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HOW AND WHY PRODUCTS GO VIRAL

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ABSTRACT

What makes a product a hit or a failure? This simple question has been a mystery for hundreds of years, but with the recent growth in access to social media and the Internet, the way that products gain popularity has shifted significantly. Word-of-mouth and local news are no longer the only methods a consumer can hear about a product fad. Rather Twitter, Facebook, Pinterest, YouTube, and Instagram are now contributors to creation of a hit product. This thesis studies and analyzes a few of the most successful products and services that have gained popularity instantly and rapidly spread to be "viral" products over the past 30 years. For the purposes of this thesis, this widespread and often rapid product adoption process is known as virality. The upcoming chapters review and analyze the contributing factors and techniques that allow any given product to go viral. Through examining case studies from present day and the 1980's, it will draw comparisons that can apply to future viral marketing efforts. It will compare how present day social media and technology play a role in the spreading of product information, benefits and disadvantages_compared to past decades. The thesis also includes first hand insights and experience from leading experts in the world of viral marketing to see what their experience has been in designing and executing these viral marketing campaigns. The overall purpose is to illuminate key underlying factors of viral products and services that could be replicated in larger businesses and startups internationally to enable more products to go viral.

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Chapter 1 Introduction

Context and History of Viral Marketing

In May 1999 Napster launched a peer-to-peer music sharing website. As shown in Figure 1, within two years, Napster reached 26.4 million global users. Simultaneously, Pokémon playing cards and Harry Potter books were taking the children's market by storm and grew into childhood staples for millenials around the world. What made these products sprout from nothing to a household brand name? What common characteristics (or magic wands) did their marketing campaigns wave to turn these products and services into overnight successes?

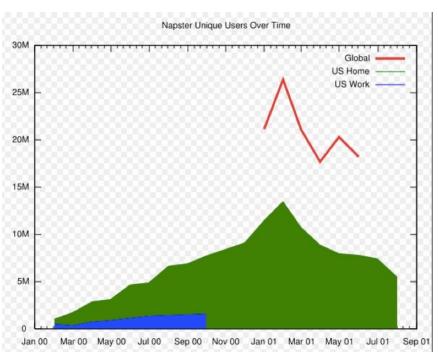


Figure 1 Napster users 2001

Before we can understand those examples, let's go back even further. The ancient Egyptians created black ink in 1885 BCE. The first ink was a mix of vegetable gum, bee wax, and soot (Egyptian). They created a product that would eventually be utilized all over Mesopotamia as well as the rest of the world, and was a durable enough liquid to last centuries. This first ink was used to create hieroglyphics, make marks on their caves and tablets to symbolize stories, recipes, or directions to tell to their native tribe. Did these ancient people have any clue that they were laying the foundation for newspapers and textbooks thousands of years from them? Probably not, but they knew they created a product that solved a problem; prior to this ink invention, communication was ephemeral and not permanent records on paper-like materials were unheard of. The ink was permanent, cost-effective, and made of readily available materials. As soon as someone looked at this ink, they would ask more questions and tell their neighboring tribe to create their own.

These are a few examples that can help elaborate the journey of viral products. Some widely used products, like the black ink from the Egyptians, may not have the label of a "viral product." This thesis aims to examine some forgotten and some more current viral products and gain insight into how to replicate their unique and often long-lasting market impact.

Psychology and Marketing

It is important to understand how psychology and marketing play together since often viral marketing is subconsciously designed to encourage people to love the product or service. A common psychological experiment is called classical conditioning. Ivan Pavlov trained his dogs to salivate when a bell rang without providing them food. Pavlov rang a bell (known as an

conditioned stimulus), fed the dog a treat (unconditioned stimulus), and the dog would salivate (which results in an uncontrolled response). He did this many times and created a habit or a pathway in the mind so that when the bell rang, the dog would salivate even if there were no treats present (Marketing Behavioral).

This same concept can be applied to help understand viral marketing. When you create an ad (unconditioned stimulus) that elicits a positive response (uncontrolled response) in the person exposed to the ad. The product or brand within the ad then becomes the conditioned stimulus. "The goal of advertisers is to get the exposed person at the grocery store or what have you, to associate the positive feeling they had for the ad with the product. This makes the positive feeling now the controlled response" (Teachers).

Take "Coca Cola's polar bear ad" campaign. The Coca Cola ad displays an adorable bear (unconditioned stimulus) to generate positive feelings (uncontrolled response) and Coke (the controlled stimulus) would then become associated with positive feelings that then become the conditioned response" (Teachers).

As another example, Apple has become known for creating unbelievably captivating advertising campaigns and marketing strategies. The psychology behind one of their ads when a cool young man was holding an Apple Mac and speaking very positively about his experience juxtaposed next to a nerdy older man being frustrated with his PC- is a prime example of classically conditioning users to believe positive thoughts towards Apple. Let's take a deeper look. The cool, young man is used as an unconditioned stimulus to create an unconditioned response that the person holding a Mac is current, modern and efficient. "The pairing of the unconditioned stimulus with the conditioned stimulus that is the represented by Apple's Mac, over time, with consistent repetition and association throughout the series of advertisements,

would elicit a conditioned response that would portray Apple's Mac, in its own entity, to be current, modern and efficient" (Grundy). Even further, by inversely displaying the PC user as outdated and nerdy, the unconditioned stimulus creates an unconditioned response that the PC is not cool and sub-par compared to the Mac. "By continuing the conditioned stimulus, the conditioned response by audience would view PC's as obsolete and not proficient" (Grundy). The combination of creating a strong unconditioned positive response toward Apple and a very negative association with PC creates a user that is not even aware, but instinctively dislikes PC's and also feels very happy and positive feelings towards Apple.

The psychology of marketing is connected to viral marketing because the event of a product or service going viral is often very tied to impulse decisions. One person will instinctively share something quickly if they are totally pleased or excited with something new, rather than not sharing. To control the ability to instinctively share allows marketers to help increase the likelihood a product goes viral.

Chapter 2

Background

The author of this thesis is Nicole Kelner, a 21 year-old entrepreneur who founded a wearable tech accessory company, SmartPurse, when she was a freshman at Penn State University. She realized and had first-hand experience with a problem: women were spending too much time losing their phones within their purses and dropping them while on-the-go. Nicole wanted to create an innovative purse that would allow women to text while their phone was safely inside their purse. So, she taught herself how to sew and created a prototype purse to meet her needs, which she posted on the international handmade marketplace Etsy. She saw local success within her peer community at Penn State by gaining press on regional news outlets such as Onward State, Centre Daily Times, and The Collegian. Then, her product started to spread internationally with reasons she could not identify at the time. Within a year, SmartPurse gained press on VOGUE UK, Entrprenuer.com, Yahoo!, Mashable, Tech Crunch, and RideOn Australia. Nicole grew curious about what made her product spread so quickly, and at what velocity interest and sales could continue to grow. This thesis is written to examine and compare personal experiences, successes and failures with product introduction to data on other products and proven success stories. In the end, the SmartPurse product did not reach a tipping point of growth where sales grew at a viral rate, but sales leveled off. The research associated with this thesis investigates reasons for and factors in viral sales and products.

Chapter 3

Literary Review

The intrigue and mystery around viral products has been investigated many researchers and authors with the goal to examine and break down what can make a product go viral. Do these products have some magic and magical features that draw in customers at a fast rate, or the product features merely far superior to their competitors? Ideally, there is a common tie to the trends of virality, and the following literature review will help explore some key examples.

The Tipping Point by Malcom Gladwell is an iconic study of virality. It opens by describing a case study of Hush Puppies, a shoe brand that was popular in the 1970s. But by the 1990s the sales dropped to about 30,000 pairs a year and executives were planning to phase out the Hush Puppy product line. But then, something unpredictable occurred to the brand. In 1995, a trendy group of New Yorkers started wearing them. Then, fashion designers began to have their models wearing Hush Puppies on the runway and by the end of the year, 400,000 pairs were sold. One year later, sales increased to over 1 million pairs (Gladwell). Two years later, they reached 2 million pairs sold. How? Not a flashy advertising campaign crafted by Hush Puppies executives. Hush Puppies resurgence is an excellent example of word of mouth marketing, psychology, and viral marketing. (Gladwell).

Gladwell also describes other examples of viral behavior: how Paul Revere's message that the British were coming was spread from door-to-door, how crime rates decreased in New York from 1975 to 1992, and the spread of sexually transmitted disease (STD). Through these captivating stories, Gladwell states there are three rules of epidemics: the law of the few, the stickiness factor, and the power of context.

The law of the few breaks down our society into different groups: connectors, mavens, and salesmen (Gladwell) Connectors are people who are involved in many different groups and essentially cross-fertilize ideas between groups that may have never been exposed to the larger population. Mavens are the people who have a desire to help other consumers make informed discussions. Salesmen are those who are unbelievably eloquent and can persuade almost anyone to buy into what they believe or are selling. The three types of people must be present and involved for viral events to take place.

Next, Gladwell explains the stickiness factor, which is the concept of a phenomenon or belief being stuck in consumer's minds. Sesame Street was the example of something becoming "sticky" for children's television since it shifted a previous assumption about cognitive abilities in children to a new light. Stickiness of a product in conversation or use helps viral events continue.

Finally, there is the power of context, which Gladwell explains by outlining the path of the novel "The Divine Secrets of the Ya-Ya Sisterhood" going from a small local sensation to national bestseller by group (bookclub) adoption. Specifically, he identifies that groups under 150 members have a greater level of interdependency, intimacy and efficiency that shifts to be less intimate after the group grows past 150 (Gladwell).

Gladwell's The Tipping Point may be considered the holy grail of viral marketing, but there are other great books that build from The Tipping Point, and go even deeper. Seth Goden's "Unleashing the Ideavirus" was a prime example of a more robust resource. In his work, Goden theorizes "we live in a world where consumers actively resist marketing. So it's imperative to stop marketing at people. The idea is to create an environment where consumers will market to each other." He calls this an ideavirus, which is essentially "a big idea that runs amok across the

target audience (Goden). An ideavirus "propagates through a section of the population, teaching and changing and influencing everyone it touches. And in our rapidly/instantly changing world, the art and science of building, launching and profiting from ideaviruses is the next frontier." An example of an ideavirus was Hotmail. They did not run tons of television ads, but rather their model was to ad an invite to Hotmail at the bottom of each email. Trusted friends spread the ideavirus and infected their peers.

The concept of an ideavirus is not totally novel, but it is a tangible way to communicate how to spread an idea. Goden explains that one key to tapping into the ideavirus is taking advantage of "sneezers," who are broken down into two categories. Promiscuous Sneezers are those who have large influence and will take on many ideas for money and spread to a wide audience. And Powerful Sneezers are those who cannot be bought off but control a wide audience of selective users. Goden describes the inherent paradox of these two sneezers and how to walk the line and pick which is your target audience for influencing (Goden).

One of the distinguishing features of the idea viruses Goden explains is the concept of "smoothness", which is the ease of the end user to spread this ideavirus. Does it take one click of a button (very smooth and easy) to spread the idea, or does spreading the concept include some risk of embarrassment to tell someone about it? The less work it takes for an end user to propagate the idea, the more likely and quickly an ideavirus will spread.

One final comparison from Goden was the concept that no one wants to go first when touching an ideavirus. However, marketers can give large audiences the illusion that the water is warm and they can dip their toes in, meaning the new idea is not toxic or crazy and they should join in. Goden uses the example of best selling book lists, testimonials or samples. These make

the process of spreading the ideavirus smooth and promote a longer lifespan for the virus (Goden).

Another great work that actually inspired the creation of this thesis was "Contagious: Why Things Catch On" by Jonah Berger. Berger breaks down why ideas or products catch on into 6 categories.

- Social Currency: Just as people use money to buy products, they use social currency to achieve desired positive impressions among people around them. Strategies to create this currency are to create a "remarkable product" or make people feel like insiders when they have the product.
- **Triggers:** Triggers are environmental reminders for related concepts and ideas. For example, the number of times the song "Friday" by Rebecca Black play on the radio spikes every week on Friday since it was a strong trigger.
- Emotion: Evoked emotion can drives people to share, and helps cause something to become viral. An example was the power of awe, which is when there is physiological arousal which is positive, such as Susan Boyle's Britain's Got Talent audition which got 100 million YouTube views in 9 days.
- **Public:** If a clothing company introduces a new shirt style and you see someone wearing it and you like it, you decide to buy the same shirt. But this is much less likely to happen with socks because they are generally kept private or not noticed.
- Practical Value: People like to pass along useful and practical information. For example,
 Shopify- a major ecommerce platform- has a constant blog full of resources to help users sell their product more efficiently and faster.

• **Stories:** Stories function as vehicles to create narratives when they don't need to. For example, the Trojan Horse story was passed along for hundreds of years through poems, stories, and music.

One final example in Contagious relevant to this thesis was a Prohibition-era bar in Manhattan called "Please Don't Tell" which is a secret speakeasy behind a hot dog shop. The name inherently causes intrigue within the customers and this secrecy and elusiveness is also another factor Berger noted (Berger).

Berger's examples are often more focused on present day examples, which provide a refreshed and updated counter-part to Gladwell's theories. Berger uses YouTube and social media driven examples and allow us to be able to compare the older theories to newer technology driven examples (Berger).

Another valuable resource is an article by Drake Baer for Fast Company titled "The Science behind why content gets shared" which examines how memes, a photo with a usually comical caption, spread (Baer). Baer theorizes that these photos are not spread because of the way they look but rather because the way they make people and users feel. As author Scott Stratten states, "People don't share commercials, they share emotions." Michele Coscia, a Harvard researched who tracked 178,801 variants of 499 memes, conducted a study to prove this theory (Baer). Coscia's study showed that 35% of these memes were viral based of this realization: "the memes that hit an above-average peak of popularity at some point in their life were less likely, overall, to ultimately break the "success" threshold. Memes that were shared more consistently over time, rather than a great deal in a short period of time, were more likely to ultimately to become viral." This essentially means that the memes with the most success had an

"evergreen" quality to them: they remained alive for a long time, through good and bad conditions. This evergreen quality is something that we can compare to the creation of black ink by the ancient Egyptians. The ink product, which they created, was not only valuable in their lifetime, but it benefited and spread through centuries of human life.

Chapter 4

Case Studies 1 & 2

For over a hundred years, our world has seen fads circulate in every segment of our daily life. From the outrageous bell-bottoms, to the creepy Furbies, to the socially addicting Facebook, it seems that every year there is a new "must-have" product, that often fades in popularity within months. This chapter examines and compares the methods selected fads spread, and compare present-day technological trends to products from 30 years ago. This background work will identify common themes and illuminate strategies on ways or steps to replicate the spread of viral products and services.

Case Study 1:The Fax Machine and Venmo

Characteristics of the Fax Machine

Prior to the fax (or facsimile) machine, the telegraph was the major method of long distance communication. The fax's greatest differentiator was its ability to receive and transmit pages of text or images. The early adoption phase for faxes was purely for military use, but beginning in 1948 the technology was opened to civilian use. It took about 20 years for the fax industry to develop primarily because each user had to have the exact same fax machine model to transmit and receive a message. According to VOIP Review, "In 1968, the Consultative Committee for International Telephone and Telegraph (now the International Telecommunications Union) solved this communication problem. It mandated the first industry

standard for fax machine transmissions. Once the format was standardized, the growth of fax machines was inevitable" (History).

The creation and adoption of a fax communication protocol was essential to the product going viral. It took 20 years for the fax machine to spread from early adoption to public use because people were unable to be on the same page (pun intended). Once the fax machine was standardized, it picked up traction in the market, and people could transmit messages to their neighbors or across the country for the price of electricity during the transmission time.

Standardization and easy access is one of the first steps a product needs to be broadly accepted.

After the mandated standard fax machines were available, the costs began to drop thus creating a lower barrier to entry for new users. The combination of three factors (the standard fax product, lower cost and fax machine being seen as the gateway to a new communication revolution) allowed this product to rapidly spread internationally. The first major country to use the fax machine was Japan (History). For the Japanese, it was easier and quicker to handwrite a document than to type it because of the complexity of Japanese characters. With some modifications in the computer software, the Japanese were able to type all 10,000 characters faster than before (History).

Characteristics of Venmo

Now we can apply these same principles, standardization and similarity in culture to a rapidly growing software application (app) today- Venmo. Venmo is part-mobile payment app and part-social media community app. The Venmo app works by allowing friends to transfer any amount of money between each other. Venmo started in 2012 and differentiated itself by making

mobile payments easier than ever. Before 2012, to transfer money most people relied on cash, Western Union or Paypal. Most customers don't realize this, but Paypal actually owns Venmo so these are not competitors, but rather a new fresher sub-brand for PayPal (New Venmo).

The key factor here is that anyone with a smartphone has access to Venmo through the iPhone and Android app stores, bringing uniformity to money transfer via smartphone. The social element and the conversation, which Venmo started, allowed it to become a focal point in young users. For example, at the end of a meal, rather than everyone splitting the check, one person could put his smartphone down and they can tell the rest of their friends to "Venmo me." Venmo's ease of use and social capital, which the group is gaining, as evidenced by Jonah Berger's theory in *Contagious*, provides an added element of social influence to encourage other users to participate. Like the fax machine, there was a similarity in culture, vocabulary, and activities that made this situation possible to replicate. Like with the rise of faxes, all parties must make the compatible hardware and software, and speed of transmission of data was a common feature for both fax machines and Venmo in smartphones.

Venmo's first large marketing campaign was one that was designed to get people talking. Figure 2 below is an image of a billboard that could be found in 2013 all over major cities like New York and San Francisco mostly in subways or large bulletins.



Figure 2, Lucas Uses Venmo, 2013

The campaign likely cost about \$300,000 and drew extreme reactions from subway users. In an article titled *Lucas talks to fast company: reviled Venmo subway ads*, written by Fast Company journalist Rebecca Greenfield, Greenfield surveyed subway-goers to find out their thoughts. She reported significant confusion and many questions such as "Who is Lucas? What is Venmo?" This confusion and intrigue is a key element to this campaign (Lucas Talks). It is similar to the example of the hotdog speakeasy in Contagious called "Please Don't Tell". The user is so curious about who Lucas is, or what is Venmo, that they will download the app simply to satiate their curiosity. And the marketing campaign was a success.

Conclusion of Case Study 1

With both fax machines and Venmo, were able to implement three key factors that allowed them to go viral: standardization, similarity in culture, and social currency. It is important to analyze how a product is able to differentiate itself from the rest of the technology or competitors before selecting how to socially market it. It is important to note that these two products are inherently different because the fax machine was not intended to be a trendy or cool

product while Venmo was. However, both products used the same marketing principles of a 2-way social transaction to spread rapidly and become a standard in our society.

In addition, both designs met an ongoing demand in many market segments: fast, secure and easy-to-use data transfer.

Case Study 2: Neopets and Reddit

Characteristics of Neopets

Neopets, a virtual pet website, was started in 1997 and over the course of two years and a lot of word-of-mouth advertising, this children's entertainment gaming site was logging an average of 600,000 page views per day. Some key characteristics that made Neopet's thrive and grow was it was incredibly "sticky," meaning users would get hooked and keep coming back for more. The average Neopets user was spending 117 minutes a week and 4 hours and 47 minutes per month in 2003 (Myers). By May 2005, there were 35 million unique users and 4 billion page views per month with 80% of the users being 14 years old or younger (Myers). Clearly, there was tremendous growth in these first few years of Neopet's existence. This success can be attributed to a few key factors: currency, anonymity, and stickiness.

The currency in Neopets was Neopoints: bright colorful tokens that every player strived to earn. At age 14, players weren't likely to be millionaires, but they could be rich in this second reality. At that age, the author was loaded and rolling in the Neopoints. This freedom and ability to work your way up to a goal you set was addicting. Children would not only play the games, but learn cheat codes and anything it took that would allow them to succeed, especially if you aren't rich in real life.

Anonymity is another Neoepet characteristic. In Neopets, you created a custom pet and user name. Your pet could talk to strangers and able have a powerful sense of connection that was not always possible at age 14. Normally, your pet would only be limited to meeting the

people in your neighborhood, school, or general proximity. This opened new virtual doors and conversations that allowed young teenagers to express themselves in an entirely new environment. Neopets was a viral product for millions of early teens because it was sticky, used an empowering currency and was based on fun anonymity.

Characteristics of Reddit

Reddit is an online community launched in 2005 that allows users from all around the globe to interact in forums filtered by interest. Like Neopets, Reddit is characterized by currency, anonymity, and stickiness, There are 8,193 subreddits for every user such as "ExplainLikeI'mFive", "Futurology, "InternetisBeautiful", "ListenToThis" and "Music." There are 174 million monthly users who all abide to the Reddit system of Karma points, a very clear social currency (Reddit). Users want to have a high link Karma that allows them to have more power and social currency. This taps directly back to Berger's theory in Contagious, by allowing users to tangibly see how they rank and provide a social hierarchy.

The anonymity exhibited through Reddit's forums is a selective choice. You can choose your username but you never have a real photo associated with your identity. There are special events called AMA's (Ask Me Anything) where celebrities or specialists such as Elon Musk or Lady Gaga will open themselves up to a question session from any Reddit user. This ability to connect with celebrities and transparency in a safe way allows users to feel secure and express their curiosity.

Reddit also has made a sticky product since the average user stays on the page for 16 minutes (Reddit). Reddit has also applied the "smoothness" factor to their product, which Goden

explains in Ideavirus. The Reddit interface is intentionally basic and not colorful. It has all the essential search functions but nothing to distract you from your intention of gaining Karma currency while keeping your anonymity.

Conclusion

Although separated in time by decades, Neopets and Reddit are viral on-line products. Both have a level of anonymity that allows users to explore to a new comfort level not available in real life. They interact in a forum that is sorted by interest and allows them to communicate in a safe public setting. This means if you live on a remote island in Southeast Asia you can meet a new friend based in Paris. The possibilities of connecting with new and interesting people provide practical value that keeps users coming back.

These products implement a social currency through a fabricated currency- Neopoets or Reddit Karma points. The social hierarchy, which they have created, gives users the ability to feel in control even if they aren't in their real life. Users get hooked by the goals and freedom, which they may not be able to meet or feel in reality. With the combination of the anonymity, stickiness, and currency, Neopets and Reddit that well-designed web-based products and services can spread very quickly to large populations.

Chapter 5

Qualitative Research

To conduct qualitative research, an IRB-approved survey was sent out to entrepreneurs and growth hackers around the world. A total of 12 respondents completed the survey and responded to the following questions:

- How would you define a viral product?
- Why do you think Gangnan Style broke the YouTube records for views?
- What is your favorite viral product, service, or video of the past 30 years?
- Why is it your favorite viral product?
- What company do you think is the best at commercializing new products?
- What online platform or website facilitates the spread of viral products/services the best?
- Have you ever created a viral product? If yes, what was it?
- Did it go viral in your community first? What was it's growth pattern?
- Were you surprised it went viral and why?
- What were the factors you attribute to the spreading?
- What could you have improved or done to speed up this process?
- When was a time you tried to create a viral product but it was unsuccessful?
- What factors do you attribute to this failure?

The table below summarizes basic demographics of the 12 survey respondents.

Gender	4 Female	8 Male
Expertise	6 Engineers	3 Entrepreneurs
	1 Designer	2 Writers
Age	20-23 (5)	24-27 (4)
	28-29 (3)	
Country	9 America	2 Canada
	1 England	

After reviewing the data and doing data reduction steps, the survey helped to analyze and examine these thought leader's perceptions of viral products and marketing. Key word analysis was conducted and then the most repeated key words were extracted to determine significance and value.

To start, when asked the definition of a viral product, the key words "share", "popular", and "spread" the most often listed. These words are characteristic of celebrities or influencers, Internet vernacular, and viruses. It shows that this population associates a viral product with something that most likely occurs through a digital interface, and is implicitly necessary to have more than one person involved in the process. Other words associated with viral were "highgrowth", "rapid" and "explodes." These are descriptive of the type of path, which a viral service will take- one that is often erratic like a flame since it is referred to as "exploding."

Next, the question "Why do you think Gangnan Style broke the YouTube records for views?" elicited words such as "weird", "ridiculous", "funny", and "catchy." Catchy in particular was repeated 3 times among respondents. The absurdity of the video was clearly a common reason these participants believed the video went viral. The catchiness is similar to the stickiness, which was previously discussed, in the literary review of *Tipping Point*.

The answers to the question "Why is it your favorite viral product?" were varied and ranged from "well-designed" to "stupid." There was not one consistent or repetitive answer, further creating the air of mystery around this process of virality. This is likely a result of the large variety of viral products and services, which the participants were referring to, since the favorites among users ranged from "Nyan Cat" to "Shamwow." However, when asked which company they thought was the best at creating and producing viral marketing, the majority said Apple. Apple has been known for creating incredible press and buzz around new product releases, so much so they will have hundreds of customers lined outside their door waiting to hand over \$500. As discussed in the introductory chapter relating to classical conditioning, it is clear that these participants have been classically conditioned to believe that all the products Apple creates have been and will continue to be loved and accepted quickly into the market.

In terms of respondent's view on which online platforms facilitate the spreading of viral products the best, Facebook came in first and Twitter in second. YouTube, email, and texting were other answers. It was surprising that YouTube was not as popular of a response, especially since the survey included a link to Gangnam style, a widely viral YouTube video.

From those respondents who had made a viral product, most of them were extremely modest or not confident in their success. This is often identified as Imposter Syndrome, where even though you are succeeding you cannot see your own success, and you can only compare

yourself as less than others (Geek Feminism). One particular respondent had an app listed as #1 in the iTunes store called WorkFlow yet did not complete the portion of the survey that asked about the viral success. Those that did respond said that they were not surprised that it spread quickly, and that they intentionally created or worked to see this success. One important key factor was talking to influencers of their area of focus is to get them to seed the articles in key websites about their product. Overall, a majority responded that they did not know what they could have done to speed up or increase the success of the product.

Based off of the survey findings, one of the key takeaways was that there is not one straightforward or clear answer to how to create a viral hit, but it takes work and intention. Even for those who created viral products, they may not feel they had a viral hit, or they don't know exactly what they did to be successful. However, two insightful respondents said that they were able to work with leaders and influencers to deliver this virality.

Observational research was also conducted in early 2015 during six group dinners held in Vietnam, Indonesia, and the United States. The experiment was simple: place a basket of bread in the middle of the table and wait. How long would it take one person in the group to reach for the first piece of bread? When there was a group of 3 or more people eating together, it would take an average of 1:30 minutes for the first person to reach into the breadbasket and butter their roll. In this scenario, often there was complete silence or a conversation about how no one wants to take the first roll, but it will still take time after that conversation for one person to make that first reach. This hesitance, uncertainty and influence of social norms are indicative of a larger pattern in marketing: no one wants to go first. They want to trust the path that someone has paved. Referring back to Chapter 2, Goden presented the concept that no one wants to go first when touching an ideavirus. Many people say they are trendsetters or early adopters, but there

are actually quite few. In this thesis, this concept of awkwardness and hesitancy is now going to be referred to as the "Bread and Butter Theory." The Bread and Butter Theory is an idea that many people may desperately want to eat the bread and are very hungry (or they need the product or want to download the app), but they are more concerned with breaking a social norm than meeting their own satisfaction.

In the context of viral marketing, you want the desire for personal satisfaction to be high and also make it appear that the user or buyer is not alone. It only takes one person to reach into the breadbasket and start a trend, so you need to make it as easy as possible for them to do so.

The new Bread and Butter Theory is supported by five previous virality discussions from

"Contagious: Why Things Catch On" by Jonah Berger:

- **Triggers:** Environmental reminders in the Bread and Butter Theory are provided by the senses: smell, hunger, and visual queues.
- **Emotion:** Evoked emotion drive people to share, so once the first piece of bread is taken, the shared experience begins.
- **Public:** In a restaurant setting, seeing the first person's joy from the first piece of bread opens the door for everyone to eat.
- **Practical Value:** The first bread eater passes along useful and practical information to everyone else at the table.
- **Stories:** People carry stories in their minds about the happiness of eating bread before and during a meal. "Breaking bread" as a group is a century-old tradition of friendship.

In conclusion, the qualitative research conducted to further understand the concept of product virality revealed three interesting insights. First, the current viral product leaders see stickiness (or catchiness) as an important feature. Second, even those who have viral products in the market do not fully understand what were the factors of success. Third, the new "Bread and Butter Theory" was observed and is supported by previous ideavirus publications.

Chapter 6

Recommendations and Key Learnings

The intention of this thesis was to examine principles of past successful viral products and understand the history of why they have been able to spread, especially in different cultures and environments. These findings were aimed to help new startups gain users and marketing support to accelerate product or service acceptance, and perphaps go viral. So as a culminating chapter to this thesis, six strategies are detailed below to implement in any startup or viral marketing campaign.

1.Smart Small.

Find a niche community that is obsessed with or hungry for your product. Gain influence over this community and encourage them to spread good words about your product through their other networks, essentially cross-pollinating the idea. Be confident that you have created something fantastic to encourage the community to feel this same emotion and share it.

2. Make your product comfortable to share.

This concept was inspired by Seth Goden's Ideavirus, where it is clear that the easier and "smoother" the sharing process, the more likely the product will spread and potentially go viral. Comfort is an additional factor which needs to be accounted for though, it should not just be easy- it should be comfortable. Use the Bread and Butter Theory: make it easy for the first person to start a trend. Make it seem that the first mover is not alone. Consider using "sticky" personal testimonials or gather your friends as beta users first. Have a group of people get on board so they are encouraged to share their experience. Make potential users hungry for your product. Marketers should be able to incorporate something familiar with the new product. So

rather than pushing a new way to share, or a new website where the user reads about the product, provide a familiar medium such as Facebook or Twitter and encourage them to simply mark as favorite, like, or retweet.

3. Condition users to love and share your product.

As examined through the examples of Coca Cola and Apple in the classical conditioning experiments which advertisers use, you can also teach your customers to have an unconditioned response to want to share your product or service. For example, create an ad showing an unrelated yet enjoyable character, animal, or place (unconditioned stimulus) with a strong positive emotion (the uncontrolled response) and associate the product you are trying to market (controlled stimulus). After repeated exposure, when the users see the ad with say a cute kitten (uncontrolled stimulus) and then your product (controlled stimulus), they will have a conditioned response to think positively of your product (uncontrolled response). They will feel whichever emotion you choose to associate, which should be either strongly positive, negative, or joyous to encourage the sharing process.

4. Provide value or incentivize to the user.

Product value can be in social currency including a laugh, the ability to save time, reduce hassle, prevent a wrong, or solve a pain point in a customer's day-to-day life. Make sure that the product stands out from the competition and ties in the emotional appeal. In Neopets, we saw the users participate in earning Neopets, and Reddit there are Karma points. Having a monetary or social incentivize that they are striving towards is an easy way to keep customers coming back.

5. Work with and learn from influencers.

Whether you want to call them Mavens, Sneezers, or celebrities, find the influentail leaders in your industry and get them on your side using the above strategies. Directly contact them and provide a mutually beneficially agreement, say if they Tweet out your site, you will provide them with a reward whether it be monetarily, socially, or emotionally.

6. Don't be normal.

The best viral products are pretty weird or strangely unique: they are conversation starters, therefore providing social currency. The eccentric, odd, and shocking products are the ones we are likely to remember. You do not want to create a normal product; you want to create a valuable product that people depend on, and miss when it's gone. You are creating a brand that has a strong personality. Not everyone will like the personality, but that provides more conversations and connections. In the qualitative research, respondents used words such as "incredible", "cute", and "hilarious" to describe why they loved a viral product. You want your brand to be the cool kid at the lunch table everyone wants to sit with.

These six key strategies have been gathered through qualitative research, case studies, and psychological techniques to try to break down the mysteries behind creating a viral product. They are not rules, but rather principles that have been successful on a larger scale that can be broken down to encourage startups to spread their products. In using them, make sure to get feedback from users along the way, and be self aware of the process to improve upon the next time. The beginning stages of a startup are often filled with uncertainty and excitement. You can

even use these emotions to classically condition your customers into sharing the same feelings and joining you on your journey

Full Survey Results (collected between January 2015 and March 2015)

1. How would you define a viral product?

I think a viral product is something that catches on to a large audience in a short period of time

Usage spreads rapidly in a particular way (see epidemiological models)

probably a product which attracts at least as many users as it signs up per user

A high-growth product where the growth comes mostly from user-driven activities.

A product that spreads on its own. A product that on average gets shared with >1

people for every person that uses it.

A product that becomes commonly known and universally used in an incredibly short amount of time. A product that explodes onto the cultural scene. A product that becomes a movement.

An item or object that has gained mass popularity and interest and been shared widely through a population

High intensity self perpetuating marketing

Something popular with a large group of people that is largely spread by word of mouth Can probably be defined by vital coefficient factor greater than N.

One that spreads between people, and spreads more the more people use it

2. Why do you think Gangnam Style broke the YouTube record for views?

It was really freaking weird

It's complicated. The simple answer is "a base level of quality + a lot of luck"

It was so ridiculous that people felt compelled to share it. probably also that i'd feel

comfortable sharing it with my mom as much as i would my best friend.

I have absolutely no idea

I think because it was a catchy song, and then it became a cultural phenomenon. It was a

really catchy, interesting song. People wanted to share it with their friends. And then once

people started covering it, it became socially valuable to create a cool cover.

It was catchy, it caught on with a few key people, and then snowballed. Honestly, I don't

really know.

It was simple, repeatable, and memorable

Repeatable ridiculousness

I have read that this was very calculated - a music label that had many subscribers already

spread it. They used this subscriber base to spread a video that appealed to the mainstream

and started getting media coverage right away because of the massive release. It spread from

there, with the help of celebrities tweeting and sharing. Funny dancing always wins the

internet.

Likelihood of shares exceeded a threshold in a certain amount of time.

It was something novel and genuinely something people found entertaining.

Things that tap into people's emotions always have a hire likelihood of being shared.

Really no idea, I guess it really caught people's attention

3. What is your favorite viral product, service, or video of the past 30 years?

Apple

Don't have one

No idea actually.

Not sure.

Slack. It's a recent product, so that may be biasing me, but it's

awesome.

Nyan cat!

Gratitude video (https://www.youtube.com/watch?v=nj2ofrX7jAk)

Loved the Old spice adverts for a long while.

Mailyourenemiesglitter.com

What does the fox say?!

Facebook

4. Why is it your favorite viral product?

It is utilitarian

Don't have one. But I think Dropbox did a good job.

It's really well designed. It's fun to use. And it allows me to communicate with my friends and people who are interested in similar things to me. It has the same effect as Internet forums used to have.

Maybe the Shamwow? Or, I love those bags where you vacuum all the air out. Space bags,

I think?

it was a hilarious and incredibly simple idea, the marketing was so simple.

Stupidly catchy and cute. I love foxes!!

Because everyone is on it and it's a great way of staying in touch

5. What company do you think is the best at commercializing new products quickly?
Apple
Apple.
Apple products make some big waves when they drop. Not sure.
I don't know if one specifically comes to mind. Maybe Virgin? They have had success
in a wide range of areas.
As Seen On TV Or maybe Apple
I guess I don't really know a product exists until I see it though, so I wouldn't know
how long it has been in the works.
Apple
Google
Apple, probably?
Apple bar none
That's a hard one I can't think of too many companies that have repeatedly
successfully commercialized multiple products, though maybe I'm missing something.
Apple?
6. What online platform or website facilitates the spread of viral products/services the
best?
Youtube

"Virality" requires an ecosystem. Many layers of systems and even types of systems working in concert. If I had to pick one that is the most obvious and large, I'd choose Facebook.

Hmm. I'd like to think messengers and email account for a good amount of sharing that isn't really quantified yet.

Probably twitter/Facebook

Email. I'd say that email invites are still big for spreading products / services. For videos and articles, probably FB or Twitter.

Facebook/Twitter

Facebook

ProductHunt / HackerNews

I would think YouTube

I would say Twitter. I think bc of its speed, things go viral there first then amplified thorough other networks.

Really not sure on this one. The viral products/services I can think of spread on their own, not through another social network, but maybe I'm just out of touch.

7. Have you ever created a viral product? If yes, what was it? If no, you're all donejust click to the end

Possibly rap test? it did really well the first two days.

I've created products that people have shared, but I don't think I've created something yet where the viral coefficient is >1. Perhaps Hacker Paradise will get there

I wouldn't call it viral, but some of the projects I've launched spread through my networks pretty widely, like Changemaker-in-Residence

I don't think Workflow was an inherently viral product; we had some word-of-mouth but the users/attention we got were mostly from press/Apple featuring us.

8. Did it go viral in your own community first? What was it's growth pattern?

Yup! seeded it in Reddit, hacker news, product hunt, and a forum full of hardcore Kanye west fans. That was enough to get a good sharing cycle going.

It always starts with spreading the ideas to the influencers

Yes, generally large adoption in a specific community to a threshold and starts growing it's other communities.

9. Were you surprised it went viral and why?

Not really. I had done so many iterations that, before releasing the rap test, it'd do an order of magnitude better than the previous iterations did.

No it was intentional to spread the word

No, a lot of it was manufactured.

10. What were the factors you attribute to the spreading?

Finding the right audience and iterating closely with them every day for 3 months.

My work spreads through trusted relationships - it's what allows an idea/thing to spread through the 'Diffusion of Innovation' - i simply have to develop trust with the early adopters and innovators and they spread it from there

It made sure to capture a specific emotion and then optimized for shares

11. What could you have improved or done to speed up this process?

Not much actually. i just wish i had less distractions in my life, otherwise i would've been able to do much more in less time.

Not sure

Optimize either CTA on sharing, time to share, our initial seed community where there are more influencers.

12. When was a time you tried to create a viral product but it was unsuccessful?

Hmm. I worked for a startup that tried to make its product viral. it did a lot of SMS invite spamming on android and fueled it with user acquisition via FB ads. Needless to say, that startup doesn't exist anymore.

13. What factors do you attribute to this failure?

Not a good understanding of how vitality works, why people share.

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ACADEMIC VITA

Nicole Kelner

PO Box 254 Solebury PA, 18963

WORK EXPERIENCE

SmartPurse

CEO/Owner of a Wearable Tech Accessories Company

- Designed, prototyped, and manufactured a patent-pending and trademarked product, The SmartPurseTM- a purse through which you can use your phone
- Featured internationally in VOGUE UK, Yahoo! News, Mashable, TechCrunch, and RideOn Magazine Australia
- Finalist for ABC television show, Shark Tank
- Earned over \$15,000 in sales in one year with 400 customers from around the world
- Managed a team of 8 interns, handled customer support for hundreds of clients, and customized product to ensure customer satisfaction
- Developed website using HTML, CSS, Adobe Illustrator and Photoshop to achieve a 0% bounce rate on website (www.MySmartPurse.com)
- Created an exit strategy which resulted in BetaBrand acquiring SmartPurse and Nicole receiving a royalty in perpetuity

Popexert- San Francsisco, CA

Marketing and Graphic Design Intern

- Created and executed a Guerilla Marketing Campaign which resulted in 20 signups/hour
- Designed a brand book to help standardize brand image along with 50+ graphics for marketing materials
- Built a Pinterest brand page which resulted in 400 hits/month and now represents 30% of all social traffic
- Analyzed registration funnels in Mixpanel, created test landing pages through Optimizely which outperformed by 34%, and conducted research using Mechanical Turk to overall help increase conversion rates by 3.5%

Keaton Row - New York, NY

Marketing and User Experience Intern

- Developed monthly marketing schedules which resulted in a 200% increase in client base
- Delivered valuable feedback to web developers to help optimize landing pages and increase click-through-rates
- Executed a social media campaign for the entire company
- Designed stunning graphics in Photoshop that were displayed on the front page of the website

The Callr- Paris, France

Content and Design Intern

• Managed all copywriting, blogging, and social media as well as designed infographics and marketing tools to expand client base in the US

• Created a drip campaign flow of emails to engage current customers

Innoblue Entrepreneurship Club – State College, PA

Vice President

- Led weekly workshops teaching 30-50 student entrepreneurs how to build their companies
- Oversaw a team of 7 executive board members
- Designed graphics for weekly meetings as marketing tools

HONORS

Women Empowerment Award

Alibaba.com

- Chosen as the winner out of the hundreds of applicants from around the world
- Awarded a mentorship program valued \$5,000
- Mentored by five successful businesswomen and CEO's, based in the San Francisco Bay Area and London

Civitas Learning Hackathon

1st Place

- Winner of \$3,000 for a data visualization of an academic plan based off of interest
- Competed among students from all around the country
- Designed and coded the front end user experience