three tendencies just described influence our future actions: The more effort we put into something, the more likely we are to value it; we are more likely to be consistent with our past behaviours; and finally, we change our preferences to avoid cognitive dissonance.
* These tendencies of ours lead to a mental process known as rationalization, in which we change our attitudes and beliefs to adapt psychologically. Rationalization helps us give reasons for our behaviours, even when those reasons might have been designed by others.
* Combine that with the psychological idea of rationalization, that anything you spend time on, you start to believe, ‘This must be worthwhile. Why? Because I’ve spent time on it!’
* Therefore, it must be worth me kicking in twenty dollars because look at the time I’ve spent on it. And now that I’ve kicked in twenty dollars, it must be valuable because only an idiot would kick in twenty dollars if it wasn’t.
* When players contemplate making a purchase, they acknowledge it is unwise to spend money on something that is not good. Yet just like the fox that perceives the grapes as sour to reduce his frustration at not being able to reach them, players justify their purchases to help convince themselves of something they want to be true—namely, that they are not foolish. The only solution is to keep paying to keep playing.
* Stored value - *The stored value users put into the product increases the likelihood they will use it again in the future and comes in a*
* *variety of forms.*
* Content - *The collection of memories and experiences, in aggregate, becomes more valuable over time and the service becomes*
* *harder to leave as users’ personal investment in the site grows.* Eg. Itunes music library
* Data – if users enter data they are more likely to return, the effort associate with contribution and value.