S-Lab Final Report
Mark Baptista, Kaine Gill, Dan Hoopes, Andy Storm
May 15, 2008
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>I.</th>
<th>Summary of Recommendations</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>II.</td>
<td>Overview of Coldpack System</td>
<td>4</td>
</tr>
<tr>
<td>III.</td>
<td>Packaging in the Cold Channel</td>
<td>9</td>
</tr>
<tr>
<td>IV.</td>
<td>Selection of Markets for Analysis</td>
<td>12</td>
</tr>
<tr>
<td>V.</td>
<td>Detailed Analysis of 4 Promising Markets</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>a. Traditional Grocery</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>b. Specialty Grocery</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>c. Pharmaceuticals</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>d. Specialty Medical</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>e. Overview of Recommendations</td>
<td>22</td>
</tr>
<tr>
<td>VI.</td>
<td>Methodology</td>
<td>24</td>
</tr>
</tbody>
</table>
I. SUMMARY OF RECOMMENDATIONS

This paper provides a strategic overview of Coldpack and offers recommendations for the company to grow sales of their Airliner packaging solution. A brief summary of recommendations include:

- Identifying and prioritizing target markets for Airliner packaging will help focus the efforts of the sales team and stimulate a deeper appreciation for the specialized needs of a uniform set of customers.

- Of the 4 markets we explored, Specialty Grocery is the first target market the sales team should target.

- With only two active sales associates, Coldpack needs to aggressively pursue the specialty grocery market as this is where they have the most experience. At least one sales associate should be dedicated full-time to developing business with the likes of Whole Foods and Wild Oats.

- Specialty medical is a very promising market with high value applications that may be very profitable, however this market will likely be difficult to penetrate, have higher competition and have a longer sales cycle.

- Traditional fresh grocers such as Walmart are unattractive targets at this time.

- Coldpack should also consider prioritizing other markets that we did not investigate including online retailers like Omaha Steaks and Peapod.

- The company should focus on verticals as soon as possible.

We believe the above recommendations will help Coldpack achieve their three strategic goals of generating new sales to support expanding capacity, operating with positive cash flows, and establishing credibility with new clients by building a diverse book of new business.
II. OVERVIEW OF COLDPACK SYSTEM

History
Coldpack System began as a venture capital supported start-up in April of 2000. Operating from Southern California, the company faced volatile customer demand, poor product quality, and limited production capacity while trying to sell a technical product to customers who were used to commoditized Expanded Polystyrene packaging solutions. In 2003, the creators of the original Coldpack technology sold licensing rights to Charles Lehideux, a prominent French businessman. In 2005, Mr. Lehideux purchased rights to the entire company and established corporate office locations in France and California.

Product
Coldpack’s primary product offering, the Airliner, is based on very complex technical processes. Over 12 different types of materials are used to create the Airliner, which is an inflatable bag inserted into a cardboard box to keep shipped items cool. In addition, the ribbing in each type of Airliner is created by custom dies used to control the wall thickness of the product.

Weight and space savings are two of the biggest Coldpack benefits. Instead of shipping fish with lots of ice, storing warehouses full of Expanded Polystyrene containers or throwing out tons of Expanded Polystyrene each year, Coldpack customers can utilize a recyclable, reusable, and easy to store product solution which reduces landfill waste and the carbon footprint of customers.
Customer perception of cost and a lack of significant production capacity for high volume customers are two of Coldpack’s biggest weaknesses. Many customers believe the manual inflation of the Airliners will increase labor costs when in fact, the product has been proven to cost less than what customers spend to prepare Expanded Polystyrene insulated boxes. Taking overall costs into consideration, per unit and set up cost of a Coldpack solution is more than an alternative like Expanded Polystyrene. Expanded Polystyrene is a commodity and the companies who sell it can cut their prices to preserve existing business. Coldpack has found that their pricing premium is usually 0-10% of competitors’ prices. Because Coldpack is not operating at an efficient scale, the company can not compete on price, nor do they attempt to. However, Coldpack does argue that total lifecycle costs are lower than those for Expanded Polystyrene. Most of the product success with customers has been realized when the customer has a specific packaging problem. They have found their product is well received in niche, low volume markets, when Coldpack can provide a unique packaging solution for which people are willing to pay a premium.

Capabilities
Coldpack’s capabilities are restricted due to a young leadership team, non-standard highly technical production processes, and limited production capacity. Currently two sales associates work out of the San Diego corporate office managing sales leads in North America and one core machine produces a majority of the company’s product. Due to the highly technical processes and tooling that enable AirLiner production and unique customer packaging needs, Coldpack endures high manufacturing costs related to designing special tools for individual customers and error proofing them to produce AirLiners with minimal defects.

Coldpack’s sales process introduces customers to the company and its products by demonstrating the features of Coldpack’s solutions in a side-by-side comparison test. The company is very careful to
support new customers during initial launch of the Coldpack product and supplies resources at the customer site to train customer employees on how to use the Airliner.

Generating new sales has been difficult. The Coldpack sales team is in the midst of revitalizing a solid list of leads to arrange potential customer engagements. Although the company attends trade shows regularly, it seems the lack of scale reduces their ability to attract high volume clients, as these clients demand redundancy in supplier operations. To align available capacity with target customers, Coldpack has started to focus attention on niche markets like chocolates, cheeses, and online delivery.

Coldpack’s ideal sales scenario includes finding a potential customer who has an immediate packaging need, has an appreciation for the environment, and has a current packaging process more costly than the solution Coldpack can provide. Ultimately, the sales team believes they can provide a unique packaging solution for customers who need to ship cold products over an extended period of time or require special packaging to preserve product quality upon delivery. The fish industry, for example, requires very precise temperature control during shipping and receiving. Some pharmaceutical drugs also require temperature controlled shipping. Chocolates on the other hand require specific packaging needs that ensure the product is received in the same condition as shipped.

The technology behind Coldpack’s AirLiner is based on machines that cost approximately $300,000. To create an AirLiner, unique dies shape a bag liner that consists of 15 different types of plastic. During the forming process, cavities are created by the die. The cavities hold the gases that enable the AirLiner to maintain specific temperatures desired by the product or customer using the bag. Customers inflate and seal the AirLiner at the point of use.

Limits of the technology include lack of learning curve economies. Over 10% of all products currently produced by the technology require inspection. Of greater concern is the technology could easily be
copied. The insulation properties of the AirLiner are proprietary, but it may be easy for competitors to develop alternative processes enabling similar performance.

As mentioned earlier in the paper, Coldpack’s operations consist of one machine. The machine is capable of producing approximately 5 million AirLiners per year. Because scale economies are essential to reducing product costs, Coldpack has been working with DuPont in Geneva for 2 years to learn how to mass produce AirLiners more efficiently. It is hoped the shared learning will enable yearly production of up to 100 million units per year.

Goals

Coldpack’s short term goals include generating new sales to support expanding capacity, operating with positive cash flows, and establishing credibility with new clients by establishing a diverse book of business. Getting to scale will help Coldpack transition down the learning curve and develop a more competitive cost structure. Decreasing costs improve the sales team’s ability to attract new customers and secure new business. Because the company has experienced stagnant sales, positive cash flow is a priority to cover operating expenses, stay in business, and avoid taking on more debt. To convince target customers in different markets to transition from a traditional form of packaging to an AirLiner requires a certain amount of trust. Coldpack believes their ability to create a diverse book of business with companies in different industries will help them build a business case for customers to switch to AirLiners. It will also provide proven cost saving estimates built on measured performance versus estimated models.

Long term goals include being acquired by a large player that could rapidly expand production and distribution of Coldpack products and technology. The Coldpack leadership team also envisions the day when Expanded Polystyrene is replaced by a more environmentally friendly AirLiner solution. To achieve both Coldpack plans to focus on low volume niche channels like delicate chocolates, high volume
but highly customized channels like McKesson’s pharmaceutical distribution, and low volume but high value channels where temperature control and cushioning are important to the shipper and end customer.

The ultimate objective of the Coldpack strategy will be to identify the key places where an AirLiner can solve a specific problem for a potential customer. In other words, Coldpack should focus on potential customers who have a current problem that impedes delivery of product and restricts quality as defined by the end customer. Identifying where Coldpack products can solve immediate problems for customers is important. The benefit of targeting these types of customers is that Coldpack will be able to demonstrate a measurable difference in shipping defects related to improved packaging performance, reduce the time to sale, and also offer an airtight packaging solution that is very different from the traditional Expanded Polystyrene. Achieving these goals will generate a reinforcing loop that will drive down costs and strengthen Coldpack’s ability to grow sales and profits in a sustainable way.
III. PACKAGING IN THE COLD CHANNEL

Innovations in cold shipping have evolved over time. Today there are two primary cold shipping supply chain designs, completely refrigerated and partially or fully ambient. Completely refrigerated supply chains maintain a refrigerated temperature in every step using “refer” train cars and trucking, and refrigerated storage and distribution centers. The partially or fully ambient supply chains for cold products are those where materials are exposed to ambient temperatures for some or all of their transportation. This second type of supply chain is of primary interest to the Coldpack team.

Today Expanded Polystyrene (EPS), commonly referred to by the brand name Styrofoam, is the dominant design that allows products to maintain temperatures in the ambient supply chain. Coldpack System’s Airliner looks to disrupt this incumbent. The major performance characteristic of completion in this industry is distance or duration a product can keep at temperature. Cost is also very important. Our project researched the importance of sustainability as a performance characteristic in the cold supply chain. The following describes some of the innovation changes in the ambient shipping supply chain over time relative to these factors.

Consider the duration of time or distance of travel that perishable items could travel as a performance metric in ambient temperature throughout the course of human evolution. Perishable items typically included food goods such as meats, fish, and vegetables, but over time included items ranging from fresh flowers to medicines. Humans originally had to consume perishable foods close to where it was obtained due to the short window of freshness and the low tech packaging and transportation materials available. Rudimentary storage methods of perishable foods like burial extended the longevity of some items, but did not dramatically improve their distribution range.

Sustaining innovations such as paper (often newspaper), and then wax coated butcher paper helped increase the distance products could travel to consumption (see the industry S-curve in Figure 1). Note
that sustaining innovations refer to the disruptive versus sustaining innovation model, not the level of environmental sustainability in the product. Later materials improvements including non-corrugated cardboard and aluminum foil were additional sustaining innovations that improved this transportation distance. More packaging materials ensued in the form of corrugated cardboards, plastics for wraps and containers, and by the 1930 the first uses of expanded polystyrene (EPS). Each of these innovations also incrementally decreased the cost of shipping relative to the duration the product could stay cold.

More effective containers dramatically improved the distance people could ship these perishable products. EPS became the dominant player in the low volume ambient temperature shipping of perishable items. EPS is still an industry standard for food, drug, and other perishable ambient cold supply chains (in low and high volume quantities). The Coldpack airliner system is functionally equal to or slightly better than EPS when compared at same width of insulation for the performance characteristic of duration or distance at temperature (Figure 1). Relative to the distance or duration of shipment, the Coldpack Airline is considered a sustaining innovation. Coldpack suggests that the distance/duration shippable is perhaps not...
the only performance metric of importance. Figure 2 demonstrates an S-curve with environmental impact as another potential performance metric of interest. The Coldpack Airliner constitutes at least a large leap on the existing sustaining s-curve. Perhaps this product is a disruption that will be a game changer that will radically alter the way companies consider cold shipping in the future.

Figure 2: Industry S-curve for perishable shipping duration and/or distance
IV. SELECTION OF MARKETS FOR ANALYSIS

Cold shipping is used in many industries, and, as a result, there are many industries that could have been examined as part of this study. In order to focus our efforts, the MIT team sought direction from Coldpack. Coldpack had already explored many industries in depth, so pointed the MIT team toward two areas the firm had not yet explored in depth, Wal-Mart and pharmaceuticals.

In the course of investigating Wal-Mart, the team established a number of contacts and uncovered a number of insights. However, the team came to believe that a part of Wal-Mart’s business, fresh grocery, was the most relevant part of Wal-Mart to approach. Fresh grocery is more than just Wal-Mart, and the team explored this broader business. The team believes that it will be most meaningful for Coldpack to divide this business into traditional and specialized grocery (described in detail in the following section).

The team also explored the pharmaceutical industry. As more was learned about cold shipping in this industry, the industry was found to be more complex than originally envisioned. The team felt there was a meaningful distinction between the traditional pharmaceutical industry and specialized medical distribution (described in detail in the next section).

There are other potentially attractive markets not analyzed here. For example, dedicated shippers (e.g., UPS, USPS) and small online food retailers (e.g., Omaha Steaks) are two potentially attractive targets which have not been addressed. These are markets in which Coldpack has significant previous experience or of which Coldpack already possesses significant knowledge.
V. DETAILED ANALYSIS OF 4 POTENTIAL MARKETS

We will examine the attractiveness of the market for cold chain packaging in four potential target areas: traditional supermarket, specialty grocer/supermarket, pharmaceutical, and specialty medical. As mentioned previously, the selection of these four markets resulted from an expansion of Coldpack’s initial request that the MIT Sloan team focus on Wal-Mart and the pharmaceutical industry.

Traditional Fresh Grocery

Recommendation

This market is only marginally attractive for Coldpack at this time because of the difficulty in finding, assessing the needs of, and closing sales with vendors that serve large retailers. Coldpack should maintain an opportunistic stance by fulfilling simple registration requirements that can make them an approved vendor with minimal cost and effort.

Analysis

The traditional fresh grocery market is made up of the fresh grocery sections of various retail segments including stand-alone US supermarkets (Stop & Shop, Albertsons) their big-box competitors (Sam’s Club, BJ’s) and larger retail giants (Wal-Mart, Costco).

Fresh food is only a small fraction of the overall traditional grocery market estimated at approximately $500B in annual sales. Since the majority of fresh food products are shipped by refrigerated truck container in order to reduce cost through high volume distribution, only a small subset of these fresh food products such as fresh fish have a consistent need for small parcel temperature controlled shipping containers.

Sales into the supply chain of large retailers such as Wal-Mart are obviously attractive because only a few orders could represent a huge volume of business. In addition, being adopted by these retailers could
create widespread adoption in the market and spur further sales. However, sales in this area may be challenging since the vendor, not the retailer, does the purchasing for virtually all of their shipping operations.

Large retailers such as Wal-Mart also tend to be guarded about the identity and practices of their vendors. However, there are standardized practices for these larger retailers to introduce their vendors to packaging suppliers and Coldpack should participate in these processes to build relationships that may bear business in the longer run. As an example, Wal-Mart has approximately 60,000 suppliers overall and we estimate that there are only a few hundred vendors that would require cold channel distribution. Only a small subset of these vendors will require a solution that Coldpack is best positioned to provide, and the most promising opportunities are likely very concentrated among a small set of very valuable customers. In addition, the ability to make a clear case to the retailer about how Coldpack’s shipping solutions will add value and help create a more sustainable shipping solution may compel the retailer to directly refer Coldpack within their network to these high-value customers.

Coldpack has the potential to add value to the fresh food grocery market’s operations by improving the quality of the fresh food product through lower defect rates or longer shelf life and should emphasize this value in their sales process. These performance metrics will likely be a more compelling selling point then a marginal reduction in cost, especially if the buyer is choosing to increase the complexity of their supply chain.

Coldpack has experience selling their product for fresh food packaging and should leverage and market their experience to potential new customers in the US grocery market. The referrals of their initial customers in this area may be critical for obtaining sales from a larger vendor. The availability of a proof-of-concept will shorten the sales cycle time by reducing operational testing. Also, Coldpack should be
cognizant of the operational requirements of their vendors which may include supply redundancy in manufacturing.

**Specialty Fresh Grocery**

*Recommendation*

Coldpack has experience selling their product to specialty suppliers and should leverage and market their experience to potential new customers in this innovative market. This market is very attractive for Coldpack, who can assess the needs of, and close sales with, these vendors using only a small sales team. Coldpack should aggressively pursue sales with the key influencers of the ten largest specialty retailers in this area, using this buy-in to sell to different internal and external vendors across various local markets.

*Analysis*

The specialty fresh grocery market is made up of the fresh grocery sections of various retail segments including up-market retailers (Whole Foods, Wild Oats) their value competitors (Trader Joes) and independent retailers (Local Co-ops).

Fresh food is a larger fraction of the overall specialty market estimated at approximately $100B in annual sales than traditional supermarkets. While the majority of large volumes of fresh food products may still be shipped by refrigerated truck containers, specialty retailers may have much larger needs for small parcel containers because of their preference to source food locally.

Sales into the supply chain of specialty retailers are attractive because sales in this area will likely grow quickly with this fast rising segment. Also, these retailers are much more likely to be vertically integrated with their suppliers, allowing them to monetize the full benefits of an improved shipping container from the full cost of the container to their operations through to the quality of the shelved product. For example, Whole Foods owns its own fishery in Gloucester, MA and currently uses small Styrofoam containers to
ship these to their local stores. By switching to Coldpack, Whole foods, unlike a traditional grocery retailer, would internalize both the change in cost of the shipping method and the change in the quality of the end product.

Specialty retailers such as Whole Foods also tend to be more open about their practices as they push the envelope of sustainable operations towards a new standard. Since these top retail chains are perceived as leaders of a new best practice in grocery operations, selling to these retailers may spur new sales in the longer tail of small, independent retail operations with much lower sales effort. Eventually, this may even spill over into the traditional retail model as they push towards local and organic models.

In Specialty grocery products, Coldpack has the potential to add value to the fresh food grocery market’s operations by improving the quality of the fresh food product through lower defect rates or longer shelf life and should capitalize on the willingness to pay for this quality in this customer segment. Also, Coldpack has a better likelihood of getting actionable traction by pursuing sales along the improved sustainability of their solution over Styrofoam.

**Pharmaceutical**

*Recommendation*

Overall, the team feels that the pharmaceutical industry is a low value target. Coldpack should not invest significant effort targeting this industry. While the market is large and growing and the products are high value and high margin, the portion of the industry that involves cold shipping in smaller packages is small. The customers are large and few, but it is not clear that Coldpack can add value. The time to achieve a meaningful sale is likely to be long.


**Analysis**

Shipping in the pharmaceutical industry is defined here as the shipping of retail pharmaceutical products for large, traditional markets. This encompasses the shipping of standard medical products, such as pills, sprays, injectables, etc., which tend to be high-value products. Much of this shipping is done in large (truckload, large container) quantities. There is also a specialty portion of this industry, with a significantly different shipping model. However, the specialty portion of pharmaceutical shipping will be discussed as part of the following section, on specialty medical shipping.

It is becoming increasingly coming in the US pharmaceutical industry to outsource shipping to large, advanced distributors. These distributors provide logistics services for storing, handling and fulfilling orders from customers, shipping and other value-added services. The three major distributors are McKesson, Cardinal Health and AmerisourceBergen, who together represent ~$200 billion in revenue and a huge proportion of pharmaceutical shipping in the US.

Industry publications identify a number of trends in the pharmaceutical packaging industry, such as¹:

- Widespread counterfeiting and diversion
- Increased environmental consciousness
- Growth in biotechnology products
- Influential retailers
- Ageing populations in developed countries
- Increased access to healthcare in developing economies
- The constant need for cost control to preserve margins and keep medication affordable

These publications expect the implication of these trends to be³:

---

• Use of RFID tagging
• Focus on environmental footprint and sustainability
• Increased need for temperature stability protection
• Desire for easier packaging (e.g., senior-friendly)
• Focus on bottom line and cost control

The implications most relevant to Coldpack and the company’s products are the predicted focus on environmental footprint and sustainability, the increased need for temperature stability protection and the focus on the bottom line and cost control. Our own investigation suggested that there is indeed an increased need for temperature stability protection and focus on cost control. However, we did not uncover any significant interest in sustainability in this industry (though some insiders predict sustainability may become an important future consideration).

While the pharmaceutical shipping market is large (more than $200 billion in revenue), the proportion of cold shipping, especially in small containers, is quite low. The largest dedicated shipper has revenues of ~$90 billion and spends only ~$600,000 per year on EPS packaging materials. This does not include the specialty business, covered in the next section, where spending on cold chain shipping materials is proportionally much higher.

The value chain in the pharmaceutical industry is shown schematically in Figure 3.
The clear target in this industry is the three largest shippers of pharmaceutical products mentioned above. While individual pharmaceutical manufacturers theoretically have the power to choose a packaging solution, they tend to outsource this decision to dedicated shippers. The producers are also much more numerous and dispersed, making targeting them with a sales force more involved.

There is little to suggest that Coldpack’s solution will provide customers in this industry with more value than existing solutions. The industry cares little about the environmental impact of packaging, and is focused primarily on the trade-off between costs and performance. Of course, if pharmaceutical producers (the customers of the direct shippers) began to request sustainable packaging solutions, the shippers would rapidly begin to seek these out. Coldpack could potentially add value by finding a specific application in which the increased cushioning of the Airliner would be particularly valuable. However, these applications are likely to be few and far between.

We expect that the time to achieve a sale in the pharmaceutical would be relatively long. There is a significant burden of proof on any new provider in this industry, and Coldpack has little relevant experience. Additionally, it will be difficult to get the attention of decision-makers in this industry because cold shipping, especially in small packages, is a small portion of the overall business.
Specialty Medical

Recommendation

Overall, specialty medical shipping is an attractive market for Coldpack. The market is large, and cold chain shipping is a significant proportion of the shippers’ businesses. If Coldpack can make a compelling case, it should require little effort to attract the attention of potential customers. Potential customers are relatively dispersed, but the positions in the value chain to target are clear. Coldpack will not be the only firm to realize that specialty medical is an attractive market, so competition will exist. However, all of the entrants to this sector have created significant buzz and complementary products and technologies are abundant. Coldpack has little experience in this industry, so the sales cycle may be long, but targeting specialty medical (as opposed to pharmaceuticals in general) will be worth the effort invested.

Analysis

Specialized medical products could include anything from proteins and cells to assays and instruments. Specialty medical shipping typically involves lower volume shipping than shipping in the traditional pharmaceutical industry. Cold shipping is also a more significant portion of this business. The users of specialty medical products are typically hospitals, university or private research labs, biotechnology firms and drug makers.

The shippers to these end users are relatively dispersed. In some cases, producers (e.g., Invitrogen) will ship directly to end users. In other cases, dedicated specialty medical shippers will ship for producers. For example, McKesson has a business unit (McKesson Specialty) which handles specialty medical products.

The cold chain shipping market within the specialty medical segment appears to be significant. For example, with revenues on the order of $500 million, McKesson Specialty spends ~$10 million annually
on cold chain shipping products (though this encompasses more than just EPS). As this is only one shipper, this market is potentially very attractive.

The value chain in Figure 3 (above) shows the position of specialty medical shipping in the larger pharmaceutical value chain. There is significantly less concentration among specialty medical shippers than among pharmaceutical shippers in general. Compared to the traditional pharmaceutical industry, these shippers differ much more broadly in size and in the scope of their activities.

Industry research suggests that there is a significant amount of activity in the area of packaging for pharmaceutical and specialty medical cold chain shipping. Because of this, it will be important for Coldpack to consider competition. Competitive firms are offer products tangential to, and some extremely similar to, Coldpack’s offering. For example, firms offer:\footnote{Forcinio, Hallie. "Protecting the Cold Chain." Pharmaceutical Technology (2007): 40+}:

- **Indicator labels**: Indicate if temperature has gone outside of limits, if freezing has occurred or how long product has been open.
- **Data loggers**: Keep an exact record of conditions and can be combined with RFID in an overall wireless system.
- **Insulated packaging**: maintains temperature and may include provisions for ice, dry ice, or gel packs. Some sample companies offering this type of packaging are:
  - Minnesota Thermal Science
  - International Safe Transit Association
  - TCP Reliable
  - Cold Chain Technologies
  - Talecris Biotherapeutics, Inc.
  - R.N.C. Industries, Inc
− Coldkeepers, LLC
− Termika US
− ThermaFreezeProducts Corp.

With the relatively large number of smaller players, it is difficult to generalize about the expected time to make a sale in this industry. As in the pharmaceutical industry, the burden of proof on any new provider is large, and Coldpack has little relevant experience. However, in this segment it should be much easier to attract the attention of shippers because the cold chain is a significant portion of their businesses.

**Overview of Recommendations**

Coldpack’s imperative is to find a book of business that will quickly get them to economies of scale, allowing them the breathing room of a manageable cash flow position from which they can grow. For this reason, they should pursue high value customers opportunistically across a few key markets until they have a sufficient volume of sales that will allow them to focus in on and dominate a particular vertical by structuring their business to best serve it.

Coldpack should identify and prioritize all their possible markets in order to focus the efforts of its salespeople, who will be more successful as they can better understand the specialized needs of a uniform set of customers. Given Coldpack’s current short term focus, Specialty Grocers is clearly the most promising of the four markets we examined. Coldpack should also consider markets such as online retailers (Omaha steaks, Peapod) that we did not explore in this project, but which they may know to be equally attractive.

In the longer term, Coldpack should explore the high value customers in the specialty medical market, especially retailers such as Invitrogen, who have very high willingness to pay and such a large volume of demand. These sales are less certain, against stronger competition, and likely to take more time for sales
interactions or testing to meet the guidelines that have been established in this industry. Traditional pharmaceuticals is unlikely to be a promising market.

With only two active sales people currently, Coldpack should aggressively pursue the most prominent targets in markets where they have experience. Specifically, at least one sales person should focus exclusively on specialty supermarkets such as Whole Foods and Wild Oats.

Coldpack should also satisfy the vendor membership requirements of Wal-Mart and similar retailers by hiring interns that can fulfill their ECRM requirement of modeling while building a compelling pitch that may generate internal sales referrals. They should also sign up and participate in the Packaging expositions of these retailers that happen on an annual basis. These small steps may yield large dividends in the future.
VI. METHODOLOGY

Per the guidance of our Coldpack sponsors, the MIT group pursued contacts in the pharmaceutical and the Wal-Mart supply chains. Our research methods consisted of general industry research, informal interviews, focused cold calling, and refined research and interviews. Each of these methodologies produced progressively more value added information and will be discussed below.

**General Industry Research**

The general industry research pursued by the MIT team included web research and informal interviews. The web research began with generic searches for articles related to the pharmaceutical and Wal-Mart cold supply chains. The goal of these searches was to obtain a primary understanding of the industry. Secondarily, the MIT team wanted to identify potential C-Level or senior executives in the industries of interest that would be strong candidates for cold calling and cold emailing. Any executive in pharmaceuticals or Wal-Mart who had quotable material on-line related to the cold supply chain became ideal candidates for cold calls.

The team also leveraged many MIT and personal contacts to gain insight into the packaging industry. For example, we conducted informal interviews on some of our classmates from the pharmaceutical industry. One interview with a classmate who worked for Wyeth Pharmaceuticals and formerly worked in a pharmacy gave the team some valuable learning into the drug manufacturer’s use of large wholesale distributors such as McKesson, Cardinal Health, and AmerisourceBergen. A conversation with a teammate’s packaging engineer uncle yielded valuable insights into some of the history of cold packaging technology described in the industry overview, as well as fresh foods applications of the cold supply chain packaging products. In addition to personal contacts the team leveraged MIT’s “Infinite Connection” a web portal designed to connect current MIT students with MIT Alumni.
Focused Cold Calling

Based on the leads derived from web and personal contacts, the MIT team identified several high potential executives within Wal-Mart, the pharmaceutical industry and Whole Foods to contact via cold calls. Using cold calling and cold emailing techniques acquired in MIT Sales Club training class by Basho Strategies (http://www.basho.com/) the MIT team members contacted these executives. Some of these calls fell on dead ears, but a significant percentage yielded quality follow-up emails and conversations. Even though many of our primary target contacts did not have direct information applicable to our project, we found that making a personal connection based on the target’s published material on the web or based on the target’s relationship through MIT opened the door to their organizations. Through the industry targets, the MIT team received direct personal references to key cold channel supply chain players in the industries of interest including their emails and phone numbers.

Contacting McKesson, Wal-Mart and Whole Foods

Pharmaceutical / McKesson Methodology

The MIT team had good luck leveraging MIT’s “Infinite Connection” to make contacts within the key players in pharmaceutical distribution. Three companies in pharmaceutical distribution account for roughly 80% of the prescription drug distribution market in America and combined have top line revenues of nearly one quarter trillion dollars, despite operating on thin profit margins of 1-2%. Randy Hyun SVP of strategy at McKesson filled the team in on some key industry dynamics and referred us to Jean Nealand a purchasing manager at McKesson to get a more detailed look at McKesson’s cold chain purchasing process. We also spoke to Eric Doss, senior director of operations for McKesson specialty. Eric and Jean both gave the team very valuable cold chain market sizing insight in pharmaceuticals and specialty medical distribution.

Wal-Mart Methodology

The team’s web research combined with some discussions with Coldpack yielded a valuable contact inside Wal-Mart. Amy Zettlemoyer is director of packaging at Sam’s club and is in charge of implementing Wal-Mart’s sustainable supplier packaging scorecard. Phone conversations with Amy illustrated how a supplier like Coldpack might enter and become one of the roughly sixty thousand suppliers to Wal-Mart and Sam’s Club. Amy also provided the team with contact information for Bill Greetan, Distribution Center Support Manager for Packaging at Wal-Mart. Bill has a strong operational knowledge of Wal-Mart’s cold supply chain. It is the team’s hope that he may be able to give Coldpack contact information for existing Wal-Mart / Sam’s Club suppliers that may find the Coldpack Airliner useful in improving their packaging scorecard ratings.

Whole Foods Methodology

Finally, the web research and cold call methodology was useful in contacting one of Whole Foods Market’s primary fish suppliers. The team found a web video, which provided some visibility into Whole Food’s fishing and packaging operations⁴. The MIT team contacted David Graham, General Mgr of Pigeon Cove Fishery, who was featured in the web video. He offered to host a visit to the Pigeon Cove facility and also put the team in contact with Lee Kane, Whole Foods Packaging Eco-Czar. Lee is responsible for ensuring Whole Foods is using the most environmentally sustainable processes possible in their supply chain. Based on initial conversations with David, the MIT team feels that these contacts may prove very valuable to Coldpack.

<table>
<thead>
<tr>
<th>Company</th>
<th>Contact</th>
<th>Role</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>McKesson Specialty</td>
<td>Eric Doss</td>
<td>senior director of operations</td>
<td>(901) 367-6982</td>
<td><a href="mailto:Eric.Doss@mckesson.com">Eric.Doss@mckesson.com</a></td>
</tr>
<tr>
<td>McKesson</td>
<td>Randy Hyun</td>
<td>Senior VP of Strategy</td>
<td>415.983.8804</td>
<td>personal email given</td>
</tr>
<tr>
<td>Sam's Club</td>
<td>Amy Zettlemoyer</td>
<td>Director of Packaging</td>
<td>Office: 479-277-7057</td>
<td><a href="mailto:amy.zettlemoyer@samsclub.com">amy.zettlemoyer@samsclub.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mobile: 479-426-8728</td>
<td></td>
</tr>
<tr>
<td>Wal-Mart</td>
<td>Bill Greetan</td>
<td>DC Support Mgr- Packaging</td>
<td>Office: 479-273-6332</td>
<td><a href="mailto:William.Greetan@wal-mart.com">William.Greetan@wal-mart.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fax: 479-277-1604</td>
<td></td>
</tr>
<tr>
<td>Whole Foods</td>
<td>David Graham</td>
<td>General Mgr of Pigeon Cove Fishery</td>
<td>978-283-5592</td>
<td><a href="mailto:David.graham@wholefoods.com">David.graham@wholefoods.com</a></td>
</tr>
<tr>
<td>Whole Foods</td>
<td>Lee Kane</td>
<td>Packaging Eco Czar</td>
<td>617-492-5500 ext 3071</td>
<td>No email</td>
</tr>
<tr>
<td>Pharmaceutical Technology</td>
<td>Hallie Forcinio</td>
<td>Packaging Forum editor</td>
<td>216-351-5824</td>
<td>No email</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>fax: 216-351-5684-</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Key Industry Contacts