The Little Old Store From Pasadena:

A Study on the Diffusion Pattern of the Trader Joe’s Company.

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Abstract
In 40 years Trader Joe's has grown to become a chain of unique gourmet stores. This paper describes and analyses the company's geographic growth from its origin in Pasadena, California. The company's diffusion has been influenced by its drive to seek out inexpensive leases and areas where warehousing is simple and efficient. Trader Joe's expansion pattern can be characterised as a hierarchal diffusion. **Key Words: Trader Joe's, diffusion, expansion diffusion, hierarchal diffusion.**

Introduction

All innovation has a lifecycle: birth, growth and decline. In this paper, I will examine the growth of the retailer Trader Joe's, a chain of unique grocery stores, which had it's origin in 1967 in Pasadena, California. From that one store, Trader Joe's has become a nationwide chain with over 250 stores in 18 states. Trader Joe's has followed an expansion diffusion pattern across the United States. Cliff (1981) defines an expansion diffusion pattern as a level of spread where the innovation has a source and diffuses out to new zones. I would compare this type of innovation to wildfire through a forest. Trader Joe's growth has four phases: Phase one 1967 -1977 (the beginning); Phase two 1978- 1988 (a sound investment); Phase three 1989 - 2000 (making the leap to the east coast); Phase four 2001 – 2007 (filling in the network).

Literature Review

To study diffusion, let's look at the process of an innovation, from it's inception to it's decline. Allaway (1994) defines diffusion studies as a charting of an innovation which changes the patterns of the area to which it is introduced (1994). So diffusion implies movement. Its earliest roots are not within geography, but lie in anthropology with the Hagerstrand model (Hudson, 1972). The Hagerstrand model is a wave type model which shows diffusion in waves moving outward from a point of innovation (Allaway, 1994; Hudson, 1972). That point of innovation is called the core or heartland. Areas which receive the innovation later are called the periphery. This term also applies if the innovation is not accepted by that area. The study of diffusion may never be fully satisfied because of the individual nature of innovation. There will never be one theory that can fully explain innovations because of their diversity, i.e., the internet, rap music, language development, etc.

Barriers to diffusion

All growth is limited by visible and invisible barriers to diffusion; such as mountain ranges, class, social, or transportation lines. These barriers are divided into three spheres: social, physical and transport. Social barriers are created by human interaction. For example, people form groups and move in networks limited by these relationships. In the early stage of diffusion, the lack of adopters can be a social barrier. The lack of adopters means that there is no one to actively promote the innovation (Allaway, 1994). In his 1997 study, Abrahamson shows that the "social networks" which provide the information, help to attract or deter diffusion potential. The diffusion potential is how far an innovation can spread. Those "social networks" will also affect the speed and completeness of diffusion; if the originator of an innovation is not well-respected or socially connected, the diffusion will be slower and not spread geographically as far (Abrahamson, 1997). Regarding a physical barrier to diffusion, Thorpe showed that the "micro location" within a city is crucial to a successful business. Sites that are outside of the town centre lower the rates of diffusion (1991). These out of centre sites lower the diffusion possibilities afforded by the centre location as noted in Allaway, 1994, because there is a greater concentration of activity in these areas. Transport as a barrier to diffusion involves both means of transportation and potential adopters of innovation. Transportation can be a visual stimulus. Foot traffic and advertising help to generate the first adopters of innovation. If a site is located too far from effective transportation the innovation will not diffuse completely. Therefore, transportation is the most effective in the local area (Allaway, 1994). These three barriers to diffusion will ultimately limit the expansion of an innovation.

Diffusion Models

Diffusion models can be used to explain the performance and growth of a retail chain on a national level. There are hundreds of models and each has it's supporters and detractors. A Meyer and Brown study of the Friendly Ice Cream Company illustrates the basics for spatial diffusion in a retail chain: "(1) the spatial pattern of acquisitions, (2) spatial variability of market potential given that the market meets threshold requirements, (3) market elasticity with respect to population, (4) logistical factors which create the organizational infrastructure through which the firm is operated, and (5) capital availability." (1979). These factors help to point out the basic level of diffusion, but to fully develop a diffusion model these elements must be examined. Another model from Laulajainen, points to warehousing as an important factor in diffusion because warehouses are a fixed cost which will allow for the economic survival of a retail chain (1988). Firms which allow for this pattern use a "contagion" diffusion model (Laulajainen, 1988). Like charting the progress of a disease across a city, the "contagion" model shows how firms' choices can affect their growth patterns. Another researcher Hudson describes an "age-area model" and "wave diffusion model" (1974). The "Age-area model" of diffusion postulates that with a greater passage of time, the area covered by diffusion will likewise increase (1974). The "wave diffusion model" is explained in the pattern of a wave, moving out in all directions from the point of innovation. Many diffusion studies stress a bandwagon theory, a positive feedback effect which begets greater levels of diffusion as the process forms a self-sustaining loop (Abrahamson, 1997). All of these diffusion models have been applied to retail chains, however because of the individuality of diffusion; they can only fully apply to the retail chain studied.

Patterns of Development

In addition, all growth takes on a pattern that can be quantified. The retailer Wal-Mart was studied by Graff in 1993. Graff states that Wal-Mart's preoccupation with company development has been largely due to its desire for a better brokering position with suppliers in obtaining name brand goods (1993). That desire led the retailer to open warehouses in advance of opening any new stores, in a reverse hierarchical pattern (Graff, 1993). Meyer and Brown state that as a firm grows and has higher levels of capital, the patterns of diffusion will change focus from store location to logistics to market area (1979). Growth patterns that are successful all have one thing in common: the area in which they grow must be receptive to new retail firms. Thus, market research becomes a larger portion of what will affect further growth.

Market Areas

The market area must be studied to determine where there is demand for new retail firms. Market areas are defined as the places that a retailer can draw from for customers and resources for business (Allaway, 1994). Central place theory has been used in geography to explain all facets within the specialty of economic geography. A basic explanation of this theory is that because of travel cost factors, services are spaced at regular intervals across an area. The central place theory shows that a customer will, in an effort to reduce travel cost, visit the closest retail firm in their environment. Laulajainen (1988) states that the central place theory is not the optimal form of analysis for a retail market area. Some of the defects of this theory are; the non-flexibility of the model (it does not allow for several competing retail firms to be in the same market area) and that a single organization may have multiple stores in one city centre (1988). Market areas can be shown as the physical manifestation of customer choice.

Methods

The data collected for this project consists of: census data and data collected from Trader Joe’s and interviews with Trader Joe’s personnel. Numerical data on the Trader Joe’s Company was collected by myself at the company headquarters in Monrovia, California. That data includes store locations, phone numbers, management names, and opening dates for all Trader Joe's stores from 1967 to February 2007. Store location data was plotted using a GIS and the website www.batchgeocode.com. All population data was collected from the www.census.gov. Each store location will have two variables assessed: population of the city and distance from the origin. Population data will allow for the deciphering of the diffusion pattern which Trader Joe's is displaying. As in Graff (1993), Meyer and Brown (1979), city size showed whether a hierarchal diffusion pattern was present. Distance from the origin can demonstrate any locational preference when considering the building of new stores (Hudson, 1972 and Laulajainen, 1988). I also conducted interviews with Trader Joe's employees about the reasoning behind some of the company's decisions and general history of the company. The aim of this analysis is to reveal the pattern of Trader Joe's diffusion, distinct periods of growth, and to gain greater insight on who is Trader Joe's target customer.

Data

Year Of Opening	City Population (in thousands)									Total Openings
	<25	25-50	50-75	75-100	100-250	250-500	500-750	750-1,000	1,000+	
	2	5			1				1	9
1967-1977	22%	56%			11%				11%	
	2	10	6	3	4		1	1	3	30
1978-1988	7%	33%	20%	10%	13%		3%	3%	10%	
	37	42	31	17	31	11	10	5	6	190
1989-2000	19%	22%	16%	9%	16%	6%	5%	3%	3%	
	7	11	11	4	4	5	2	1	3	48
2001-2007	15%	23%	23%	8%	8%	10%	4%	2%	6%	
Category Total	48	68	48	24	40	16	13	7	13	277

Figure 1- Number of Trader Joe's Openings by Population Size of City: 1967 – 2007

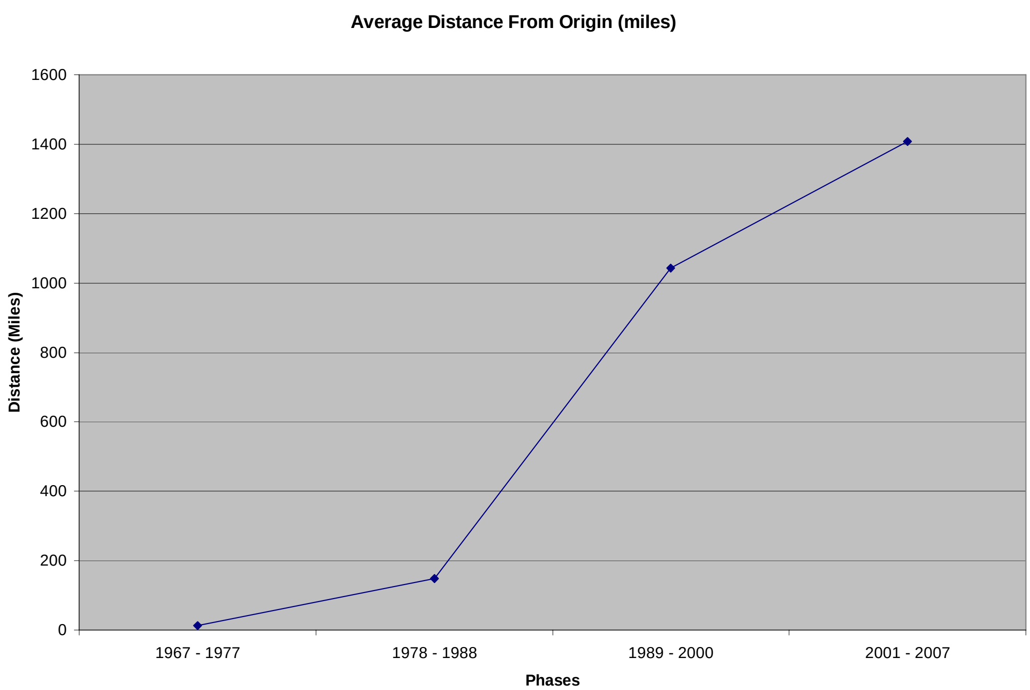
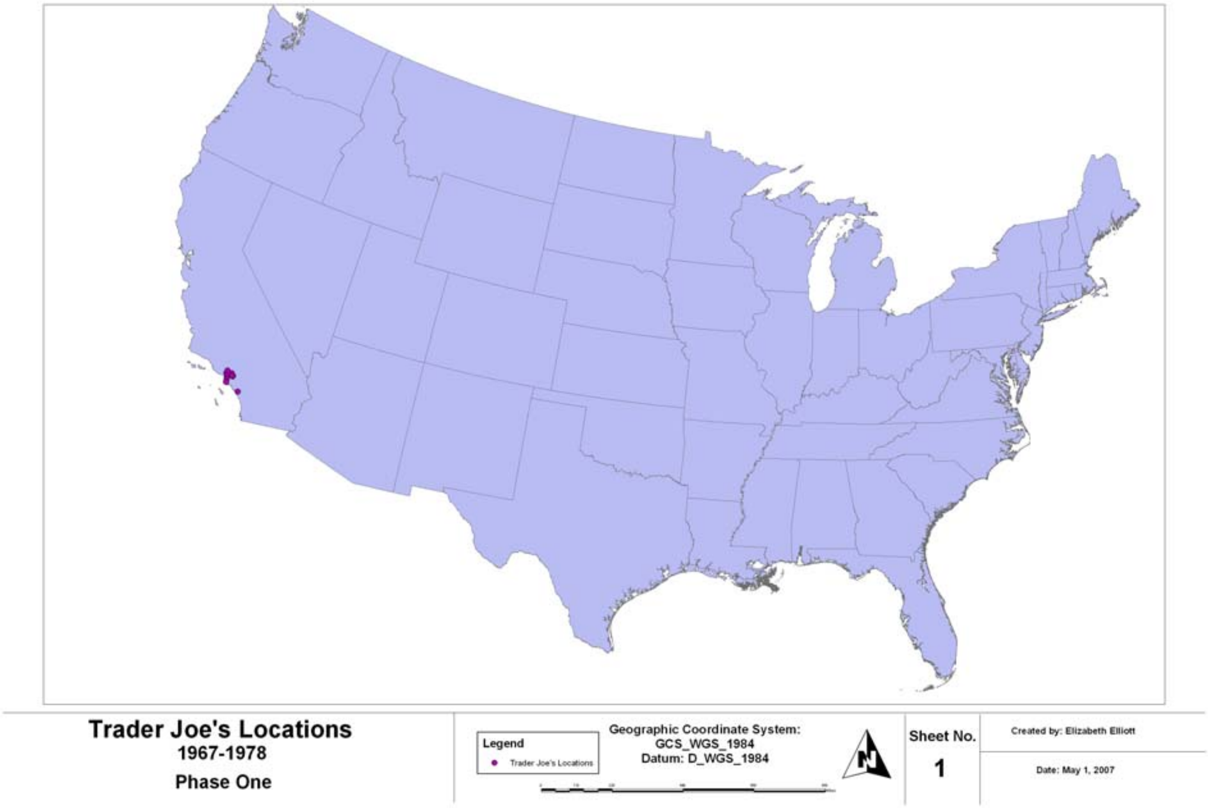


Figure 2- Average Distance from Origin


Trader Joe's Locations
1967-1978
Phase One
Legend
Trader Joe's Locations
Geographic Coordinate System:
GCS_WGS_1984
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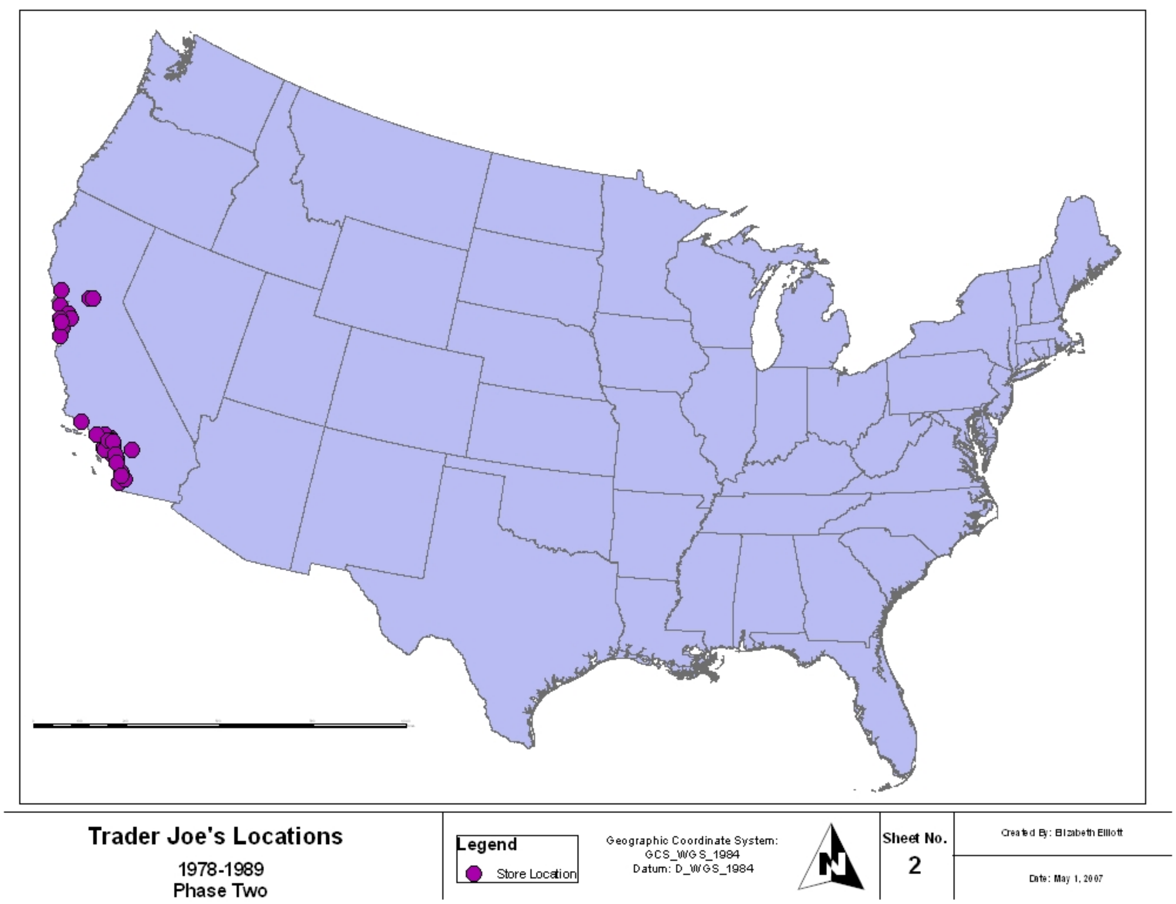
Date: May 1, 2007

Figure 3


Trader Joe's Locations
1978-1989
Phase Two
Legend
Store Location
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Datum: D_WGS_1984
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Date: May 1, 2007

Figure 4

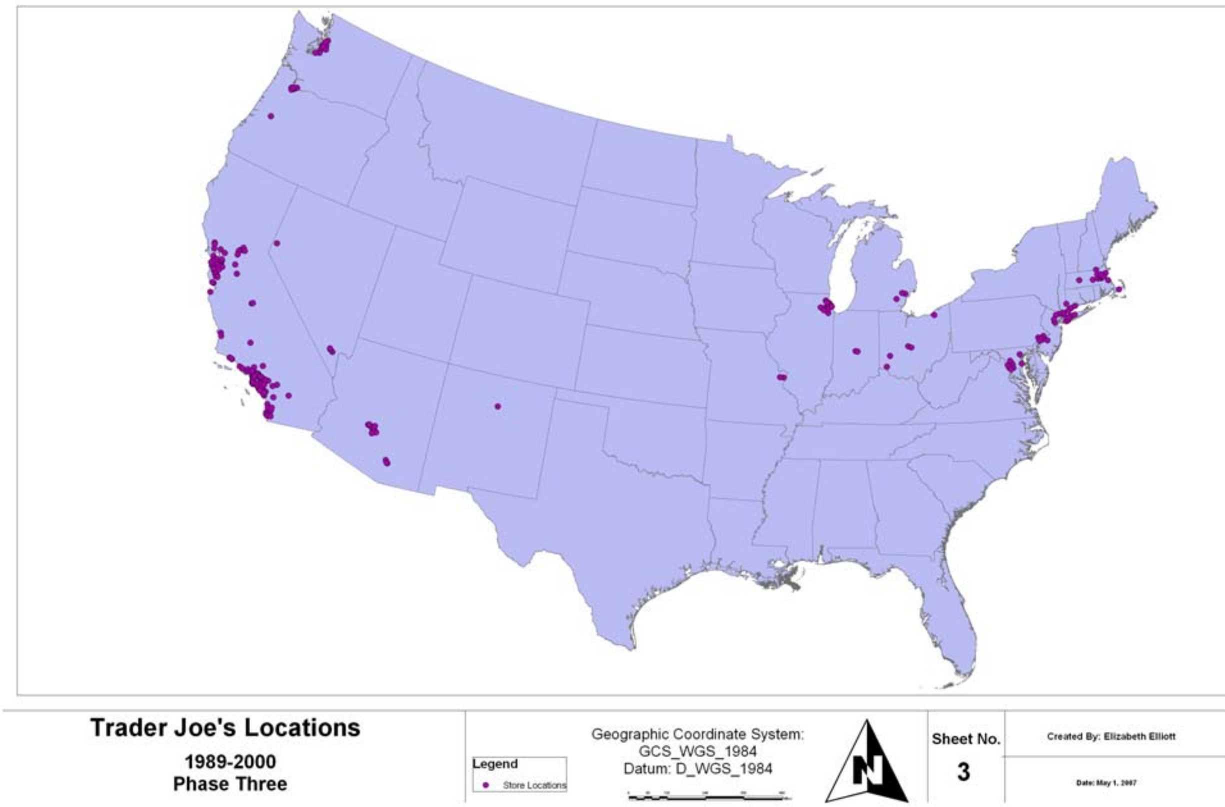

Figure 5

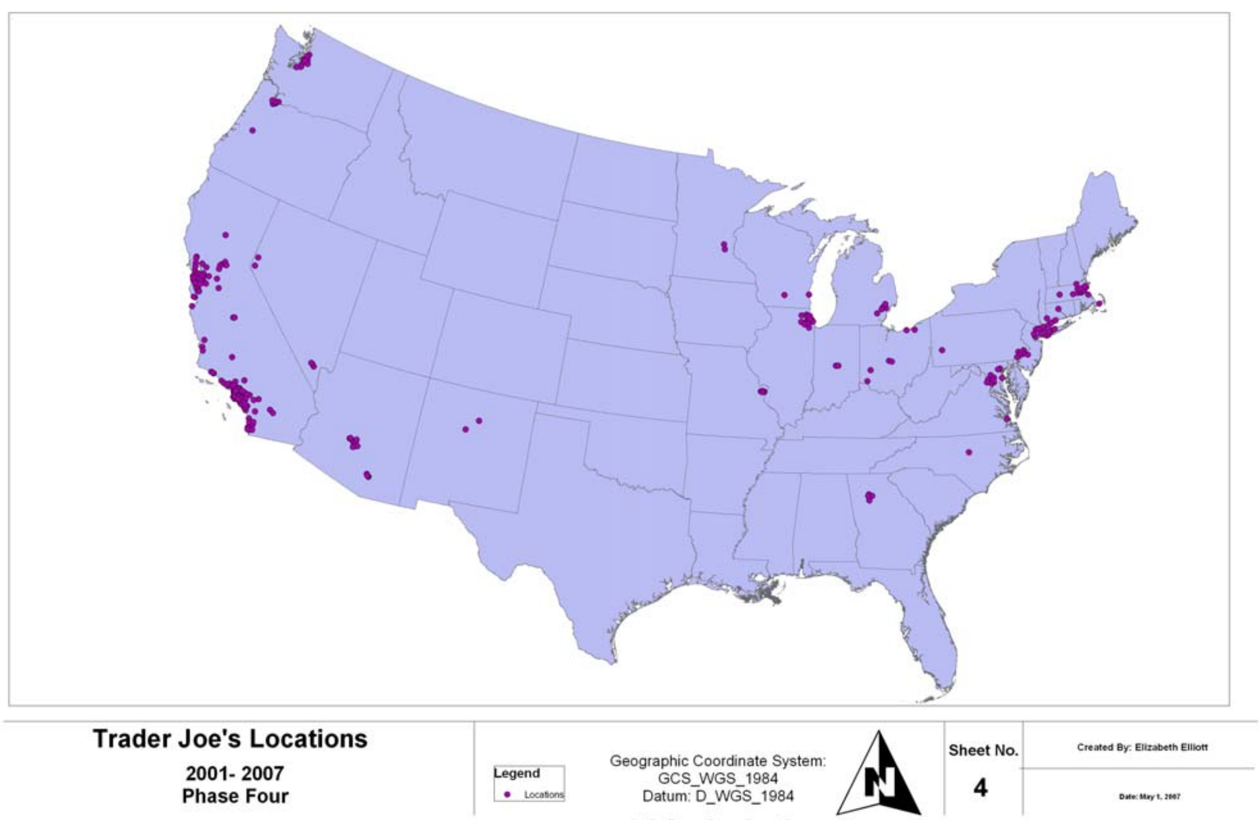

Figure 6

Interpretation

Phase One: 1967-1978 Beginning

Trader Joe's was founded by Joe Coulombe, the entrepreneur who took seven Pronto Markets (a chain of convenience stores) and turned them into Trader Joe's. Coulombe was on vacation when he had a sudden thought about his Pronto Market locations. He was worried that the new chain 7Eleven was going to put him out of business. Coulombe wanted a format change and used the theme of his vacation to inform his decision. He knew that people tried new things when they were on vacation and that people loved to travel to exotic destinations. In 1967, Coulombe returned from vacation and shut his Pronto Markets down to reopen them as Trader Joe's. Trader Joe's had cedar planked walls, Hawaiian shirted crew (staff), discounted gourmet food and drink items. Coulombe purchased bargain wine and cheese from overstocked distributors and importers. The national brands were removed from all of the stores so that Coulombe did not have to compete with other markets' prices. Coulombe said that Trader Joe's was for "the over-educated and the under-paid." (Coulombe, 2007)

When looking at the seven stores, I was told that there was originally no warehouse that supported these stores. The only storage available was in the store itself, which is not much, considering that these locations were only 12,000 sq. ft. converted convenience stores. These stores were located primarily in cities with less than 50,000 residents (figure 1), by no means a disadvantage. The smaller cities that were selected in phase one, helped to develop the culture of Trader Joe's as the neighbourhood store with an eclectic mix of necessities and well-priced luxuries. Figure 2 and 3 point to the localized nature of Trader Joe's beginnings; all of the stores being located within 50 miles of each other the average distance from the origin was 12 miles. That small radius allowed for word of mouth advertising which has proven to be quite successful as the excitement generated by one store's success would assist the others as well (Dinlersoz, 2004).

Phase Two: 1978- 1989 A sound investment

The second phase of Trader Joe's development included a purchase by the German discounter Aldi in 1978. Aldi is a German company that runs a very successful chain of discount grocery stores in Germany and other parts of Europe. Coulombe was resistant to sell to foreign investors. At first, he felt the differences between the two companies seemed too great for them to work well together. Aldi is a company with a different objective than Trader Joe's; they are a discounter more like Big Lots (e.g., good prices, poor quality). After years of negotiation, Coulombe reached what he called a very good price, along with his active involvement in running Trader Joe's to allow for a smooth transition. Many on the Trader Joe's side were worried that everything would change when Aldi took over. But one long time employee noted that the only thing that changed was the availability of more European products and better health care options for the employees. In the beginning, Aldi purchased Trader Joe's to have a presence on the west coast of the United States with no intentions to spread across the nation. In this phase, the average distance from the origin is 149 miles.

This second phase in Trader Joe's diffusion had grown to cover both northern and southern California (figure 4). These locations were focused on the edges of the large population centres of San Diego, Los Angeles, and San Francisco. One store manager said, "Trader Joe's has always had a business model which used cheap leases to drive good profit margins for the company."(Dakkak, 2007). The company does not buy real estate and therefore can place those monies back into the business. "We see ourselves as a destination for consumers; we can turn a small strip mall on the edge of town to a retail adventure destination."(Coy, 2007). These out of centre sites that Trader Joe's chooses, stand in direct opposition to Thorpe's postulation that out of centre sites limit development (1991). Trader

Joe's marketing itself as a retail adventure must help to add to the theme that each store has its own quirky location on the edge of the city. For example, store number 55 is a converted movie theatre where the floor gently slopes to the southeast, and unwatched shopping carts may careen down the aisles.

Phase Three

1989- 2001 Making the Leap to the East Coast

The third phase of Trader Joe's diffusion as a company showed the greatest expansion both in number of locations and in distance from the Pasadena California origin (Figure 1 and 2). The person most responsible for this rapid expansion was John Shields. John Shields became Trader Joe's CEO in 1989. He initiated the move to the east coast of the United States for Trader Joe's (Shields, 2007). After researching where to expand their locations, Shields believed that the most receptive area would be the 500 mile corridor between Boston and Washington D.C. Shields dubbed this as "Trader Joe's Country" (Shields, 2007). Why did it appeal to the company? The area is home to more colleges and universities than any other area of the United States. According to its founder Coulombe, Trader Joe's target customer is "the over-educated and the under-paid." This area is full of educated people located in close proximity to one another. If Trader Joe's wanted to keep its status as a discount gourmet store, the warehousing needed to be carefully planned. Laulajainen, showed that the image of a company entering into new markets is the most essential part of business development (1988). Most of the stores in the east coast expansion are in that corridor that Shields first imagined. The other locations are strategic in other large population centres of the Midwest (Figure 5). The average distance from the origin in this phase was 1,044 miles. The east coast had a demand for Trader Joe's stores, but Shields wanted to keep the same feel as the California stores: happy, high energy staff in a relaxed environment. To assist this process, he imported real California Trader Joe's employees as the management of these new stores. He said that people from California are just different, and that fits with Trader Joe's image of the unique and appealing.

Phase Four

2001- 2007 Filling in the Network

Phase four began with the retirement of John Shields. Dan Bane became Trader Joe's CEO in 2001. Now that Trader Joe's was located on both coasts, it was ready to build up the new regions that it had begun in phase three. These stores are outpost locations in the chain; Atlanta, St. Paul, and St. Louis. Outpost stores are the initial points where additional stores will be set up around like spokes in a wheel (Figure 6). Warehousing systems have been created and suppliers are ready: the new regions are poised to expose many more to the Trader Joe's way of business. The company receives letters from people in these regions all the time; asking to open a location closer to their home. "Customers ask this all the time, "Why isn't there a store in Colorado?" and the answer is that as a company we have a very slow growth rate. There is also the problem of the Rocky Mountains. Before we (Trader Joe's) move into an area and open a store, we need warehouses that can supply the goods that the stores will need. Until our research shows that an area can support both the warehouse and the stores we will not open in that area (Duarte, 2007)." This most recent phase of the company may be the most exciting in the future. Although the average distance from the origin was 1,408 miles with a large number of new locations on the east coast, the Midwest, and California, Trader Joe's did not forget its origin. California remains a developing region for expansion.

Discussion

Was the diffusion that Trader Joe's demonstrated a true expansion pattern? With each phase there was a different diffusion method. Phase one was the only time that the expansion diffusion pattern was visible. The origin had eight stores spreading out from that location.

There was no warehouse supporting these original stores, which is the major reason behind the lack of growth beyond the southern California region. Without the extra space that warehouses provide, Coulombe was limited by what his stores could hold (Coulombe, 2007). That lack of warehousing space limited Trader Joe's diffusion until the second phase, when they received a much better bargaining position with suppliers due to increased buying power. In the second phase, Trader Joe's expanded to northern California. This move bypassed all of central California, which makes this phase indicative of the relocation diffusion pattern. Defined as when an innovation moves in a hopping motion bypassing some regions to land in other areas (Cliff, 1981). This method was used to ensure the success of the chain and to become aligned with the new owner's vision for Trader Joe's: to cover the west coast of California. Phase three included the risky move to the east coast that has provided large dividends for the company. Moving into a new region, Trader Joe's is using the hierarchal diffusion pattern. The hierarchal diffusion pattern is where there is an order and sequence to the diffusion pattern (Cliff, 1981). The west coast stores' tremendous profitability has aided Trader Joe's in its expansion into this untapped market. Phase four continues the expansion that Trader Joe's entered in phase three. Thus, Trader Joe's manifests the hierarchal diffusion pattern, as seen in phase three.

Conclusions

My hypothesis was proven invalid. Trader Joe's followed an expansion diffusion that was not shown to be true, but a hierarchical diffusion was the more evident pattern. Diffusion patterns at Trader Joe's are changed with each phase; however, the final two phases illustrated hierarchal diffusion. Trader Joe's growth was primarily driven by a desire to keep costs low and profits high. To accomplish these goals, they stress: cheap leases, private label goods, effective warehousing, and slow growth to keep demand high. The aspects of Trader Joe's that could be researched in greater depth are: 1) evolution of the warehousing system, 2) development of private label products, and 3) location selection within metropolitan areas.

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