

# Pch international: managing the flows of information



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CASE: GS-61 DATE: 04/01/08 PCH INTERNATIONAL: MANAGING THE FLOWS OF INFORMATION, GOODS, AND FINANCE

Liam Casey, CEO of PCH International Limited (PCH), was in every way an adventurer. Born and having spent most of his youth in Cork, Ireland, Casey had never lived in China until he started traveling and working in the country in his late twenties. Yet, without speaking much Chinese, Casey managed to establish an innovative supply chain solutions company in China's factory city of Shenzhen and grew it to almost 700 employees in just ten years.

By 2007, PCH had become a global company; it had customers in Western Europe and North America and its IT operations, manufacturing and warehousing support was located in Ireland, China, Singapore, Taiwan, South Africa and Brazil. In fact, so successful was Casey's business that the "mildmannered and extremely diligent entrepreneur won the Ireland 2007 Ernst & Young Entrepreneur of the year award." <sup>1</sup> Collecting business competition accolades was not what Casey had in mind when he first started PCH.

When Casey went to Taiwan in 1996 to attend a computer and electronics fair, he saw an opportunity to help global technology companies take advantage of Asia and China's low-cost supplier base and manufacturing capabilities. Although PCH started out in the mid-1990s as a sourcing agent of low-priced electronic components from Taiwan and China to the Western world, by 2007 it had evolved into a provider of comprehensive supply chain solutions to global technology companies. PCH was designed to address the needs of a complex global technology supply chain landscape. Arthur Beesley, "Casey Picks Up Overall Award," Irish Times, October 26, 2007, p.

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12 Jennie Tung prepared this case under the supervision of Professor Hau Lee as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. Copyright © 2008 by the Board of Trustees of the Leland Stanford Junior University. All rights reserved. To order copies or request permission to reproduce materials, e-mail the Case Writing Office at:[email protected]stanford. du or write: Case Writing Office, Stanford Graduate School of Business, 518 Memorial Way, Stanford University, Stanford, CA 94305-5015. No part of this publication may be reproduced, stored in a retrieval system, used in a spreadsheet, or transmitted in any form or by any means -- electronic, mechanical, photocopying, recording, or otherwise -- without the permission of the Stanford Graduate School of Business. PCH International: Managing Goods, Information and Financial Flows GS-61 p. 2 STATE OF THE TECHNOLOGY SUPPLY CHAIN

The Maturing Supply Chain By the twenty-first century, technology products of all sorts became ubiquitous and profoundly transformed the way people lived and worked. However, in the 1990s, in comparison to other global supply chains such as garments and toys, which had over some 50 years of outsourcing experience, the technology supply chain was still in its early development. For example, by the mid-1990s, the digital camera, the mobile phone, and the laptop computer had only just become a mainstream consumer category.

As such, in addition to focusing on designing cutting edge products, technology companies were trying figure out the most efficient ways to deliver their products to end consumers. On the consumer technology supply

chain timeline, the 1970s and 1980s showed only a small number of global brands, such as the large technology conglomerates Sony and Siemens, who were industry leaders in many product categories. These industry leaders relied on their vertically integrated supply chains and their ability to lock in suppliers to keep new competitors from entering the market. However, as venture capital funding became more available in the 1990s, the technology market saw continuous waves of innovation, shorter product lifecycles, new products and brands. At the same time, the 1990s also saw a drastic increase in independent manufacturers and suppliers, particularly in Asia. These businesses had developed sophisticated technical capabilities after serving the global brands for a number of years. The confluence of these factors changed what it took to win in the technology space. Vertically integrated players of the past were replaced with engineering-savvy, asset-light marketing and design companies. As such, both large and small technology companies had the opportunity to bring products to market through the use of sub-contracting. By the late 1990s, consumers not only had more product choices but also multiple channels to buy from, including online stores, which were becoming popular. Within the world of technology products, the supply chain systems for the wide-ranging product types were not uniform. For example, the more complex large systems, such as telecom base stations, had a different supply chain model from the smaller consumer electronics products, such as personal MP3 players and laptop computers.

This case focuses on the small consumer electronics supply chain, whose characteristics included having many component suppliers, with assembly sites doing the final assembly and testing. The modular structure of

technology products meant that the brand owners had to manage a large network of suppliers. To stay competitive, large and small technology companies began to outsource a significant part of their supply chain to third party vendors in order to focus their resources on brand differentiating activities, such as product design and marketing. This outsourcing trend in the 2 3

PCH International Limited (PCH), “ Information Memorandum for Potential Investors,” November 2007, pp. 3-5. Ibid. 4 www. Alibaba. com was an online directory of suppliers in China 5 PCH, op. cit. pp. 3-5. PCH International: Managing Goods, Information and Financial Flows GS-61 p. 3 1980s created a new industry known as Electronic Manufacturing Services (EMS). By the 1990s, the EMS industry had a number of global scale players, notably Hon Hai Precision Industries (Foxconn), Flextronics, Celestica, Sanmina-SCI, Jabil, Elcoteq, and a few dozen others.

In addition, several thousand smaller companies continued to occupy EMS niches and served a wide range of consumer electronics brands. The business model for the EMS industry was based on large economies of scale in manufacturing, raw materials procurement, pooling of resources, and industrial design expertise, in addition to other value-added services such as warranty and repairs. Products manufactured by EMS companies were labeled with the brand owner’s brand and corporate identity.

As price competition intensified in the consumer electronics industry in the late 1990s, EMS players gradually shifted their manufacturing assets to lower cost areas, such as cities in Southern China. While the leaner overhead structure provided numerous operational and financial benefits, the <https://assignbuster.com/pch-international-managing-the-flows-of-information/>

technology companies faced enormously complex challenges in dealing with procurement, manufacturing, and logistics vendors. Fragmented Supplier Base Many technology companies looked to Asia as an outsourcing location, given the number of low-cost manufacturing and component suppliers in the region.

By 2007, China became a major sourcing and production hub for many technology companies. However, to take full advantage of China's low cost supplier base was not always straightforward. As China was rapidly developing into the factory of the world, many companies strove to achieve low cost while maintaining quality. Low cost technology goods suppliers were abundantly available in the coastal regions of China, in particular in the southern city of Shenzhen, just a 50-minute train ride from Hong Kong. As a procurement officer for a technology company, trying to identify the most suitable supplier could be a huge headache.

For example, for every cable connector, printer circuit board, and MP3 player accessory item, there were literally hundreds of suppliers to choose from in China. 4 For many technology companies, many of these components were not core or strategic. However, poor management of component parts could impact every aspect of the supply chain, leaving behind many unsatisfied customers. Therefore, to take full advantage of China's wealth of suppliers, technology companies needed to filter through numerous vendors to find ones that optimized cost, speed to market, and quality.

**Working Capital Constraints** While independent manufacturers and component suppliers benefited from global outsourcing trends in the late 1990s, they also had to face increasing financing challenges. Casey, who had <https://assignbuster.com/pch-international-managing-the-flows-of-information/>

worked with hundreds of factory owners, learned of the challenges in raising working capital: [In the earlier days of outsourcing,] suppliers were able to take a purchase order of a guaranteed volume from a well-known company to the bank and, upon verification, would be able to obtain working capital financing. Letters of Credit (LCs) were issued by the purchaser. However, guaranteed longer term product volumes have been replaced by rolling short term product guidelines forecasts. The reason is as a technology company faces tough competition and declining PCH International: Managing Goods, Information and Financial Flows GS-61 p. 4 margins, it needs to manage costs aggressively by minimizing inventory build-up. This is necessary given the need to match the ebb and flow of customer taste and requirements.

They in turn demand ‘just-in-time’ delivery from their suppliers— which shifted some of the inventory holding costs upstream to its vendors, further increasing its need for working capital. In addition, sometimes the purchasing company may not be one of the blue-chip globally recognizable brands; banks sometimes perceived this as an additional credit risk. This trend resulted in substantial volatility and pressure on some suppliers as banks were not as willing to provide trade financing given the perceived increased risk levels.

This meant some suppliers found it tremendously difficult, if not extremely expensive to obtain financing. Increasingly Demanding Customers Consumer technology products of the twenty-first century were about superior functionalities, seamless ordering process (both in-store and online), timely and accurate product delivery, and a memorable out-of-box experience— referring to how consumers felt when they opened the box and reacted to

the overall product presentation. Of course, it was critical that the products themselves be “ trendy” and “ cool,” and accompanied by a whole host of accessories to jazz up the products.

For many consumers, technology products were perceived in the same vein as fashion goods. Brands, therefore, needed to meet constantly changing tastes and extremely short and tight product development cycles. While professional technology products generally placed more emphasis on product functionalities, they still required support services, such as regional configuration (e. g. , language differences and pre-loaded software) and just-in-time delivery of products, in order to minimize inventory costs. Finally, technology companies needed to provide their customers these highly customized products and purchasing experiences at a competitive price, while achieving all of the above. These were just some of the characteristics that made the technology supply chain much more challenging than the supply chain of more traditional industries. EMS companies, as discussed above, while able to deliver manufacturing savings to brand owners, were unable to adequately address these pain points, given that their business model focused on large scale production.

The end consumer’s increasing demand for low price and customized products made it challenging for EMS companies to address these evolving market trends. TECHNOLOGY SUPPLY CHAIN FLOWS AND CHALLENGES An insightful entrepreneur, Casey saw the pain points described above as opportunities. Over the years, Casey had thought a comprehensive solution addressing the market and customer challenges would provide extraordinary value for technology companies. In PCH’s menu of services, the over-arching



theme was to help clients better manage the three distinctive flows in the technology supply chain: information, goods, and financial.

These flows essentially addressed every element required to take a product from concept to being retail ready, including the key steps of manufacturing, packaging, product customization, logistics and supplier financing. (See Exhibit 1 for an overview of the three flows in the technology supply chain. )

PCH International: Managing Goods, Information and Financial Flows GS-61 p. 5 The Virtual Supply Chain The virtual supply chain referred to information flow that occurred in the supply chain as goods moved through the various stages.

The information requirement might be for a unique customer, such as, “ when will my goods arrive at my door step;” or for the planning department in a company, “ how much inventory should I order given existing inventory levels in different parts of the supply chain? ” When a company outsourced each portion of the supply chain to different vendors, disbursing and piecing information back together from disparate sources could be extremely challenging. The Physical Supply Chain The physical supply chain referred to the steps by which physical goods went from product concept to their final customers; it dealt with the movement of goods from various physical locations, such as procurement of components, manufacturing, and logistics.

6 As discussed in the section on challenges facing the technology supply chain, the large number of suppliers and manufacturers in Asia made it extremely cumbersome for companies to identify the most appropriate vendors for their needs. In addition to price negotiation, service quality also required significant due diligence.

For example, incidences of delinquent delivery and product quality issues were commonplace. Given the myriad of choices that consumers had for any given technology product, the margin of error allowed was very small. Another challenge in the physical supply chain was customization of products. A question often asked by supply chain executives at technology companies was, “ how should I best take advantage of economies of scale by producing in volume while achieving the customization for each local market, and sometimes for each individual customer? This question highlighted the challenge of managing market-level customization since most technology products needed to reach multiple countries around the world. The challenge could be as simple as placing different language labels on products, to more complex tasks such as first consolidating product shipments from different manufacturing sites and then assembling various units for unique customer orders. Finally, logistics and shipment also needed to be managed in an efficient and cost effective manner.

The Financial Supply Chain Tied very closely to the physical flow of goods, the financial supply chain referred to the financing required for each step of the supply chain. For example, a manufacturing contractor would need financing to buy components and pay its workers to make the products, before shipping them to the technology company to collect the revenue. Established vendors may have had enough cash to last through a collection cycle but smaller or newer vendors could be strapped for cash when a large order came through.

While commercial banks could provide financing for some vendors, new or smaller vendors ended up paying extremely high interest First Capital

Presentation at the Zhejiang University Innovation Institute's Supply Chain Forum, Zhejiang, China, November 13-14, 2007. 6 PCH International: Managing Goods, Information and Financial Flows GS-61 p. 6 costs, at least in the initial years of operations—until they had developed a stronger track record to borrow at more favorable rates from banks. THE PCH SOLUTION

By 2007, PCH counted a number of global clients as customers. Among its clients were three of the top five personal computer companies, three of the top five telecom and networking companies, and the top five leading contract electronics manufacturers. 7 According to Casey, “ PCH offers customized solutions for each client. PCH helps to manage the various communication, culture and geographic barriers that often create operational friction between the [technology company] and its suppliers in the supply chain. In Casey's framework, each PCH solution could be mapped to the various challenges in the three flows of the supply chain, thereby addressing the various gaps in coordinating these flows. For example, PCH manufacturing services addressed the needs in the flow of goods, while PCH Capital addressed the needs in the financial flow in the supply chain (See Exhibit 2 on PCH services categories). Like PCH's technology customers, Casey believed an asset-light approach in managing his business worked the best and, therefore, he had no ownership in any of the vendors that PCH worked with.

PCH was neither a supplier of goods nor an importer for global technology companies. PCH was a service provider—a coordinator that helped orchestrate and maximize the benefits of an outsourced supply chain for all parties involved. Addressing the Needs of the Virtual Supply Chain

Information transparency was a highly valued feature for technology companies given the many moving pieces involved. Casey explained why its software services division was core to PCH's offering to clients and why developing these tools was important to PCH in the long term: Transparency of process is a central PCH offering.

This is why we've developed a series of online software tools that drive internal PCH activities and to provide a portal for clients to oversee and participate in the process. These systems enabled PCH, customers and third-party suppliers to view and share the same data. [As all parties] are working with the same data on the same platform, confusion is reduced, the need for status communication is reduced and clients can have full visibility to PCH's activities even [though] they may be half a world away. By 2007, PCH had developed a set of software visibility tools that consolidated relevant information for each individual customer.

Examples included StatusFlo, which showed inventory levels of goods in the various locations of the supply chain; and TransFlo, which housed all information relevant to billing and shipping documents in one central location for each order. Given the myriad of suppliers, ChinaFlo provided a database of background data on over 900 factories evaluated by PCH. Each factory profile contained detailed information ranging from basic background information, to factory qualification reports, and to capabilities case studies. Customers also had the ability to view pictures of their products and even search 7 Beesley, loc. cit. PCH International: Managing Goods, Information and Financial Flows GS-61 p. 7 for hotels in the vicinity of the factories, as the factory profiles had GPS coordinates associated with them. Resolving the

chaos and lack of data transparency in the virtual supply chain was one key value-add that PCH offered. (See Exhibit 3 for a screenshot of different sections of PCH's information portal. ) Addressing the Needs of the Physical Supply Chain Casey reflected on the path that PCH took: The historical success of PCH was in manufacturing services where goods were sourced and manufactured for our clients.

This was how the company got started. Over time, PCH had moved deeper into the product life cycle where solutions were replacing entire distribution systems; for some of our clients, [PCH] took over warehousing, inventory management, and retail preparation functions. We wanted to move to higher value services as opposed to being just a sourcing agent. With this strategy, PCH developed three core services that addressed the complexity and confusion of sourcing and manufacturing in Asia, in particular in China. As of 2007, these services were manufacturing, postponement, and fulfillment services.

Manufacturing Services PCH offered its manufacturing services to clients as early as the product development phase. Technology companies would approach PCH with ideas for products and PCH's design team then developed prototypes for manufacturing. Casey proudly mentioned how PCH's differentiated services created benefits for the entire supply chain. Even if our clients just ask for product quotes, we would put the product through industrial design optimization that yields the best cost for the customer while minimizing potential quality issues.

Many of our clients did not expect this but this is the level of services that we aim for. We do not tie [the product design] to the capabilities of any specific

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factory group but act independently on behalf of our clients...This level of services also compares favorably to just a [company to outsource manufacturer] relationship where the focus is on landing the contract and meeting minimum quantities; [this also meant] final product quality and the end user experience being far down the outsource manufactures' list of priorities.

The other part of PCH manufacturing services entailed factory identification, qualification, and ongoing monitoring. For this set of services, PCH also leveraged its software services (see information supply chain in previous section) to differentiate itself from other competitors. Casey said, " Rather than just identifying the factories for manufacturing, we would map out the locations of the various potential manufacturing sites and how that would fit in the overall supply chain. This strategy ensured that the entire supply chain was optimized, taking into consideration the later steps in the process, such as warehousing and shipment consolidation. PCH International: Managing Goods, Information and Financial Flows GS-61 p. 8 Postponement and Fulfillment Services Traditionally, once the technology products were produced and quality checked in the approved outsourced factories, they were shipped to warehouse facilities before going to the various retail destinations.

A potential downside to this model was that when the bulk shipment arrived at the retail destination, which might be in a high cost country such as the U. S. or Europe, the products still needed to be further customized for each local market; whether it was adding country appropriate labeling or putting on UPC labels. This meant that even though a company had saved by

manufacturing its goods in Asia, this last mile customization could bring the total product costs back up. The other downside was that a technology company also needed to pay for inventory holding costs.

And, this inventory had limited flexibility; a company could not move it to other geographies, even if a particular product was running a shortage in other locations. To address these challenges, PCH offered postponement services—the act of holding goods in the supply chain (often in bulk format pending final assembly or packaging) for delivery to a warehouse, retail store or the end consumer. <sup>8</sup> In Casey's words, " What we are doing is bringing a vanilla product to a stage in a process and then flavor in the last minute. So you're postponing the flavoring. The final steps would only be carried out once the demand was clearly visible. Most of PCH's clients' products were manufactured around the coastal areas of China, so PCH strategically located its postponement processing facilities in the southern Chinese city of Shenzhen, and in Singapore. These locations were selected for their relatively low labor costs (some of the final packaging was quite labor intensive) and the availability of favorable tax-free trade zones. For example, one of PCH's clients was a global personal computer (PC) company. When its PCs arrived in Shenzhen's postponement processing facility in bulk, the machines had no software. Given these computers could be destined for different locations around the world, PCH would wait for the final order before it preloaded the different language operating systems into these computers for the various markets. These computers were held in Shenzhen's Futian Tax Free Trade zone; which yielded lower inventory

holding costs, as compared to having them sit at the warehouses in a higher cost country location.

As PCH's goal was to help customers fully manage the physical supply chain, its fulfillment services addressed the "handling of product orders from clients, their distribution chains or directly from end consumers over the Internet." <sup>9</sup> This meant that after products had gone through final assembly and packaging in the postponement phase, PCH could have them delivered directly to retail stores, ready for sale or to the end consumers' doorstep. Working with third party logistics providers, PCH had several options for pickup and shipment to overseas locations.

Even though PCH provided postponement in China, technology products were often transported by air, so this did not mean PCH's response time was much worse than the conventional approach of having postponement at the retail distribution center in the U. S. Casey explained why the combination of postponement and fulfillment services worked well for PCH's technology clients and how it addressed challenges in the broader market environment:  
8 9 PCH, op. cit. pp. 9-13 Ibid. PCH International: Managing Goods, Information and Financial Flows GS-61 p. 9

The constantly shifting consumer tastes and trends make forecast volume for any [technology] product difficult. When Internet sales direct to a customer's home are added into the array of distribution possibilities, the processing needs become even more complex. With postponement and fulfillment services located close to the manufacturing sites, it drastically shortens time to market. By offering a variety of packaging and shipment options, PCH is able to both manage fast and slow moving inventory in a  
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manner that reduces the overall supply chain costs to [technology companies].

This approach provides clients with substantial leverage in their operations: total factory commitments remain somewhat unchanged, product inventory quantities shrink, warehouse networks shrink, if not disappearing all together, and the cost of operating the supply chain falls. PCH's Unique Position In summarizing PCH's value proposition, Casey believed PCH's role as the coordinator in the supply chain was beneficial for all parties involved: Our purpose as a company is developing partnerships, delivering peace of mind.

None of our customers have ever gone direct to a factory. Some customers have made phone calls to factories, but the factories will call us immediately because [those factories also made products for five of our other clients. ] So we bring a very big book of business to these component suppliers and that's why they like to work with us. The factories are getting a steady flow of business through our volume consolidation. At the same time our customers also benefit from economies of scale by consolidating their orders with their competitors, which are nonproprietary stuff.

Casey believed that in the 1990s, global companies operating in China were all about the knowledge challenge and everyone was just trying to learn about the landscape. By 2000, " it was all about the execution challenge; that is, how do you actually do it and benefit from what China has to offer," said Casey. Client Case Example10: Managing the Physical and Information Supply Chain PCH worked with a wide range of technology clients; but perhaps its partnership with one global consumer technology company <https://assignbuster.com/pch-international-managing-the-flows-of-information/>

provided the best example to illustrate the principles behind technology supply chain outsourcing.

**Situation** The client was a global consumer electronics company and, since the early 2000s, had produced a number of blockbuster products that were sold worldwide. Sales revenue was growing rapidly and most of its products were manufactured in Taiwan and China. These products were sold over the Internet, in addition to a variety of retail outlets, and were often sold with accessories such as protective carrying cases, spare parts, and alternative configurations of the products. PCH operated under a confidentiality agreement with most of its clients; hence, actual client names have been disguised.

Some of the company data provided was fictitious to preserve anonymity. 10

PCH International: Managing Goods, Information and Financial Flows GS-61 p.

10 Playing in the extremely competitive consumer technology space, this client had introduced new products every year or so—sometimes with an entirely new product line and sometimes with upgrades to existing models.

**Complication** In the initial years, this client worked with a global logistics provider to operate its more than five North American and European warehouse facilities; inventories from Asia arrived in bulk and were stored in these locations.

Its products were delivered to end consumers or retail locations upon ordering. Its accessory parts were produced by different factories in Asia and were then shipped separately to various destination markets. For example, when customers ordered four accessories, they might receive four different shipments on four different dates, leaving them sometimes confused and

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unable to track the status of their orders. This arrangement was also expensive for the technology company, given the high cost of inventory storage and the multiple airfreight bills for each customer.

More importantly, the client promised its end consumers more than just beautifully designed products, it also promised a superior consumer experience—from placing the order on the Internet to actually receiving the product. The order status had to be available real-time and visible to consumers at each stage of execution; the delivery commitment to its end consumers was two to three days to the doorstep, which was often half a world away from where the goods were produced.

Finally, considerable care and attention were given to the packaging and presentation of the products to ensure that end consumers were truly delighted when opening the box. Solution In serving this client, PCH set up an on-site real-time data transfer between client's and PCH's system in Shenzhen, China. As customers place orders in North America, the orders were consolidated and fed live to PCH's processing facilities.

PCH had already stored bulk inventories of various accessory parts in its facilities; once information for each orders were received, the PCH teams in Shenzhen then go and grab the various parts and assemble them into one single package for each customer order. Customized and country appropriate packaging, including items such as usual manuals and in-country product support, were added to these parts. Finally, product codes were added to products in case the consumer wanted to a return or obtain customer services in their local customer service centers.

This solution brought all product handling (post manufacturing) into China and all orders were shipped directly from one location to the final destination. This translated into savings on logistics as customers were now receiving only one shipment as opposed to multiple shipments. Addressing the Needs of the Financial Supply Chain As discussed in the state of the technology supply chain section, component suppliers and factories sometimes ran into a working capital crunch when unable to obtain feasible financing from commercial banks.

On the opposite side of the table, the commercial banks generally appreciated the opportunity to help finance the components suppliers and factories, thereby gaining more visibility into the operations of these small to medium size operations. Casey drew insights from observing these challenges and decided that PCH was actually in a great position to help de-risk the entire supply chain—for the technology companies, banks, and the factories. Casey described how PCH's services were different from those of other global PCH International: Managing Goods, Information and Financial Flows GS-61 . 11 logistics providers: " The FedExes and DHLs know where the boxes are, but PCH knows what's inside the boxes. " Given its participation in the supply chain, PCH gained a wealth of knowledge about the factories, the products, and the ultimate client. This knowledge became extremely valuable in doing risk assessment. For example, PCH staff (including Casey) had personally visited the factories and had worked with the owners and the technology companies for months. This level of understanding far exceeded what could be accomplished by lending officers.

This unique position enabled PCH to effectively play the trade finance role in the supply chain cycle. By 2008, Casey envisioned the ways in which PCH could play a broader role in the financial supply chain as it saw pain points in the retailer to factory relationship. In the past, U. S. retailers (customers of PCH) placed purchase orders (POs) with outsourcing factories in China. The U. S. retailers would then apply for a Letter of Credit (LC) with a bank that would provide the required financing to the factory. Once the orders had been manufactured, the factories would then ship the goods directly to the retailers.

As the consumer electronics industry evolved, retailers were no longer willing to place large purchase orders, given the uncertainty of the market. In order to protect their margins and to minimize inventory costs, retailers changed payment terms on the factories. The factories were required to obtain financing on their own and would only be paid 90 days after the retailers received the products. This put a tremendous amount of pressure on the factories. PCH saw this as an opportunity for another value-added service.

Casey envisioned that PCH could play the role of an intermediary to facilitate the financial flow from the moment the retailers placed their orders to the delivery of goods. The new model was such that retailers would place orders with PCH and PCH would then place the orders with the factories. Given PCH's size and its relationship with global technology firms, banks would be willing to lend funds to PCH. At the same time, PCH could then lend funds back to its factories and suppliers at a higher interest rate, but still lower than what the factories and suppliers would have gotten on their own.

PCH effectively made the interest spread between the banks and the factories and suppliers. JOURNEY TO-DATE AND PATH GOING FORWARD Casey, the business adventurer from Ireland seemed to have demystified the often chaotic Chinese manufacturing landscape. Casey recalled the tremendous difficulty in initially setting up the business in 1996: I found companies in Ireland that were buying cables, connectors and audio accessories through British distributors... who were actually sourcing them from Asia anyway.

It took a long time to convince these Irish companies to go source directly from Asia because their perception was that you couldn't get quality or the right products in Asia, plus they were worried about dealing with the time difference. With only \$20, 000 in start-up capital and unable to afford staff, Casey worked alone for two years, getting to know factories in China, opportunities, and the business. Just ten years into the PCH International: Managing Goods, Information and Financial Flows GS-61 p. 12 ame, Casey disclosed that by 2007, PCH generated over \$100 million in annual revenue, not a small feat for someone who still claimed to “ not speak much Mandarin. ” As the company grew into a much larger company since its start-up days, Casey believed one of the most important things to preserve in the company culture was the sense of urgency. In the initial years, he remembered that every single customer contract determined the survival of the company. “ That sense of urgency, to get things done, to exceed customer expectation continued to stay in the company even after all these years.

This sense of urgency was a trait of PCH—the speed and the can-do attitude,” said Casey. (See Exhibit 4 and 5 for revenue breakdown. ) A long-

time customer of PCH was Better Energy Systems (BES), the brand owner of Solio portable solar power. PCH had been managing BES's end-to-end supply chain. " Put simply, PCH understands the business and quality requirements of the West, while at the same time can effectively manage the day to day complexities of a Chinese supply chain," said Christopher Hornor, chief executive of BES. 1 While Casey believed PCH's end-to-end solution provided a unique value proposition to technology companies, he also humbly admitted: " there's nothing that would prevent our customers from going directly to the suppliers in the future. " In trying to chart out the growth plan for his company in the years to come, he was contemplating several options: expanding service options or obtaining strategic investors. Regardless of the growth strategy, Casey had always believed in " building PCH one client at a time. You do a good job, they give you more work," he said. It's all about service—making sure they get what they want, when they want it. " 12 And such was the truism in operating any supply chain. 11 12 Clifford Coonan, " Understanding the Rules Is Key to Success in China," Irish Times, September 25, 2006. Anna Healy Fenton, " Irish Rover Now Fluent in Solutions-Speak," South China Morning Post, March 26, 2005. PCH International: Managing Goods, Information and Financial Flows GS-61 p. 13 Exhibit 1: PCH Integrated Supply Chain Approach Technology Supply Chain Solution Virtual Supply Chain • Flow of information Physical Supply Chain • Flow of products

Financial Supply Chain • Flow of funds Source: Company Internal Information Exhibit 2: PCH Services Categories PCH International: Managing Goods, Information and Financial Flows GS-61 p. 14 Exhibit 3: PCH Information Portal Source: Company Internal Document Exhibit 4: Revenue

Breakdown by Category 2005 49% 19% 13% 10% 10% 2006 42% 32% 12%  
6% 7% 2007 45% 29% 14% 5% 6% Electronics Telecom Medical PC Other

Source: Company Internal Document Exhibit 5: Revenue Breakdown by  
Geography 2005 51% 23% 9% 17% 0% 2006 46% 26. 5% 0. 4% 27% 0. 1%  
2007 48% 22% 3% 25% 1% USA Ireland Europe Asia Brazil Source: Company  
Internal Document