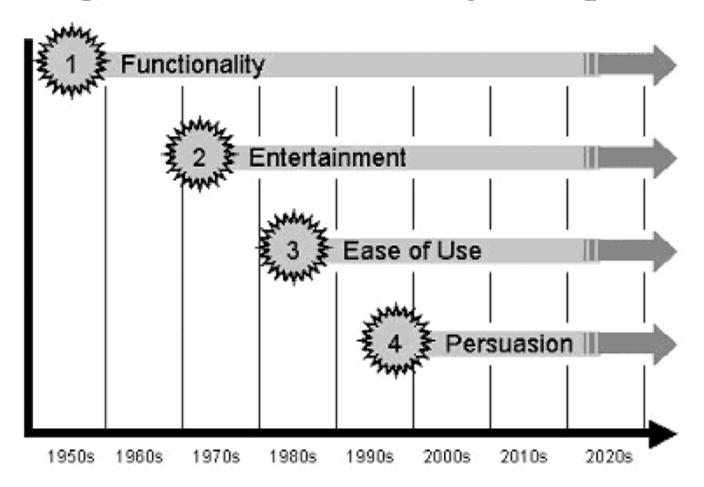
#### Persuasion

#### Major Waves in Computing



#### Fogg Behaviour Model

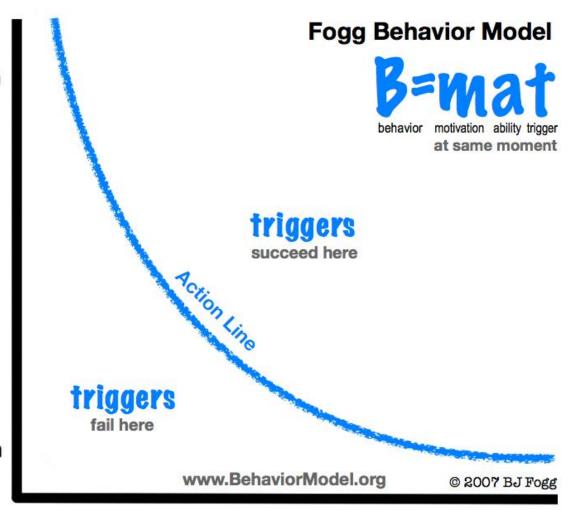
- Behaviour is a product of three factors:
  - motivation,
  - ability
  - triggers
- For a person to perform a target behaviour, he or she must
  - Be sufficiently motivated
  - Have the ability to perform the behaviour
  - Be triggered to perform the behaviour

#### High Motivation

## motivation

Low Motivation

For permissions, contact BJ Fogg



Hard to Do



Easy to Do

#### Scenario

- Suppose a web site creator wants to persuade site visitors to sign up for a newsletter by entering their email address.
- In order to prevent bots from signing up, the creator includes a CAPTCHA.
- Consider
  - What personas would be positioned where on the model?
  - Are they likely to sign up for the newsletter?
  - What can the creator do to increase the likelihood of people signing up?

#### Fogg Behaviour Model

- In order for behaviour to be occur, people must have some non-zero level of both motivation and ability.
- The implication for designers is clear:
  - Increasing motivation is not always the solution.
  - Often increasing ability (making the behaviour simpler) is the path for increasing behaviour performance

#### Persuasive Technology

- Persuades people to act
- Boost either motivation or ability (usually by making something simpler, like 1-click purchasing) or both.
- However

The behaviour must be triggered.

#### A Story (from BJ Fogg)

One of my goals is to practice the ukulele each day. This little instrument is great fun, but some days I don't practice. Why not? Let me explain. I like practicing the ukulele, and it's easy to do. I have sufficient motivation and ability. What's missing is a well timed trigger. I lack something that says, "Hey, right now is a great time to play the ukulele!" Without this trigger in my life, I don't do this target behaviour each day.

#### **Triggers**

- A trigger can take many forms e.g.
  - An alarm that sounds
  - A text message
  - An announcement that a sale is ending
  - A growling stomach
- Successful triggers have three characteristics:
  - We notice the trigger
  - We associate the trigger with a target behaviour
  - The trigger happens when we are both motivated and able to perform the behaviour

#### **Behaviour Activation Threshold**

- When the combination of motivation and ability places a person above the behaviour activation threshold, then a trigger will cause that person to perform the target behaviour.
- If a person is underneath this threshold, then a trigger will not lead to the target behaviour.

#### **Triggers**

- If we want to perform a behaviour, a welltimed trigger is welcome.
- If our motivation is low for that behaviour, a trigger is distracting.
- If we want to perform the behaviour being triggered but lack ability, we feel frustrated.

#### Question

- (Why) do we
  - Respond to pop-up ads?
  - Respond to 419 scams?
  - Check email regularly?
  - Check Facebook regularly?
  - Check Webcourses regularly?

#### Increasing motivation

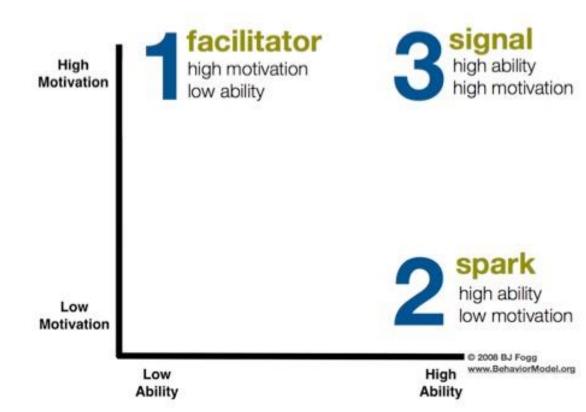
- 1. Pleasure / pain
- 2. Hope / fear
- 3. Social acceptance / rejection

#### Increasing ability

- Reduce time required
- Reduce monetary cost
- Reduce physical effort
- Reduce brain effort

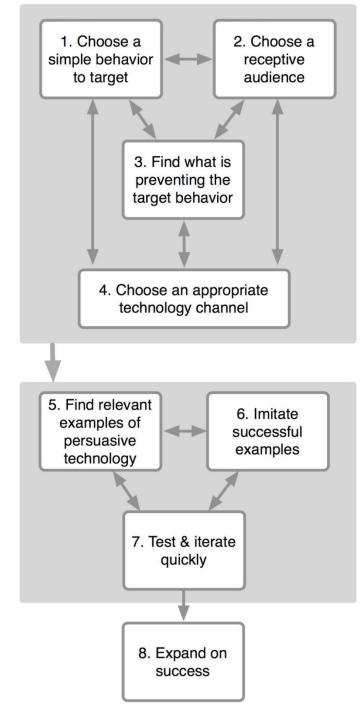
#### Types of Trigger

- Spark as Trigger (to inspire)
- Facilitator (to enable)
- Signal as Trigger (to remind)

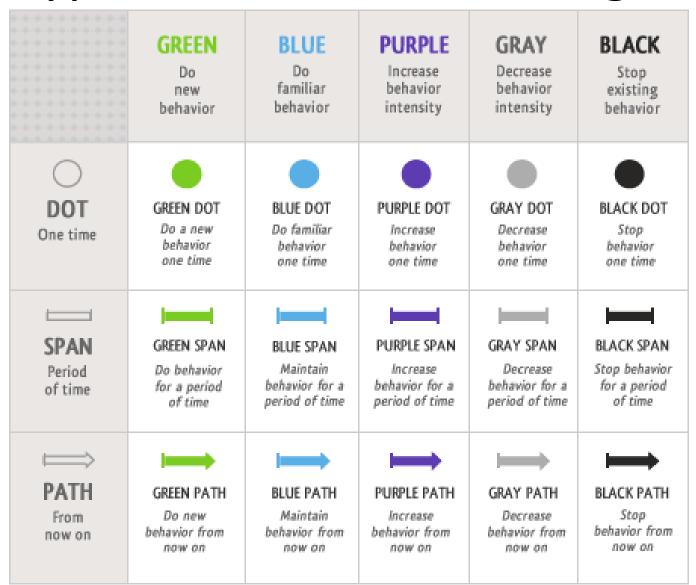


#### Design Process

- Step 1: Choose a simple behaviour to target
- Step 2: Choose a receptive audience
- Step 3: Find what prevents the target behaviour
- Step 4: Choose a familiar technology channel
- Step 5: Find relevant examples of persuasive technology
- Step 6: Imitate successful examples
- Step 7: Test and iterate quickly
- Step 8: Expand on success



#### Types of Behaviour Change



#### Green Dot Behaviour

- If you want someone to do a new behaviour just one time
- Used in the beginning stages of complex behaviour inductions.
- For example, if a company is interested in creating a loyal, repeat customer, they might start off with a small introductory offer. This can then lead to more extensive, prolonged relations and, eventually, habitual purchasing behavior.
- Main challenge is a lack of ability
- The subject must have enough knowledge to successfully complete the action on the first attempt. Otherwise, frustration, and quitting, may occur.
- Suggestions
  - Couple the trigger with a motivational or facilitative element.
  - Increase the ability of the subject by explaining the novel behavior in terms of one that is familiar.
  - Increase the motivation of the subject by explicitly highlighting the benefits of the action.

#### Green Span Behaviour

- If you want someone to commit to a behaviour for a period of time, you are seeking a Green Span Behaviour.
- To succeed you should make sure these things happen:
  - Boost motivation, while downplaying factors that de-motivate.
  - Increase the ability to make the commitment.
  - Deliver the trigger (request to commit) when motivation and ability are high.
- The first challenge is in framing the new behaviour in a way that reduces costs (money, effort, time, etc.) and increases benefits.
- The second challenge is timing the trigger so it comes at the optimal moment.
- Fear is the primary reason people resist Green Span Behaviours (again, this means agreeing to do something for a period of time) comes mostly from fear (negative expectations). Will this new activity take up too much time? How much effort does the ongoing behaviour require? And, what if I change my mind?

#### Green Path Behaviour

- If you want someone to commit to a new behaviour for the long term (lifelong), you are seeking a Green Path Behaviour.
- The specific steps
  - Boost motivation (if needed)
  - Enhance ability by making the commitment act simple
  - Issue the trigger when #1 and #2 are in optimal states.
- For example,
  - Couple the trigger with an existing habit
  - Increase the perceived ability (self-efficacy) by making the behaviour easier to do
  - Reduce demotivation by making the behaviour more familiar
  - The challenge is in influencing the target audience to perform the behaviour and then getting them to repeat it, from today onward. Green Path relates to forming new habits.

#### Green Path Behaviour: Example

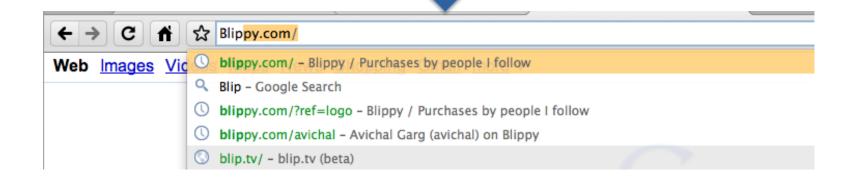
- Daily visit to a new website
  - If you've created a new website and want people to visit it each day from now on, you are seeking a Green Path behaviour from your audience. This is the goal of many websites, but few succeed.
  - Case study: Blippy.com

#### The newest addiction: blippy



# The question: How can blippy create a compelling experience that keeps users coming back?

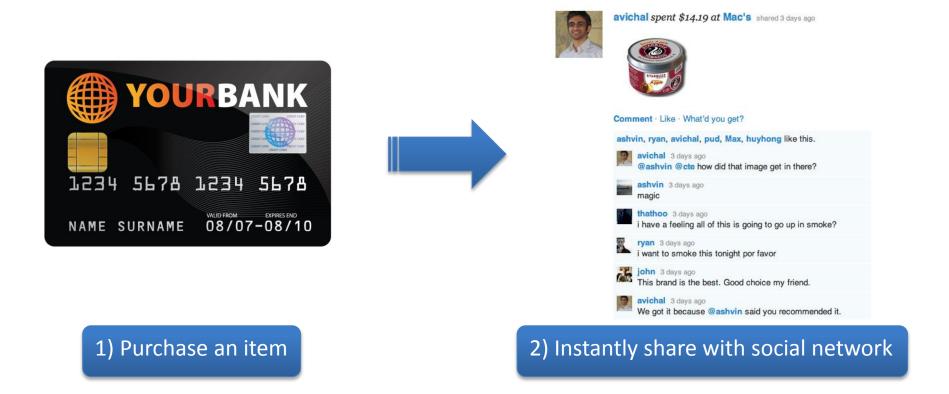
The behavior they want: Users to visit the site regularly



#### What's Blippy?

Blippy is an activity stream for your purchase – where each purchase becomes a post. Users can comment on and "like" their friend's purchases, or be tagged in specific items.

#### How does it work?



Blippy encourages thousands of users to share their financial transactions by offering a compelling user experience. Yin Yin Wu - Habits.stanford.edu

#### Blippy's goal: encourage users to visit the site regularly

	Green behavior Do NEW behavior, one that is unfamiliar	Blue behavior Do FAMILIAR behavior	Purple behavior INCREASE behavior intensity or duration	Gray behaviors DECREASE behavior intensity or duration	Black behavior stop doing a behavior
Dot behavior is done ONE-TIME	GreenDot	BlueDot	PurpleDot	GrayDot	BlackDot
	Try eating seaweed for a snack today	Eat vegetables at dinner tonight	Increase mindfulness at lunch today	Eat only half a hamburger tonight	Don't buy ice cream on this shopping trip
Span behavior has a DURATION, such as 40 days	GreenSpan	BlueSpan	PurpleSpan	GraySpan	BlackSpan
	Substitute quinoa for rice for one month	Drink water each morning this week	Eat more veggies at dinner for two weeks	Eat fewer carbohydrates for one week	Don't drink sodas for two weeks
Path behavior is done FROM NOW ON, a lasting change	<b>GreenPath</b>	BluePath	PurplePath	GrayPath	BlackPath
	Adhere to a vegan diet from now on	Take daily vitamins from now on	Buy more healthy eating options from now on	Decrease fried foods in diet from now on	Stop eating fast food forever

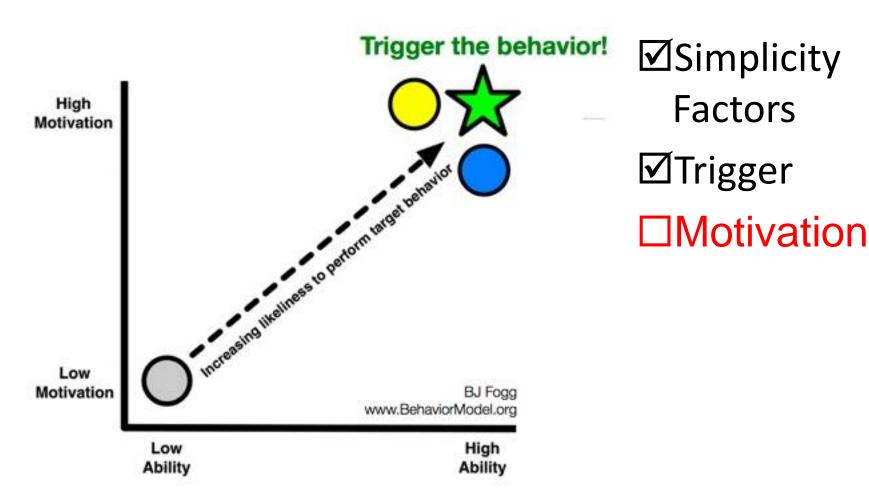
#### Analysis of Greenpath Behaviors

Visiting a new website is a green behaviour because it's a habit the user have never done before.

Social networks depend on users repeatedly visiting the site. It's simple to attract users to the site one-time, but the value is in building a community of users that revisit the site frequently.

Mission: Instill a greenpath behaviour in users.

### Creating greenpath behaviors: What's needed?



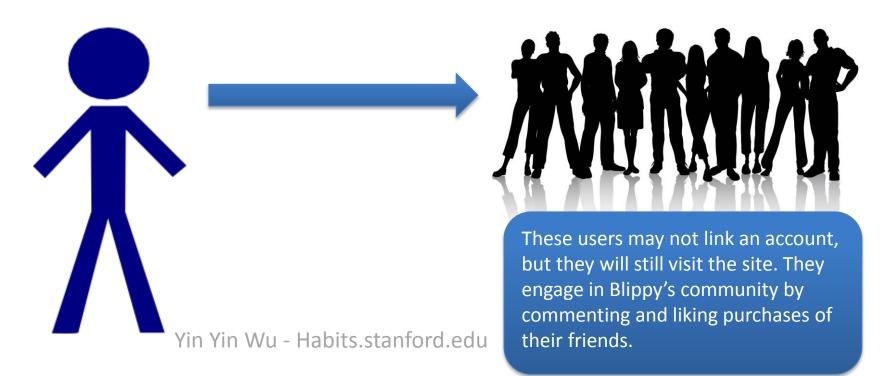
#### Achieving the simplest step

- How does Blippy encourage people to link their credit cards and visit their website?
- ☑ Simplicity factor- very easy, allows you to link to existing accounts
- ☑ Trigger- reminder to share an account every time you login to Blippy
- ☐ Missing factor: Motivation

People are weary of sharing their purchasing history- how does Blippy encourage people to share?

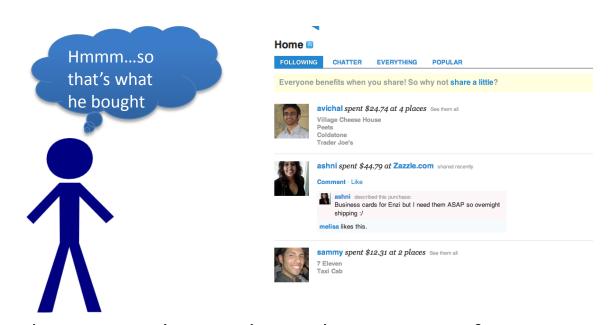
#### **Motivation: Social Networks**

One to many: The few users that link their credit cards brings with them the curiosity of their entire social network.



#### **Motivation: Curiosity**

Adaption through curiosity: While people don't initially link their credit cards, they can easily engage in the Blippy community by following the purchases of early adapters.



As more and more people join Blippy, sharing your information will become the mainstream option as people become more familiar with experience of making your purchases social. Blippy provides a simple non-intrusive way for people to engage with the community

#### It's easy to join the community

Blippy works because the simplest step that matters is very simple.

- To build an active online community, Blippy only needs users to link their credit card or other online account.
- Once the card is linked, every user becomes an active user with no extra effort.
- Minimal awareness- Users do not need to attend closely to what they are doing to habitually create rich data that builds the social networks



#### Attachment to existing habit

 Blippy turns an existing behaviour into a social behaviour. It doesn't require users to actively create content.



#### Environmental trigger

Environmental cues trigger and maintain habit performance

- Credit card with Blippy logo
  - Allows user to choose the purchases to share:
     "Hmmm...perhaps I won't buy that with the credit card linked to blippy"
  - Viral marketing approach- promotes Blippy to others: "What's this sticker?"



#### Information trigger

- Homepage page defaults to feed of friends' purchases. Blippy follow a similar format to friend feed on facebook by making the default page social. The home page forces users to see the activities of others to encourage them to interact more.
- Email reminders about friend's purchase updatesencourages users to return to blippy

#### Combining the pieces

Easy "simplest step that matters" + Physical trigger + Online reminders = addictive website



#### Then what happened?

So it turns out that almost nobody wants people to check out their purchases. And also that just adding a social element to a feature isn't enough to make it useful. The lessons of user adoption are sometimes learned the hard way.

Thus is the story of the failure of Blippy, a product that launched in private beta in December of 2009 and that we breathlessly fawned over again, and again, and again and again (and again and again ...).

"Imagine being able to see everything your friends buy with a credit card as they do it," MG wrote. "This not only tells you what kind of things they're actually into (rather than someone just saying they like something), but also other information like how cheap they are, as well as where they actually are at a given time."

What we failed to ask was, "Who cares?"

Blippy raised almost \$13 million in funding and at some point its valuation was at \$46.2 million, with enviable investor David Hornik posting his \$8 million dollar purchase of Blippy stock on Blippy itself.

Even Apple copied it, taking the concept of purchase sharing over to its (also failed) social music service Ping. But underneath all the sloppy kisses it seems like people were more in love with the Blippy concept (and the irony of its association with charismatic FuckedCompany founder Philip Kaplan) than the Blippy practice.

#### References

- http://www.behaviourmodel.org
- Creating Persuasive Technologies: An Eight-Step Design Process, BJ Fogg
- http://ui-patterns.com/