

**A Consumer Participation Approach to the Design of Functional Collector Toys by
Incorporating Designer Toy Subculture**

by

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Abstract

Designer toys have become one of the emerging toy markets since the late 1990's. Designer toys were designed by artist especially targeted at first to underground art collectors and until now it has been targeted to toy collectors who are predominately males in their 20's and 30's. Designer toys exude nostalgic qualities that drawn adults due to its character influence from films, comics, television shows, and cartoons. Also designer toys aesthetic are heavily based on freshly new character designs unlike traditional toys that have character design based on franchise market. Designer toys also has stem into its own subculture which included collectors, artists, and toy companies. The objective of this project is to create an approach for both designers and toy companies to integrate the designer toy subculture elements into a toy design suitable for adults.

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List of Abbreviations

AETC	Average Expenditure in Toys per Child
AU	Auburn University
GDP	Gross Domestic Product
NPD	National Purchase Diary
THQ	Toy Head-Quarters
UK	United Kingdom
US	United States

CHAPTER 1

INTRODUCTION

1.1 Problem Statement

According to *Entrepreneur*, traditional toy companies in the United States like Mattel and Hasbro generated \$21.2 billion in 2007. Toys such as Barbie dolls and Hot Wheels were created in mass production and sold to chain retail and department stores. For years, these toys have thrived in the franchise markets from movies, cartoons, comics, and television shows. A majority of these toys are targeted towards children under 15 years old. However, there are also other growing toy industries such as the designer/art toy that targets mostly adults from 20-40 year old.

Designer toy companies, for example, Kid Robot, have grown significantly since 2002 and generated \$1.75 million in 2008. This growing market has had a recent increase of 10% in the toy market for adults (Goodale). Designer toys are toys sold in limited edition created by artists and designers. Most of these artists and designers have a strong background either in graphic design, illustration, low brow art, classically trained art and design, or are self-taught. Usually, these toys are designed based on original character designs by artists and designers. Designer toys range in material from vinyl, plastic, wood, cloth, and metal. These toys have been marketed towards adults as collectible toys and as works of art.

Moreover, the designer toy created its subculture within the community among graffiti artists, illustrators, designers, collectors, and fans. Its subculture consists of loyal fans and collectors who avidly collect toys from their favorite artists and designers. Most of these fans and collectors found information on these toys through Internet blogs. Blogs are able to give more exposure especially for new upcoming artists and designers who are trying to break into the designer toy market. Aside from the internet, social gatherings at conventions, artist signings, exhibitions, and custom toy parties were created by the designer toy community in gathering people to share common interest and to inspire others.

The typical designer toy collector strives to collect toys as way of reliving their childhood. Collectors do so mainly as a way to escape from the pressures of society. Some collectors may be more serious than others as in how actively they are involved in the designer toy subculture.

Basically, the designer toy subculture generates fresh new creative toys, which the traditional U.S. toy industry lacks in their toy products. Most traditional toys are designed based on characters from the franchise market; these toys lack originality of aesthetics and qualities that designer toys have. Traditional toys also lack in creating social connections with the consumer like designer toys can offer. Most often traditional toys are viewed mostly as childish products since they are targeted toward children. In contrast, designer toys are mostly collected by adults who are drawn to the nostalgic qualities these toys have. Therefore, traditional toys are viewed as disposable toys compared to designer toys as being collectible items.

1.2 Need for Study

Designer toys have become a popular art commodity which created its own subculture trend among graffiti artists, illustrators, designers, and collectors. The subculture of designer toys stems from the passion of people and the artists in pursuing toys that had nostalgic qualities but with non franchise character design. Unlike franchise toys, designer toys are designed from original character designs by the artists. These original character designs are what designer toy collectors strive for especially for its originality, creativity, and inspiration.

By exploring the designer toy subculture community, the US toy industry can learn from the passion of the community and how these toys have an effect on the current market trends especially in upcoming toys, comics, illustrations, and video games. Aside from current trends, the designer toy subculture can offer more insights to the passions of the people who are involved and how their passions lead to creating communities such as conventions and gallery exhibitions in which they share ideas, exhibit toy designs, collaborate with others, and network with other toy designers.

However, most designer toys are created based on the artist's taste. Designer toys are often collected as an art piece that most do not have practical functions. This thesis will require a consumer centered process and toy designs with practical functions.

1.3 Objective of Study

The objective of this thesis is to explore the designer toy subculture community and incorporate it into a toy design process for the US toy industry.

- Research current trends in the World and U.S. toy market
- Verify where collectors fit into the toy market demographic
- Research the designer toy subculture and its effect on collectors
- Determine a subculture in the designer toy that is suitable for the US market
- Develop an approach to design a toy with the designer toy subculture approach
- Create a toy in 3 dimensional form that utilizes the approach

1.4 Definition of Terms

1. **Articulation:** A joining or connecting together loosely so as to allow motion between the parts.
2. **Character Design:** Pre-production sketches, drawings, and cels depicting preliminary character studies.
3. **Designer Consumer Electronics:** Subcategory of designer toy that is used with a purpose.
4. **Designer Toy:** Toys created by artist and designers and produced in limited editions (as few as 50 or as many as 2000 pieces).
5. **Illustration:** Visualization such as a drawing, painting, photograph or other work of art that stresses subject more than form.
6. **Platform Toy:** A blank toy that is customizable and ready to be decorated by artist.

7. **Resin Toys:** Toys created using synthetic resin material and resin casting. After casting the resin toy receives a varnished Layer over the dry painting.
8. **Storyboard:** Graphic organizers such as a series of illustrations or images displayed in sequence for the purpose of pre-visualizing a motion graphic or interactive media sequence, inclosing website interactivity.
9. **Subculture:** A group of people with a unique culture (whether distinct or hidden) which differentiates them from the larger culture to which they belong.
10. **Traditional Toy:** Toys that have ties to corporate or commercial entities especially marketed to the age demographic of 15 and under.

1.5 Literature Review

1.5.1 History

The designer toy scene has been around since the early 1990's. It emerged first in the East such as Hong Kong and Japan and then spread throughout the West. Figure 1 shows the emerging designer toy companies from the Eastern and Western parts of the world.

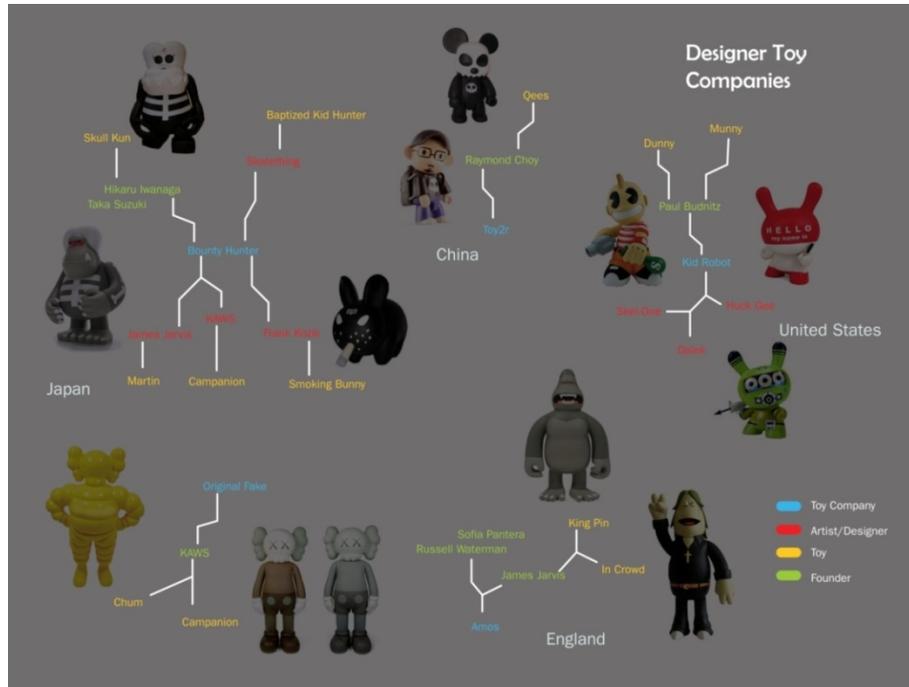


Figure 1: Designer Toy Companies

One of the first Eastern countries that designer toy emerged in was Hong Kong. Hong Kong’s toy manufacture, at the time, was succumbing to competition from lower labor on the Chinese Mainland. Lower labor from China led Hong Kong’s toy manufacture to decline as toy nostalgia flourished (Lubow).

Lubow commented on toy nostalgia in Hong Kong as, “Transforming hard-plastic, 12-inch action figures into pop-culture icons – that was a familiar pastime for Hong Kong toy collector” (par.1). One of the first artists who created these 12-inch action figures was Michael Lau. Lau was known to make these figures by using bodies he scavenged from G.I. Joe action figures. He would replace some of the G.I. Joe’s body parts with his own original molded heads, hands, and feet out of hard plastics. Lau would

turn his G.I. Joe figures into skateboarders, surfers, and snowboarders (Lubow).

Examples of Lau's figures are in Figure 2.



Figure 2: Gardener Toys

Mainly, his figures were influenced from street and hip-hop culture in Hong Kong and it influenced other designers such as Jason Siu and Raymond Choy.

Another Eastern country that designer toy scene thrived in was Japan. Toy nostalgia had also flourished in Japan like Hong Kong. Japan for years had toy figures that catered to fanatical adult collectors.

“It was only in the 1990s that the collection mania for toys (along with nostalgia items) began to be accepted as a trend among the Japanese people at large.”

(Vartanian 12)

The trends in toy design were that figures had fine detail work which set the production standard of quality especially targeting collectors. These collectors were mostly young adults and even adults who had their own kids. Collectors would buy these toys in the backstreets of Tokyo's hipster Harajuku area (Vartanian). The Harajuku area was known to have merchants setting up super-trendy clothing shops that sold toys, games and action figures. One of these shops was Bounty Hunter.

Bounty Hunter was formed by Hikaru Iwanaga and Taka Suzuki. They were known to popularize collectible vinyl toys they sold in their shops especially in 1996. They designed vinyl toys influenced by the American cereal box characters such as Franken Berry and Cap'n Crunch which led to their signature vinyl toy series the Skull Kuns (Vartanian).



Figure 3: Skull Kuns Toys

They would also collaborate with Western artists such as James Jarvis and Kaws.

James Jarvis was a British illustrator who had drawn minimalist, potato headed cartoon characters which were inspired by the design ethos of the early Modernist movement. These potato headed cartoon characters would become Jarvis' signature characteristics of his designer toys. In 1998, Jarvis would release his first vinyl toy, Martin, which was launched in Japan by Sila's Tokyo distributor and produced with the help of Bounty Hunter (Vartanian).



Figure 4: Martin Toys

Jarvis would then launch his second toy, evil Martin and Bubba with the help of Silas. His vinyl toy releases allowed Jarvis to become one of the first British artists to bring his works into Europe.

In 2002, Jarvis created the Juvenile Delinquents characters for Sony's Time Capsule project and co-founded Amos with Russell Waterman and Sofia Prantera. Amos was the only distributor of Jarvis's figures, and he developed new projects with other

artists and designers with whom he, Waterman, and Pranter had worked. In 2003, through Amos, Jarvis released the first eleven, six-figure, sets of the In-Crowd series (Vartanian).

Kaws, also known as Brian Donnelly, was an American artist based in Brooklyn, New York. He was best known for his graffiti which he painted over advertisements of other people's imagery. His graffiti featured many of his early characters such as the Companion which had a signature trademark of skull and bones with crossed-out eyes motif. Companion would then become Kaws' first vinyl toy released in partnership with Bounty Hunter in 1999.



Figure 5: Companion Vinyl Toys

With the release of Companion, Kaws became a founding figure in the designer toy movement especially in the United States. By summer of 2006, Kaws opened his own store ‘OriginalFake’ in Aoyama, Tokyo (Vartanian).

Another American who brought designer toys to America was Paul Budnitz. Budnitz discovered designer toys from Japan and Hong Kong. He found these designers to be, “quirky, intricate toys as works of popular-art, pieces that mixed many aesthetic movements he loved—including fashion, cartoons, graffiti, comics, music, and fine art.” (Lubow)

In 2002, Budnitz wanted to bring designer toys to America by starting his own company, Kid Robot, in California. He later would relocate to New York City in 2003. There, Budnitz began collaborating with his friend Tristan Eaton. They created the signature characters for Kid Robot which were Dunny and Munny.



Figure 6: Dunny Series 5



Figure 7: Munny

These characters would become the best selling characters of Kid Robot. Budnitz would later incorporate collaborative work into his philosophy. His philosophy of collaboration would bring dozens of other fine artists, graffiti artists, and illustrators to work on toy projects (Kid Robot).

1.5.2 Types of Designer Toys

Designer toys come in various forms ranging in materials from vinyl, resin, to cloth. There are four types of designer toys categorized as urban vinyl, resin toys, designer plush, and designer consumer electronics.

- Urban vinyls are figures made of vinyl. They are also known to feature original designs, be produced in small numbers, and marketed to collectors, predominantly adults.
- Resin toys are toys created from synthetic resin material and resin casting. After casting, resin toys get a varnished layer above the dry painting.

- Designer plush are soft, stuffed dolls produced in limited quantities by artists and designers.
- Designer consumer electronics are designer toys that are used and feature a purpose. An example of these designer consumer electronics is the Mimobots.



Urban Vinyl



Resin Toys



Designer Plush



Designer Consumer Electronics

Figure 8: Four Categories of Designer Toys

1.6 Scope and Limits

The thesis will have restrictions due to the scope and limitations of the study. The scope of the study is to identify designer toy subcultures from global or universal

communities across international and cultural boundaries. The scope will also include research on the current and past market trends of the traditional toy industry. By acquiring this knowledge, an approach will be illustrated that the toy industry could use to design a toy based on the target subculture market.

The study will be limited to one subculture as a main target market. This subculture will be on cubicle workers as model for application of the design approach. The research will be conducted on subjects who have experiences working in a cubicle. The subjects will be limited to students, staff, faculty, and their associates from Auburn University. The design approach will also be limited to people who may be in the U.S. toy industry or who are interested in the designer toy subculture.

1.7 Procedures and Methods

The thesis will be conducted by the following procedures and methods.

- Procedure #1:
 - Research on toy industries' current and past market trends
- Method:
 - Conduct library and internet research
 - Research on current market revenues
 - Research world toy market
 - Research consumers
 - Research on the influence of films, cartoons, and video game industry
- Procedure #2:

- Research toy products in the US that had potential of creating a subculture
- Method:
 - Research toy products that had subculture elements
 - Research the company that created these toy products
 - Determine the problems of the toy products
- Procedure #3:
 - Study and document designer toy subculture on its history and passion of the people
- Method:
 - Do library and internet research
 - Find patterns within the history
- Procedure #4:
 - Research different types of designer toy
- Method:
 - Do library and internet research
 - Document the significance of each type of designer toy
 - Create a visual study
- Procedure #5:
 - Interview people who are involved in the designer toy market
- Method:
 - Interview collectors
 - Interview store owners

- Analyze their perspective on the designer toy market
- Procedure #6:
 - Develop a method to design a toy with designer toy subculture approach
- Method:
 - Determine which designer toy subculture is feasible
 - Determine the consumer
 - Create a product positioning map
 - Develop a design criteria
 - Develop a toy product that models the approach
- Procedure #7:
 - Create a toy in 3 dimensional form that utilizes the approach
- Method:
 - Sketch concepts for a toy design
 - Develop prototype models
 - Determine materials and functions
 - Finalize model and concept

CHAPTER 2

TOY MARKET RESEARCH

2.1 Toy market size

The world toy market has steadily increased from 2004 to 2007; as a result of the economic downturn, from 2007 to 2008 the market remains stagnant as shown in the Figure 9.

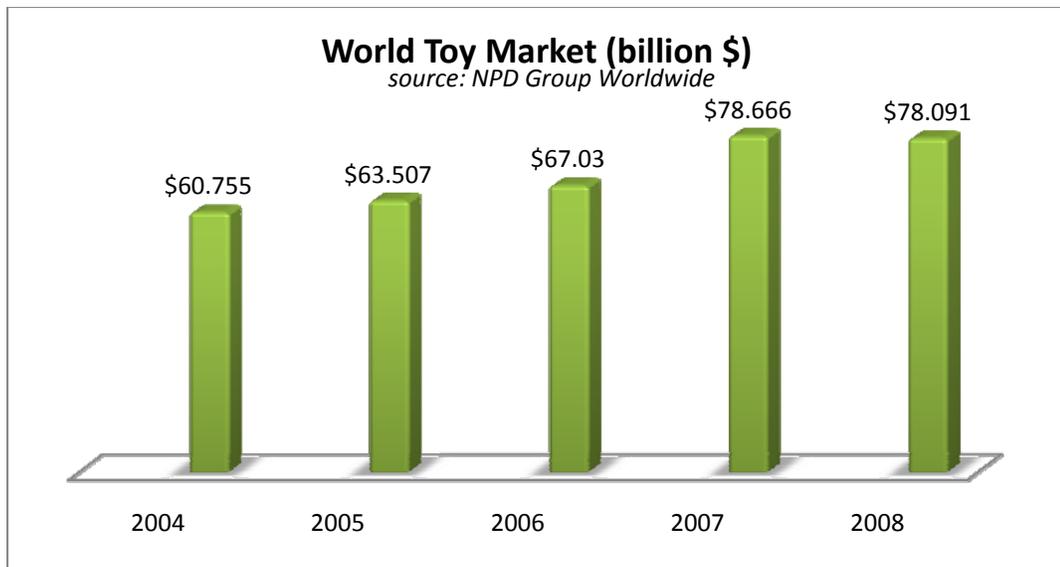


Figure 9: Current World Toy Market

The increasing trend in the world toy market trend was caused by the impacts of growing areas in Asia, Latin America, and the Caribbean (NPD Group). These areas were on the

rise due to the rapid development of their middle class group. The middle class was known to be largest consumer in the toy market (Knowledge at Wharton).

The middle class was defined as “earners making between \$10 and \$20 a day adjusted for local prices.” According to the World Bank, the global middle class was estimated to grow from 430 million in year 2000 to 1.5 billion in year 2030. The World Bank conducted researched in the year 2000 and the developing countries were 56% global middle class, however, by year 2030 it was expected to increase up to 93%. They also expected China and India to account for two thirds of the expansion, with China contributing 52% of the increase and India 12% (Knowledge at Wharton).

In the past, the large middle class areas were located in Europe, North America, and Japan which were known as the “Triad”. Through the 1970’s and 1980’s the middle class expanded in South Korea, Brazil, Mexico, and Argentina. Recently, the middle class has developed further in Asia especially in China and India. Asia currently has four fifths of the world’s middle class population with China constituting half. China was anticipated to become the third largest consumer market by 2025. Even the Mckinsey Global Institute predicted China’s middle class to increase from 43% in 2000 to 76% by 2025 (Knowledge at Wharton).

The growth of the global middle class increased the toy markets in Asia from 24% to 27%, as Latin America and Caribbean have grown from 7 percent to 8 percent. This was shown in the Figure 10.

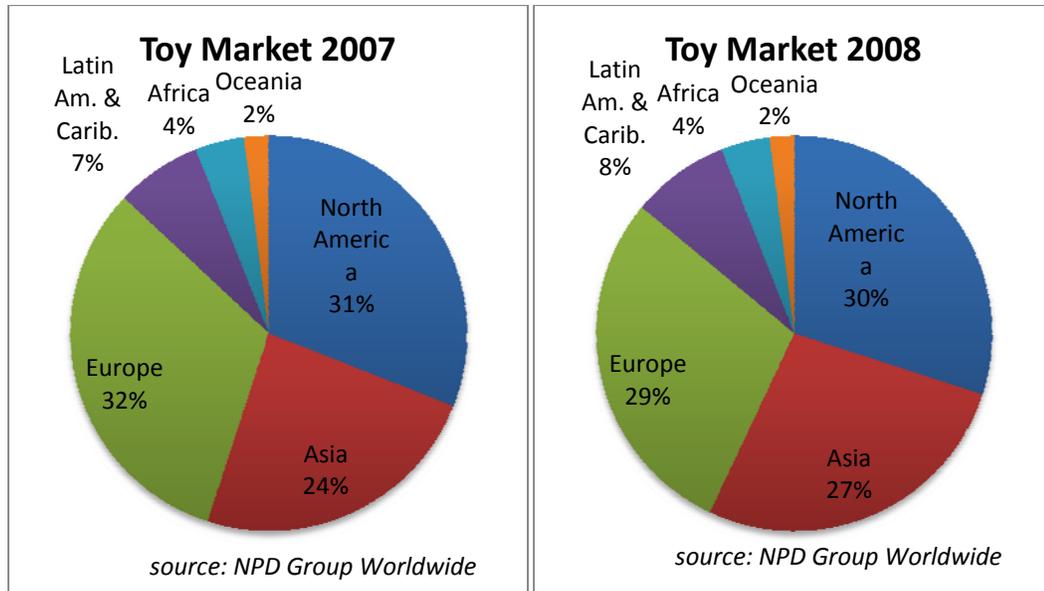


Figure 10: Toy Market Comparisons

These growing areas are located within the top ten toy market countries in 2008. The current top ten countries in order are: United States, Japan, China, United Kingdom, France, Germany, Brazil, India, Mexico, and Italy (NPD Group 16).

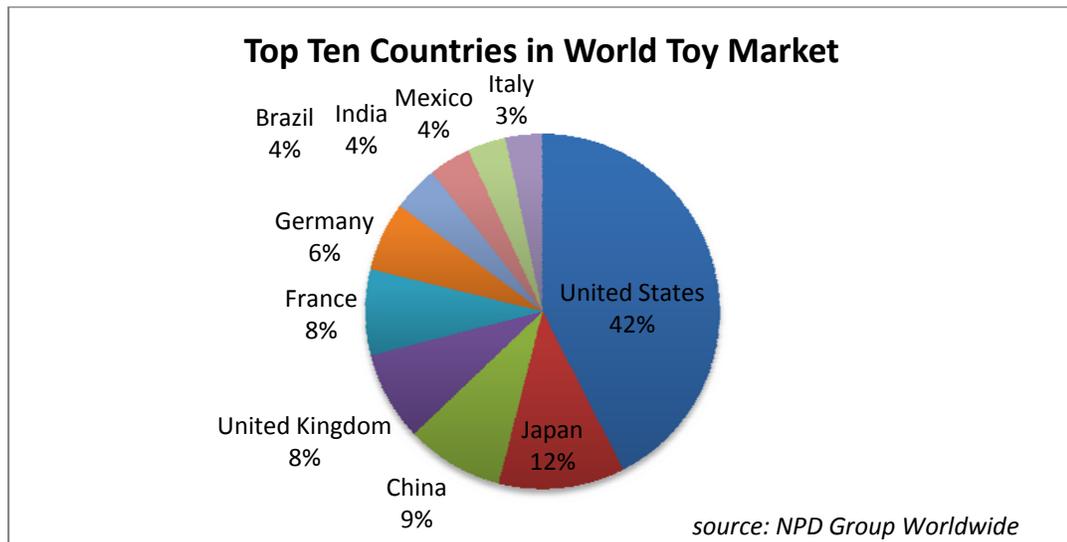


Figure 11: Top Ten Countries in World Toy Market

From 2007 to 2008, China, India, and Mexico began moving into the list of the top ten world toy market. China moved from rank five to three, India moved from rank nine to eight, while Mexico moved from rank twelve to nine (NPD Group 16). Overall, the United States was still by far the biggest toy market. The U.S. toy market in 2008 was worth \$21,650.83 million as shown in Figure 12.

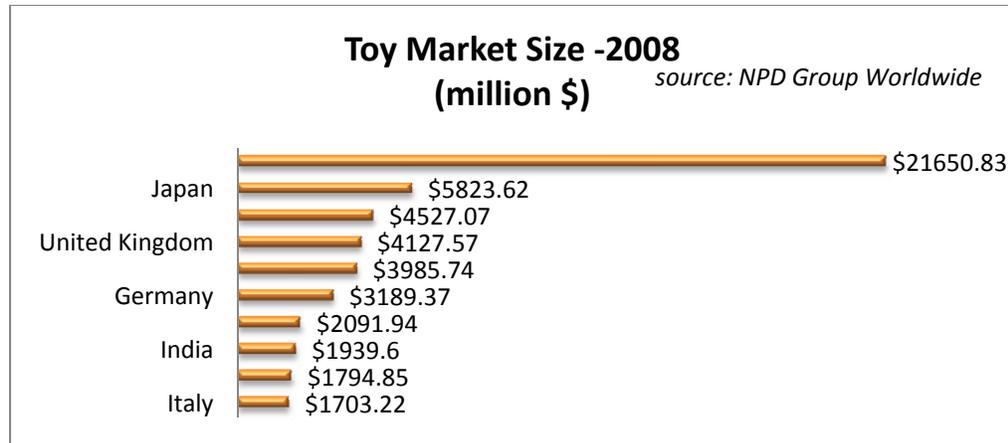


Figure 12: Toy Market Size In 2008

2.2 Categories of Toy Market

Based on demographic age, the toy market can be categorized into three markets: kids (15 and under), teenagers (15 and above), and adults (18 and above). The kids market makes up the traditional toy markets. Whereas the teenagers and adults are considered growing toy markets caused by the increased usage of consumer electronic products and the impact of the internet on the change in distribution channels.

2.2.1 Kids: Ages 15 and Under

The kids (15 and under) demographic is the main target of the traditional toy industry. Traditional toys consist of action figures, dolls, vehicles, outdoor and sports, youth electronics, infant/ preschool, games/puzzle, playsets, plush, models, arts and craft, and other related products (NPD Group).

Especially in the United States, the 15 and under demographic is the largest toy market. The toy market in the United States has 6,296 manufacturers of traditional toys in 2007. The top five toy categories for the five years since 2003 are: infants/preschool, dolls, outdoor and sport toys, arts and crafts, and games and puzzles.

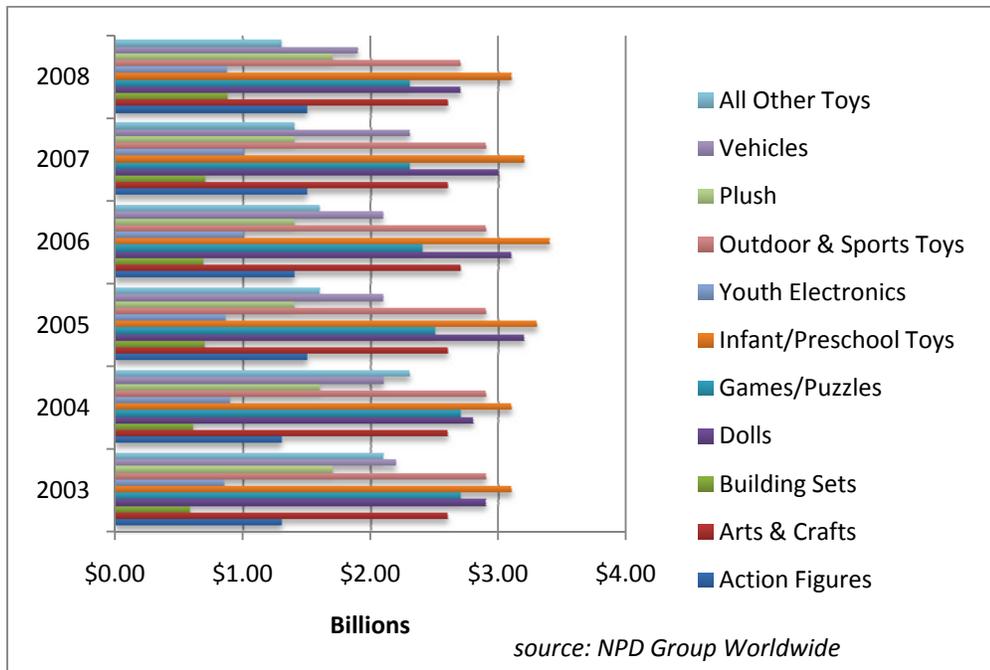


Figure 13: Toy Categories Sales

The top toy companies in 2008 were Mattel, Hasbro, and JAKKS Pacific which generated revenues of \$5.97 billion, \$4.027 billion, and \$903.4 million, respectively.

Mattel was known as the world's largest manufacturer of mainstream toys and having the largest market share for both action figures and dolls. Hasbro became the United States' second largest toy company and was known to own the largest market share in the board game industry, producing popular board games such as *Clue*, *Monopoly*, and *Scrabble*. JAKKS Pacific became the United States' third largest toy manufacturer (Google Finance).

2.2.2 Teenagers: Ages 15 and over

The toy market for teenagers (15 and over) is mostly composed of teenagers and young adults who have started to outgrow their traditional toys and lean more towards electronic consumer products like computers, cell phones, cameras, and especially video games.

The video game industry has become one of the fastest growing industries in the United States. The video game industry by comparison has recently increased compared to the toy industry which has been decreasing in the past few years (Seeking Alpha).

Figure 14 shows this comparison.

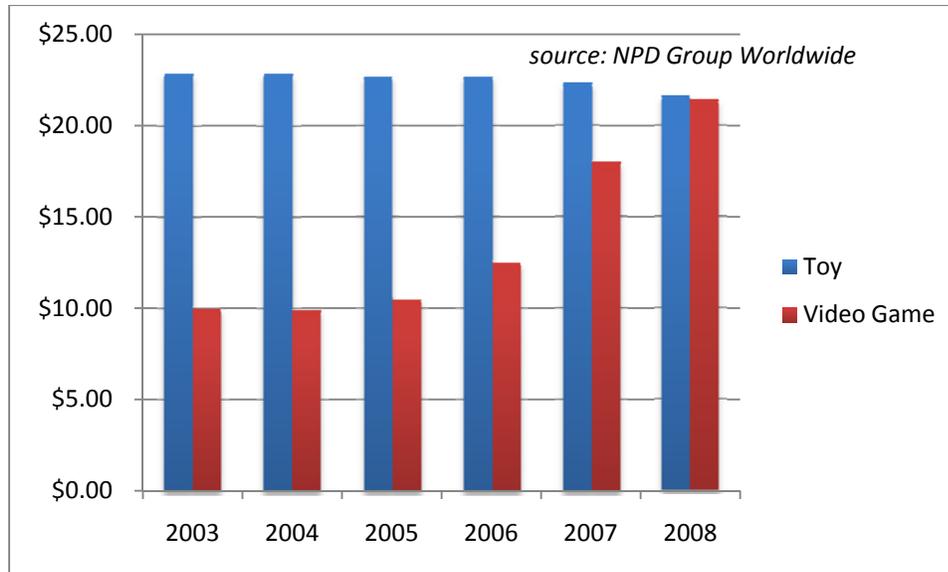


Figure 14: Video Game Industry vs. Toy Industry

In comparison from 2006 to 2007, traditional toy manufacturing industry revenue fell from \$22.3 billion to \$21.2 billion which was a 4.9% decrease. In contrast, the video game industry is rising from \$12.5 billion to \$18.9 billion which had a 51.2% increase (Seeking Alpha).

The rise of the video game industry shows that the consumer was rapidly shifting from traditional toys to video games. As consumer preference shifted, companies from the toy industry began to emphasize video game products. For example in 2006, Mattel entered the video game industry to keep up with the changing trends in the toy industry. Also, JAKKS Pacific is collaborating with THQ in producing video games under the World Wrestling Entertainment (WWE) brand (Seeking Alpha).

As the video game industry shifted the toy market, there were factors indicating how this industry created the ages 15 and over market. This market was mostly found in countries that have high Average Expenditure in Toys per Child (AETC).

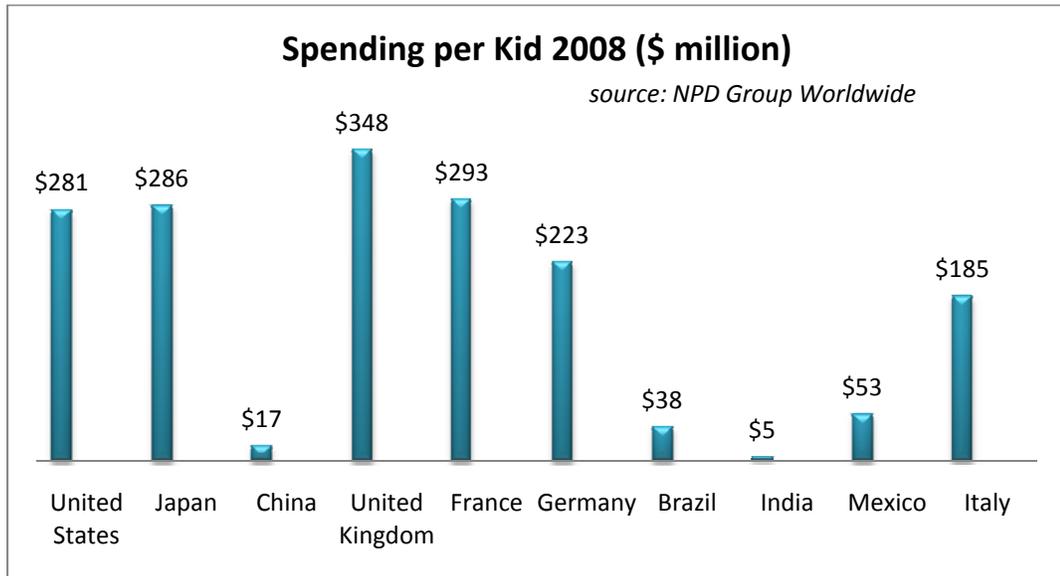


Figure 15: Spending per Kid 2008

The United States, Japan, United Kingdom, France, Germany, and Italy have the highest numbers in spending per kid. As well these countries have a high percentage of the market to consumers 15 years old and over shown in Figure 16 (NPD Group).

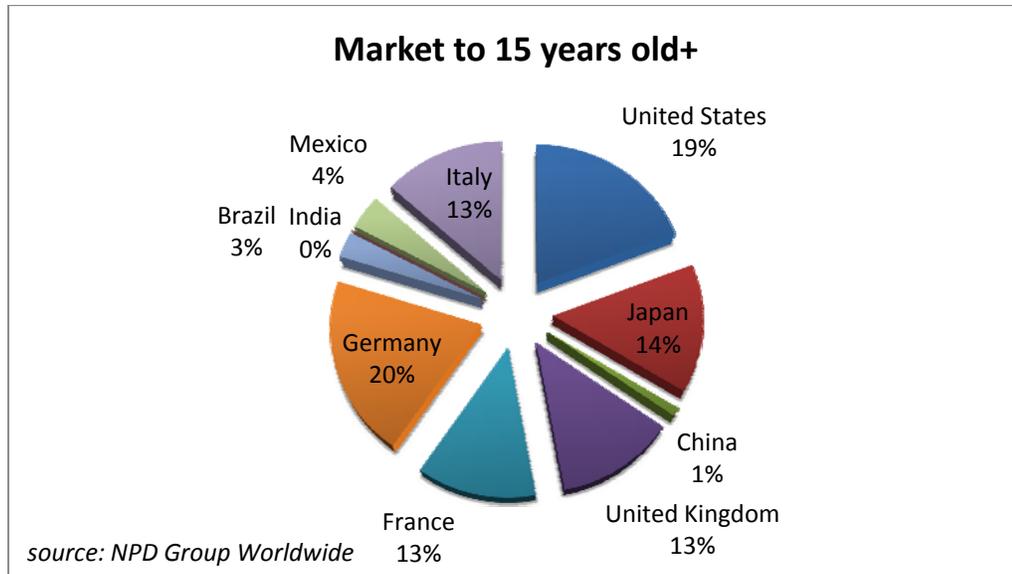


Figure 16: Market to 15 years old and over

2.2.3 Adults: Ages 18 and above

The toy industry for more than a decade has targeted a growing toy market of adults over 18 and up. They targeted “grownups” because in recent years, especially in the United States, more children were favoring electronics over traditional toys (The Boston Globe, 2007). In 2007, the United States retail sales geared for adults over 18 increased to 10% (Goodale). This was due to the rise of the video game industry in which the demographic tends to lean toward an older audience. Such as in Britain, it was found that the average age of video game players was 29 in 2000 compared to 18 in 1990.

Moreover, these grownups tend to favor toys that come from movies, art, music, and video games. In catering to the grownups’ taste, more toy companies have products retooled and regrouped as if the grownup grew up with them (Goodale). However, there

was a toy industry such as the designer toy industry that created toys that have more refined details and humor which caters to most grownups.

The designer toy industry has significantly grown and matured since 1999. In the beginning, designer toys were mostly targeted to underground art collectors who were typically men in their 20's and 30's. These collectors were known to spend \$100 or \$200 for a toy, which were usually a small fraction of the original cost. At the time, designer toys were only sold to independent, specialty and hobby stores aimed at underground art collectors. Underground art collectors collected designer toys because designer toys had nostalgic quirky qualities, which were similar to vintage children's toy (Vartanian). Examples of these designer toys were designed based on inspirations from iconic figures from movies (Darth Vader), cartoons (Ultraman and Gundam) and cereal boxes (Cap'n Crunch, Franken Berry, and Count Chocula).

Recently, more and more designer toys have appealed to a wider audience from the age group of 15 and over. This was due to the exposure of designer toys being blogged on the internet by fans and collectors and also from toy cons. The internet blog site like ToyCyte, helped to expose designer toys to people by word of mouth. Toy conventions like the Taipei Toy Festival help generate business and exposure for artists and designer toy companies since they were known to showcase new toys. The designer toy market has expanded its products to mainstream venues like Tower Records and Urban Outfitters. For example, designer toy company, Kid Robot has been distributing its product first exclusively to specialty stores. Soon Kid Robot decides to expand to

other audiences by distributing their product such as the Dunny toy series to Urban Outfitters.

The expanding market of designer's toys was seen in fashion and major corporations. In fashion, trendsetting Paris fashion and design store Colette showcased two exhibitions of designer toys in June. Also, a New York art and fashion magazine, *Visionare* showcased a gallery show of designer toys which were customized by fashion designers: Karl Lagerfeld, Marc Jacobs, and Dolce & Gabbana. In 2006, companies like Kid Robot begin creating a limited edition apparel line. Kid Robot's apparel line can be found in Barneys New York and many other high-end retailers worldwide where clothing prices range between \$175 and \$3000 (Lau).

Corporations have begun to sponsor and contract designer toy artists and promote business by showcasing artist exhibitions, toy products, advertisement, etc. Companies like Sony have contracted artists like Michael Lau to license his Gardener figures in Asia. Sony also contracted Pete Fowler to create the first Monsterism vinyl toys project with toy maker Cube Works as part of Sony Creative Products. TADO, a character design duo, was known for their pop aesthetic characters appearing in advertisements for clients including BA, Daimler Chrysler, Habitat, Honda, MTV, Nike, Pioneer, Sony, and the world Wildlife fund. Another illustrator, Jon Burgerman, has work that has been published in some of the world's leading periodicals. Burgerman also has contributed his artwork to clients including Diesel, Pepsi, MTV, and the BBC (Lau).

2.3 Conclusions

From the toy market research, the toy industry has begun expanding its market to an older demographic especially for eighteen and above. The research revealed that the video game industry has impacted the toy industry especially in gearing towards teenagers and adults. Aside from the rise of the video game industry, the usage of electronic devices from cell phones, digital cameras, to computers has seen increased use especially by adults. Also, most adults tend to like toys that exude nostalgic qualities from their childhood pastimes of collecting, movies and televisions shows they watched, and even video games they played.

Although some toy companies have begun catering toys movies and televisions to adults, the toy industry has overlooked the growing designer toy market. From the literature research, designer toy market relies mainly on adult collectors. These adult collectors tend to collect designer toys for their nostalgic qualities especially for their unique creation of non-franchise characters. In the research, designer toys have begun to expand to the mainstream market in fashion, corporation sponsors, and advertisement.

In conclusion, the toy industry could benefit from understanding the designer toy market. In understanding the designer toy market, the toy industry can gain insight into the wants and needs of designer toy collectors especially in creating toys with nostalgic qualities and new unique characters.

CHAPTER 3

DESIGNER TOY MARKET

3.1 Introduction

The previous chapter gave general insights to an emerging collector toy market on adults eighteen and over especially in the designer toy market. The impacts of modern society have begun pressuring adults which causes stress in their daily life. As an escape, adults would collect toys as a way to restore their eternal youth. There was further research in exploring the designer toy market's unique way of marketing their toys to adults. Other exploration was to understand how the designer toy market has created its own subculture especially among the collectors, artists, and designer toy companies.

3.2 Toy Collector's Eternal Youth

Eternal youth is a mindset in adults who relive their childhood by collecting toys. Many adults collected toys as a way to escape from the pressures of society. Societies today have become more competitive especially for adults. Adults escape from their responsibilities that society has pressured them with by "engaging themselves in childish things" as a way to relieve stress (Yeung).

The “childish things” was the cause of the “age compression” defined by toy industry expert Richard Gottlieb. Gottlieb defined “age compression” as how “adults are holding onto their toys longer, children are setting them aside at an ever-earlier age.” Gottlieb also explained that the “age compression” causes both sides of the spectrum to embrace the teen culture which is the “sweet spot of our time.” Furthermore, everyone wants to aspire to be that eternal youth (Goodale)

Adults embrace their eternal youth because there is more entertainment or cultural activities, like pop concerts, geared towards only to young people. This is as sociologist Frank Furedi explains, “Modern society does not have any cultural identity for adults.” (Yeung) The aspects of being young convey being “energetic, curious, unconventional, and opposed to authority and having fun.” Basically, the symbolism of eternal youth is a “carefree lifestyle where people have few worries and are apparently free of responsibilities.” (Yeung)

3.3 Type of Collectors

Collectors of designer toys are becoming more and more diverse in its demographic. There are three types of designer toy collector which are cubicle collectors, casual collectors, and serious collectors.

- Cubicle Collectors

Most collection begins in a cubicle. The cubicle environment is a great place to start a budding collection because of its sparse interior. Cubicle

collectors do not all become serious collectors. Many of them enjoy collecting toys and scattering them over their desk for conversational starters or distraction. The toys also give them a sense of instant gratification or even soothe them while they are working (Brautman).



Figure 17: Cubicle Collection

Companies like Rotofugi have thrived on the cubicle collector market. Rotofugi caters also to serious collector but they have found that cubicle collector is mostly people who are shopping for gifts and/or something fun for their desk at work. Rotofugi claims that 50% of their sales are from cubicle collectors (Brautman).



Figure 18: Rotofugi Store

- Casual Collectors

Casual collectors are usually new to the designer toy scene. Most may have a friend that drew them in. Most would take their toys out of their boxes and display them. Many of them would patronize neighborhood stores and chat on toy bulletin boards. Casual collectors are largely families and kids (Brautman).



Figure 19: Casual Collector's Toys

- Serious Collectors

Serious collectors are very passionate about the designer toy scene. They are known to spend hundreds of dollars a month or more on designer toys.

Serious collectors usually would follow a particular artist, companies, and even toy series. Many have been collecting for many years and are willing to travel overseas or even spend more than they need to in finding a rare piece (Brautman).



Figure 20: Serious Collector's Toys

3.4 Distribution of Toys

Most collectors buy designer toys from independent toy store owners such as Schmancy. Schmancy is owned by Kristen Rask and is located in Seattle, WA. Rask describes that store owners like herself act as the middle man between the toy company and the collector. She and other store owners would be supplied by the toy company, Kid

Robot, who manufacture designer toys or even artists to produce their own toys. Artists are usually the ones who collaborate with toy companies and store owners in designing the toys. Figure 21 shows the distribution of how designer toys' supply work.

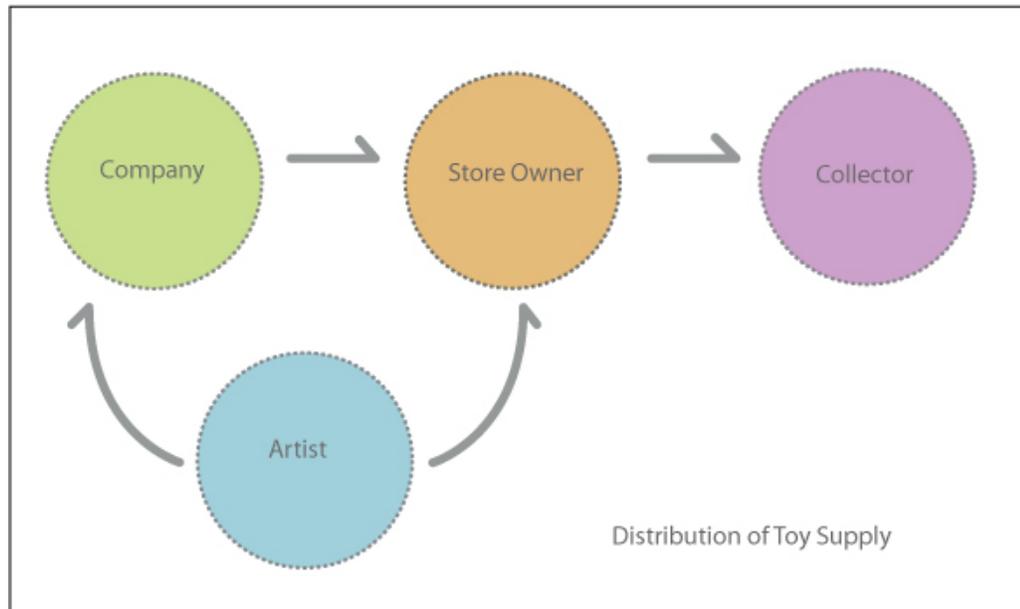


Figure 21: Distribution of Toy Supply

3.5 Marketing Strategies: Blind Boxes

Blind boxes are a marketing strategy used by designer toy company to sell toys with their contents being concealed until opened by the consumer. Examples of blind box toys are Kubricks, Qees, and Dunnys.



Figure 22: Dunny English Series

Blind boxes allow designer companies to produce more figures without having risk of not selling unpopular figures. Blind box toys are like gumball machine toys by getting consumers to come back for more. Consumers rarely would buy only one box because he/she might not get what he/she wants. Most would buy blind box toys by a handful or even the case in order to collect the entire series. Thus this benefits both the designer toy company and even the store that sells them (Brautman).

Blind box designer toys ranges from \$8 to \$30. Most stores' accounts find that young kids are the fastest growing consumers of blind box toys. Some fans do enjoy opening these blind boxes because it gives them the thrill and engages them to trade duplicate or undesirable figures with others (Brautman). Blind box toys are also gateways to introduce people to artists and a new medium for collecting art.

Most stores would only open the blind box toys only to display a few range of possible figures the consumers would get. Some stores would open all the blind box toys in the case set to cater for the serious collectors. Even some stores owners would allow the consumer to trade their figures for the display figures (Brautman).

3.6 Marketing Techniques: Guerrilla and Viral

Most artists, designers, and some companies use the tactics of guerilla and viral marketing to promote their designer toys.

- **Guerrilla Marketing**

Guerrilla marketing involves using unconventional promotions, which relies on time, energy, and imagination rather than a big marketing budget. This unconventional promotion is done by intercepting encounters in public places, street giveaways of products, pr stunts, and other unconventional marketing in achieving maximum results from minimal resources.

Graffiti artist, KAWS, is known for using guerrilla marketing in promoting his artwork, character designs, and toys. KAWS uses his signature crossed eye skull and bone character and integrate them in subverting imagery on highly prominent billboards, bus shelters, and phone booth advertisement.



Figure 23: Kaws' Phone Booth and Bus Stop Graffiti

- Viral Marketing

Viral marketing utilizes marketing techniques that use pre-existing social networks to increase brand awareness or to achieve marketing products through self-replicating viral processes. Viral marketing approaches can be a word-of-mouth by using the networking abilities of the Internet. Other viral marketing forms are video clips, interactive flash games, advertising games, electronic books, branding software, images, or even text messages.

Most designer toy companies like Kid Robot, Strangeco, and Toy2R use social networking sites like Facebook, MySpace, and Twitter as viral marketing tactics. Social networking sites are a great way for designer toy companies to promote their brand through a larger mass. Social networking sites also act as a

word-of-mouth technique since people are able to discuss, post, blog, and share what their passions are.



Figure 24: Toy2R Facebook Page

3.7 Conclusions

From the designer toy market research, there is significant discovery on the collector's passion for collecting toys and what types there are. Collectors from the toy market research study are adults mostly males in their twenties to thirties. Their passion reflects on their mindset of eternal youth, which is to engage themselves in youth activities and culture to escape from the pressures of society.

Collectors are categorized based on how they avidly follow and collect designer toys. They are cubicle collectors, casual collectors, and serious collectors. The research

finds that cubicle collectors and casual collectors are not as actively involved as the serious collectors are.

Other discoveries include how the toys are distributed and what marketing strategies and techniques are used to sell toys. Toys are distributed through artists, toy companies, store owners, and collectors illustrated in Figure 21. Store owners would act as the middle man between the toy companies and collectors.

Toy companies use marketing strategies of blind box toys in selling collectible toys to collectors. Blind boxes conceal the identity of the toy until the toys are opened. It helps to prevent toy companies *in* not selling unpopular toys. Marketing techniques toy companies and artists use are guerilla and viral marketing. Guerilla marketing is mainly used by artists to exploit their work through unconventional tactics such as graffiti on bus stops, phone booths, buildings, etc. Viral marketing is used by toy companies in expanding their markets to the media and fans by social networking sites, internet video, flash games, and etc.

Overall, this chapter reflects the designer toy market especially on the collectors and the marketing tactics used to sell to these collectors. But there are some issues needed to be addressed on the toys. First, these toys lack practical functions especially for cubicle collectors. Second, the toy market also lack user-centered design process since most toys are subjectively designed for the artist themselves not their consumers. The next chapter will research further into the subculture study of designer toys.

CHAPTER 4

DESIGNER TOY SUBCULTURE

4.1 Introduction

The popularity of designer toys has surged into a new art phenomenon that has developed into its own subculture. This is due to a unique blend of art and mass production capabilities that the designer toy exudes, which as Vartanian describes, “adapting visual and conceptual strategies from art history, vernacular elements from the street, and marketing devices from corporate culture.” (Full Vinyl) These elements Vartanian describes are also the distinctive feature of the designer toy subculture. The subculture of designer toys consists of artists, collectors, and toy companies that share a passion for creating and sharing new toys. Vartanian would describe the designer subculture as, “this expanding universe of artist-designed figures is at once outside the art world and consumer cultures, and functions as a parallel field of creativity and commerce.” (Full Vinyl)

4.2 Toy Collectors

The collectors are the fans and consumers in the designer toy subculture. They would collect designer toys from their favorite artists, new artists, and even certain toy

companies. The collectors would also share and trade information on their favorite artists and toys with other collectors or people who are new to the scene. Basically collectors build that connection with the artists in which it creates, “intimacy to the entire community.” (Vartanian 4)

The intimacy the collectors share with the artists is that they symbolize designers as a “part and parcel of a social statement of sorts.” (Vartanian 12) This social statement that the collectors seek is to share common interests with other collectors and artists in community such as punk music, graffiti, pop art, combat toys, illustrations, and street-wear design. Their interest serves as their expression of their youth as seen in the previous study on the collector’s eternal youth.

4.2.1 Toy Collector Interviews

In understanding the designer toy subculture, interviews with designer toy collectors were vital to the study. The interviews were conducted with collectors who are very passionate about designer toys.

The interview displayed is an interview with Acher Chang and Max Gang, both industrial designers in Taiwan. The interview was conducted through Skype and video recorded. The following are questions on their passion and perspective on collecting toys.

4.2.1.1 Questions for Acher Chang and Max Gang

1. How long have you been collecting toys?

AC: I started collecting toys 10 years ago.

MG: I started collecting at the age of 11 so I have been collecting about 20 years.

2. What influences and inspires you to collect toys?

AC: I had influence from Hollywood movies like Star Wars and Alien in which they have realistic style features that I like. I had been collecting Star Wars books for a long time.

MG: I love the Bakugan cartoons which bring me nostalgia childhood memories.

3. What kind of toys do you collect?

AC: I pretty much collect anything especially something that is very cute and special.

MG: I collect Bakugan toys which are fighting warrior and very manly.

4. Do you gravitate to certain character styles?

AC: I mainly collect things that are animals and monsters. I do not collect anything that appears like human. I look mainly for toys for aesthetic qualities of cuteness.

MG: I search toys with macho, sharp, and not soft appearance. I search also for cute and softer looks which depends on my mood at the time but not specific.

5. Do you try to follow a certain artists?

AC: Yes. I start by collecting the toy that I think is cute, then I would find out the artist that created it.

MG: No. I only look for something cute but not quite curious on whom the artist is.

6. Does the story behind the character matter?

AC: No

MG: I do not about the context story of the character.

7. Do you attend any conventions? Why?

AC: I go to the Taipei Toy festival to find artists they feature from Hong Kong. I go to find new toys I can collect. I usually take pictures of the toys I can't afford.

Gang: No.

8. Where do you display your collections?

AC: I display them at my office and my home. Since I live in a small house with 3 bedrooms, I put my toy collection in huge glass shelf.

MG: Yes. I display them in my office and my car.

9. How would perceive your toy collection?

AC: I view them mostly just as toys nothing more. My toys especially the cute ones bring me a sense of happiness for a brief time. I see my toys together as a small world in which they give me a sense of friends.

MG: I feel that my toy collection gives me a sense of futuristic qualities which is not happening in the real world. I feel the characters are the

connection to the future. My toys help reduce my anxiety especially when I am in my car while driving. I look at them too kill time especially during traffic.

10. Do you share your toy collection with others? How?

AC: I share them with others by posting pictures of my collection on Facebook.

MG: I do not trade with anyone and I do not like to share my toys with anyone. I would rather keep my toy collection information to myself.

11. Do you play with your toys?

AC: I will not play with the toys but I use them only as decoration.

MG: I only use them as decoration especially the cute toys.

12. Would you like toys that have more articulations?

AC: Yes. Articulation allows me to change the position of my toys when displayed.

MG: N/A

13. Do you think accessories for toys are necessary?

AC: No. I believe accessories on toys should be limited. There is no need for excess accessory.

MG: N/A

14. Do you modify your toys or modify some custom toys?

AC: I only modify my toys when I need to repair them or repaint them. I cannot seem to find a good custom toy I like to modify.

MG: I like to modify custom toy because it allows me to design a toy that no one else can have. I also like to draw my own characters for my design.

From the interview, Acher Chang and Max Gang share some significant similarities and differences in terms of collecting, and perspective on designer toys. The similarities that Chang and Gang share is they started fairly young. They started collecting toys from movies and cartoons and kept collecting until when they were adults. They kept collecting through their adulthood because it gives them a sense of childhood nostalgia they can escape to. However, Chang and Gang had different perspectives in their involvement and emotional connection with the designer toys and the subculture.

Chang seems to be more actively involved with the designer toy scene than Gang. Chang would go far in collecting toys by going to toy conventions, sharing his toy collection on the internet, and finding out the artist who created the toys he collected. Chang's collections are shown in Figure 25 and 26.



Figure 25: Acher Chang's Home Toy Collection



Figure 26: Acher Chang's Office Toy Collection

Thus, Chang's determination in seeking new toys would categorize him as a potential serious collector. Gang, on the other hand was very private about his toy collection which makes him as a casual collector. But Gang has more emotional connection with his toys as he perceives them as a glimpse into what the future will be. Gang also feels his toy relieves his anxiety for that brief moment.

4.3 Artists

The artists are the ones who design and create the designer toys and initiate the designer toy movement. Most artists create designer toys as a way to explore, experiment, and challenge their work depending what kind of designer toy they can offer. Many artists range from professions of graffiti artists, illustrators, and industrial designers. Thus, the artists serve the role as the driving force in the designer toy subculture.

4.3.1 Designer Toy as New Form of Art Medium

Most artists would find that the designer toy is another new art form or art medium outlet they can explore. This new art form artists describe is that designer toys are three dimensional figures or sculptures that can be played, touched, displayed, and sometimes moved. Also, designer toys come in different forms of material and surfaces like vinyl and plush, which the artist can experiment with.

Such as vinyl toys, the three dimensional form is treated like a blank canvas that artist would paint on. Instead of working on a flat surface, the three dimensional surface

on vinyl can offer more challenges to the artist. The three dimensional form also pushes the artist to translate their character designs from two dimensional forms to three dimensional forms. Examples of these painted vinyl toys are from the following visual studies on custom designer toys in Figure 27.

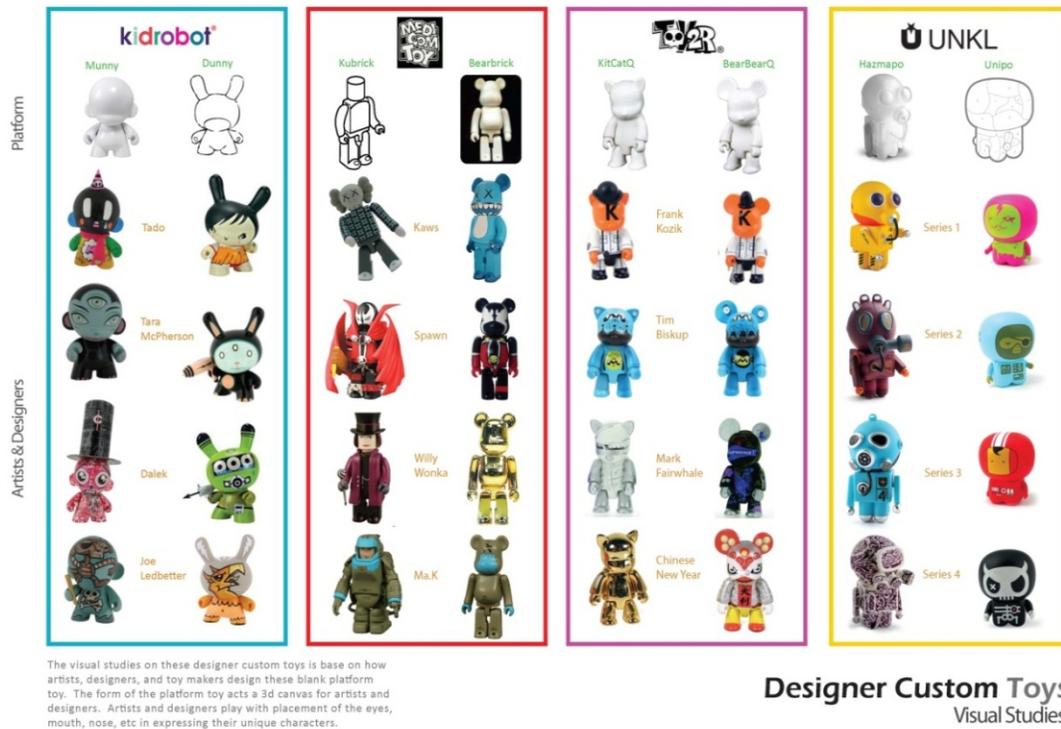


Figure 27: Designer Custom Toys Visual Studies

Plush toys offer a different challenge to artists in terms of the material and textures. The cloth, thread, and stuffing are a few ways that an artist can play with the form of the toy. The techniques in making plush toys such as knitting, crocheting, and sewing offer unique textures artists can use to challenge their creativity.

4.3.2 Artist Background and Professions

Each artist brings a unique perspective to the subculture that is based on their experience in their respective fields. The artists' backgrounds range from graffiti artists, illustrators, and designers.

- Graffiti Artists

Graffiti artists have been incorporating the urban and street culture into their designer toys. Since graffiti itself is already an “example of art as lifestyle rather than mere hobby.” (Vartanian 4) Graffiti artists are known to create signature characters in tagging urban areas. These signature characters would become as their character branding and promotional piece in their designer toys. An example is the Reach Bear Toys by the graffiti artist Reach.



Figure 28: Reach Bear

- Illustrators

Illustrators are known for their strong character designs with story backgrounds in their designer toys. They have strong character design because in their illustration work, they focus on the subject more than the form. Through their character designs, illustrators tend to create background story on them. The background story serves as the basis for the line of characters designed for a series of designer toys. An example is Illustrator, Nathan Jurevicius, who is known for designing a series of vinyl toys based on an animated short and now a flash game, Scary Girl. (Vartanian 102)



Figure 29: Scary Girl Website

- Industrial Designers

Industrial designers have the most experience in working with three dimensional forms since their profession requires them to design products and/or packaging. Some industrial designers have prior skills in toy designs for the traditional toy market. An example would be Jakuan. Jakuan uses his industrial

design skills in designing the packaging and building prototype figures for his own vinyl toy designs and collaboration with designer toy companies. (Vartanian 126)



Figure 30: Nosferatu Vinyl Figures

4.4 Designer Toy Companies

From the previous research on designer toy companies and stores, they serve as the distributor of designer toys to the collectors. But they are more than just being the distributor; they also play a major part in the designer subculture as a hub central unit for

collectors and artists to gather together. Designer toy companies do so by holding social gatherings of custom toy parties, new toy release party, and exhibition shows.

Custom toy parties are for fans, collectors, artists, and their families and friends to create their designs on custom toys provided by the designer toy company. Companies like Kid Robot, are known for their Munny custom toy design parties held in their stores.



Figure 31: Kid Robot Munny Custom Toy Party

Kid Robot also provides the event with materials such as paints, markers, and pens for the people to design their Munny.

Toy companies host new toy release parties to spark interest in their products or generate a buzz for the Artist that designs for them. Some toy stores like Schmancy have created their own exhibition show, Plush You.



Figure 32: Plush You! Exhibition

Store owner Kristen Rask created the Plush You exhibition show in helping up and coming artists and even promote her store especially in the Seattle area.

4.5 Internet Influence

The internet has been a huge impact on the designer toy subculture. The internet has been able to connect fans, companies, and artists from all over the world. Through blogs, social networking sites, and emails, the designer toy community is able to share their passion for designer toys. Blogs provide the community with information such as the artist's upcoming projects and fans review of the new toy releases. As from the previous chapter, social networking sites have provided designer toy companies opportunities to promote their products, announce events, and connect with fans and

artists. Emails provide more direct communication such as fans would ask toy companies and artist questions and comments. Figure 33 shows the distribution of information passed through the designer toy community.

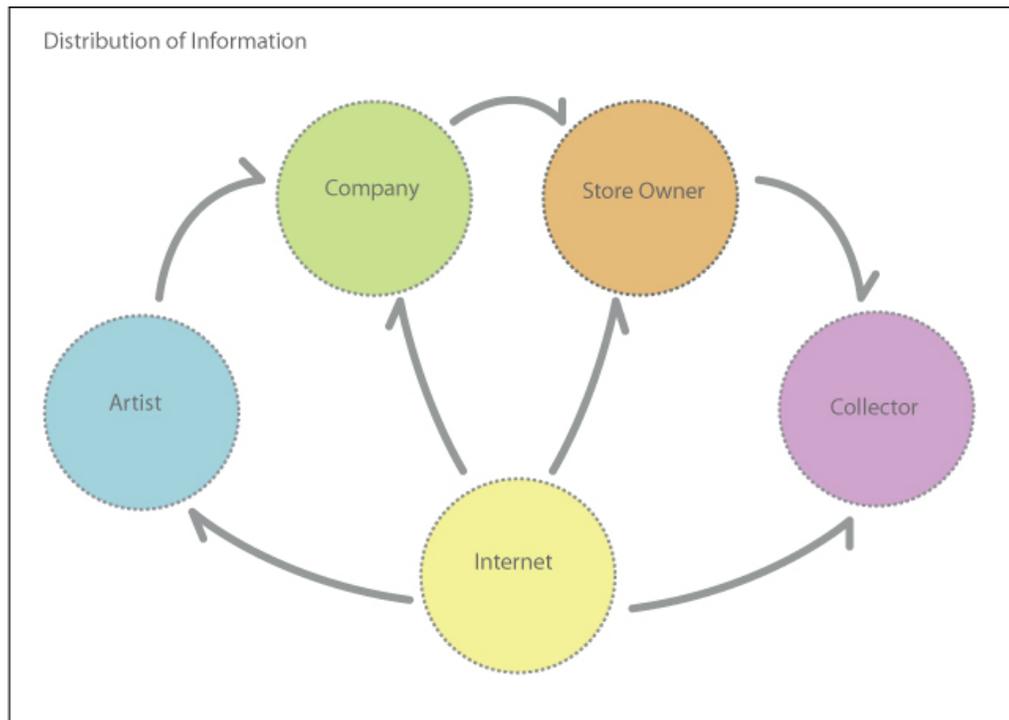


Figure 33: Distribution of Information

The figure above shows how much information is shared among the designer community. Globally, the community benefits in connecting with others from around the world and these people would meet each other through toy conventions, companies, and even social gatherings. Fans are able to share their collection and discover new information on their favorite artists. Overall, the internet is the major source in expanding the designer toy subculture.

4.6 Cultural Difference

Designer toy scenes were known to be distinctly different in the Asian, European, and American culture.

- Asia

Since the early 1990's, Asian countries like Hong Kong (China) and Japan, have been known to be the birthplace of the designer toy scene. Designer toys from Hong Kong and Japan were inspired by themes from the Western culture such as pop-culture, movies, and even cereal box characters. Also, social cultures such as hip-hop, street, punk, and graffiti were known to be the root of the designer toy scene,

“Designer roots of the vinyl scene can be traced back to the East. Here the focus shifted from Japanese influence to Western fringe cultures, such as hip-hop, skate boarding, and graffiti.” (Vartanian, Full Vinyl)

Designer toys in Asia were mostly custom figures that are platform toys customized by artists and designers. Also, some custom figures had been commissioned with Western artists such as KAWS. These toys were marketed as collectible items. Mostly adults from 20-40 were collecting these toys which brings them nostalgic memories of childhood. The collecting trend of designer toys would lead to the nostalgia market. The nostalgic market thrived in Asia especially with designer toys. The influence of the nostalgic market also crossed international borders and spread to Western countries of Europe and the United States.

- Europe

In recent years, the designer toy scene has grown in Europe especially in the United Kingdom. Most UK designer toys have been influenced from the East, but what makes their toys unique was the humor element that the toys had,

“From the Eastern influence to the humor they inject into their work, UK designers have helped a vibrant community to establish itself.” (Vartanian)

The humorous elements that UK designer toys had were heavily based upon character design that had strong emphasis on back story. Basically, these character based designer toys were done by illustrators who became the driving force in the UK designer toy scene.

“The scene in the UK is predominantly driven by illustrators (Pete Fowler, James Jarvis, TADO, Jon Burgerman, and others). The illustrative background of many UK designers has led to more character-oriented and character-driven design, with a richer back story for the figures created.” (Vartanian)

Also, the UK market has very few custom toys compared to the American and Eastern markets. Since in the UK there are very few vinyl production and manufacturing companies, those companies that do produce their own vinyl production were set up by the artist involved and only work with the artists on their books. Basically, these companies do not make figures for unknown artists because it is not lucrative for the market. Most unknown artists tended to go

overseas to find a manufacturer/production company or produced their own toys themselves.

- North America

In America, designer toys were inspired from the Asian culture and the graffiti culture. Designer toys in the U.S. were more heavily based on graphics which were more likely designed on custom figures. Many custom figures thrive in the U.S. since these figures can be designed by different artists from all over the world. Custom figures allowed other artists from outside the U.S. to expose their work in America. Designer toys in the States have gained popularity especially in the East coast and West coast areas. Most designer toys in America are sold to smaller toy stores mostly run independently.

4.7 Conclusion

Overall, the subculture research has provided more insights to the community of collectors, artists, and companies. From the collector's perspective, they are buying designer toys in reliving their youth by collecting toys that remind them of their childhood and even teen years. The artists treat the designer toys as a new form of art medium that can be more affordable for their fans. Artist perceives them as a three dimensional form for them to paint, modify, and characterize. The companies manufacture and distribute designer toys by collaborating with the artists. The companies also act as the central hub for artists and collector to congregate. The internet

provides the global communication tools for these communities to share their passion. The subculture also has some distinct cultural differences in Asia, Europe, and North America in terms of how designer toys are manufactured, created, and distributed.

However, most of the designer toys themselves do not have very much practical function with which the collectors can have more interaction. Most of the designer toys are seen as art commodity that people collect for their homes and office. Also collectors need vary from one another as seen from the interview. So there is a need to identify a target collector market and develop a toy that is functional and suitable for adults. From the subculture study, the customization of toys such as adding graphics can be implemented into the toy design process.

CHAPTER 5

DESIGN APPROACH

5.1 Introduction

This chapter will introduce an approach for designing toys. The studies from the previous chapters are to support the analysis and premise of this approach which will be applied to the design project. The approach is intended for designers to develop toy designs with practical functions suitable for adults by incorporating elements from the designer toy subculture.

The research from the subculture study is to help identify the target market. After a target market is found, user research will be conducted on them through observation studies, interviews, and surveys. The subculture study will also help to develop a product positioning map in comparing existing toys.

5.2 Identifying Target Market

In identifying the target market, one must thoroughly understand the collector toy market especially for adults. The previous chapter shows that there are three types of collectors in the designer toy subculture. They are cubicle collectors, casual collectors,

and serious collectors. One must analyze each of the collectors in their wants and needs in a toy design. Then one must decide which type of collector is appropriate. The cubicle collector will be used as a model example of how this approach is applied. The next step is to conduct user research on the target market in order to understand their perspective and environment.

5.3 User Research

From the previous research, it was found that cubicle dwellers tend to start a collection in their workspace which identifies them as one of the collectors categorized in the designer toy subculture. To further research on cubicle dwellers, user research was done by observing their environment, conducting interviews, and giving questionnaires and surveys.

5.3.1 Observation Study

The observation study was to understand the environment of cubicle dwellers by visiting their workplace. The observation study was conducted by taking pictures from the visit and interviewing the people there. The visit took place at the Media and Digital Resource Lab (MDRL) which is inside the Auburn University Library. In the MDRL, there were four supervisors working in their own cubicle spaces. They are Chris Mixon, Eileen Hall, Gary Hawkins, and Gerritt Dewitt. Their cubicle spaces were located in the right back corner of the MDRL shown in Figure 34.



Figure 34: Media and Digital Resource Lab Layout

All of the cubicles were also aligned on the right corner making it more accessible for the supervisors and others. Their cubicles had short walls with translucent sliding doors.

The figure below shows each of the supervisors' cubicle spaces.



Figure 35: Observation Study on MDRL Staff

From Figure 35, each of the supervisors had their own unique ways of decorating and collecting items in their cubicle space. A tagline was assigned to each supervisor to set their personality apart. Chris was “The Boss” since he was everyone’s boss. Eileen was “Kitch” as discovered from her unique quirky toy collections. Gary was “Animator” as evident from his posters of past character animation projects. Gerritt was “Techie” given that he only collected several computer parts even broken ones. Through the observation, Chris, Eileen, and Gary had the most interesting collections.

Starting with Chris Mixon, his cubicle space was filled with items he collected from trips, friends, co-workers, families, conferences, and fast food places. His items range from toys, souvenirs and posters. Each of the items he collected had a story behind

them. Such as the light bulb found by another supervisor and the crow saved from a prank.

Next was Eileen Hall, her cubicle area was mostly filled with toys. The toys she collected were from her husband, student workers, friends, and herself. Her toys range from plush toys to plastic toys from gum ball machines. She finds these toys comforting and even making her space feel more like home. This was because she makes her cubicle as her home base since she has to run errands all day.

And finally Gary Hawkins, his workspace was also filled with varied items. He collected things from family photos, magnets, posters, toys, old electronics, to hand crafted pieces. He seems to keep them varied by collecting of each type of item. He also has some of the most expensive items such as the glass facet sculpture.

Overall, the observation study revealed that each of the cubicle dwellers has collected items. But, the supervisor like Chris, Eileen, and Gary were prime examples of cubicle collectors. Some of the common traits were their cubicle space was unorganized yet they kept their collection organized. Some items were gifts from their family, friends, and co-workers. The items were also use as decoration and conversation starters.

5.3.2 Interviews: Jannell Canerday

An interview was conducted on a cubicle dweller in obtaining further information in what items he/she uses, stores, and collects in their cubicle space. He/she was also asked what other cubicle dwellers they know may also have collected in their work space

and why they do so. The purpose of the interview was also to pull any ideas that he/she has on maybe a practical toy design suitable for the cubicle dwellers like themselves.

The most significant interview conducted with a cubicle dweller was Jannell Canderday. She is an Industrial Designer who works for Hunter Fans based in Memphis, Tennessee. Through this company, she has experienced working from a closed cubicle area to now an open cubicle area.

5.3.2 Interviews

An interview was conducted on a cubicle dweller in obtaining further information in what items he/she uses, store, and collect in their cubicle space. He/she was also asked what other cubicle dwellers they know may also have collected in their work space and why they do so. The interview was also used to pull any ideas he/she has on maybe a practical toy design suitable for the cubicle dwellers like themselves. Below is the interview.

5.3.2.1 Interview on Jannell Canderday

What is your profession?

JC: Industrial Design

2. Who do you work for?

JC: Hunter Fans

3. Can you describe your workplace?

JC: I have recently moved into a new building from an old manufacturing facility. The new building has a long narrow room and concrete floors which is where my cubicle space is.

4. What kind of cubicle space do you work in?

JC: Our design director has been pushing us industrial designer to not be working in a boxed cubicle space. Instead, we are encouraged to work in an open space.

5. What kind of cubicle space do the other professions in your company have?

JC: The engineering and marketing department works in a traditional cubicle space which is boxed in and set in more of a corporate setting.

6. How would you describe your cubicle space?

JC: In my cubicle space I have a wooden top table for my work stations. I also have baker's metal shelves to store things. There is not enough space to work on 3D modeling so mainly I would use my cubicle space to do computer 3D modeling. This is because our company is based on alias modeling.

7. What kind of office supplies do you have?

JC: I have prisma markers, pens, several drawing pads and papers, little notebooks made from scraps of paper, huge white dry eraser boards, exacto blades, binder clips, and post-it notes.

8. Describe some other interesting items in your cubicle space.

JC: Since I am in charge of glass design I have several shards of glass on my table. I also have bobby pins. I also have this tiny trash that holds spare change. I had this since I was a graduate student at Auburn.

9. How do you store your office supplies and other items?

JC: For pens, pencils, prisma markers, and prisma color pencils I would place them in the cups. I have trays that stick to my magnet bars to store items like papers, files, and notepads while keeping them track. For magazines I would place them in metal racks. I place them here so that other co-workers can use them.

10. Do you collect anything in your cubicle space?

JC: I tend to cut out clipping from design magazine in which I collect them by mounting them to my wall. I also have a collection of tea bags on my desk.

11. Do you know another people in your department that collects any toys?

JC: I know one guy that collect Star War figures and collects toys in which were use for some of his design projects.

JC: One girl collects more design toys like a little robot pencil sharpener and can hold the pencil too.

12. Do you know if anyone in the other departments like engineering collect anything or decorate their space?

JC: I know that a few of the engineers do collect some stuff or decorate their space. One guy collects Dilbert comic strips and another guy collects hunter stuff. I know one lady that has decorated her cubicle space into a little room with carpet and lamps to make it very homey.

13. Do you have any suggestion for an office toy design?

JC: I would suggest a personal box set for workers like storing deodorant, bobby pin, and q-tips. This personal box set would be like a first aid kit for appearance especially for presentation. Another thing I would suggest is maybe have a vicious gun that maybe shoot rubber bands for employees to play with when they're on their down time.

14. On any of your co-worker's toy design collection, what kind of style or aesthetic that appeals to both men and women?

JC: The universal style that appeals to both men and women is toys that have character design especially non-human types.

From Canerday's interview, there were some significant insights to being a cubicle dweller and why they collect certain items. Canerday revealed that certain professions had different kinds of cubicle space such as industrial designers have an open cubicle compared to the engineers and marketers who had boxed cubicles.

Canerday herself being an industrial designer had an open cubicle in which she stores things from office supplies, drawing supplies, magazines, and material samples for

her projects. Some of the interesting items she had were that she collected magazine clippings, bobby pins, miniature notebooks made from scratch, a trash can toy that holds her spare change. Canerday would store these items by using metal racks for magazines and cup holders for her writing utensils. She also mentions that other co-workers have also collected items and decorated things in their cubicle space. Figure 33 shows Canerday's workspace, environment, and her co-worker's toys.



Figure 36: Jannell Canerday's Workspace & Environment

Co-workers that collected things, especially toys, were from her own department. Canerday mentioned that a guy collects star wars figures and a girl that collects toys with functional designs like a robot that sharpens pencils in Figure 36. Other co-workers from other department collected comic strips and even decorated their cubicle space into small homey room with carpet and lamp.

Canerday also suggested some ideas for a toy design suitable for cubicle dwellers. One of the significant ideas she suggested was the toy should have a compartment for storing personal items like deodorant, bobby pins, and q-tips. This toy would be like a first aid kit for appearance especially for presentation. Some other significant trait that both men and women would like for their toy was to have a character design especially non-human style.

Overall, Canerday's interview provided better insights on her cubicle space and other's cubicle space setting whether it's opened or boxed cubicle. Her interview also gave perception on what she and her co-workers collect in their space. Mainly, the interview confirmed the need for practical functions of collector toys. Canderday emphasized on ideas on the practical functions the toys could have. These ideas will be helpful in the design development process for the toy design.

5.3.3 Questionnaire and Surveys

From the previous research on the designer toy subculture, cubicle workers were one of the primary collectors of designer toys. It was evident that cubicle workers tend to collect objects from friends, family, and co-workers. A survey was sent out to cubicle workers in order to understand their environment, why they collect toys, and what kind of

characters and style they like. Below is the survey.

Results for: Cubicle Workspace

1) What is your profession?

(The last five responses are given)

- Designer
- Insurance Claims Adjuster
- Industrial Designer
- Industrial Designer
- Industrial Designer

2) What is your gender?

	Percentage	Responses
Male	58.8	10
Female	41.2	7
Total responses:		17

3) What age group do you fall in?

	Percentage	Responses
20-30	82.4	14
30-40	17.6	3
50-beyond	0.0	0
Total responses:		17

4) What kind of cubicle do you work in?

	Percentage	Responses
Boxed in with tall walls	17.6	3
Boxed in with short walls	23.5	4
Cubicle with windows	0.0	0
Cubicle with doors	5.9	1
Open Space cubicle	41.2	7
Other	11.8	2

5) Describe your cubicle workspace.

(all results shown)

- Just a normal bedroom.
- Sectional desk with upper and lower cabinets. Main goal of function, but I have pictures of family and two plants.
- Metal rack for computer and storage, wooden workbench for drawing, swivel/rolling chair, metal/woodtop storage cabinet, window!
- wire racks with modified keyboard desk and modified work table, products bought from Sam's club. PS, I am 45, but that choice was not given to me in question 3, so I said I was 30-40
- Cluttered! Wire rack computer station with a wooden-topped table forming an L-shaped space. The surfaces are all stacked with papers divided into "trash" and "current", post-its, cups full of pens and pencils and markers, finish samples, catalogs, and magazines. I have several plastic crates for files, and metal buckets for supplies. I also have a rolling cart for office supplies like paper clips, thumbtacks, etc. and a heater because it's always freezing.
- Bland colors of course. Lots of negative Dilbert cartoons on the walls, and a whiteboard.
- Very open; Brushed metal/wood work benches; Brushed metal racks w/ wheels.
- 270 degree wrap around desk space with light wood grain and neutral colors.
- cage-like, four-sided, sliding door, 5-ft. walls, furniture/modular assembly
- Small, carpeted cubicle, crowded
- I have desk space around three walls, with a transparent sliding door in the front. My computer is in one corner, and there's random work and personal stuff piled everywhere.
- Not big / with 1 computer, / lots of books, magazines, postcards, magnets, & toys / a space for sketch drawing
- I sat at a simple desk with my computer right in front of me. The desk was about 7' wide, and did not wrap around as it was an open-space work area. The walls were 3 panels, one in front and two on the sides of the desk. Underneath, there were drawers to one side, and the computer tower on the other. It was small.
- Two 60" desks formed in an L pattern. No walls. To elaborate on question 6: one desk (one with computer) is clean and the other is messy. Mostly b/c people give me models to work on and on that desk they stay out of the way till I need them.
- My cubicle space has 2 filing cabinets, 2 working areas and over the desk storage shelving.

6) Is your cubicle space organize, mess, or in between?

	Percentage	Responses
organize	23.5	4
messy	11.8	2
in between	64.7	11
Total responses:		17

7) What kind of items do you have in your cubicle?

	Percentage	Responses
Office supplies	15.4	16
Storage units (filing cabinets)	11.5	12
Computer/Laptops	16.3	17
Phones	16.3	17
Books	11.5	12
Food/Shack	11.5	12
Toys	9.6	10
	3.8	4
Other	3.8	4

8) List the top five office supplies you use.

(all results shown)

- **Computer**

Pencil

Stationary(paper)

Wacom Tablet

Hard drive

- **Computer, Phone, Storage Units, Books, Pen**

- **pens, paper, post-its, markers, pencils**

- **Sharpie, recycled note pad, post-its, hole punch, color laser printer, black ball point pen**

- **Computer**

Pens/Markers

Post-its

Binder Clips

Small wire bin for current papers

- **Pens, Paper pads, Manilla folders, Coffe, Whiteboard markers**

- **Pen; Pencil; Paper; Stapler; Eraser**

- **note pads**

sticky notes

pens

xacto knives

- **pens & sharpies**

cell phone

paper

desktop computer

label printer

- **Computer, 8.5 x 11 paper, colored pencils, markers, tracing paper**

- **sticky notes, pens, weekly planner, notepad, cds/dvds**

- **the pens,a ruler,a stepler,a knife,3M post-it**

- **Pens, scratch pads, stapler, erasers, sticky notes.**

- **scissors, pens/pencils, measuring tape, calipers, headphones (to listen to music, though it technically isn't 'office supplies')**

- **Stapler, Pens, Highlighters**

9) Do you decorate your cubicle? Why or why not?

(all results shown)

- No
- Yes, I have plants that I enjoy watering and taking care of, and pictures of my family to make the cubicle more homey.
- yes, because i want it to feel personal/comfortable
- somewhat, my most personal photos I keep at home, keep a fun calendar, origami animals, two plastic turtles, pictures of my favorite artists at the time up.
- Yes. I like to have photos of my dog and my family where I can see them during the day. And I like to have a collage of inspirational images that help me create new concept ideas.
- Yes. I am stuck in my little cube for hours day after day, so I have got to do something to inject a little happy and make me feel more at home.
- No, because I don't want it to feel like a home away from home.
- Yes, to make it personal. You live more at work than home.
- Sparsely, with replaceable items, because I cannot secure its contents.
- no, but i wanted to. the office doesn't allow a lot of decoration.
- Yes. I spend as many waking hours at work as at home, so I want to see things that interest me or make me happy.
- Of course, it makes me work with pleasure.
- I had a cat poster on one side, and a few photos of my project car on the other, but there wasn't much room for anything else.
- only on the opposite side of the desk where the toys, models and business cards aren't in my way.
- Right now it is slightly decorated with a family picture and Auburn stuff.

10) Do you collect certain things in your office? Why or why not?

(all results shown)

- No
- No, I'm just not a collector.
- yes, to have a grouping of inspiration, see 11
- no, my collections stay at home because they are too valuable and personal to share with my co-workers
- Nothing specific, stuff tends to accumulate on its own, and I would prefer an uncluttered space if such a thing were possible.
- Yes I do collect certain things, because they only really fit in in the office environment.
- No, Just never interested me to do so.
- Yes. My cube is like a museum. It has random interesting conversation pieces and family photos.
- Yes, mostly junk ends up there because I say I'll recycle an old battery or something and then wait until I have a pile of them before taking them to be recycled.
- no
- I collect little plastic gumball machine characters. They appeal to me and line up nicely along the top edge of a computer monitor.
- Yes. Just for fun.
- I didn't have time to collect stuff to put in my cubicle, but I ended up with alot of sticky notes everywhere!
- if I collect anything it's b/c it has to do with a certain project we are working on. example: I have a few kids toys b/c we were designing a product for kids and I bought some for research.
- Auburn stuff so I can support my college in my office area (I'm in SC so I have to represent).

11) List some items you collected.

(all results shown)

- No
- n/a
- just interesting inspirational cutouts from magazines
- Ceramics, trading cards, glass, home decor
- no real "collections"
- Primarily I collect the smart ass office cartoons.
- n/a
- Old Ikegami television studio camera.
- Cartman (south park) character plastic bank.
- A Spawn demon character
- batteries, iPod parts, RAM, computer parts
- n/a
- plastic gumball machine characters
- little plastic care bears
- toy bats
- little toys, magnets, some interesting office supplies
- Sticky notes, soda cans, candy wrappers, etc.
- toys (mostly from fast food restaurants b/c I always order from the kids menu), competitors cables and electronics, packaging that inspires me (electronics based or not)
- AU flag, AU magnets, AU shakers, etc.

12) How do you store your collection?

	Percentage	Responses
Shelving unit	19.4	6
Table	25.8	8
Top of cubicle wall	6.5	2
Racks	3.2	1
Mounted on wall	25.8	8
Other	19.4	6

13) Do you collect these items in your house? Why or why not?

(all results shown)

- No
 - n/a
 - yes, but i put them in a book. use them also for inspiration, but for personal projects
 - yes, because they give me joy to look at
 - No. again, I don't actively collect, stuff seems to just collect itself.
 - Not really, because I have other stuff for the humor at home.
 - n/a
 - No. The home is less whimsical.
 - I try not to collect computer parts at home, but it happens.
 - n/a
 - I collect similar things, or have larger collections of the same kind of thing.
- Why? Because I'm kind of a packrat, and I like toys.
- yes, for fun.
 - I collect way more stuff at my home office than at work.
 - no, I don't want to think about work too much when I go home. I try not to bring it home with me unless I have to
 - Not really. They are too tacky to plaster up at home

14) Do you collect any toys?

	Percentage	Responses
Yes	41.2%	7
No	58.8%	10
Total responses:		17

15) If you answered yes from the previous question, could you describe them?

(all results shown)

- robot pencil sharpener, switch pitch ball
- trading cards, star wars related items
- Yes, transformers... Yes I know what you are thinking, and yes it is a little odd. I go for the older versions from the 80s.
- n/a
- I collect bat toys and female action figures.
- lots of toys in different species
- Little scale model cars, novelty clocks, wind-up cars, comic books.
- For projects, not for personal reasons. to elaborate on question 16: it depends on the toy. I have mr. potato head and I enjoy that but maybe not something with tiny parts.

16) Do you like any toys that come with accessories?

	Percentage	Responses
Yes	50.0%	6
No	50.0%	6
Total responses:		12

17) What kind of characters do you like?

	Percentage	Responses
Animal	29.4	10
Robot	20.6	7
Human-like	8.8	3
Monsters	14.7	5
Aliens	14.7	5
Other	11.8	4

18) Rank the order of character styles you like most, 1 being the most favored.

	Average Score	Responses
Cute	3.47 / 8	17
Scary	5.47 / 8	17
Satirical	4.59 / 8	17
Cartoon	4.41 / 8	17
Realistic	5.88 / 8	17
Minimalistic	3.76 / 8	17
Retro	3.71 / 8	17
Abstract	4.71 / 8	17
Average Score		4.71 / 8

19) If you have other character styles you like that is not listed from the previous question please list them.

(all results shown)

- n/a
- **Handmade or Arts and Crafts**
- n/a
- **some designer's limited editions**
- **Other than characters, I like car-related stuff.**

20) Would you like a toy that can have practical function such as holding your pens? If so, would you like to suggest some functions?

(all results shown)

- **Yes. Keeping time, some type of usb or computer interface(hard drive, extra usb port), maybe a small light, music player, any feature that can fill time or stimulate creativity w/moving parts, or customizing.**
- **I go for a more professional look, so toys wouldn't be for me even if functional.**
- **yes, just like my robot!**
- **yes! business cards, ipod, calendar, mouse pad, post-its, notepad, clips, stapeler, hole punch, mirror, magnets**
- **Magnetized toy can also hold papers to metal surface**
- **Could be used to shoot soft foam darts or other office-safe projectiles at co-workers**
- **records voice messages (reminders)**
- **personal toiletries kit**
- **provides heat or cool breeze**
- **No way! The last thing I want in my cube is more practical. I've got enough logic there already.**
- **no**
- **No**
- **Sure. I also like stress-relieving exercise toys (like stress balls).**
- **i like toys that interact and entice other people to come to my desk and play**
- **Yes. Holding pens, etc.**
- **Holding sticky notes. Flash drive/mouse/other computer peripheral.**
- **Of course,it's useful.**
- **I would like something that you can simply stick your pen into and have it stick, like a big ball of rubber gel. That way I don't have to worry about them rolling all over my desk and onto my lap.**
- **it would help justify a grown up having a toy...**

Figure 37: Questionnaire from FreeOnlineSurvey.com

Some results that were expected from the survey were that the majority of cubicle workers were males in their 20's and 30's just like collectors of designer toys. Yet, majority of the cubicle who took this survey had little knowledge of the designer toy subculture. It was found that the majority of the cubicle workers who took these surveys were in design professions such as industrial design.

Most of them also had open space cubicle space since design professions tend to have this type of cubicle. However, the most effective aspects of the results were how the survey provided more insights into the user's cubicle workspace.

In their cubicle workspace, many of the cubicle workers said their space was in between being organized and messy. Many tend to have items like office supplies, filing cabinets, phones, computer/laptops, food/snack, and even toys. In their office supplies

description, many have items from pencils, pens, post-it notes, paper, and markers. Many claim they do decorate their cubicle in making it more personal, comfortable, inspirational, and enjoyable while they work. They decorate their cubicle workspace by collecting things from themselves, co-workers, friends, family, and projects.

Some of the things these cubicle workers collected were: cut-out from magazines, home décor, cartoon strips, electronics and parts, magnets, snack foods, and toys. The cubicle workers that collect toys were characters from films, television shows, and comics; plastic gumball machine characters and fast food restaurant toys. They store these collections on their shelves, table, and even mount them on the wall.

About a half would collect things outside of their office especially in their homes. Those that collect things at home actually enjoy collecting for fun. But those cubicle workers who collect things only in the office mention that it was not suitable for their home environment. Since they find it to be tacky, whimsical, and they remind them of work.

Mainly, this survey was to obtain suggestions about what kind of characters and functions they would like to see in a toy for cubicle workers. A majority chose animals as their favorite characters compared to human-like characters. Also, they ranked the top three character styles to be realistic, scary, and abstract. Some of the functions they suggested were to hold office supplies, personal toiletries, and engage interaction with other people.

5.4 Product Positioning Map

After conducting the user research, the next step in the design approach is to create a product positioning map. A product positioning map is a grid map used to pin point products that have accumulated or not accumulated in certain areas of the grid map. The product positioning map is used in this thesis in analyzing the custom toys found and functional toys.

The custom product positioning map is to analyze what kinds of toys that the artists have created. The product positioning map for custom toys is shown in Figure 38.

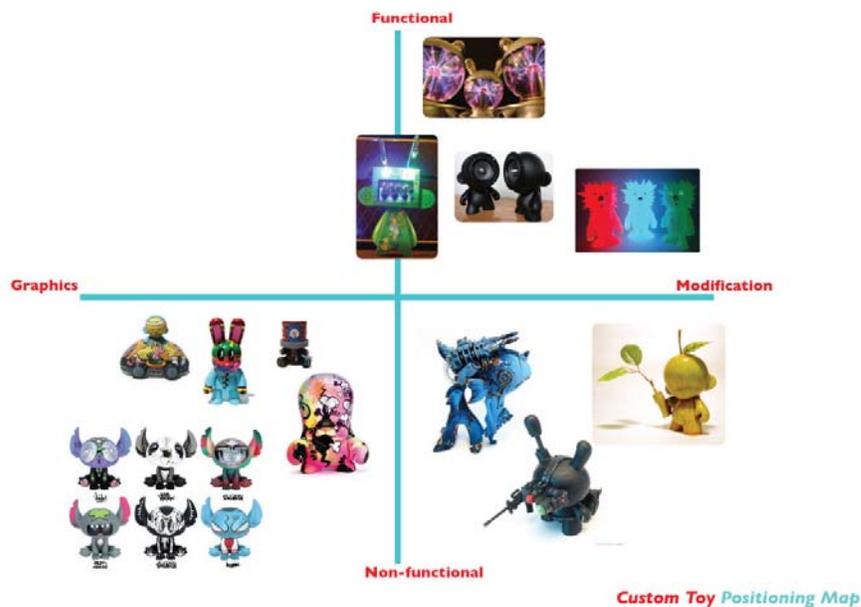


Figure 38: Custom Toy Positioning Map

From the product positioning map for custom toys above, the map shows on the lower left quadrant that these custom toys have been graphically painted on. It shows that these graphically custom toys are not functional thus making it become more as an

electronics toys found in the upper right quadrant of the map have functions like playing mp3 songs, lighting, and connecting to computer devices. The single function electronic toys found in the lower right quadrant of the map are mostly usb flash drives. On the right side of the quadrant, these toys have functions but are used also for decorative purpose. Especially the toys in the lower left quadrant, these toys can be found in the office workplace such as the tape dispenser snail and the hedge hog magnetic paper clip holder. On the other hand, there are hardly any decorative multi-functional toys which are on the upper left quadrant.

Overall, the product positioning map showed which kinds of toys are popular and unpopular. First, the custom toy positioning map was to find which kinds of custom toys are popular and then analyze which of these popular custom toys can be applicable in designing a new toy to adults. The popular custom toys were graphical, accessorized, and functional. The functional custom toy proves that there is potential market in analyzing what kinds of functions and features that the artist has integrated into these custom toys. Therefore, the functional toy positioning map was created to find the gaps in these toy markets. From the map, it was evident that there was a gap in the decorative multi-functional toy market. This was very crucial because most cubicle dwellers suggested several functions for their toy design.

5.5 Comparative Product Chart

The comparative product chart has been used as a designer strategy in investigating current products in the early stage of the design process. For this thesis, the

comparative product chart was used to compare possible functions from products that adults use which could be applied to the functional toy designs for adults. The chart created for this design approach is shown in Figure 40.

Comparative Product Chart

	Product	Product	Product	Product
Existing Products				
Strengths				
Weakness				
Potential Changes				

Figure 40: Comparative Product Chart

The chart will be helpful in comparing the strengths and the weakness of the functions that the product has. The strengths of the product function are features maybe integrated into the toy design. The weaknesses of the product function are maybe needed to be modified in the toy design. The potential changes will suggest some things that may need to swap, modify, and integrate into the toy design. The chart in Figure 41 is applied to the thesis project.

Comparative Product Chart - Product Functions

	Vending Machines	Toaster	Refrigerator	Washer
Existing Products				
Strengths	lots of storage organizes multi-function	storage pop up function	lots of storage organizes	stores cycle function
Weakness	bulky complicated functions	one function not enough storage	one function bulky	one function not enough storage bulky
Potential Changes	simply the functions make it less bulky replace snacks with office supplies	replace toast with business card storage	make it less bulky replace food with office supplies	make it less bulky replace food with office supplies

Figure 41: Comparative Product Chart - Product Functions

The chart compares four products which are a vending machine, a toaster, a refrigerator, and a washer. It determines that the vending machine had more functions that can be applied and modified into a toy design functions. Functions that store and organize snacks in the vending machine can be replaced with office supplies that the toy design can hold. Also, the dispense function can add some quirky fun qualities to the toy design.

5.6 Character Design Flow Chart

The most important step of the thesis approach is character design. Character design gives the theme of the toy's aesthetics and form. But it can be very broad as there are so many varieties of styles and forms of character. This can be very confusing in choosing which styles and forms to develop. This is why user research was done in order to understand which characters the people may like. A flow chart is created as a guide to decide which type of characters to pursue. The flowchart is shown in Figure 42.

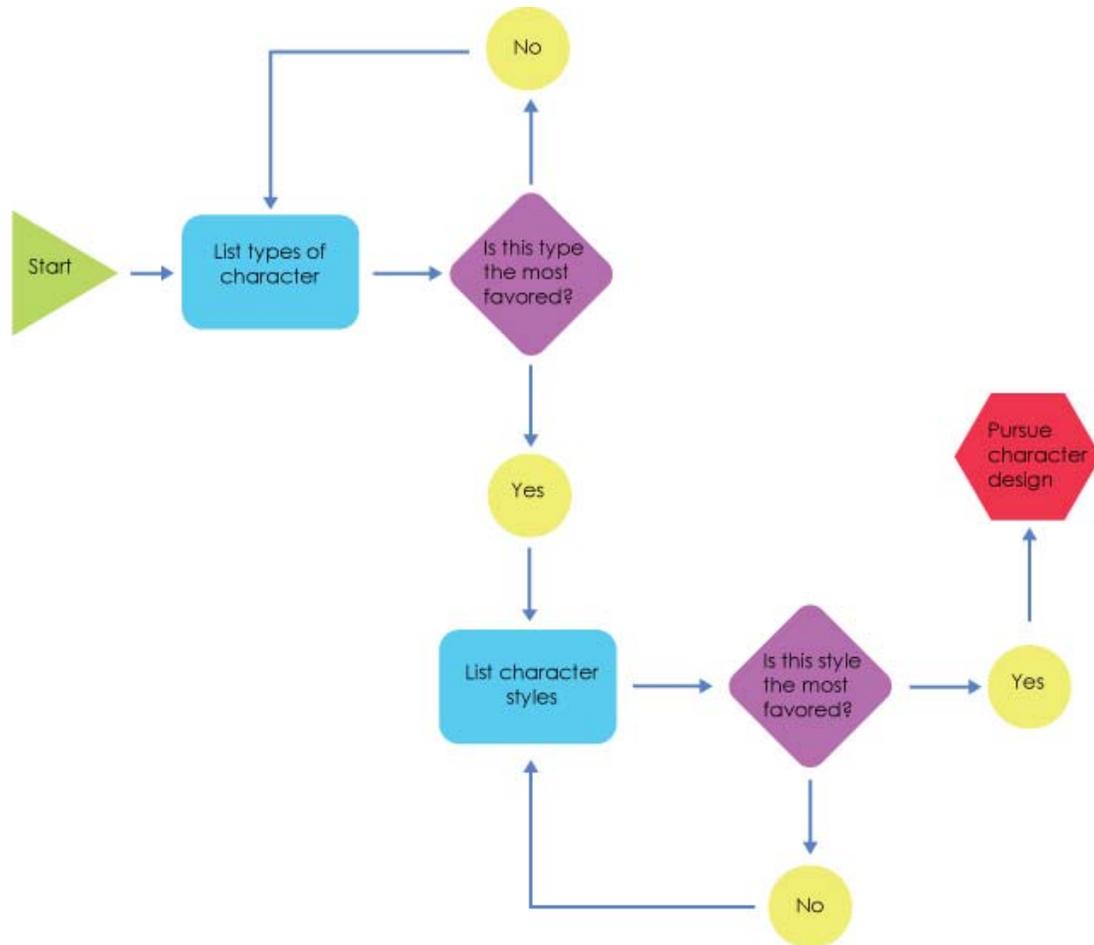


Figure 42: Character Design Flow Chart

The flowchart is to insure the character design is suitable for the adult market. The chart guides through these following steps:

- Put together a list of character types. Whether it is an animal, robot, monster, alien, etc.
- From the user research, use the data from the interviews and the surveys to narrow the most popular characters.
- Decide on the character type base on the most popular votes.
- Create a list for character styles. Whether it is cute, scary, satirical, cartoonish, etc.
- Use the data collected from the user interviews and surveys to narrow the popular character styles.
- Decide which character styles are suitable.
- Pursue the character type and style chosen and begin developing.

After choosing which character design to pursue, all the approach steps up this point will be gathered to set a design criteria for the toy development.

5.7 Design Criteria

Design Criteria sets the requirements on the restraints and qualities in designing a product. The criteria can optimize the design for the human, the technical, the production, and the marketing function for the users and producers. These criteria functions are compiled from the previous research and approach outlined. For this thesis,

the criteria will cover the features needed to design a toy successful for the adult market.

Figure 43 shows the criteria for a cubicle toy design.

Performance Criteria: Cubicle Toy

Human Function	
Size	able to fit on shelves, desk, and cabinet
Ergonomics	movable, not too heavy, good hand interaction
Aesthetic	quirky, fun, cute, simple
Technical Function	
Dispense	container the character is holding
Storage	organize small office supplies, small toiletries, small snacks
Lever	tail of the character
Product Function	
Distribution	cubicle dwellers, offices, gifts
Molds	character body, shell pieces, container piece
Material	ABS plastic
Market Function	
Character	armadillo
Target	cubicle dwellers, office workers
Advertisement	desiner magazine, office supply catalogue, novelty

Figure 43: Performance Criteria - Cubicle Toy

CHAPTER 6

DESIGN DEVELOPMENT

6.1 Overview

This chapter will demonstrate the approach outlined in chapter five as an example of how successful the approach can be when applied properly. This project will depict explanation for each phase of the approach. It will also detail the exploration of concepts and explain the process of taking a concept to the final prototype. As well, the method, style, and materials employed were selected due to a knowledge and familiarity of them. If another designer wishes to follow this example, be aware this method is not universal and can be modified to fit the designer's own comfort and abilities. From this method, other designers can learn a new paradigm of user-centered and user participated design process.

6.2 Idea Sketching

Visual communication is a key component of any designer's abilities. Sketching allows the designer to illustrate his/her ideas. With all the research that has been done, one must be able to support an idea or a product will never be produced. Now that a type of product has been selected the sketch phase begins. A free and loose style of sketching

is used to capture the feel of the product and how it will be used, without taking large amounts of time on one idea. The more sketches that are produced, the more ideas can be generated.

6.2.1 Brainstorming

The brainstorming sketches illustrate the character designs and product functionality created from the approach. These sketches are then further developed into two phases of concept sketches.



Figure 44: Function Concepts



Figure 45: Thumbnails of Character Designs

6.2.2 Concept Sketches Phase One

The following sketches in Figure 46 and Figure 47 illustrate the vending machine functions integrated into the animal's body.

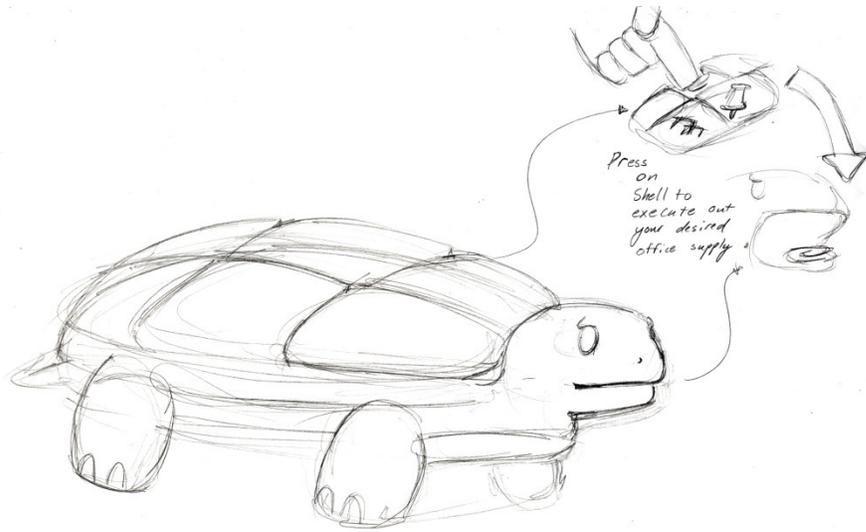


Figure 46: Turtle Sketch

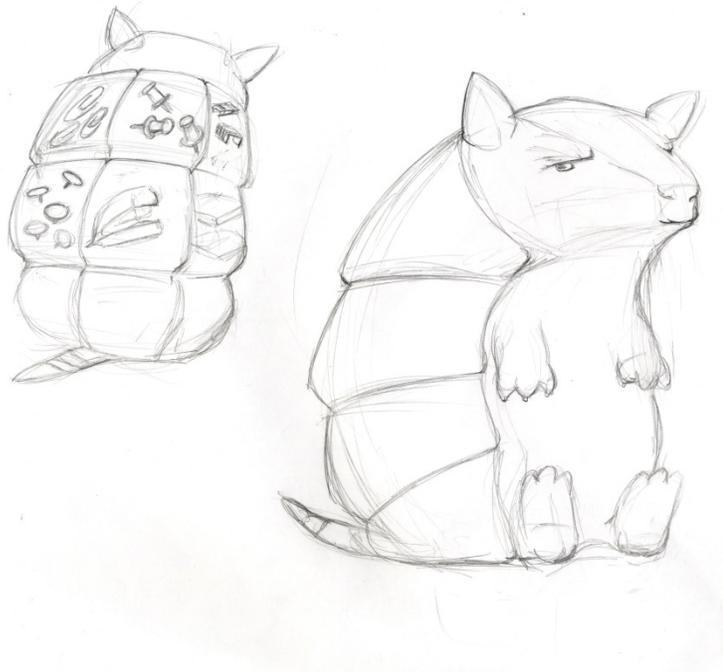


Figure 47: Armadillo Sketch

6.2.3 Concept Sketches Phase Two

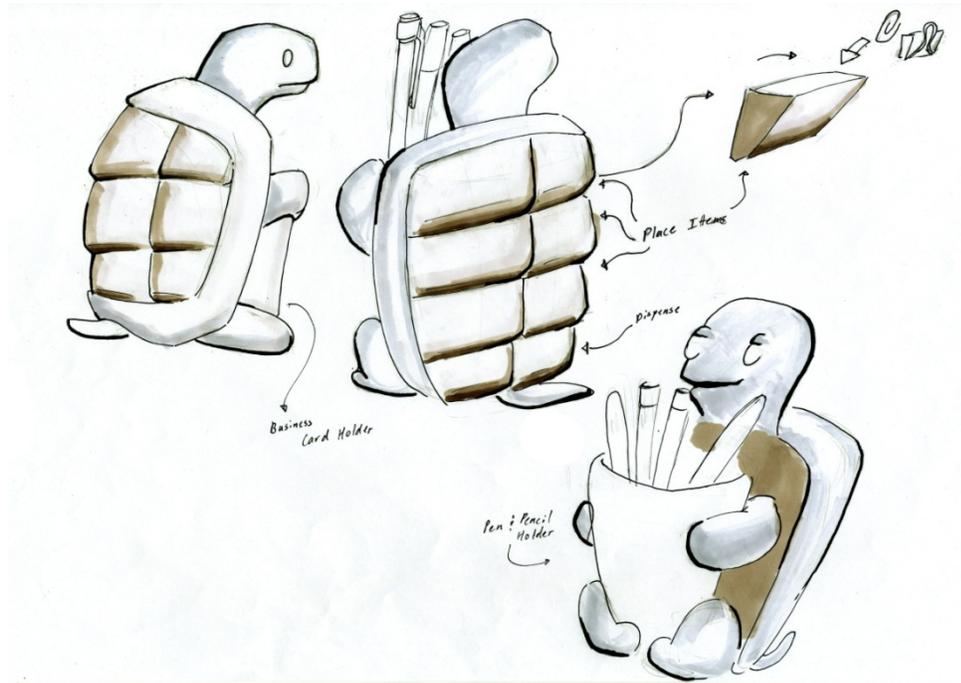


Figure 48: Turtle Concept

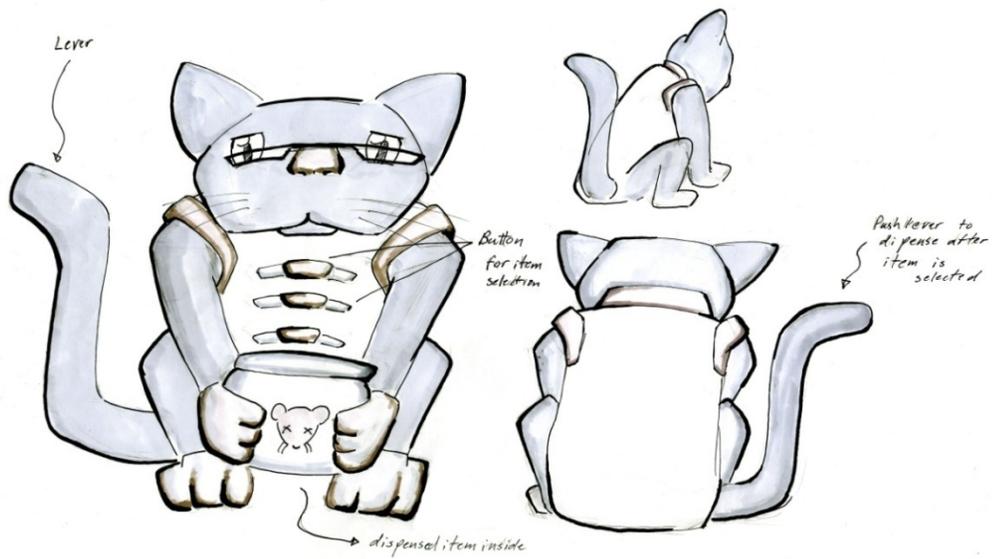


Figure 49: Cat Concept

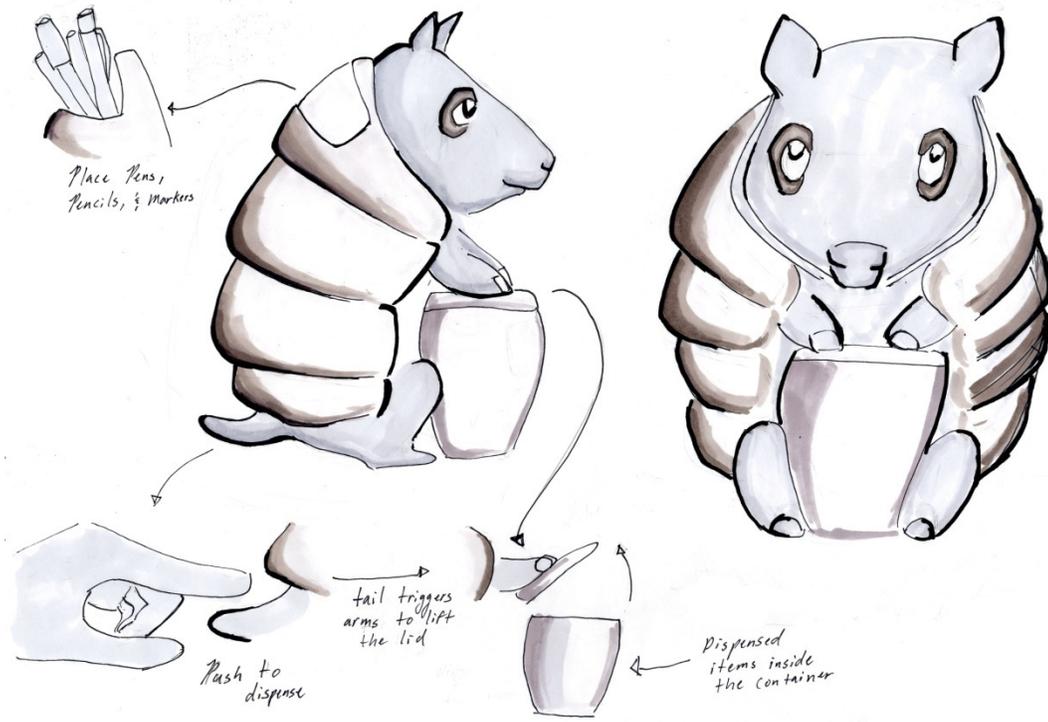


Figure 50: Armadillo Concept

6.3 Form development

The concept sketches act as a guide in building the concept into a product. Once a sketch has been selected, the sketch will be processed into a computer model in understanding the design in three dimensions. After the model has been examined, the next phase is refining the concept computer models.

The armadillo concept is chosen because its shell can be easily integrated into vending machine functions. The shell can organize and store small office supplies. In developing the form, studies were done on an armadillo's anatomy and distinct features shown in Figure 51.

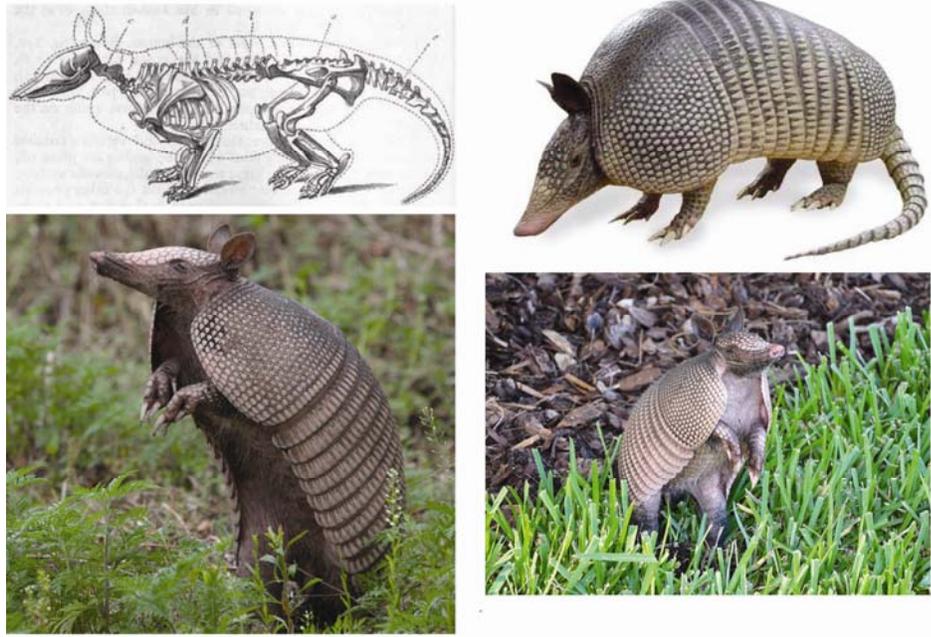


Figure 51: Armadillo Study

These studies were to help to refine the sketch concept and add more characteristics to the computer model. Some characteristic feature was incorporating the armadillo's long snout into the computer model.

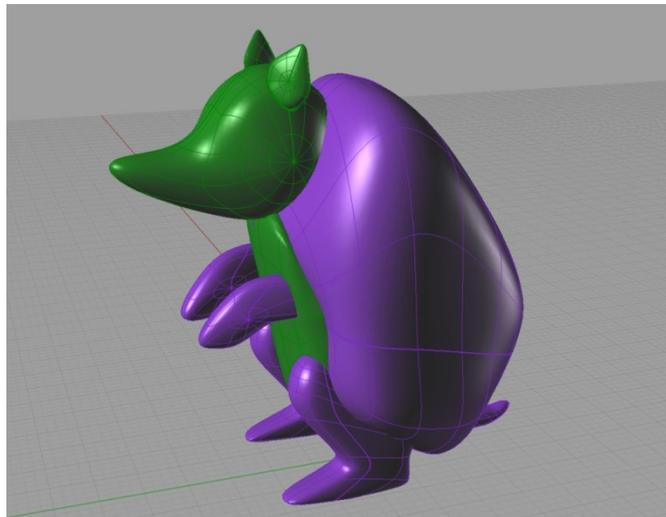


Figure 52: Computer Model 1

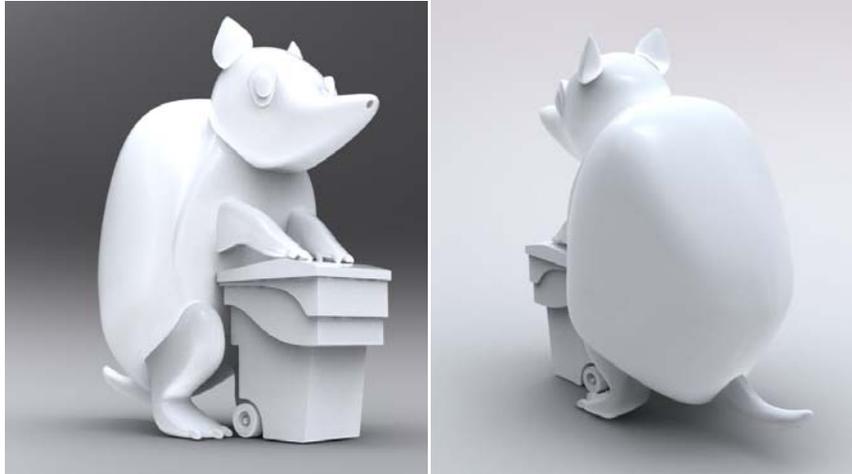


Figure 53: Computer Model 2

The computer model was further developed into three different armadillo characters. Each armadillo will hold a trash bin, a coffee cup, or a tea cup which the office item will dispense into.

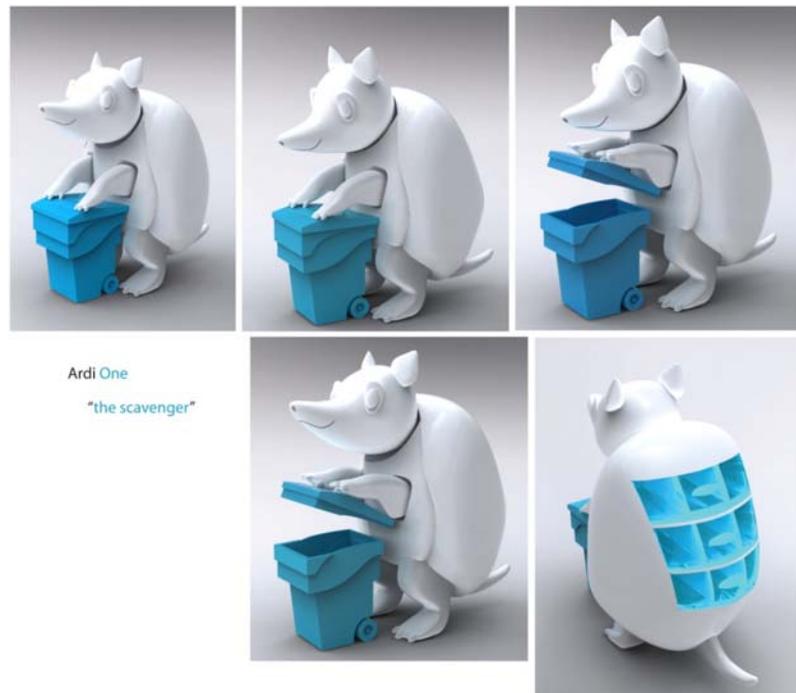


Figure 54: Armadillo with Trash Bin



Ardi Three
"the brewer"

Figure 55: Armadillo with Coffee Cup



Ardi Two
"the sipper"

Figure 56: Armadillo with Tea Cup

6.4 Concept Refinement

The next phase in the process is the concept refinement stage. In this stage, revisions are made on the computer model based on consumer feedback from the initial concept sketches and models.

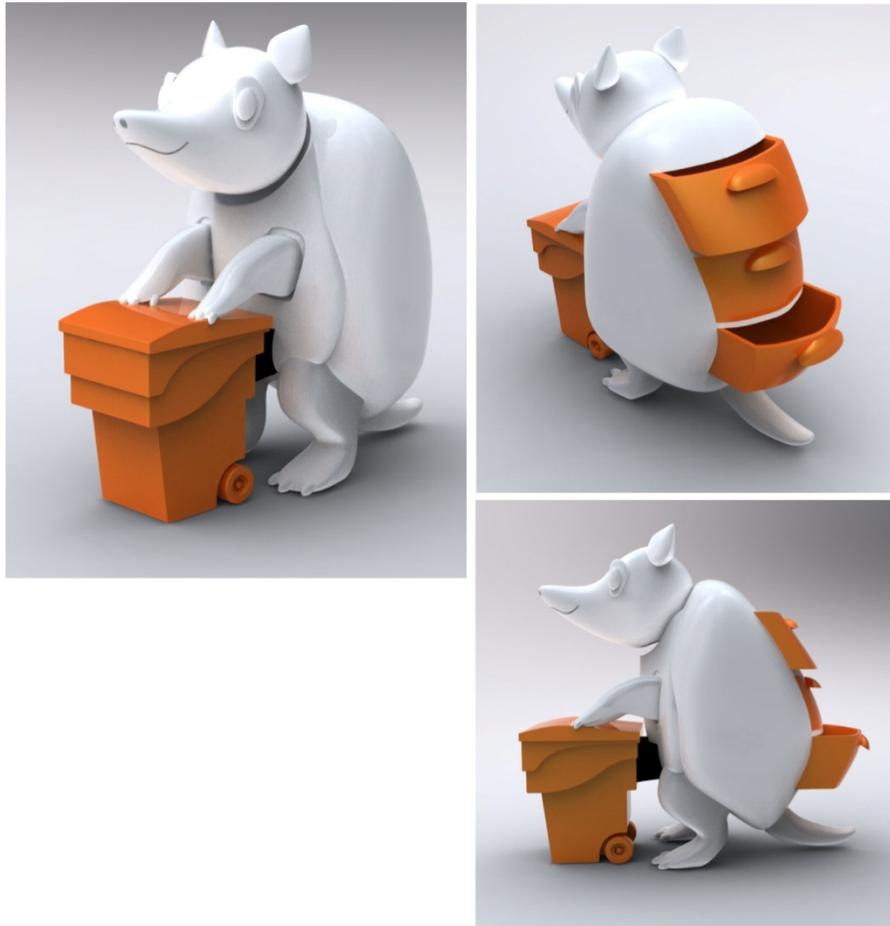


Figure 57: Armadillo with Trash Bin Refined



Figure 58: Armadillo with Coffee Cup Refined



Figure 59: Armadillo with Tea Cup Refined

6.4.1 Applications of Designer Toy Subculture

The applications of designer toy subculture are incorporating the vinyl toy aesthetics and the customizable capabilities into the armadillo toy design. The aesthetics of vinyl toys are known for their smooth clean look which was applied to the armadillo's overall shape. The armadillo's body is kept white in allowing the users to customize. Just like the custom vinyl toys, the armadillo's body can be painted, drawn, add decals, and to

whatever the user's desire to make his/her armadillo unique. Figures 60-62 show the blank template for each of the armadillo design.

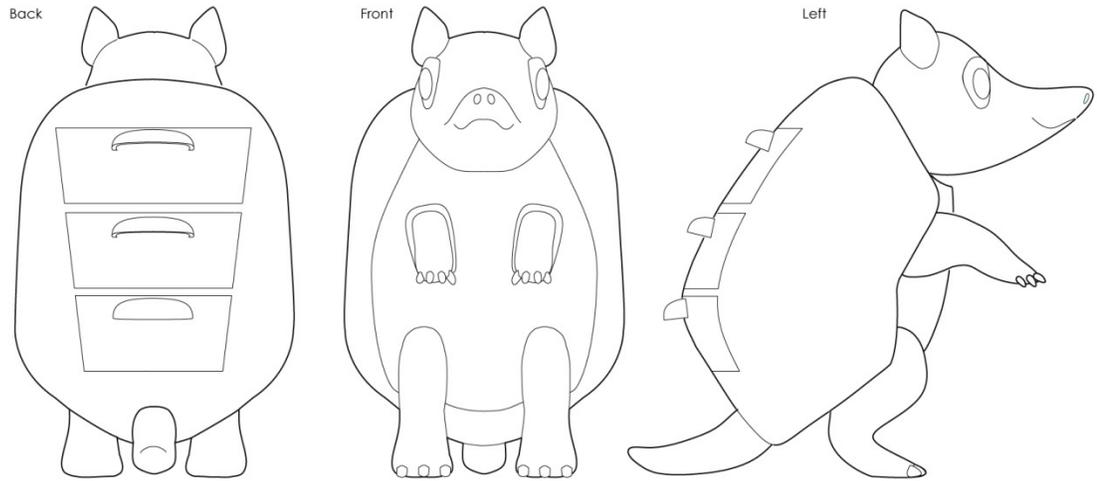


Figure 60: Custom Template for Trash Armadillo

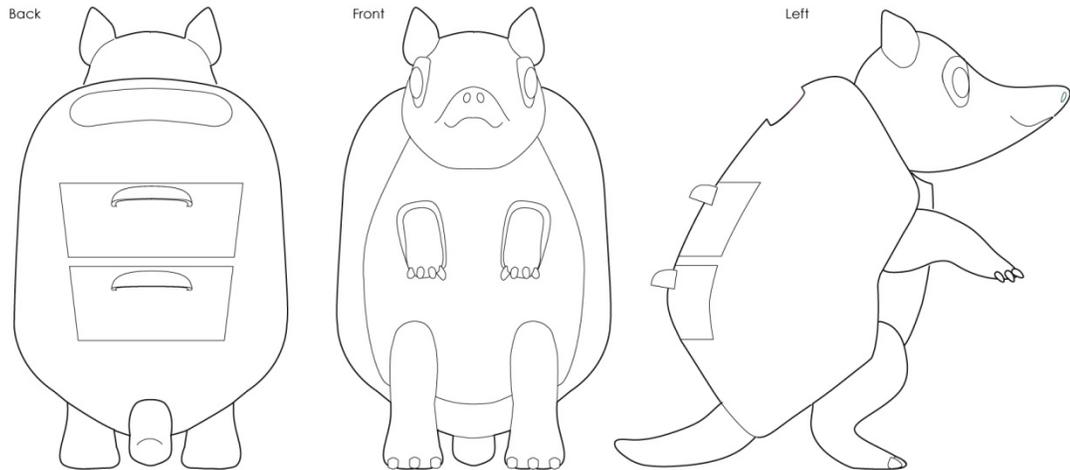


Figure 61: Custom Template for Coffee Cup Armadillo

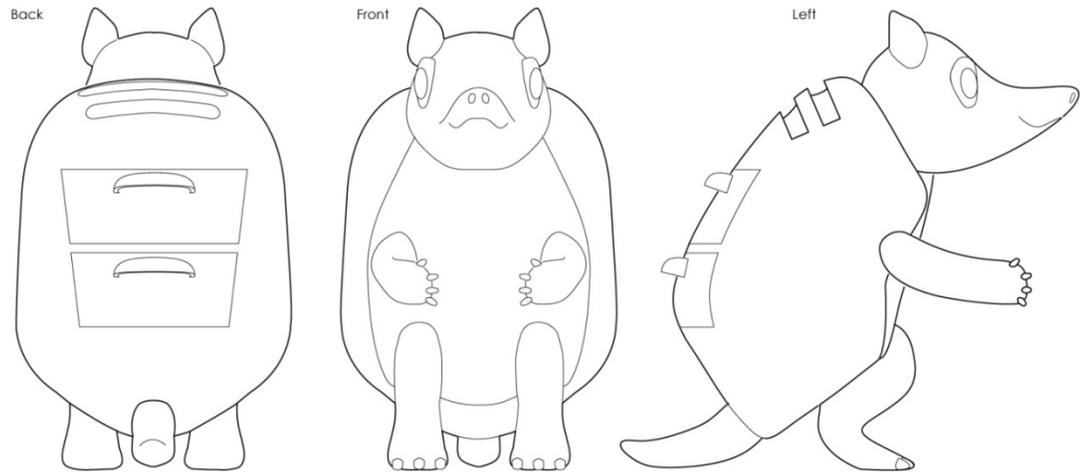


Figure 62: Custom Template for Tea Cup Armadillo

6.5 Final Design



Figure 63: Final Designs



Figure 64: Final Design 1 in Cubicle



Figure 65: Final Design 2 in Cubicle



Figure 66: Final Design 3 in Cubicle

CHAPTER 7

CONCLUSION

7.1 Closing Summary

Chapter one introduced an emerging toy market which was designer toys. It also described the origins and types of designer toys. Chapter two focused on the toy market trend from the past few years. It discussed that the toy market was categorized into three demographic groups which are kids (15 and under), teens (15 and above), and collectors (18 and above). It was found that there was growth in the toy collector market. Chapter three researched further into the collector toy market in understanding the collector's passion and the different types of collectors there are. Chapter four described the designer toy subculture in understanding the passion of the community and how it influences others. It mentioned the roles of each community in the subculture which are artists, toy collectors, and toy companies. Chapter five outlined the approach developed from the previous studies on toy collectors. The approach included user research of surveys, interviews, and observations along with other design research methods. Chapter six detailed the project modeled from the approach in chapter five. This chapter included the final project shown in both computer and physical model.

7.2 Implications and Applications of Study

The approach was created for designers to develop toy designs with practical functions and suitable for adults by incorporating elements from the designer toy subculture. In this thesis, user participation was heavily focused on to understand their wants and needs. This will be beneficial in the character design process as the users' most favored character will become the focal design of the toy. Compared to the methods used in designer toys, most character designs are designed based on the artist's own subjective style. The users' input will help generate more ideas on what practical functions the toy could have. The approach will also aid in the collector toy market in creating toys with practical functions.

7.3 Recommendations for Future Study

Future studies are still needed to be done on the collector toy market and the designer toy market. There are other collector toy markets besides the cubicle workers explored in this thesis. These other collectors may have different wants and needs based on their values, backgrounds, culture, etc. The designer toy market is still fairly new compared to traditional toys. New toys are still being released by new and upcoming artists and designers. These toys' aesthetics and style could affect a new trend. The trend should be studied and followed closely as the designer toy further transitions into the mainstream market. Overall, the challenge is to keep up with the ever-changing trends in which further research is encouraged in this study.

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