2. CHAPTER 1

The present document is a business case about the finished internship at Holcim (US) Inc. that lasted from the second day of July, 2007 till the twentieth of December of 2007, as a requirement for graduation. It deals with the activities performed at the company, a specific project encountered, together with the proposed solutions.

2.1 Holcim (US) Inc.

Holcim (US) Inc. is one of the largest cement producers and suppliers in the USA. Among its products, the principal income driver is cement; however other construction aggregates and mineral components are also produced. Aggregates and Mineral Components are cement by-products that increase the quality of concrete, for example Grancem® and flyash. Holcim (US) is a wholly owned subsidiary of Holcim Ltd., a publicly traded company on the Swiss Exchange (SWX). The corporate headquarters are located in Waltham, Massachusetts. As all group companies under the Holcim Ltd. umbrella, Holcim (US) focuses on internal growth as a way to increase its presence in its individual market. Once a strong market share is established, Holcim (US) starts to cut costs as a secular way of improving profitability.

The cement market inside the US has identifiable characteristics that guide the strategies used by companies. First, as the US is a developed nation, the general level of infrastructure is advanced. This fact limits the demand for cement compared to the booming needs of a developing nation. On the other hand, the disposable budget for construction is relatively large, compared to other industries.

Two of the most important factors that influence the income levels of the company are price and volume. Because the industry presents a high level of concentration (Carpenter & Sanders, 2007, p. 97f), that is, there are just few competitors in this oligopolistic-type industry that command more 75% of the income in an industry, every change in the price of cement

makes a direct hit to the bottom line. Still, price is not the only factor that has such an impact. Volume is directly correlated with the same way.

Holcim Ltd. also has operations in Canada. This office is relatively new and is under the coaching and direction of Holcim (US). Over time, increased foreign direct investment has flown into Canada to establish a stronger and more independent presence of "Ciment St. Laurent" (Saint Lawrence Cement, hereafter called "SLC").

Over time, this coaching has sped up the development of SLC and it was decided that on December 31st of 2007 the current relationship between the two companies had to change. From January 1st of 2008 a major realignment occurred, that shifted the roles of many employees and altered the organizational structure. Many departments in Holcim (US) would start to serve for both companies, while others would be set up in a ways that mirror the structure and functions of those at Holcim (US). This realignment was set in place to draw on synergies that were not been exploitable under the previous structure, where Holcim (US) was coaching a fast-growing SLC. SLC now is ready to stand on its own and supply the Canadian market more efficiently. Although done for the good of the company, this change affected many departments and positions. This, alas, had no impact for the purpose of this work, as it is limited to the financial planning and analysis department, which remained unchanged after the realignment and works as a center of excellence for Holcim (US) and SLC.

2.2 Mission and Vision of the company

A simple mission drives ambitious goals into action. "To be the most respected and successfully operated company in our industry" (Holcim Ltd., 2008, electronic version) is simply said. However, this requires a strong culture as well as clearly defined philosophic and strategic orientations. Holcim has the vision of becoming provider of the foundations of society's future (Holcim Ltd., 2008, electronic version). These are strong core elements for the continued growth

of the company, and must be taken into consideration when beginning to understand Holcim (US).

2.2.1 The industry according to Holcim (US)

Following the definition of industry explained by Carpenter and Sanders, "[…] an *industry* [is] a firm or group of firms that produce or sell the same or similar products to the same market." (Carpenter & Sanders, 2007, p. 97). The definition of the industry according to management is to compete in the construction materials industry. Within this very broad environment, Holcim (US) competes in the cementitious materials group. It focuses on the production of cement as a main product and additionally competes with other cement byproducts called Aggregates. These increase the quality of the cement and can alter its properties to accommodate specific needs of large customers.

As mentioned before, the industry is a highly concentrated one. The main competitors are large in size, operational assets and CAPEX are massive. As cement requires a very heat intensive chemical procedure, operational assets are costly and require strict maintenance to continuously yield the expected capacity and product quality. On the other hand, the margins attained between Sales and Costs of Goods Sold (COGS) are small. This requires volumes to be large enough to compensate for the investment needs of any cement producer. Not only is this a factor for the industry's concentration degree, it also represents a high entry barrier.

Holcim (US) has strong optimized processes to function and compete in its industry. This is a vital to maintain a cutting edge cost structure in place, and also is the reason why volume and price have such a great impact on the bottom line of the company. Everything major in the value chain inside Holcim (US) has been optimized. However this creates the need to search elsewhere for further value growth. Holcim (US) has found new ways of growing its reach with the acquisition of other links in the supply chain. Thus, controlling the sources for raw materials and

major distributors, Holcim (US) has managed to capture more of the value that is generated. Vertical integration is advantageous to the company to establish a stronger competitive position. This same opportunity was found with links closer to the consumer as well. Holcim (US)' main strategy here has been a thorough Customer Relationship Management program. This is the best alternative viewing the fragmented and highly differentiable customer pool.

2.2.1.1 Future downturn of the US cement market. As mentioned above, the market is a mature one; unlike in many emerging markets, the demand for cement is not growing rapidly but at a steady pace in stable and relatively foreseeable conditions. This is normally the description of the cement industry of a developed nation in a nutshell. However, at this particular moment, the demand for cement is falling along with other industries that complement the demand for cement, like the housing industry. Although concrete has many uses, across a wide variety of consumers, the main customer buys cement for the housing purposes. This is maintained on a market-wide basis, so all competitors are experiencing a downturn. Not one cement producer is interested in large public projects only. With the current economic downturn affecting especially housing, the demand for concrete is strongly affected as well; luckily, the segments supplied by the company diversify the current environment risks.

Customers usually buy on credit and normally are expected to repay within a month. However, the levels of bad debt and average collection time have slowly increased on an industry basis. To name a few ways with which Holcim (US) has been able to cope with these changes were higher prices than its competition and good relationships with its customers. Higher prices maintained a growing bottom line compensating for smaller volumes sold and good relationships with its stakeholders applied pressure to keep bad debt levels in check.

2.2.2 The most successfully operated one

Managing effectively the large operational assets is vital to maintain profit margins. To do this, highly proficient costs' and processes' structures govern the operations of the company. With the amounts of volume produced, every cent in the total cost per ton produced is important, due to the strenuous competition of the cement market. All support activities are aligned to reflect and strengthen the production activities of Holcim (US). The financial statements of the company are a good example. Their structures evolve together with the company to reflect new improvements, current focuses and areas of opportunity identified by top management.

More important than cost-cutting is the quality level of the product. A tradeoff may surface if higher than average quality levels impose greater production costs. There has to be a balancing point that solves this issue and is coherent with the core values of the company. This creates the necessity to have high achieving people working in lean teams across the organization. The human resources department creates them taking into consideration two main dimensions. Measuring their professional experience, capacities and knowledge, and if they are a person that will fit into the working team. People that can work together proactively are able to create synergies to increase the product's quality and delivered value, either as a more sophisticated and user friendly result or as in less invested resources to achieve the same result. These teams represent small department level structures that encourage employees to take ownership of the work, be flexible and available for the needs and maintain a level of good customer service with all other stakeholders. All these are aspects of the culture of the company.

2.2.3 The most respected one

Social responsibility is a main ingredient for every person in the company, for its stakeholders and for society in general. Good relations are very important in many parts of society. Be it governmental lobbying, environmental concern and staying in touch with

associates and customers. This has many advantages to the business. For instance, help on strict government policies, indirectly inoculating customers to increase their loyalty to the brand, or generate synergies that can increase the competitiveness of the company.

Being the most respected company in the eyes of their stakeholders goes beyond customers and suppliers. This also focuses employees. Being the most respected company goes hand in hand with being the most successfully operated one. The idea of the most respected one creates a stronger focus on employees, above other stakeholders. Every employee is motivated to deliver the best possible customer service. Particularly in the corporate office, all the elements of the geographical breakdown in the country are accounted as clients that are worthy of receiving the best support possible. People are the single pieces that represent the foundation to further advance towards accomplishing Holcim (US) objectives and goals. (Holcim Ltd., 2006 annual report, p. 16). (See Appendix A)

2.2.3.1 CEO Statement. But to fully understand this part of the mission, the best approach is to review the CEO Statement for Holcim (US). A strong commitment is made to sustainable development. This, according to Patrick Dolberg, current president and CEO, is a necessary philosophy to meet the present goals and leave a solid foundation for the future of society. Cement and concrete are primordial ingredients in the physical development of society and its prospering growth. They are used to create buildings, houses and virtually any other foundation and structure. Providing these products means to provide society with the necessary assets to thrive at its own pace and directions. To be able to tackle this endeavor, the company has to align all its activities towards the achievement of its vision. Thus, the philosophy of the company focuses on "a thoughtful balance of economic growth, environmental stewardship, and social responsibility" (Dolberg, P., 2008, electronic version).

In the very case of cement manufacturers, this equilibrium is a very delicate and complex matter. Being among the first links in the supply chain, especially in an asset intensive industry of a mature market, creates the need to bank on scale and scope economies to generate a profit. In addition to this, the extraction of raw materials from the quarries damages the environment greatly, not to mention the great amount of toxic wastes that are generated in the manufacturing process. It is ordered by law, that every cement manufacturer restores the areas that were destroyed or severely damaged in the processes utilized to gain the necessary raw materials, turning quarries into lakes or pastures, after the quarry is exhausted. All these factors are threats to a company choosing a total cost leadership position in this market.

2.3. Strategies followed of Holcim (US)

According to the annual report of 2006, three elements configure the main strategy of Holcim (US) along time to create value. Focusing on the core business first, is an important boundary when growing the company. Maintaining focus prevents the company from branching out into other industries or even other markets in which Holcim (US) has little or no experience in, just for the sake of higher profits. Besides, as a vertically integrated company, diversifying would divert resources and attention from the existing operations, countering its current position. Thus, Holcim (US) is definitely not "straddler"; a term coined by Michael Porter to describe a company that is pursuing a strategy that has neither cohesion nor coherence. In other words, a strategy that does not define a clear strategic position in the market and thus points to contradicting investments and projects. Instead, Holcim (US) demonstrates focus: the production and distribution of cement and aggregates follows a product strategy, where quality elements are used to produce valuable products, using a diligently managed asset base. The most capital intense part of the process lays in manufacturing. In this area rests "the main focus of investment activities and value creation efforts" (Holcim Ltd., 2006, p. 16).

Following the idea of maintaining a focus on core business, comes the second element, geographical diversification. In emerging markets, Holcim Ltd. makes almost half of its consolidated revenues. The way Holcim Ltd. has grown is by entering in new markets, investing in foreign direct investment in each country it has entered so far. Up to date, Holcim has entered in more than 72 countries. A focused strategy has been followed in all emerging markets, excluding Mexico. Holcim entered in a joint venture with the local producer "Apasco". This was a clever move, considering the competition that is already established in Mexico, mainly because of "Cemex". It would have taken too much time for Holcim (US) to enter the Mexican market on its own. This strategy minimized the risk of foreign direct investment, gave Holcim (US) a jumpstart and combined the resources and experience of a large local competitor with the ones of Holcim (US).

Last but not least lays the issue of management. Following the idea of geographical expansion and into new markets, Holcim (US) understands that is "has to gear itself to the conditions and needs of the individual markets, since it is there that value is created. In order to fully exploit the potential, Holcim has standardized all key corporate processes. This allows local management to concentrate on market and cost leadership […]" (Holcim Ltd. 2006, p. 17). Working in the corporate office made me verify this for myself. It is integrated with managers from various countries, being only the CEO and the CFO sent from Holcim Ltd. The rest of the managers and employees create the bridge between Holcim Ltd. and the rest of the Holcim (US). This eases communication between cultures of the subsidiaries and the head offices in Switzerland. Having a single contact point for foreign managers to come to the US is a much simpler approach, than to coach many managers responsible for regions inside the US to work across a cultural bridge. These are highlights of the company's strategy. (For a more detailed version, see Appendix B)

2.4. Products

Cement is the main product of the company, but not the only one. Cement, classified as a cementitious material, is obtained by mixing limestone and clay in a kiln and heating the mixture to about 1450°C. This produces a product called "clinker", which has to be mixed with other high grade materials to produce cement. The blend of cement that is produced to a larger extend is Portland Cement. Here, the added material is gypsum; in other blends flyash, pozzolan, slag or limestone can be added to modify its quality and attributes. These added ingredients are called mineral components. The normal volumes of clinker for Portland Cement vary between 87% and 95%. The more mineral components are added the better the quality of cement usually is. Further restrains are placed on the composition of cement by some local governments in most countries. So, Holcim (US) has to find a suitable balance between the amounts in its ingredients. Using more clinker creates more scale economies and thus, adds a lower variable cost, but on the other hand, the more clinker is used the lesser is the quality of the product.

There is a stronger need for cheaper concrete in emerging markets than for more specialized higher value cement. Since the buying power and customer sophistication levels of developing economies focus on demanding products that offer a decent quality level at affordable rates, Holcim (US)'s main focus for these markets is the production of clinker and procure the needed gypsum from a different source. As the level of infrastructure develops in a country, its construction needs become more sophisticated as well. Only then does the market demand higher quality levels above the need for a competitive price.

Holcim (US) sells ready-mix concrete, concrete products, mortars and asphalt, mostly to end users. These comprise a pool of general contractors, masons, self-builders and civil engineers. Consumers use Holcim (US)'s products mainly in the housing, commercial & industrial building sectors, and to a lesser extent for the development of a site's infrastructure.

Some concerns arise in the production of cement. For example, the large amounts of hazardous and non-hazardous wastes that are co-produced, the non-renewable energy levels that are needed and the high costs incurred in the extraction and procurement of mineral components. For these reasons a new sister company was created. Geocycle, previously called Energis, is a waste management plant that started to handle the wastes created by Holcim (US)'s facilities. By recycling many different kinds of wastes, it created an alternative source of energy for the cement production process, as well as increasing the company's positioning as an environmentally focused company.

Over time, Geocycle expanded geographically to serve other Holcim (US) plants and started to make its own revenues by recycling materials for other companies. In doing this, it has found not only a way to increase its own revenues and expand its capacity; it also has found a supplementary source for mineral components. Many of the waste materials treated by Geocycle contain large amounts of these byproducts for cement. Holcim (US) created in this way a fruitful scope economy.

2.5. Geographical breakdown of the company

Holcim is a nationwide producer of cement. It was, however, a much stronger presence in the east of the country and, over time, gradually moved west. Their headquarters are in Waltham Massachusetts and in Dundee, Michigan. The company has divided the country in four main regions called: River, Mountain, East and the Texas/Oklahoma region. This map is the geographical breakdown as of January 1st, 2008. The mentioned realignment reconfigured the East and the River regions to the shape shown.

For the purpose of this project it is important to note that each region has one credit manager who is in charge of leading the collection efforts of each debtor and is co-responsible for maintaining good relations with the stakeholders of the company. A new set of indicators is

created for each region. These are the same across all the regions and the country and can therefore be used to measure changes in the credit collection efficiency. Each city in the map (see figure 1) is a cement producing facility that sells usually to customers limited in its own region.

Before the realignment, the area covered by the Mountain region entered Canada. This was intended as a complementary supply arm for SLC. As said, SLC was under coaching of Holcim (US), and since it was growing it could have lost an important part on the Canadian cement market. That is why, until SLC could stand on its own, Holcim (US) was purposely cannibalizing the market for SLC. Now after the realignment, SLC took over the market share that was guarded by Holcim (US) from SLC's competitors.

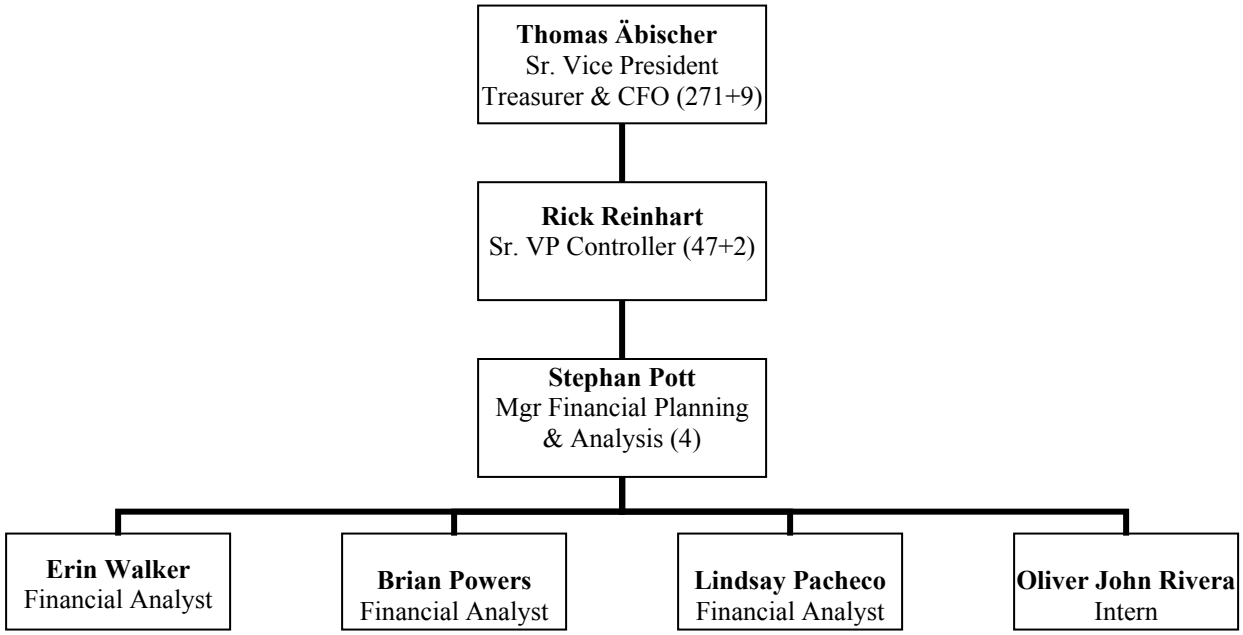
Figure 1: Holcim (US)'s production facilities inside the US

Source: Holcim (US), http://www.holcim.com/USA/EN/id/536892814/mod/gnm0/page/location_map.html

2.6. Organizational Chart

This is an Organizational Chart of the relevant positions to the internship, for a complete picture of the company's organizational chart, see Appendix C.

Figure 2: Relevant positions to the internship



Source: Self-created, 2008

Relevant to the internship were the following positions: The CFO as the highest ranked person in the finance department needed to review many of the results and analyses produced by the financial planning team, like the company's budget, to make decisions. As this was the position farthest away from me, only scarce direct interaction happened.

Rick Reinhart, senior VP of Controlling, has the responsibility to sign off (i.e. authorize) the produced financial statements created by the all the managers and their teams. He reviews every report for accuracy and correct compliance with Holcim's Accounting and Reporting Procedures (HARP). Same as developing new projects, analyses and other confidential works, most of which no intern has access to.

Stephan Pott was my manager. He leads the Financial Planning and Analysis team through the stages of the different forecasts Holcim (US) does for different purposes. Many tasks he has to fulfill filter through to his team. He empowers them and assures the completion of the work. He is also responsible for all the analyses and forecasts that are used by many other departments and higher management to make decisions.

As for the financial planning team, we worked on the assignments that came to us from other departments, higher-ups and those that routinely had to be done. These included most of the times ad hoc requests, SAP data management, and the preparation and analyses of the forecasting tools created and used to inform of Holcim (US)'s financial outlooks for the short term and long term future.

2.7. Financial Information

2.7.1. Annual Report 2007[1]

Information from the Annual Report of the company shows many financial amenities that situate Holcim (US) in the context of the Holcim (US) Group. Within this framework one can better understand the situations that have led to the resulting numbers.

2.7.1.1. *Main Influencers* are those changes or events that have contributed to the largest shifts in Holcim (US)'s competitive environment. The company has increased in 2007 its Cash Flow from Operating Activities by 19.1%, considering currency fluctuations when repatriating these cash flows. This was achieved mainly because of the booming needs in the housing industries of emerging markets, especially in India and Indonesia. This is quite the contrary for the US market, where the housing industry and the development of infrastructure have both received a serious hit because of the real estate crisis. This was compounded by the seasonal

[1] Information enclosed here was taken from the 2007 Annual Report, highlights for Holcim (US) are briefly commented.

drop in sales at the end of each year, causing the last trimester of the year to be weaker in sales than the year before. Comparing this to the 12-month information, it becomes clear during these months was the effect of the mortgage crisis the worst for the cement industry. It is also important to notice that the increase in prices that made up for lost volume gave a strong boost in revenues during the year's dry season. This is represented by the EBITDA for North America in the following table. The strongest decline is observed at the end of the year, due the factors discussed. The rest of 2007 was almost level with 2006. The yearly difference was only 5 million CHF. Rather than making enormous losses, Holcim (US) could barely manage the crisis, as said, mainly through cost cutting actions, streamlined operations and solid stakeholder relations.

Table 1: Operating EBITDA

Operating EBITDA

Operating EBITDA per region

	January-December (12 Months)				October-December (3 Months)			
Million CHF	2007	2006	±%	±% local currency	2007	2006	±%	±% local currency
Europe	2,399	1,966	22.0	17.0	564	502	12.4	10.5
North America	999	1,033	-3.3	-0.4	228	257	-11.3	-7.3
Latin America	1,256	1,244	1.0	4.8	324	289	12.1	19.6
Africa Middle East	653	692	-5.6	-2.4	118	180	-34.4	-34.1
Asia Pacific	1,844	1,366	35.0	29.5	442	433	2.1	-1.5
Corporate Eliminations	(221)	(215)			(86)	(64)		
Holcim Group	6,930	6,086	13.9	12.6	1,590	1,597	-0.4	-0.1

Source: Holcim Annual Report 2007, retrieved: 2008

Another detrimental change that affected the cement industry is the stark increase in fuel prices. Be these in fossil fuels, electricity, or gasoline prices; the energy needs for the production and distribution of cement are greater than the harshest cost savings Holcim (US) has done. So, even if the EBITDA Margin shows almost no increase, the amount that made it to the bottom line was way larger than in 2006.

Table 2: Operating Results

Operating Results

Sales volumes and principal key figures

		January-December (12 Months)				October-December (3 Months)			
		2007	2006	±%	±% local currency	2007	2006	±%	±% local currency
Sales of Cement	million t	149.6	140.7	6.3		36.8	36.9	-0.3	
Sales of Mineral Components	million t	5.5	6.0	-8.3		1.3	1.6	-18.8	
Sales of Aggregates	million t	187.9	187.6	0.2		50.9	49.6	2.6	
Sales of ready-mix concrete	million m^3	45.2	44.2	2.3		11.6	11.4	1.8	
Sales of Asphalt	million t	14.8	15.3	-3.3		4.3	4.2	2.4	
Net Sales	million CHF	27,052	23,969	12.9	11.3	6,766	6,455	4.8	4.5
Operating EBITDA	million CHF	6,930	6,086	13.9	12.6	1,590	1,597	-0.4	-0.1
Operating EBITDA margin	%	25.6	25.4			23.5	24.7		
Operating profit	million CHF	5,024	4,385	14.6	13.5	1,063	1,104	-3.7	-3.2
Net Income	million CHF	4,545	2,719	67.2	66.0	688	769	-10.5	-5.8
Cash Flow from Operating Activities	million CHF	5,323	4,423	20.3	19.1	2,063	2,075	-0.6	-0.3

Source: Holcim annual report 2007, retrieved: 2008

2.8. Background of the problem

This case is about the revitalization of a report for top management that focuses on the accounts receivable. It uses a sales figure to calculate one of the most widely used ratios in the cement industry, the Days Sales Outstanding (DSO).

This report is called "Credit Letter" (hereafter called CL). It shows a comparison of the collection efficiency of the credit managers of the regions Holcim (US) segmented the country in. It is necessary to collect the necessary information from various sources and create a set of files on a monthly basis that showed the changes and trends in the collection performance of the company. These allow the controller to compare the collection performance of the regions.

The purposes of this report vary for each reader. For the Credit Managers, it means a comparative report from the controller that is used to stir competition among them. For top management it is a simple information tool that does not get reported to Holcim Ltd. and provides a clear and simple picture of the current situation of this part of the company. With this report, alignment was created among the users of these information pieces, specially the DSO.

Many reports calculate a DSO based on the company's procedures, however use different Sales and A/R data and create incongruent results. When the project was finished, it was implemented at a department level and still is in use. It had a new user interface, was streamlined and accounted for accuracy and compliance.

This internal report started with an employee called Kurt Walker. He created the complete report from scratch and delivered it to the controller at the beginning of each month. About four months after the CL was initially created, Kurt retired. The creation of this document was passed on to the Financial Planning department. However, almost no instruction was left behind on how to create the CL. The finance team had to learn to create the CLs on-the-go, based only on previous ones. This strenuous process was avoided by many of the team members because no real instruction was present on how to create this report; besides, it had to be delivered at the beginning of each month. These times are the busiest for the department, because the team has to perform the closing of each month. A complete Income Statement is produced for the activities of the past month. This includes a detailed breakdown of all segmentation levels beyond the normal regional and sub-regional breakdown. With this important tool, the controller acknowledges the changes that happen to every line item in the Income Statement and what measures were taken to address these changes. This analysis has priority over every other task, since it gets reported to Holcim (US) Ltd. On the other hand, if the CL is delivered late, the information it provides becomes obsolete and inaccurate.

The report itself was not self-explanatory. The various readers of the report found it difficult to understand. For example, the Credit Managers had difficulty understanding the measurement tools used to evaluate their performance. Thus, they paid more attention to make a good job and await feedback from Rick. At the time of closing, more important tasks had to be fulfilled, meaning that the creation of the CL is postponed. Furthermore since just very little

knowledge was available on how to complete the CL, the process was slow and very cumbersome. It took three people the better part of four days to complete this process, and most of the times the calculated results were not complying with officially published results for any given period. This was very frustrating for the finance team as they were producing information that was hard to generate, too complex to understand and on top of all was inaccurate. This even had, as a consequence, increased costs in this department, since the invested time was very unproductive.

The rest of this case discusses the proposed alternatives found to these issues, the chosen solution, its implementation and further options for Holcim (US) to build on in the mid- and long-term future.