Sustainability at Banorte

A Comprehensive CSR Strategy

Erb Institute, University of Michigan 3/4/2011

Laura Frey, Marcos Mancini, Tina Tam, Jeremy Taub

In partial fulfillment of the requirements for the master of science degree at the University of Michigan School of Natural Resources and Environment

Faculty Advisors:

Richard J. Bunch Professor Deborah Burand

Table of Contents

Index of Figures	5
Index of Tables	6
Abstract	7
Executive Summary	7
Introduction	13
Scope and Objectives	13
Banorte Background	13
History of Banorte	14
What is CSR?	15
Why CSR Now?	15
Growth	16
New Markets	16
Innovation	16
Synergy	17
Partnerships	17
Return on Capital	17
Operational Efficiency	17
Workforce Efficiency	18
New Revenue Opportunities	18
Risk Management	18
Competitive Risk	18
Reputational Risk	19
Market Risk	19
Climate Change Risk	19
Regulatory Risks	20
Management Quality	20
Leadership Development	20
Adaptability	21
Methodology: Four CSR Pillars	21
CSR Competitive Benchmark Analysis	21
CSR—A Global View of Best Practices	23

	Environmental Responsibility	. 23
	Value Chain	. 23
	Equality and Governance	. 25
	Community Commitment	. 26
	Standards and Compliance	. 27
	Macroenvironment for CSR in Mexico	. 27
ļ	Articulating a Shared Vision	. 28
I	nitiative Generation and Prioritization	. 29
CSF	R in Banorte: Low-hanging Fruit and Short-term Strategy	. 32
CSF	R in Banorte: Progress to Date and Long-term (Three-year) Strategy	. 34
F	our Management Principles	. 34
l	ong-term Strategy	. 35
Cas	e Study: Paperless Initiative	. 38
(Case Study: PyMEs CSR Education Initiative	. 57
CSF	R Education Initiative	. 58
	What is CSR Education?	. 59
	CSR Education: SWOT and Learnings	. 59
9	SWOT Strengths	. 60
	Motivation Alignment	. 60
	Adaptability	. 60
	Champions	. 61
	Resources	. 61
	Expertise	. 61
	Management Ease	. 61
9	WOT Challenges	. 61
	Channel Development	. 61
	Content Maintenance	. 62
	Monitoring Performance	. 62
9	WOT Threats	. 62
	Champion Dependence	. 62
	Tighter Environmental Regulation	. 62
(SWOT Opportunities	. 62

Incorporate Vision Cliente	62
Develop New Partnerships	63
Create New Products and Services	63
PyMEs Initiatives: Developing Strategic Options	63
Strategic Options: Key Identified Initiatives	63
CSR Education	63
CSR Knowledge Sharing	65
Sustainability Loan	67
University Partnerships	68
PyMEs Key Takeaways	73
Organizational Learning for the Future	74
Conclusion	83
Final Thoughts	86
Glossary	88
Reference	89
Appendix	93

Index of Figures

Figure 1. Seven-stage strategic work plan	8
Figure 2. Key CSR management principles	9
Figure 3. Methodological process to arrive to CSR initiative portfolio	31
Figure 4. Key CSR management principles	34
Figure 5. Key efforts to be pursued under each management principle	
Figure 6. Successes and progress of the paperless initiative to date	40
Figure 7. Paperless initiative SWOT analysis	41
Figure 8. Key takeaways of best practices from paperless initiatives	46
Figure 9. Planning Template	48
Figure 10. Excerpt from Green Teams: Engaging Employees in Sustainability. Green Impact. I	Nov.
2010	50
Figure 11. Organizational learning: moving toward a multi-directional feedback mechanism.	52
Figure 12. Current developments of the CSR education initiative	59
Figure 13. SWOT analysis: CSR education initiative	60
Figure 14. PyMEs initiative three-stage outlook	64
Figure 15. Contagion effect model for paperless and PyMEs	74

Index of Tables

Table 1. CSR four pillars	9
Table 2. Compliance of the benchmarked organizations across several top and emerging	
standards	. 27
Table 3. Detailed status of each low-hanging fruit	. 33
Table 4. Lean six-sigma examples from Comerica	. 46
Table 5. Problems and strategies associated with effective change management	. 51
Table 6. Incentives for different stakeholders in the university partnership initiative	. 71
Table 7. Paperless initiative contagion portfolio	. 77

Abstract

As financial institutions approach sustainability in new ways, this report, prepared as a master's project for the School of Natural Resources and Environment, represents an innovative comprehensive corporate social responsibility strategy for the 3rd largest bank in Mexico, Grupo Financiero Banorte (Banorte). Through an extensive review of CSR literature, a compilation of best practices, and incorporation of organizational and decision-making frameworks most relevant to CSR, the report provides an overview of the year-long collaboration between Banorte and University of Michigan students from the Erb Institute for Global Sustainable Enterprise. This collaboration yielded key current and future short and long-term steps that will allow the bank to better integrate CSR (environmental, social and financial performance) into its core business strategy. In addition, the report includes two representative case studies of CSR initiatives: Small and Medium Enterprise education and Paper Reduction. Each of these studies provides key learnings and insights applicable for continued progress in creating an innovative corporate social responsibility strategy over the next three years and beyond.

Executive Summary

Over the past year, a University of Michigan School of Natural Resources and Environment master's project team (the Team) consisting of four MBA/MS students who are part of the Erb Institute for Global Sustainable Enterprise has worked closely with Grupo Financiero Banorte (Banorte) on a comprehensive, strengths-based corporate social responsibility (CSR) strategy. Banorte cemented its position as the third largest bank in Mexico after merging with Grupo Financiero Ixe (the tenth largest bank in Mexico prior to the merger). Banorte, post-merger, has approximately \$55.5 billion in total assets and 1,250 branches (as of the end of 2010). The only major bank owned by Mexicans, Banorte is largely a retail and commercial bank with particular strengths in small and medium enterprise, government, and personal banking. Prior to the University of Michigan's involvement, Banorte had already developed several key sustainabilityrelated initiatives primarily focused on community commitment issues through its foundation. Also, a senior level working group had been formed under the guidance of the CEO and CSR managing director, with the objective to learn, design, and implement a bank-wide CSR strategy. In 2009, the International Finance Corporation acquired an approximately 5% stake in the bank, a relationship that provides considerable expertise as Banorte moves forward with its CSR strategy.

The Team's involvement was focused on three stages of a seven-stage CSR strategic work—a plan devised by Banorte's CSR managing director and presented below:

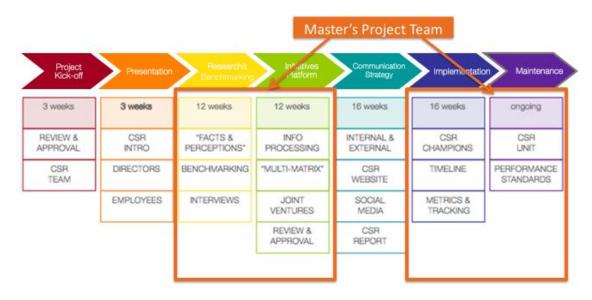


Figure 1. Seven-stage strategic work plan

In the first phase, **Research and Benchmarking**, the role of the University of Michigan Team was to develop and aggregate key research about CSR most relevant for Banorte, including industry best practices, executive-level priorities, and vision for the future. The initial result of this research was both a framework to organize best practices, tailored to Banorte, as well as additional executive-level education on the meaning and definition of CSR for the bank. This research resulted in the creation of an organizing framework, divided into four pillars that allow Banorte to both organize and communicate the different values of CSR. The four pillars are: community commitment, equality and government, value chain, and environmental responsibility.

Environmental Responsibility: Responsibility to take action in a conscious manner with respect to the environment, conserving resources used by the company and helping to create social and environmental awareness.

Value Chain: Responsibility for providing quality products and services and for influencing the supply chain so that it adopts more sustainable practices.

Equality and Governance: Responsibility to provide favorable working conditions and ethical standards that promote both personal and professional development within and outside of the workplace.

Community Commitment: Responsibility to interact with and support the growth of the community by linking the interests of the company and the community.

Table 1. CSR four pillars

Applying this framework, the Team co-created sixty potential sustainability initiatives as part of the **Initiatives Platform Phase.** This co-creation was the culmination of close consultation with a variety of department leaders. Throughout this process, several initiatives were selected for their relevance to each of the four pillars, current internal strengths and external opportunities that these initiatives leveraged, and overall alignment with both executive priorities and departmental capabilities both now and in the future. The Team created a multi-criteria matrix tool that prioritizes the initiatives by putting weights on key criteria: investment, implementation feasibility, risk, time, and impact. This matrix incorporates the Analytical Hierarchy Process (AHP), a process that is in wide use for complex stakeholder-driven decision making in both corporate and environmental settings such as the United States Environmental Protection Agency and Hewlett-Packard.

The initial result of this of this phase was the identification and prioritization of six "low-hanging fruit" that represented quick wins, had executive buy-in, and captured Banorte's mission and key values. The Team identified key CSR management principles necessary for these low-hanging fruit to succeed. These principles include: develop metrics, create products and services, build internal & external human & social capital, and adopt national and international standards & practices.

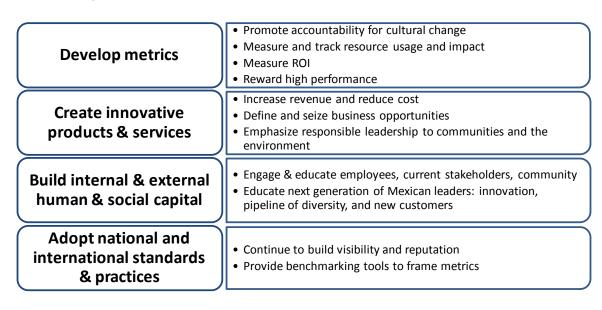


Figure 2. Key CSR management principles

The next phase of the project was the basis for the long-term strategic roadmap for Banorte. This roadmap, included the low-hanging fruit as part of a pilot process which was followed by

the extraction of key learnings. The key learnings were then applied to facilitate the success of both low-hanging fruit initiatives and for the long-term success of the entire CSR strategy.

As part of this process, two specific initiatives were identified that had taken hold within the bank: a paper reduction initiative and a PyMEs (Spanish for pequenas y medianas empresas, which translates to "small and medium enterprises") departmental initiative that provides CSR training and education as a part of the department's client services.

Paper reduction is one of the key issues we addressed when looking at Banorte's environmental impact. This initiative also contributes to greater organizational and staff-wide efficiencies and learning. Small and medium enterprises (SMEs), the largest-growing sector in Mexico and a key driver of Banorte's business, have significant environmental, social, and economic impacts because of their share of the market, their impact on local communities, and the pollution that originates from this sector.

These two initiatives formed the basis of two separate case studies. The goal of each was to identify a strategic path that would lead Banorte toward a state of "integrated innovation" that would take hold over the next three years and beyond. In this envisioned state, CSR would be fully integrated into Banorte's organizational DNA, imbedded in the bank's culture and growth strategy and a key component of continued learning and innovation. The Team also identified and harvested key learnings from these two initiatives as a springboard necessary to move the bank's overall CSR strategy to this state of integrated innovation over the next three years.

Focusing on internal cultural change and planning in the first case study, the Team looked deeply at best practices for paper reductions well as key stages and areas of development along a three-year roadmap. Starting with a value proposition about the specific impacts of paper and the cost savings possible, the recommendations focused both on human capital development and the necessary planning and tracking metrics that would allow the bank to understand, quantify, and communicate CSR successes, opportunities, and challenges. The Team discussed how the learnings developed from the implementation of the paper reduction initiative would be relevant to other initiatives, especially internal waste reduction and energy efficiency initiatives.

Looking at external client awareness-building opportunities, the PyMEs CSR education case study looked at ways in which Banorte can best educate and encourage clients to adopt CSR principles. Building on the current education and training initiatives already in development for clients, the Team identified a learning path that would encourage this important client segment to understand the relevance of CSR in their smaller-scale businesses. In addition, the Team presented key partnership opportunities that would enhance Banorte's ability to serve this segment as well as key planning and metrics to track this progress over time. As in the case of the paperless initiative, the Team also shared how the learnings from this initiative would apply to the entire CSR strategy, with a focus on bringing a CSR strategic outlook to other client and business development opportunities across the bank.

Conclusion

Over the past year, the Team has had the opportunity to share many of the successes of Banorte's CSR efforts. The Michigan Team has been excited to see the publication of Banorte's first Global Reporting Initiative GRI report and the recognition of the bank's success by a number of different organizations and periodicals. Below is a brief summary of some of these impacts:

- **Development of 4 Pillars**: In the fall of 2010, Banorte released its first GRI report, which received a B+ rating. This report discussed initial progress and commitments and featured the four pillars as a critical organizing framework for the bank's CSR agenda.
- Paperless Reduction Rollout: With the Michigan Team's encouragement and under the leadership and guidance of the CSR managing director, Banorte's COO and material resources team have set clear goals and commitments for reducing the bank's paper use in 2011. As part of this work, the Team has identified CSR champions in several departments (including IT, marketing, and operations) who are committed to collaborating on this initiative and in the future on other waste reduction and energy efficiency initiatives. The following additional paperless steps have also begun to take hold:
 - Movement to change default fonts
 - Call center pilot
 - Duplex printing capable printers
- CSR Initiatives Pipeline: A number of the initiatives that have been identified with the
 bank have begun to be implemented. While some of these ideas preceded the Michigan
 Team's involvement, there is a measurable CSR pipeline with many new opportunities
 being explored.
- PyMes CSR Education Case Study: As part of the summer work of Marcos Mancini (a member of the Michigan Team), the PyMEs department has continued to grow its capabilities around CSR education. They now feature a PyMEs-specific CSR case study (developed with Marcos's guidance) on their departmental website.

In addition to these internal initiatives, Banorte has also begun to see external recognition for its efforts around CSR. Some see this kind of recognition as the result of good marketing, but from our experience working with the bank we have come to view this initial recognition as representative of the authentic progress the bank has begun to demonstrate in moving forward with its CSR work. These include:

- A declaration of sustainability within Banorte's mission and values statement
- A GRI report with B+ grade
- The invitation of Banorte's CSR managing director to the exclusive CSR program at Harvard University

- The recognition of Banorte as the eighteenth most socially responsible institution in Mexico (Grupo Mundo Ejecutivo)
- The recognition of Banorte as a leader of the SME sector by President Calderon
- A "Best Places to Work" recognition

In the end, the University of Michigan Team provided key resources, next steps, and new ideas leveraging our own expertise and the resources of the University of Michigan academic community to present the bank with a comprehensive CSR Strategy. Ultimately, the purpose of our work was to build upon Banorte's strengths as a learning organization. This, of course, could not have been possible without the leadership of the bank's CEO, Alejandro Valenzuela Rio, and the CSR managing director, Mayra Hernandez, as well as Fausto Hernandez Pintado and the senior executive CSR committee leadership. Each of these leaders has made themselves available countless times in Mexico City, Ann Arbor, and over the phone. Banorte's passion to invest in its learning will serve it well as it embarks on the path toward CSR leadership in Mexico and in Latin America. We are most grateful to have had the opportunity to learn along with them.

Introduction

Scope and Objectives

Grupo Financiero Banorte (Banorte) partnered with the University of Michigan's Erb Institute to create the bank's first integrated corporate social responsibility (CSR) strategy. The Erb Institute is a dual-degree program between the Stephen M. Ross School of Business and the School of Natural Resources and the Environment and is recognized as a leader in issues concerning social, environmental, and economic sustainability. As part of a multi-disciplinary capstone master's project, four student consultants have engaged with Banorte to share their expertise and collaborate with senior management on how to navigate changing times and inspire innovation through CSR. This yearlong project aims to:

- Educate Banorte on industry-best practices within CSR
- Create a common language to speak to internal and external stakeholders about CSR values, principles, and goals
- Define CSR initiatives based on Banorte's current activities, strategic vision, strengths, structure, and values
- Provide a prioritization tool for initiatives (based on five variables: impact, implementation, risk, investment, and duration) and provide recommendations for lowhanging fruits and long-term high-impact initiatives
- Create a three-year focused guideline with defined milestones, provide insights on how to efficiently meet these goals, lay a foundation to an enduring CSR culture, and customize CSR initiatives along a specific timeline created to produce optimal results

Banorte Background

Banorte is a Mexican-owned financial group that identifies itself as the "Strong Bank of Mexico," currently ranking third in the country in terms of total assets. Banorte provides a full range of services through its banking unit, broker-dealer, insurance, retirement savings funds, mutual funds, annuities' company, factoring and leasing department, and warehousing, serving more than fifteen million clients. The bank conducts a wide range of commercial and retail banking activities in Mexico through its nationwide footprint of 1,098 branches and 4,539 ATM's. Banorte also has presence in the US Hispanic market through Inter National Bank (INB), based in Texas, and the remittance companies, Motran and Uniteller, based in California and New Jersey, respectively. The bank also maintains a presence in New York City through its Banorte Securities operations.

Over Banorte's storied history, the institution has experienced significant growth, largely through acquisition of a number of local and regional banking networks in Mexico. In 2006, Banorte expanded across the border to acquire a majority stake in the Texas-based Inter National Bank, finalizing a 100% acquisition in 2009. In 2010, Banorte merged with Grupo Financiero Ixe, Mexico's tenth largest bank at the time. The combined entity is the largest

Mexican-owned bank and third largest bank in Mexico after Banamex (Citi) and BBVA Bancomer (BBVA of Spain) with approximately \$54.3 billion in total assets, a loan portfolio of \$21.6 billion, and deposits of \$23.8 billion. The following is a brief overview of some of the key milestones in Banorte's growth.

History of Banorteⁱⁱⁱ

- In 1899, Banco Mercantil de Monterrey was founded.
- Almost half a century later, Banco Regional del Norte began operations.
- In 1896, through the merger of Banco Mercantil de Monterrey and Banco Regional del Norte, Banco Mercantil del Norte (SNC) was established.
- In 1992, Banorte was acquired by its current group of shareholders, led by Roberto González Barrera. In October of the same year, GFNORTE made a public share offering on the Bolsa Mexicana de Valores (the Mexican stock exchange).
- In 1993, Banorte incorporated stock brokerage, factoring, warehousing, and leasing services into its business.
- In 1997, Banorte acquired Bancen and Banpaís banks and created a savings and foresight Sector (insurance, saving funds, and pension funds) as Banorte joined in alliance with the Italian group Assicurazioni Generali.
- By 1998, Seguros Banorte-Generali was offering its services at more than 460 branches; by 1999, it ranked ninth among Mexican insurance companies.
- Bancrecer was incorporated in 2002, making Banorte the fifth largest bank in Mexico at the time.
- In 2005, Banorte struck an alliance with Telecomm Telégrafos and Banorte's new corporate headquarters were inaugurated in the Santa Fe district of Mexico City.
- In 2006, the bank acquired UniTeller, a remittance handler in New Jersey, as well as 70% of the assets of Texas-based Inter National Bank.
- In 2007, the Los Angeles-based remittance handler Motran Services was acquired and the bonding operations were spun off from the financial group.
- Banorte's leasing and factoring operations merged in 2008.
- In 2009, the remaining 30% share of Inter National Bank was acquired, Corporación Financiera Internacional (IFC) invested \$150 million in Banorte, and GFNORTE was listed on the Latibex (the Madrid-based market for Latin American securities).
- In November of 2010, Banorte merged with Grupo Financiero Ixe

What is CSR?

Before discussing the specific CSR opportunities as they relate to Banorte, this section provides an overview of both CSR definitions and the value that a CSR program can bring to an organization. While a comprehensive CSR strategy provides context, organizational planning framework, and new ideas, many CSR-related initiatives have already begun at Banorte. When appropriate, we reference specific examples of how these CSR concepts apply to these initiatives.

Corporate Social Responsibility is a global phenomenon with several different interpretations. Banorte has adopted The Mexican Center of Philanthropy's (CEMEFI) definition of CSR since the institution sets a national standard for Mexican businesses and best captures Banorte's missions and values. Additionally, Banorte hopes to become accredited by CEMEFI in the near future so as to legitimize its CSR commitment and be in the position to train sales force, partners, and clients in CSR principles. The following is CEMEFI's definition of CSR.

"Responsabilidad Social Empresarial, es el compromiso consciente y congruente de cumplir integralmente con la finalidad de la empresa, tanto en lo interno como en lo externo, considerando las expectativas económicas, sociales y ambientales6 de todos sus participantes, demostrando respeto por la gente, los valores éticos, la comunidad y el medio ambiente, contribuyendo así a la construcción del bien común."

In English, this translates to read: "Corporate Social Responsibility is the consistent and congruent commitment to fulfill the mission of the business both internally and externally, considering the economic, social and environmental expectations of all its members, showing respect for people, ethical values, community and environment; thereby contributing to the common good."

Why CSR Now?

Crisis brings progress. It's in crisis that great innovation, discoveries, and strategies are born. Those who surpass crisis, surpass themselves.

—Albert Einstein

In the face of an economic crisis, most companies retreat in order to protect their bottom line, but Banorte used it as an opportunity to shine. "Careful, conservative management enabled Banorte to survive the currency crisis of 1994 and its aftermath. While many other banks its size went under, Banorte took advantage of the crisis to acquire other banks and to expand from Mexico's north into all areas of the country. [While doing so] it did not lay off any employees, [in fact, Banorte] added a few hundred."

One could say that Banorte has a competitive advantage in dealing with risk, and this, along with the company's traditional management, were major contributing factors that led International Finance Corporation (IFC) to take a 5% equity stake in the bank. Integrating CSR into the bank's overall strategy had been under discussion internally for several years, but the IFC partnership

served as a driving force that prompted Banorte to commit to clearly define and articulate its current and future CSR strategy. The co-creation process started to build the case that CSR would be the appropriate tool to leverage the company's strengths, values, and principles in order to spur continuous growth and competitive advantage. As stated by CEO Alejandro Valenzuela and echoed by senior management, "...CSR must make the business case..." The Team dissected the business case further into four key sectors: growth, return on capital, risk management, and leadership development, based on the McKinsey Finance article entitled "Valuing Social Responsibility Programs." (See Appendix A.) Banorte has a long history of being the "bank of Mexicans for Mexicans" and is in the best position right now to take the reins and help steer Mexicans toward a better, more sustainable future.

The following section takes a deeper look into the driving forces for creating a comprehensive CSR program^{vi}:

Growth

CSR creates a unique platform to engage consumer segments in new ways, and by doing so Banorte has the opportunity to access new markets and create innovative products and services to meet their needs. Growth drivers such as **new markets**, **innovation**, **new customers**, and **partnerships** indicate the ways in which Banorte can maintain a competitive advantage.

New Markets

The current partnership with IFC has permitted Banorte to access new markets and serve higher-risk customer segments, including small and medium enterprises (SMEs) and the unbanked or underbanked segment. For example, the focus of both Banorte and IFC is building products and services specifically tailored for SMEs. Traditionally, SMEs form an important part of Mexico's economic development but are also considered risky investments. Guarantee funds, currently being structured by IFC, are meant to provide access to finance for SMEs while cushioning the risk involved in serving them. Banorte views this as a driver not only because of the impact it will have on Mexican society but also because it will defend their position as a market leader in this segment.

Innovation

The best companies "search actively and imaginatively to find and invent solutions that simultaneously produce more profits and better social [and environmental] outcomes." Access to new markets and new partnerships, as well as internal operational breakthroughs can enable Banorte to develop products and service and an intrapreneural (internal entrepreneurship) culture of ideas that would not have been formed otherwise. Throughout the course of this report, we will discuss particular ways of thinking as well as new approaches and guidance to exploit CSR as a driver of innovation at Banorte.

Synergy

Banorte has a competitive advantage by being a privately owned Mexican bank in that it can tailor products and services by regional needs, respond quickly to crises (both financial and natural), and ultimately be able to **reflect Mexico's voice and concerns** in their business decisions. In order to do this more effectively, Banorte is undergoing an organizational shift; the bank is moving from a siloed structure to one that integrates its various departments and becomes more client-centric. This new customer relation management (CRM) strategy is called "Vision Cliente." CSR has become a driver to reinforce Banorte's ability to get closer to the communities in which it works, serve new and existing customers better, and ultimately work toward a more cohesive/collaborative company culture that designs the shared vision for Banorte's future.

Partnerships

A focused CSR strategy permits Banorte to be **proactive instead of reactive** to forging new alliances and partnerships (both internal and external). These partnerships are important in several ways because they bring together businesses, NGOs, universities, and government to: create culture change through co-creation and collaboration across departments, functions, and status; build internal expertise; and fill gaps by outsourcing expertise. For instance, internal green teams build expertise around CSR themes as a means to influence internal culture change. This knowledge can also be transferred outside of Banorte by participating in ABM (Association of Mexican Banks) to influence greening the supply chain of the banking and corporate sector. Banorte's foundation also has strategic alliances, such as the future one with CEMEFI, which Banorte could leverage in order to legitimize its commitment to CSR. It is through partnerships that Banorte acknowledges the skills that others bring to the table and goes beyond beginning a program to starting a movement. Without a clear CSR strategy, Banorte's efforts would be fragmented. With a focused CSR strategy, Banorte can build partnerships with purpose and measureable impact.

Return on Capital

CSR also creates opportunities to generate cost savings through **operational efficiency**, **workplace efficiency**, and **revenue opportunities** as a result of focused, strategic investments. Each of these impacts is discussed briefly below. Some initiatives are clear in their financial savings (such as increasing the energy efficiency of the bank's buildings) while others have social repercussions (such as employee productivity and increased retention rates). In essence, these are all returns on either financial capital or human capital.

Operational Efficiency

There are several opportunities to **generate substantial cost savings** through operational efficiency initiatives. However, achieving these goals calls for a better understanding of Banorte's baseline values in resource and energy consumption, waste management, and

greenhouse gas emissions. CSR not only becomes a driver for expanding IT capabilities to monitor these initiatives but also gives the bank a way to think about the metrics it would use in the first place. By having clear goals and targets, the bank will become better equipped to communicate the types of behavior changes it seeks. In essence, one of the reasons that energy efficiency initiatives can be challenging to execute is because there is a need to mobilize employees and change company culture in order to make these efforts sustainable. CSR provides this opportunity to mobilize employees and make the bank a leaner, more responsible business.

Workforce Efficiency

Banorte has received the 2010 "Best Place to Work in Mexico" award. This important achievement signifies that the workplace is enjoyable, the benefits and salaries are competitive, and the leadership opportunities are relevant. More and more, the issues of talent retention and productivity are intertwined with creating a sense of loyalty to the firm, to foster opportunities to expand skill sets, and to derive purpose in one's tasks. CSR enables employees to shine in different ways, expand their leadership skills, influence on company culture, and make an impact on society. These new opportunities bring more purpose to work and affect loyalty as well as productivity. Investing time and resources in the personal and professional development of employees through a CSR program is a clear indicator of their importance to the firm's success.

New Revenue Opportunities

Through an integrated CSR strategy, Banorte would be better able to prioritize new revenue opportunities and recognize the ripe opportunities appropriate for immediate investments to achieve the highest return on investment, using CSR as an opportunity to listen to and learn from its clients and developing new revenue-generating products that also provide environmental and social benefits.

Risk Management

As with any business strategy, one must consider the risks and how to mitigate them. CSR has the potential to respond to **competitive**, **reputational**, **market**, **climate change**, and **regulatory risks**, as discussed below. Some of these risks are addressed by considering investor trends, to avoid bad media, losing goodwill and brand recognition. Others, such as climate change and regulatory risk, are in response to changing national and global policies to protect natural resources.

Competitive Risk

Banorte's peers such as Bancomer, Banamex, Santander, and HSBC are winning "top of mind" brand recognition thanks to their CSR programs. By comparison, Banorte is late to

incorporating CSR strategies—but not a stranger to social commitment. Although Banorte has built a brand on being the "Strong Bank for Mexicans," a 2010 poll showed that when Mexicans were asked about "who helps Mexicans" and given a number of banks to choose from in response, the majority said Banamex. One of the reasons for this result is that regardless of whether or not the respondent was a client of Banamex, Mexicans see Banamex as a major sponsor of social, environmental, and cultural events, which has been a part of Banamex's CSR outreach. Banorte, on the other hand, gives 1% of company profits to its foundation and has supported more than 108 social organizations but goes unrecognized for its work both externally and internally. A defined CSR strategy will allow Banorte to articulate its values, goals, and impact so that Banorte can instill pride from within the company and demonstrate its continuous external efforts outside of the company.

Reputational Risk

Corporate performance, especially for global corporations, is now almost universally understood as multidimensional. It includes economic, environmental, and social aspects. This is why more companies are reporting triple bottom line (GRI) reports than ever before. These reports provide **transparency and accountability for CSR endeavors**, which is one way to mitigate reputational risk. In fact, a Multinational Monitor interview with Vogel concludes that CSR has a huge impact on diminishing reputational risks that would adversely affect a company's brand name. Companies don't want to be seen as irresponsible, especially if lagging behind competitors that are vocalizing good deeds within the community. In this sense, CSR becomes a kind of differentiator. Undertaking an authentic CSR position makes it less likely that negative press will target a company and more likely that the public will be more forgiving of a company's downfalls.

Market Risk

Most recently, investors are asking whether Banorte is invested in CSR. One of the main challenges for the Investor Relations Department was to explain why Banorte had not ignited a program. Sixty-five percent of Banorte's institutional investors come from Europe, and many of them are comparing Latin American banks not only by their portfolios but also by their responsibility to their communities. This is something that matters to these investors and is an area in which Banorte has fallen behind, especially when compared to their peers in Brazil. There has been pressure to comply with the Equator Principles and to provide measureable results of Banorte's CSR endeavors. It is easy to see why getting CSR right will indeed affect the perception and persuasion of investors in the future—possibly even widening the pool to new types of investors that value a double or triple bottom line.^{xii}

Climate Change Risk

Financial institutions are subject to high degrees of scrutiny by third party organizations such us civil society organizations (CSO), so efforts to **mitigate environmental risks** as part of a CSR

strategy will be looked on favorably by both the government and the international community. Mexico is particularly at risk of the uncertain and extreme weather that is created by climate change, as can be seen most recently by the devastation of the northern part of the country in the summer of 2010. To mitigate this risk, Banorte must get at the root causes of this change by measuring and reducing its GHG emissions both in its own operations and through investment in sustainable infrastructure across Mexico. Some of this work is underway. Specifically, Banorte's Asset Recovery Department has large venture capital investments in real estate that require environmental compliance according to government standards. Examples of these investments are community development projects to build housing, highways, and infrastructure for public lighting and better water treatment. Currently, the IFC is interested in assisting Banorte's sustainable integrated urban development projects (DUIS) to serve vulnerable communities as well as comply with necessary social and environmental standards. CSR becomes a great vehicle in which to build partnerships with the global community and government to build smarter, more sustainable communities. XiII

Regulatory Risks

The government is seen as one of the biggest drivers of **risk due to changing policies and government regulation**. For instance, the government is tightening environmental regulation on SMEs, and therefore Banorte, as a leader in SMEs, must rethink the products and services that will prepare this customer segment to be more profitable and competitive in the future. Part of that strategy involves environmental compliance. Banorte has a long history of working with the government, especially through community development and municipal and state government projects (such as DUIS). It has been in Banorte's best interest to partner with the government because it gives the bank a chance to engage in large high-impact projects. CSR has the ability to further align Banorte's goals with the social and environmental mission of the Mexican government, and by doing so Banorte can mitigate risk by either influencing policy or adapting faster to government pressures.

Management Quality

Not only does CSR have the ability to engage external stakeholders, but it also has the ability to influence cultural change from within through **leadership development** and **adaptability**, discussed below. Both factors deal with integration: collaboration across departments and functions as well as interaction with communities. By doing so, Banorte is establishing communication channels to be more effective and efficient in building business solutions that reflect culture and community.

Leadership Development

Banorte has the chance to engage its employees in new ways through a CSR program. For instance, Banorte has been encouraging **collaboration and communication across departments** through Vision Cliente, its customer relationship management (CRM) strategy. CSR goes a step

further by allowing senior managers to devise the shared CSR vision of the company and to lean on them for leadership or oversight to execute the initiatives successfully. In order to do so, leadership must be developed within the company and at various levels in order to achieve "contagion" across the bank. CSR fosters feedback loops through top-down and bottom-up communication. It is an opportunity for voices to be heard, new leadership to be formed, and innovative solutions to be generated.

Adaptability

As much as external partnerships allow Banorte to be **faster at adapting to current political and economic trends**, Banorte can also leverage its own human capital to be the eyes, ears, and voices of its communities. CSR forms an extra communication channel in which employees can step out of the office and into their communities, seeing the world through a different lens. In an industry that is increasingly client focused, these insights are extremely important.

Methodology: Four CSR Pillars

CSR Competitive Benchmark Analysis

Driven by the factors and values of a CSR strategy discussed in the last section, many organizations have started to implement CSR programs. Therefore, to devise a comprehensive CSR strategy, an assessment of the current global and regional CSR trends and best practices must first be conducted. Our Team analyzed thirty-two financial and nonfinancial organizations based on the breadth and depth of their CSR initiatives as well as their compliance or adoption of international standards. The Team co-developed this list of organizations with Banorte's leadership team, selecting a set of organizations both for their perceived leadership position in their respective fields and for the diversity they represent in both industry and geographical location. These thirty-two organizations included nine Latin American banks¹, seven global financial service firms², four social investment funds organizations³, three regional banks⁴, two development banks⁵, and seven nonfinancial institutions⁶. Research sources included in-person interviews, published reports, company websites, third-party (such as NGO) websites, and academic journals and other publications.

Aligned with the project as a whole, the analysis was based on the premise that CSR practices are an integral part of the organization's business strategies. Under this premise, initiatives were first analyzed using the following categories:

⁵ Intern-American Development Bank (IDB) and North American Development Bank (NADB)

¹ Banamex (Citi), Banco do Brasil, Banco Real (Santander), Bancolombia, BBVA Bancomer, Bradesco, Compartamos Banco, Santander, and Unibanco (Itau)

² American Express, Citibank, Deutsche Bank, Goldman Sachs, HSBC, JP Morgan Chase, and UBS

³ Calvert Investments, E+Co, Domini Social Investments, and Sustainable Asset Management (SAM)

⁴ Comerica Bank, La Caixa, and ShoreBank

⁶ Cemex, Gruma, Grupo Bimbo, Pemex, Starbucks, Tata, and Walmart (focusing on Wal-Mart's Mexican operations)

- internal carbon accounting and sustainable operations, which describe efforts and mechanisms through which the organization measures or manages carbon emissions and reduction;
- products and services offered by the organization that produce not only economic but also social and/or environmental benefits;
- philanthropic activities, such as corporate giving and employee voluntarism efforts;
- community education, as characterized by programs that focus on expanding the capacity of community members;
- internal education, including not only educating employees on company CSR efforts but also employee engagement (such as co-creation efforts);
- supply chain education, including educating suppliers as well as clients on relevant social and environmental best practices;
- corporate equality, including diversity focuses, employee training, and labor and working conditions; and
- governance structure, including the existence, organizational structure, processes, messaging, and transparency of a CSR governing body.

The Team then leveraged existing frameworks and emerging themes from the assessment to develop Banorte's four CSR pillars. The four CSR pillars were subsequently adopted by the bank in both its internal and external communications. The four CSR pillars are defined in the following table. To ensure cultural appropriateness, the translations in Spanish and English are slightly different.

CSR Pillars in Spanish CSR Pillars in English		
Protección al Medio Ambiente:	Environmental Responsibility: Responsibility	
Responsabilidad de accionar de manera	to take action in a conscious manner with	
consciente con el medio ambiente,	respect to the environment, conserving	
conservando los recursos utilizados por la	resources used by the company and helping to	
empresa y emprendiendo acciones que	create social environmental awareness.	
generen una conciencia ambiental social.		
Cadena de Valor: Responsabilidad de brindar	Value Chain: Responsibility for providing	
productos y servicios de calidad e influenciar la	quality products and services and for	
cadena de suministros para que la misma	influencing the supply chain so that it adopts	
adopte practicas más sustentables.	ables. more sustainable practices.	
Ética y Calidad de Vida en la Empresa: Equality and Governance: Responsibility to		
Responsabilidad de brindar condiciones de provide favorable working conditions and		
trabajo propicias y bajo estándares éticos que ethical standards that promote both persona		
fomenten tanto el desarrollo personal como and professional development within and		
profesional dentro y fuera del ámbito laboral. outside of the workplace.		
Apoyo a la Comunidad: Responsabilidad de Community Commitment: Responsibility to		
interactuar y apoyar el crecimiento de la interact with and support the growth of the		
comunidad mediante un accionar acorde a los community by linking the interests of th		
intereses de la empresa y la comunidad.	company and the community.	

The four CSR pillars offer an elegant framework that conveys the integral nature of CSR activities while emphasizing the categories of focus key to a comprehensive CSR strategy. Naturally, most initiatives pertain to more than one pillar.

CSR—A Global View of Best Practices

The findings of the benchmark analysis showed that all of the organizations implemented CSR initiatives that built upon their core competencies and strengths. These efforts were often reported to shareholders and the public via marketing strategies such as media campaigns or reporting mechanisms such as CSR sections on company websites or published CSR reports. The findings presented to the bank's senior management and discussed below, highlight the best-inclass examples to provide an overview of the broad spectrum of activities for benchmarking purposes. In some cases, Banorte already had similar efforts underway. The research findings identified common themes as well as unique innovations; all aligned with the CSR drivers of growth, return on capital, risk management, and management quality discussed in the last section. The following subsections highlight themes found within each pillar while later sections draw upon specific CSR best practices most relevant to the scope of this project.⁷

Environmental Responsibility

In the area of environmental responsibility, the findings showed efforts common across different organizations. Organizations are engaging in initiatives that go above and beyond environmental compliance requirements, clearly recognizing not only the reduced environmental impact but also the significant cost savings and public image opportunities brought by resource-reduction efforts. For example, one of the trends was energy, resource, and emission reduction and associated measuring, tracking, and internal and external reporting mechanisms. The following are a few notable environmental initiatives:

- Banco Real's major internal recycling campaign and multi-company pilot project for paper reduction^{xiv}
- Citibank's desktop standardization initiative in which the company upgraded every computer to an energy-efficient desktop. Core to this initiative is also power management such as centralized sleep settings and automatic wake-up for computer software.
- Grupo Bimbo's founding of the Civil Association Reforestamos Mexico, an association that preserves forests and rainforests through community empowerment efforts

Value Chain

Within the value chain pillar, the Team found many innovations that built upon individual organizations' core competencies and business models. This pillar is about educating and influencing both suppliers and clients. The organization leverages those relationships and talents as well as its key strengths and resources to develop innovative products and services to reach new market segments and improve sustainable practices throughout its value chain. In some

⁷ Unless otherwise indicated, the source of each example is the website or CSR report of the organization being discussed.

cases, the organizations form new alliances that allow them to create and execute new ideas that would not have been possible otherwise. The following is a list of select examples:

- Goldman Sachs: GS SUSTAIN is a unique global equity strategy that brings together ESG (environmental, social and governance) criteria, broad industry analysis and return on capital to identify long-term investment opportunities. During 2008, Goldman Sachs placed more than \$1.4 billion in catastrophe-linked securities to address risks of hurricanes and other natural catastrophes. In 2009, the Goldman Sachs Group, Inc. (NYSE: GS), Blue Source, and CE2 Carbon Capital today announced a \$12 million U.S. carbon offset transaction.
- JP Morgan Chase: J.P. Morgan's Social Finance unit provides investment and capital markets services to social enterprises, funds, foundations, non-governmental organizations, development financial institutions and other investors serving the base of the economic pyramid. In doing so, Social Finance achieves a double bottom line of financial return and social benefit. JP Morgan became a founding member of Hope Now, an alliance among counselors, mortgage market participants, and mortgage servicers to create a unified, coordinated plan to reach and help as many homeowners as possible. In 2008, J.P. Morgan acquired U.K.-based ClimateCare, a pioneer in the development of high-quality voluntary offsets. It has helped J.P. Morgan increase awareness of the link between energy, poverty, environmental degradation and climate change and assisted in funding low-carbon technologies with environmental and social benefits.
- Comerica Bank: Development of several new green banking products, such as a new credit card with green reward options that is expected to let customers use reward points to support green or environmental organizations
- HSBC: created a US\$50 million eco-partnership over five years to fund conservation projects around the world by partnering with WWF, Botanic Gardens Conservation International (BGCI) and Earthwatch.
- Santander: Santander's Dividendo Solidario equity fund; invests in companies with strong environmental and social commitment.
- Banco do Brasil: Banco do Brasil conducts social-environmental and risk analyses for investment projects valued at or greater than US\$ 10 million, based on criteria established by the International Finance Corporation (IFC).
- Banco Real: Banco Real established an Ethical Fund, which is the first fund in Latin America exclusively to feature stock from companies that have responsible social and environmental practices and solid corporate governance. Real Microcrédito, an initiative by Banco Real ABN AMRO, offers small loans to growing businesses that lack access to conventional forms of credit. Through the provision of microcredit, Banco Real ABN AMRO is committed to the economic and social development of its borrowers, and to promoting Brazil's economic growth. In early 2001 Banco Real began mobilizing suppliers to integrate sustainability into their management practices. For example, all contracts with suppliers now include clauses that prohibit discriminatory practices and the use of child or forced labor.

Equality and Governance

Viewing diversity, employee satisfaction, and training opportunities as competitive advantages, all of the analyzed organizations have executed efforts that focused on workplace quality issues or employee career development. One of the Team's key takeaways is the way in which diversity of employees mirrors the diversity of the organization's clients; diversity and representation in the workforce enables companies to better reach, and meet the needs of, their clients. Equality and governance initiatives such as leadership training are also critical for employee retention, leadership development, and overall productivity of the workforce. Another overarching theme in this area involves the planning and implementation of CSR responsibilities within the organizational structure. Organizations with the best-integrated CSR efforts have a formalized CSR governance structure that report to top management. This structure indicates the importance of internal accountability and priority. It also signals to internal and external stakeholders the company's commitment to make CSR part of the company's strategy and culture going forward. Examples of these key takeaways are:

- Santander: Professional Ascension Program (leadership training). Santander has an innovative training and knowledge model, introduced in 2009, the goal being "to consolidate itself as an international reference in this sphere via innovation, continuous improvement and a deep understanding of the business needs"xv. These trainings target such specific groups as women and high-potential young executives in order to grow the leadership within the bank.
- Compartamos Banco: Recognized as one of the best places to work in Mexico for women, by the Great Places to Work Institute. Compartamos was one of 47 companies recognized for their efforts. The survey performed by Great Places to Work was based upon a number of quantitative criteria that included:
 - -"Total number of women working in the company.
 - - Percentage of women managers and executives.

Qualitative criteria included:

- -The implementation of innovative practices focused on the development, health, maternity, etc, offered by the organization to assist women there.xvi"
- JP Morgan Chase: A web and social media women-recruitment campaign. JP Morgan's
 "Winning Women" program provides a dedicated women-recruitment website and
 features events and opportunities for developing women leaders at various stages of
 their careers. The site utilizes a variety of social media tools such as podcasts, videos,
 photos and a link to Facebook***ii.
- Grupo Bimbo: Strong focus on CSR programs for associates (employees) in two areas: economic (e.g., health assistance and home improvement) and development (training in many areas)**Viii.

- Banco do Brasil: Created a multidisciplinary team to analyze and propose measures about initiatives related to social-environmental responsibility
- Bradesco: Executive committee of social-environmental responsibility reports directly to the executive vice-president and includes Board member and executive officer representation^{xix}
- Bradesco: Challenge of the Planet: employee quiz bowl on building sustainability knowledge and engagement with 87% of active employees participating and prizes awarded to the top contestants. The bank also published the names of the top scoring employees in their sustainability report. Bradesco also engaged in supplier training on social and environmental responsibility issues^{xx}.

Community Commitment

In addition to traditional philanthropic activities, many organizations implement community support and engagement programs by leveraging existing resources or the talents of their employees. Many of these initiatives are synergistic with the company's business objectives, such as recruiting or employee engagement efforts. The findings clearly indicate that community commitment has gone beyond corporate giving; companies have found a way to combine time, money, and talent in order to leverage strengths. These can be seen as employee development opportunities—powerful engagement tools—in which the companies are demonstrating to their employees how the skills they have attained are valuable not only to the workplace but also to society in general.

In addition, community commitment initiatives provide companies with the ability to form alliances with local, national, or international leaders as well as a way to integrate themselves more into the communities they serve. Initiatives such as employee volunteering, financial literacy and mentoring programs are examples of initiatives that allow companies to not only give back to the community but also to gain new customer perspectives.

- American Express: "The Paid Sabbatical Program offers eligible employees the
 opportunity to donate time and talent to not-for-profits while maintaining full pay and
 benefits."
- Bradesco: The bank has a professional development support and training for black youth. This two-year training program in collaboration with several academic partners includes seven modules and an internship opportunity to prepare these youth for the workforce^{xxii}.
- La Caixa: "Incorpora" employment integration program supports marginalized populations such as at-risk youth and people with disabilities, that have the most difficulties finding jobs, by connecting them with job placements available within a network of participating companies. As of November 2009, 9,000 companies had joined the network and 22,000 job placements had taken place***iii.

- Wal-Mart Mexico: In 2009, the company foundation increased its involvement in a Natural Disaster Fund in partnership with Mexican Red Cross, UNDP and FUNDEMEX to deliver basic necessities to those affected by natural disasters in Mexico^{xxiv}.
- JP Morgan Chase: JP Morgan Chase's Financial education to low-income adults: This
 area is one of the priorities of JP Morgan's philanthropic strategy, which included \$100
 million in giving and sponsorships for 2009^{xxv}.

Standards and Compliance

Many institutions have adopted international standards, which not only enable them to demonstrate their social and environmental commitment but in some cases also allow them to expand their networks. For example, Equator Principles was a product of collaboration by a group of private-sector banks. The following table shows the adoption by the benchmarked organizations across several top and emerging standards and global networks as of February 2010:

Standard	Quantity	Percentage of Total
Global Reporting Initiative (GRI)	20	62%
Compliance		
Equator Principles	12	37%
World Resources Institution (WRI)	13	40%
Greenhouse Gas Protocol		
UN Global Compact	16	50%
Carbon Principles	3	9%
Climate Principles	1	3%
UN PRI	10	31%
ISO 14001	12	37%

Table 2. Compliance of the benchmarked organizations across several top and emerging standards

Additionally, of the researched companies, Itaú Unibanco, Bradesco, UBS, Santander, and JP Morgan Chase are on the Dow Jones Sustainability Indexes.

Macroenvironment for CSR in Mexico

Mexico is the thirteenth largest economy in the world and the second most populous country in Latin America according to the World Bank (2010). In 2009, Mexico was the second largest economy in Latin America behind Brazil based on GDP. In 2007, the poorest 20% of the Mexican population accounted for only 3.9% of total income. Furthermore, 47% of the Mexican population was below the asset-based poverty line in 2008. In addition, the informal sector accounts for 40% to 60% of the total workforce in the country. This income disparity presents potential CSR opportunities for the financial sector, especially in offering products and services that focus on social and environmental benefits in addition to economic ones. Approximately 40% of the entire Mexican population remains underbanked. This underbanked segment represents potential new long-term customers for financial institutions. Companies like Compartamos have tapped into this segment and shown impressive results despite the

economic downturn. The success that microfinance and similar models have had on the underbanked segment has caught the eye of international investors. In fact, there is a global trend to push for more socially responsible investments (as confirmed by Banorte's director of investor relations).**

Mexico's Global commitment to the Kyoto Protocol as well as the carbon reduction policies that are in place in the country also present great CSR opportunities. Currently the eleventh largest carbon emitter in the world, Mexico made a major GHG emissions reduction commitment during the December 2009 Copenhagen Climate Change Summit. As reported by the Natural Resources Defense Council (NRDC): "Mexico announced a target to reduce its greenhouse gas emissions up to 30 percent compared to business-as-usual levels by 2020 and 50 percent by 2050, provided there is adequate financial and technological support. Mexico has also committed to cut carbon dioxide emissions 51

Side Box A. Greenhouse Gas Protocol

Created in partnership with the Mexican environmental agency (SEMARNAT) and World Business Council for Sustainable Development (WBCSD) (in conjunction with its local counterpart CESPEDES), the Greenhouse Gas (GHG) Protocol Initiative is a voluntary GHG accounting and reporting program. The first Mexican companies to report GHG emissions were: Altos Hornos de México, Grupo Cementos Chihuahua, Cooperativa La Cruz Azul, CEMEX México, Cementos Portland Moctezuma, Ford de México, Grupo Modelo, Grupo Porcícola Mexicano, Holcim Apasco, Mittal Steel Lázaro Cárdenas, NHUMO, PEMEX, SICARTSA/Villacero, Siderúrgica Tultitlán.and Sumitomo Corporativo de

million tons by 2012." To reach these goals, Mexico has taken out loans (such as from the World Bank), set up a CleanTech Fund (projected to generate \$42 billion per year by 2020 from carbon trading), and turned to the private sector to voluntarily reduce carbon emissions. See Appendix B for details of the country's policy objectives. XXXXIII

Further, Mexico was in the spotlight as the host of what was known as "COP 16," held in Cancun. Although the results of the conference were reported to be "modest," it was generally acknowledged to have laid the foundation for stronger global measures on emissions reduction in the future. The global trend is such that countries and industries are considering these potential policy implications in their strategic plans.

Articulating a Shared Vision

The focus of the industry analysis was to create a benchmark from which to develop and compare Banorte's achievements so far in the CSR area. Following the industry analysis, efforts were focused on establishing Banorte's core competencies to develop a comprehensive CSR strategy. In an initial presentation, this benchmark as well as best practices were presented, as were the concepts about CSR, so as to establish a common language.

During this presentation a detailed scenario "exercise" was performed with top executives from the bank in order to understand Banorte's current strengths and future opportunities in the development of the CSR strategy. In this exercise Banorte's executives were first asked to consider the current initiatives that the bank was pursuing and list their top priorities under each of the four CSR pillars. Subsequently, they were asked to list the initiatives that they would like the bank to pursue in the future under each of these pillars. For this second part of the exercise they were asked to think about the questions: Where do you see Banorte in the future? What CSR initiatives do you see Banorte pursuing in the future?

As stated by Collins and Porras, a well-conceived vision consists of two major components: core ideology and envisioned future xxxiv. By running through this exercise we were able to capture what Banorte currently stands for (i.e., its core ideology) and what it aspires to become (i.e., its envisioned future). Understanding which of Banorte's core values are more inspirational to people was of key importance in order to establish the three-year roadmap and leverage people's passions to create a balanced portfolio of initiatives that would find early adopters among Banorte's top leadership. In order to create this balanced portfolio, we also leveraged people's vision of CSR "ten years from now." We challenged the executives performing the exercise to establish big, audacious goals. In presenting this scenario, the executives were required to think beyond Banorte's current capabilities to the source of innovation to achieve these goals in the future. The outcomes of this exercise are shown in Appendix C.

With the objective of expanding on the knowledge generated through this initial scenario exercise and to better understand the structure of the bank as well as the interactions among the different business units, additional interviews were scheduled with directors of the different bank departments. The purpose of these interviews was to perform a SWOT in order to identify the departments' mains strengths that could be leveraged when developing the bank's CSR strategy. Additionally, the interviews intended to pinpoint potential challenges as well as opportunities that could be taken advantage of in each area to integrate a comprehensive CSR program across the organization.

During a second instance, additional phone interviews were scheduled with the executives initially interviewed in order to present the SWOT analysis results to them and obtain their feedback on the data gathered from other executives. The objectives of these additional phone interviews were not only to obtain feedback from the executives on the SWOT previously performed but also to jumpstart a co-generation process that would ultimately generate initiatives under each of the four pillars previously described. The results of the SWOT analysis are presented in Appendix D. The synthesis of this work led to the next stage in the development of the CSR strategy, the generation and prioritization of initiatives.

Initiative Generation and Prioritization

Through our conversations with the heads of different departments and through collective work with the managing director of CSR for Banorte, a list of sixty possible initiatives was generated. These initiatives ranged across the four different pillars and could be implemented over a wide period of time (current, short term, or long term). The initiative co-generation process was approached in such way as to have a balanced portfolio of initiatives across all the different CSR pillars as well as short- and long-term implementation initiatives. For a complete list of the initiatives generated as well as the initiatives that the bank is currently pursuing, please refer to Appendix E.

In order to evaluate these initiatives, prioritize them according to different sets of criteria, and create a sustainable "CSR culture" to think about CSR initiatives, the Team developed a higheraltitude scenario decision-making tool in order to provide a framework for the analysis of future

initiatives generated at Banorte. This decision-making tool would allow Banorte to plan ahead, anticipate, and evaluate different scenarios and alternatives while addressing CSR in order to become a more sustainable, driven institution.

While the prioritization methodology is described in greater detail in Appendix F, we note here that we used a multicriteria decision-making framework in order to prioritize these initiatives, based in part on the analytic hierarchy process (AHP) methods. AHP served as a dynamic tool, allowing the Team to structure complex decisions, simplify, and rate different alternatives. AHP is used both to prioritize environmental and air quality issues as well as in complex corporate decision-making settings, such as at Xerox and at GM. The greatest advantage of this method is that it provides an opportunity for stakeholder learning about different initiatives as it looks for optimization of particular variables and subvariables.*

In order to evaluate and further prioritize the portfolio of initiatives generated, each initiative was rated according to five different variables (investment, impact, time, implementation, and risk), using a score on a scale of one to five in order to further rate the complementary subvariables for each of the five main variables. Please see Appendix G for the variable and subvariable definitions.

Through the use of this tool, initiatives were classified into two categories:

Low-Hanging Fruit: Initiatives that are considered to be high impact, low risk, low cost, and high ease of implementation.

Long-Term Initiatives: Initiatives that are considered high impact and low risk.

The following graph summarizes the research and methodological process that the Team undertook to arrive at a CSR initiatives portfolio and, specifically, the low-hanging fruit initiatives, which make up the short-term CSR strategy for Banorte. In the following section, well provide the details of this strategy, specific case studies of two low-hanging fruit scenarios, and a final synthesis of learnings in order to create and present a long-term CSR strategy for the bank.

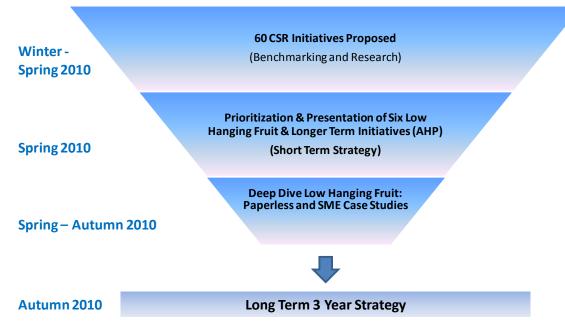


Figure 3. Methodological process to arrive to CSR initiative portfolio

CSR in Banorte: Low-hanging Fruit and Short-term Strategy

Over the past six months, through the use of the prioritization tool described in the last section, the Team has identified several low-hanging fruits in coordination with Banorte. In addition to prioritization, we also looked at the alignment of these initiatives with Banorte's mission, vision, and current strategic priorities presented by senior leadership. The original list of the low-hanging fruits included:

- Paperless initiative
- Union engagement
- University partnerships
- Women diversity initiative
- PyMEs CSR education

Please see Appendix H for both the mission and vision of Banorte as well as how these low-hanging fruit initiatives fit into that mission and vision.

Banorte has also been working on several current initiatives with CEMEFI and the IFC, both independently and in conjunction with the above initiatives.⁸ The bank has also begun the documentation process for creating its first GRI report (released in the fall of 2010), capturing the energy of CSR at the bank and creating a public commitment to continue this effort. These initiatives were discussed in greater detail previously.

The Team's goal was to understand "lessons learned"; specifically, what kinds of lessons about the successes or challenges of advancing the above initiatives would be helpful in furthering the sustainability movement and CSR program at Banorte. To this end, the Team conducted follow-up calls and received information on the status of these initiatives. The goal was to capture this learning—specifically, the good and flourishing activities—and to see how this positive learning can be applied across future initiatives and provide a guide to the creation of a three-year strategic plan at Banorte. The following table details the status of each of these initiatives.

Low-hanging Fruit	Developments: May–November 2010	Progress
Paperless	*Installed new printers with scanning capabilities	Medium-
	*New CSR team members hired and tasked with paperless reduction oversight duties	High
	*Assessing legal and storage needs that going paperless would require	
	*Reassessing opportunities for vendor relationships (paper/printing) * Examining automatic duplex opportunities	
	*Creating green communication capsules as part of Acciones (HR-led	
	employee engagement initiative), encouraging individuals to use double-	

⁸ These relationships also include additional outside partners engaged in energy efficiency

⁹ See Kim Cameron, *Positive Leadership*. San Francisco: Berrett-Koehler Publishers, 2008. A very helpful discussion of organizational flourishing and positive deviance.

	sided printing *Defining metrics	
University Partnerships	*Continued development of Mexican University internship program for students in final years of undergraduate programs. Successful program graduates will be placed in full-time positions as appropriate. *New Monterrey-centralized call center will not only feature energy efficiency but will also allow Banorte to strengthen its relationships and partnerships with local university students since many of the call center workers are students * Opportunities also explored as part of PyMEs Circle and Education Initiative.	Medium
Union Engagement	*Conversations have continued with the Union leader, who has continued to express interest in collaborating with Banorte around CSR initiatives while leveraging the partnership to bring CSR to other banks (e.g., Scotia Bank)	Low- Medium
PyMEs CSR Education	*Circulo PyMEs has incorporated CSR case study and thinking *Presentation given by Banorte's PyMEs director and CSR managing director at the PyMEs Circle Event *Developed CSR content for future Road Shows, to be updated on an annual basis *IFC partnership to provide energy efficiency loans being pursued *CEMEFI/Great Places to Work partnerships formed to create opportunities for organizations to receive CEMEFI certification and/or Great Place to Work training	High
Campaign: Hiring Women	Put on hold per human resources overview for strategic plan	N/A

Table 3. Detailed status of each low-hanging fruit

CSR in Banorte: Progress to Date and Long-term (Three-year) Strategy

Four Management Principles

In identifying the low-hanging fruit, the Team also identified key drivers of a successful CSR strategy at Banorte. These critical management principles are described below.

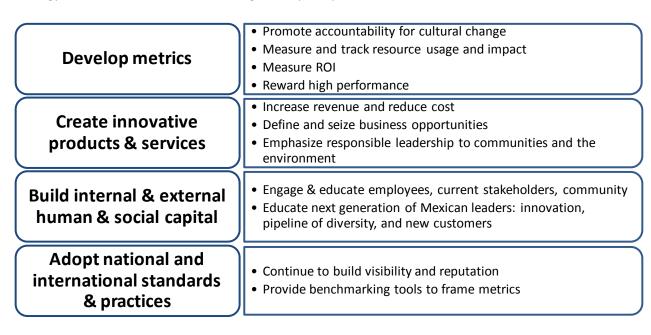


Figure 4. Key CSR management principles

Whv?

Each of these principles, both individually and collectively, is a higher-level guidepost that transcends all of the initiatives. Early on in the process and discussed previously, the Team (along with our partners at Banorte) looked at essential drivers of CSR; specifically, how these drivers would influence the future direction of the bank's strategy. Concurrently, the Team also defined the areas of CSR, the four pillars and how different initiatives, departments, and business units would touch each of these four pillars. Pillars are a guiding framework and are the "what" and the "where" of CSR at Banorte—what specific organizational framework defines CSR concepts and where each initiative falls. This is a critical part of communicating CSR both internally and externally, but it doesn't establish the process by which to most successfully move initiatives forward.

Complementing this initial organizing tool are the management principles, which represent the "how" aspect of the strategic planning process. The management principles addresses issues like: How can Banorte move forward with its strategic plan? How can the bank measure its progress? How can the bank define, learn from, and respond to stakeholders (both internal and external)? These principles are essential to the overall success of Banorte's CSR program, specifically, its ability to create a business case that is measurable and that leads to both internal

and external innovations. Collectively, these principles also represent a set of tools that allow Banorte to effectively capture and communicate company values.

Long-term Strategy

Our long-term strategy builds upon the four management principles over the short, medium, and long term. We start with what we see as an achievable future for Banorte in three years and beyond. This future scenario centers on integrated and continuous innovation and improvement. We then define the stages, discussed below, to guide Banorte along the path toward that goal. Finally, we look at both successes and challenges of current initiatives, focusing on paperless and PyMEs initiatives as case studies, in order to create a roadmap that best captures and harvests the organizational learnings related to the entire spectrum of CSR activities.

As mentioned, the possible scenario for three years and beyond is integrated innovation, defined as follows:

Integrated Innovation (Long Term/Third Year and Beyond): The team sees the third stage as an achievable future that will start to be realized in three years. This stage is about improvements and innovations that are continuous and long lasting. This stage includes an organic multi-directional conversation (or feedback loop) that builds upon and maintains the progress realized to date while instigating excitement about new opportunities. This stage represents integration both internally and externally, in that CSR is fully imbedded in the bank's organizational DNA, aligned with Banorte's financial, environmental, and social goals. In this stage, a fully integrated CSR position enhances Banorte's overall leadership and competitiveness in the market.

We have defined the two stages that represent the building blocks along the path toward the integrated innovation stage:

Foundation (Short Term/Current, First Year): This is the planning and definition stage necessary to a) establish and/or refine Banorte's CSR objectives and value propositions, b) prioritize both human and infrastructure investments, c) develop communication channels and build awareness internally and externally, and d) evaluate current successes and challenges as an opportunity to celebrate achievements and capture lessons learned. During this stage, Banorte establishes the business case.

Capacity Building (Medium Term/Second Year): This is the implementation stage where formalized systems allow for greater penetration of CSR goals both across the organization and with external partners. During this stage, Banorte builds upon the initial infrastructure in the foundation stage to expand internal capacity and formalize external relationships. This infrastructure includes integrated IT systems that allow for the tracking of key indicators defined in the foundation stage. Training and education are crucial to shift awareness into a culture of knowledge and best practices sharing around CSR. At this stage, through the establishment of green teams and pilot projects begun in the foundation stage, a two-way (bottom-up as well as top-down) feedback and knowledge-sharing channel develops.

The following table describes the key efforts involved in each stage for each of the four management principles:

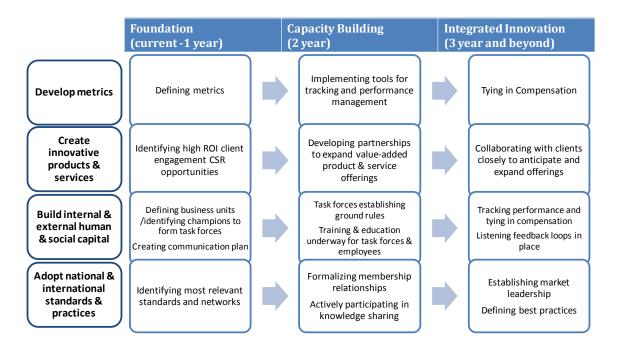


Figure 5. Key efforts to be pursued under each management principle

In the following sections, the Team will discuss the application of these management principles as they pertain to the paperless initiative and the PyMEs CSR education initiative. These self-contained studies provide tangible examples of how one can move along the path as shown in Figure 5 (above).

Case Study: Paperless Initiative

Case Study: Paperless Initiative

Value Proposition

"Toward a Paperless Future" is a portfolio of initiatives and steps that provide opportunities for Banorte to plan and implement strategies to reduce its paper footprint by creating a system of measurement for tracking the use of paper and paper products as well as other waste reduction and energy efficiency goals. Based on the Team's study of paper use at Banorte, we have discovered that there is a strong case for the argument that going paperless, if effectively implemented, would lead to greater operational efficiencies and influence the planning process and impacts (both inside and outside of the bank).

Based on an initial assessment of paper usage, the Team has determined that a 50% reduction in paper alone could lead to at least P\$6,190,016 per year in savings, based on paper usage in 2009 (See Appendix I). This figure is based on stationery and copy paper consumption. If one were to include all paper stocks (e.g., rolls of paper, etc.), the savings would increase by approximately an additional P\$1 million per year based on a total annual spending of approximately P\$14,868,487. ***xxxvi**

In addition to paper consumption, toner consumption is another example of a situation in which making a small change (such as using different fonts) can lead to additional savings and also have positive environmental impacts. The University of Wisconsin-Green Bay recently switched to Century Gothic, which according to the University uses 30% less ink than Arial font. Ink itself makes up 60% of the cost of a printed page. As a result, the organization was able to realize cost savings. Other fonts such as EcoFont (which uses even less ink by punching holes in the letters) also are options. **Example** Based on these assumptions, if Banorte switched fonts to, for example, Century Gothic font, a savings of 30% on current toner usage could be realized. This yearly savings would be equal to approximately \$1,136,432 Mexican pesos. **Example** **Example*** The province of the content of the cost of a printed page. The province of the cost of a printed page. The province of the cost of a printed page of the cost of a printed page. The province of the cost of a printed page of the cost of a printed page. The province of the cost of a printed page of the cost of a printed page. The province of the cost of a printed page of the cost of a printed page. The province of the cost of a printed page of the cost of the cost of a printed page. The province of the cost of a printed page of the cost of the co

Greater Efficiencies and Benefits

This figure does not include the savings that comes from less redundancy in paper filing (for example, the cost of filing a document is \$20 USD/document and the cost of a misfiled document is \$120 USD/document). xxxix

Finally, the cost savings described previously do not reflect additional side benefits in energy savings that would result from creating and engaging human capital and measuring and tracking infrastructure for both paper and other waste streams within the bank. The ability to learn and grow the CSR program at Banorte, while also improving the paper reduction strategy, is a key goal of this case study.

In addition, based on some industry-sponsored white papers, it is clear that the savings available to Banorte would also be applicable for paper-intensive small- and medium-sized businesses. A white paper conducted by Image Technology Consulting indicates a monthly savings of \$1,318

USD for a small financial advisory firm in the United States. XII We have also included the firm's sample ROI calculator for reference (See Appendix J).

Environmental Benefits

As important as the financial savings are the significant environmental impacts of reduced paper usage due both to the energy-intensive nature of the paper industry (the third largest CO₂ emitting industry) as well as the waste streams that paper generates. The approximately 1,652,775 pounds of paper that Banorte used in 2009 represent the following environmental impacts as provided by the Environmental Defense Fund paper calculator IIII.

Impact Type	Quantity	Equivalent to about
Wood Use	3,054 tons	21,380 trees
Net Energy	24,704 million BTU's	271 homes/year
Greenhouse Gases	4,860,917 lbs CO2 equivalent	441 cars/year

Table 4. Environmental impacts of Banorte's current paper consumption

Toner and cartridge production also has significant environmental impacts both in the production of the devices and in the use phase in which volatile organic compounds (VOCs) are emitted into the workplace causing health deficits. For example, according to one study, the manufacturing of a single mono toner cartridge emits approximately 4.8kgs of CO₂. Even the production of a recycled cartridge emits up to 2.4kgs of CO₂. ^{xliv}

It is clear that Banorte's paper footprint is significant, as is appropriate for a large financial services organization. This continues to make the case for why an investment in going paperless will continue to lead to significant results as part of a CSR strategy. As many organizations have found, going paperless presents some obvious opportunities and low-hanging fruit/quick wins. However, it is not always an easy strategy to implement. In the following sections we will discuss a variety of challenges of paper reduction as well as some of the steps that Banorte has begun to take in order to reduce paper usage across the bank.

Current State of Paperless at Banorte: Progress, Strengths, and Successes to Date

The process of shifting to a paperless system is being executed by a dedicated team under the leadership of Alejandro Garay, the COO of Banorte and person in charge of both material resources and operations at the bank. This process includes both a dedicated project manager within the department and the advancement of several key tasks necessary to drive the paperless system in the bank. Successes are both internal/operational (staff, duplex-capable printers, and digitization) as well as external (paperless statements, vendor relationships, and new mobile banking platforms). Finally, some of the reduction in paper has already been piloted

at Banorte's main call center in Monterrey where the staff has begun to print duplex and change fonts. A summary of these successes are listed below:

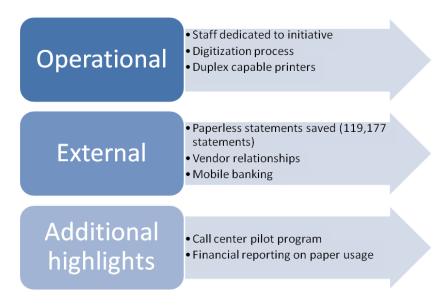


Figure 6. Successes and progress of the paperless initiative to date

While it is critical to celebrate these successes, many related to internal capabilities and competencies, the goal of the Michigan Team is to specifically address some of the critical challenges and seize opportunities necessary to help Banorte become a paperless organization and to move forward both as a self-contained portfolio of initiatives and as an opportunity to best position the bank to discover and harvest learnings that can best be applied to other waste reduction/energy efficiency initiatives as part of a CSR strategy. Below is a basic SWOT (strengths, weaknesses/challenges, opportunities, and threats) that the Team has identified in partnership with the Banorte leadership team.



Figure 7. Paperless initiative SWOT analysis

Key among the **challenges** is the importance of mobilizing employees in a way that is empowering to staff members at all levels. This behavior and culture change is a critical component to a successful paperless (and waste-reduction) campaign. In fact, this internal change is in many ways more important than some of the infrastructure changes that also must be made in that if staff do not have the appropriate tools, resources, and education to sustain the change, much of the larger change will not reach the final stage of a comprehensive CSR strategy that the Team discusses in the following sections.

External **opportunities** and partnerships are a significant opportunity to be realized for Banorte. Drawing on the strength of Banorte's relationships with the ABM, suppliers, unions, and other organizations, the bank can also leverage its buyer power in order to drive change both within the bank and across the Mexican financial and corporate sector.

While we have identified a number of **threats**, the biggest of these is the issue of record keeping requirements and the need to maintain paper backups for regulatory and compliance purposes. While the Team has focused less on this requirement, which is outside the scope of this study, the bank's ability to create partnerships with others and collectively advocate and move the market is a key lesson learned from United States-based financial institutions. An additional opportunity that should be explored is learning from Banorte's recent merger with Ixe, a bank that has had success in digitizing records at the branch level.

Benchmarking—Best Practices

In order to understand opportunities for Banorte, the University of Michigan Team has investigated a number of best practices at both US-based and international financial and nonfinancial institutions in addition to speaking with NGOS and sustainability consultants. Key

among these financial institutions is Bank of America, an early adopter of a paperless program and one of the largest multinational institutions. Bank of America is the subject of a seminal case study written in 2002 on going paperless. We also looked at Comerica Bank, a superregional US-based institution that has undergone a thoughtful and thorough sustainability planning and implementation plan over the past three years, including paperless strategies through consultation with Deloitte Consulting (strategy) and Accenture (IT). In addition to these key institutions, the Team has also returned to look at the thirty-two institutions (twenty-four financial and eight nonfinancial) that made up our best practices and benchmarking process. Below are several key best practices examples from several of the financial institutions that are part of our benchmarking study.

JP Morgan Chasexiv

- Elimination of 101 million documents by providing paperless services in their treasury department. Eco-analysis calculators of paper use and savings strengthen value proposition with clients.
- Since late 2008, replacing 22,000 single-unit printers with 6,000 duplex multifunction printers. Expected savings: 65%–80% energy savings and 20%–30% cost savings.

American Express^{xlvi}

 Reducing paper weight in marketing mailings starting in 2006 resulted in 3,517,000 pounds of paper saved and cost savings of \$1.4 million by the third quarter of 2007.

Itaú-Unibancoxivii

- Sustainability calculator geared to SMEs to provide information on how they are reducing carbon and paper use.
- FSC (Forest Stewardship Council) paper adopted across the bank (for rollout in 2010).
- Sustainable Idea Bank: several awards programs for employees that provide various recognition and incentives (like gift certificates, trophies, and stock options) for innovative ideas/projects in categories such as efficiency, quality, innovation, sustainability, and people management.

Supplier Contracts

A number of institutions (including JP Morgan Chase, Deutsche Bank, Bradesco, and Itaú-Unibanco) have begun to educate vendors and to insert sustainability requirements into vendor contracts, including those with paper suppliers.

Examples include:

• **La Caixa**^{xlviii}: Guía Compra Verde para Oficinas (Buying Green Branch Guide), a document that provides guidance on the sustainable purchase of office material (2006).

- Bradesco^{xlix}: As part of their work to comply with SA8000 (measuring social responsibility) through their supply chain relationships, Bradesco created a specific website portal as an educational opportunity for suppliers in addition to a supplier relationship system to centrally manage all relationships. Since 2006, Bradesco has also been holding supplier education events (seven hundred companies had attended the events as of the end of 2009).
- Banco Real (now part of Santander Brazil)!: As part of their goal to use recycled paper sources of appropriate quality and at a comparable price, the bank worked with their main paper supplier Suzano, providing microcredit to the company's raw-material suppliers and technology partners (such as IBM and Xerox). As a result, 49% of the paper stocks used by Banco Real were recycled stocks at the same price as previously in 2004.

Bank of America

While well known as one of the largest multi-national banks in the world, Bank of America was also an early adopter of paperless initiatives, featured in one of the best documented case studies of paperless initiatives available. Bank of America began their paperless initiative in 1991. Even before new information technologies emerged, the bank realized \$1 million in savings through paper reduction by 1995. This savings has totaled \$5 million annually since 2002. While the scale of Bank of America has grown significantly with a variety of acquisitions, it is also important to note that the bank has moved to make a \$20 billion commitment over ten years to CSR projects (both internal and external). Since the 2007 announcement of this initiative, \$8.4 billion has been committed to projects.

Based on the Bank of America case study and guide to going paperless, the most important things to have in place include:

- CEO articulation of environmental policy
- A full-time staff person for tracking. Bank of America acquired a staff member to fill
 this position early on. They also had a single tracking system, which allowed for
 additional measurements of paper usage to be considered.
- Close collaboration with suppliers. In order to move the market toward the production
 of more sustainable paper products, Bank of America took the lead in organizing both
 the Recycled Paper Coalition and later the Paper Working Group to collectively bargain
 for less expensive recycled and FSC-certified paper products.
- Centralized form production. Both Bank of America and Comerica found that
 centralizing the creation of forms, digitizing them, changing margins and fonts, and
 where possible reducing the number of redundant forms themselves (Comerica) would
 lead to both a reduction of paper use and an increase in efficiency. When Bank of
 America started this effort in 1992, the bank reduced paper consumption by 565 tons.
- Internal grassroots efforts. Bank of America was able to leverage local green teams and interest in paperless/environmental initiatives in order to create a company-wide strategy.

- Elimination of unnecessary reports. Bank of America's senior officers attached a survey to regular reports asking if they were needed and whether there was a more efficient way to send them. As a result of these efforts, appropriate revision and elimination of reports was executed, resulting in an estimated savings of 9 million pieces of paper or \$70,000 per year in paper costs alone, not including additional costs.
- Addressing "Energy Creep." Bank of America has found that without continued and sustained training and employee engagement, energy efficiency and waste reduction efforts will decline, leading to a 5%–10% increase in energy use. To address this, Bank of America has recently introduced additional trainings for operational and management staff to refresh knowledge about these issues.
- Reducing the paper weight of ATM statements. By reducing the paper weight of ATM statements from 20 pounds to 15 pounds, Bank of America realized 228 tons of paper savings and \$500,000 of cost savings annually. An employee worked for two years on finding the appropriate paper and was subsequently awarded \$50,000 for leading this effort.

Comerica Bank^{lv}

Comerica Bank is one of the top twenty banks in the United States with \$2.555 USD billion in revenue as of 2009. The bank has also been ranked number one among S&P 500 for its quality of carbon disclosure project (CDP) disclosure in 2009. In 2008, Comerica began the process of implementing a comprehensive sustainability strategy under the direction of a newly appointed senior vice president, Rick Plewa. Plewa previously headed the environmental risk management group and had served in a number of facets in the bank, including credit administration officer and M&A loan portfolio due diligence specialist when Comerica acquired a number of smaller banks. While much has been written about Comerica's efforts, the Team had the opportunity to both research and speak directly to Plewa about specific best practices as they relate to creating a sustainability (CSR) strategy and specific opportunities that have significant learnings for the success of going paperless and executing other waste reduction initiatives. The following are key insights from our conversation, explained in detail.

Question: "What would you have done differently?"

- Management systems: Build audit systems from [the start] instead of three years later.
 - When Comerica started tracking its key performance indicators around paperless efforts and waste reduction, it was tracked using excel spreadsheets. Only later after realizing the complexities of tracking and reporting requirements did Comerica work to implement a comprehensive tracking and measurement system. Comerica moved to using the Hara system, a smaller company based in California that has significant experience in working with clients. Selecting the right system based on the specific needs of the bank is a critical step that should be undertaken early and thoughtfully.

- Governance structure: Connect risk management and have the board's role and committee in place from the start.
 - Comerica's ability to connect the various departments involved in CSR decision making, especially as it pertains to issues of energy efficiency/waste reduction, has been key.
- Consistent messaging: Articulate what CSR is from the start and send a consistent message throughout organization.
 - Getting the CSR message right has been a critical component of Comerica's strategy and also a lesson learned. For example, the organization originally focused the messaging on community-based environmental activities. In time, they found that these activities were less important to motivating employees who wanted CSR activities to be integrated into the business. While messaging is important, finding ways to make sure your message is well received through regular stakeholder dialogue is also important.
- · Green teams: Get them right from the start.
 - Comerica has found that it is important to have senior level buy-in on green teams while recognizing the motivations and interests of specific employee segments. Plewa stressed the need to invest early on in these initiatives and also to make sure that senior managers are involved in the process. Comerica finds it so critical to get the green teams right that they are investing in professional facilitators to get them started.

Lean Six Sigma

Critical to Comerica's success with its paperless, energy efficiency, and waste reduction initiatives was the incorporation of lean six-sigma principles into the bank's operations. Lean six sigma incorporates elements of lean manufacturing and six-sigma continuous improvement. This kind of thinking is very much aligned with the kind of planning currently taking place in the strategic planning division of Banorte. Comerica initially trained twelve managers as six-sigma experts (known within the company as "black belts"). These managers were responsible for spearheading many of the operational and energy efficiency initiatives.

After identifying specific paper and waste/energy reduction initiatives, the kaizens (i.e., continuous improvement of processes) were incorporated into the CSR action plan. Below are several examples of the lean six-sigma initiatives that took place at Comerica.

Initiative	Description	Results		
Sprint	Target: Back office printing and	Saved 14 million printed pages		
	opportunities to digitize these print jobs			
Legal, Treasury,	Created opportunities to cut down on	Legal: Digitized subpoena and		
and Funds	paper in each of these divisions	legal docs to extent possible		
Transfers		Treasury: Social Security		
		benefits transfer program;		

		converted 10 million paper checks to a preloaded debit card (2009) Funds Transfer: Investigating opportunities to reduce printed documents, specifically in letter of credit area
E-Statements	Migrate accounts to digital	Goal: Convert 180,000 accounts during 2009–2010
Hyperion	Target: Company-wide MIS (management information system) function and the printing out of forms. The Team looked at paper expense reports that were shipped across the company, representing many stacks of paper. This program created a desktop application technology so that reports would be sent only digitally. In many cases, settings were created so that managers were not able to print these reports.	Saved 3 million printed pages

Table 5. Lean six-sigma examples from Comerica

Below is a table of some of the best practices gleaned from Bank of America, Comerica, and other financial and nonfinancial institutions that have undertaken paperless initiatives as part of a comprehensive CSR strategy. We have grouped these based on the two key areas that we will discuss as a part of the paperless initiatives.

Metrics

- Recognize and track efficiency cost savings
- Carrots and sticks
- $\bullet Explore\ collective\ agreements\ with\ suppliers\ to\ incentivize\ green\ products$
- Lessons Learned: Put into performance reviews as an expectation -> merit increases or bonuses
- $\bullet Lessons\, Learned$: Get right from the start with opportunities to learn and adapt along the way!

Human Capital

- $\bullet \ \mathsf{Green} \ \mathsf{teams} \ \mathsf{and} \ \mathsf{localized} \ \mathsf{initiatives}; \mathsf{Challenge:} \ \mathsf{culture} \ \mathsf{change}$
- Green Teams (Comerica):
- $\bullet \ Invest more in them! \ Using professional facilitators to get them \ right.$
- Surveys to gauge interest but look for centers of influence too.
- Address "Energy Creep"; without awareness, 5-10% rise in energy use
- Lesson Learned: Get more senior level managers involved in process would be helpful to Comerica

Figure 8. Key takeaways of best practices from paperless initiatives

One of the key takeaways of the best practices is the need for clear management and planning that is required to get the paperless and other CSR initiatives going from the start. This is not always easy because of the complexities of getting the initiatives right while also making sure that the skills, personnel, and means for dissemination across the bank are in place. Based on our research, we will provide some key recommendations for planning so as to best realize the opportunities of paperless and other CSR initiatives as part of a CSR strategy.

Using the Planning Template for the Implementation of CSR Initiatives

The initiation and execution of successful CSR initiatives require conscientious goal setting, careful planning, integrated monitoring and tracking mechanisms, and strong organizational involvement—just like most other types of strategic projects or programs. Recognizing that Banorte owns a wealth of project management experience, the Team has created a twelve-step planning template specifically focused on tasks and techniques important for successful CSR initiatives based on the best practices research discussed above as well as six sigma^{lvi} and other project management principles. This planning template is in line with the way of thinking the Team has observed in the bank and should serve as a useful complementary tool as the bank continues to develop its planning methodologies for CSR initiatives. To the extent possible, the planning template should be aligned with existing methodologies and strategic planning processes to avoid duplication of efforts and to enable maximum synergies. For internal accountability and effective execution, it is also important to identify high-level departmental champions responsible for overseeing targets and for furthering cross-department collaborations. Although the paperless initiative is used as a case study in this report and in the context of the planning template, the planning template is designed to be used simultaneously for other resource efficiency and waste reduction initiatives.

As mentioned above, best practices and lessons learned from other organizations strongly highlight the importance of metrics and human capital development as being crucial to the success of CSR strategies. The rest of this section is devoted to the long-term strategy for these two critical areas within the context of the planning template. The following illustration maps the focused efforts involved in developing metrics and human capital along the twelve steps, showing the efforts involved in each stage in order to arrive at the integrated innovation stage.

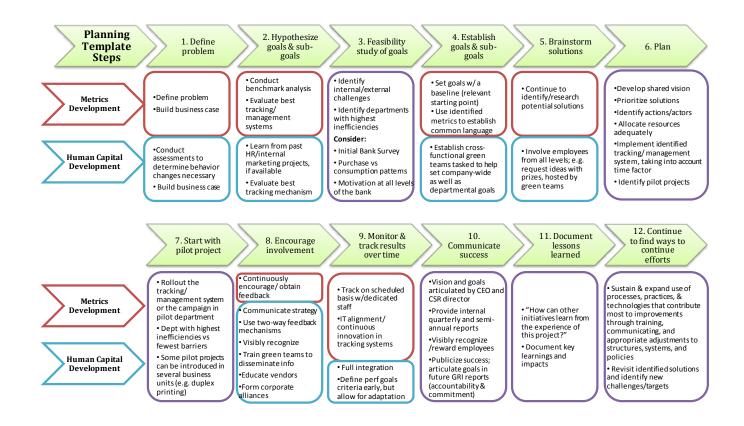


Figure 9. Planning template

First Six Steps: Goal Setting and Green Teams Formation

The goal of these first steps is to create a clear and actionable plan. During these initial steps, the bank defines the problem, builds the business case for the initiative, and carefully determines the goals to build a strong foundation for the most feasible and executable plan. This plan not only prioritizes solutions and identifies timelines, tasks, and high-level departmental champions responsible for execution and facilitating cross-departmental collaboration but also develops a shared vision across the organization. The bank conducts benchmark analyses and initial assessments to hypothesize goals and determine the best metrics that will serve not only as the unit of measurement across the organization but also a common language for accountability and reporting purposes. Prior to establishing goals and a baseline (or relevant starting point), the bank identifies key internal and external challenges to further refine the goals. In the case of the paperless initiative, an example of a paper-reduction goal for the bank may be: "reduce paper usage by 50% by year 2013, using year 2009 consumption as a baseline." Along with setting a goal and sub-goal, leveraging the IT department's expertise to evaluate the best tracking and management system at this stage is critical, as strongly suggested by industry best practices.

Conducting an initial bank-wide survey at this stage can be very useful for both metrics as well as human capital development. A survey can help identify departments with the highest inefficiencies or the fewest barriers for pilot programs. A survey would also assess different departments' willingness and capability to change, as well as the employees' interests and capacity to participate in green teams, the formation of which is a key foundational step. Green teams are cross-functional and cross-hierarchical teams established to facilitate company-wide CSR initiatives. A green team can serve as a bridge and catalyst of change between employees and senior management by collecting and channeling feedback on the one hand and disseminating training and information on the other. Green Impact, a strategic environmental consulting practice that created a report on green teams by conducting case studies on several major corporations, concluded that green teams offer the following values^{lvii}:

- Cost savings: Carrie Freeman, a Corporate Sustainability Strategist at Intel, commented, "When it comes to looking at ways to reduce our footprint, we very much see a direct correlation between reducing our costs and engaging our employees." Be it changing light bulbs, turning off the lights or getting your employees to innovate greener solutions in their jobs, engaging your employees to identify easy, low cost efficiency initiatives can result in significant cost savings. For example, Intercontinental Hotels invested \$400,000 to change light bulbs on their properties and saved \$1.2 million over four months.
- Attract/retain best talent: A green team, when part of a broader sustainability strategy, can give employees an outlet for their personal interests, help raise moral, improve loyalty and help attract and retain the best and brightest talent, who are attracted to companies with an authentic green commitment. Losing and replacing a good employee costs companies between 70% and 200% of an employee's annual salary, according to Engaged!, a new book on employee engagement. And when the economy begins to heat up, the best talent may be looking for greener pastures. Libby Reder, Head of Environmental Initiatives at eBay, believes their Green Team is an important reason why some employees stay at eBay, and according to their recruiters, it also helps them attract the best talent.
- Strengthen brand and increase market share: Companies can bolster their brand and potentially increase market share by walking the talk and supporting green teams as a strategy for getting their employees and customers behind sustainability. They can also use employees to identify new opportunities to improve their practices and achieve their sustainability goals. "The engaged workforce will find more opportunities to get lean and identify more opportunities to innovate and create products and services that lower customers' environmental impacts. All of this work will improve the top and bottom lines," comments sustainable business expert Andrew Winston, in his recent book Green Recovery.

Figure 10. Excerpt from Green Teams: Engaging Employees in Sustainability. Green Impact. Nov. 2010.

Time and resources should be invested in green teams to ensure that they are well organized and have established procedures and communication and feedback channels to effectively achieve their missions. See Appendix L for the key things to note in order to establish effective green teams.

Steps Seven and Eight: Pilot Projects and Encourage Involvement

During steps seven and eight, initiatives have started to be implemented. These two steps are about extending the groundwork established during the initial steps to build internal capacity and formalize external relationships. The bank has evaluated the best tracking and management system and is now ready to implement the system of choice, fully recognizing the time factor and associated barriers of the agreed-upon process. The role of the IT department is especially critical in this stage (specifically, efforts that leverage IT staff expertise and know-how while providing them with the education and training to both implement and maintain systems). During these steps, the bank may choose to pilot the tracking and management system in a department or in several departments previously identified in the initial steps.

During the course of our research, we discovered that internal behavior and cultural change is the most critical and yet most challenging component to the effective implementation of CSRrelated initiatives. For the CSR strategy to be fully integrated into the bank's DNA, change must come from within. As stated in the 2010 UN Global Compact-Accenture CEO Study: "Transforming a company's larger culture requires providing new educational opportunities and encouraging new ways of working." The goals of effective change management, therefore, are to develop understanding, capacity, and motivation. The following table describes the problems and strategies associated with those goals and the rest of this section focuses on the information strategy and the people strategy (as the budgeting strategy is outside the scope of this study).

Goal	Problem	Strategy
Understanding	Lack of clarity; ambiguity	Information: manage flow of information (up/down, horizontal, feedback loops)
Capacity	Lack of resources	People : training, including leadership training; incentives alignment; recruitment
Motivation	Resistance	Budgeting strategy : flow of resources as an indicator of what the organization is doing

Table 6. Problems and strategies associated with effective change management

Managing the Flow of Information

Green teams and pilot projects are great vehicles for managing the flow of information to develop understanding within the organization. Using the "train the trainers" approach, green team members are trained and fully utilized to disseminate information and educate the rest of the work force in order to empower all staff to take the appropriate steps as necessary for the given initiative. Pilot projects are a great way to remove the barrier of ambiguity. As illustrated by the following organizational learning graphic, change involves continuous listening as well as participation at all levels of the organization. For CSR initiatives to be successful, a multidirectional feedback mechanism and engagement are required. It is through pilot programs and green teams that the multidirectional feedback mechanism and organizational learning are achieved.



Figure 11. Organizational learning: moving toward a multi-directional feedback mechanism

The Team recognizes that financial institutions in general (as well as local cultural norms) tend to rely upon a fairly robust hierarchy in which decisions come from the top and are implemented downward. While it is important for the leadership to set direction and hold all levels of the organization accountable by encouraging others to be part of this process, sustainable CSR initiatives require effective feedback loops and can be seen as an opportunity to empower employees at all levels of the organization.

Externally, the bank informs and educates relevant vendors. For example, many banks have sustainability terms within their vendor contracts, as discussed in the best practices section. The Bank also forms corporate alliances, such as with ABM and CEMEFI.

Strategies for Developing Capacity and Motivation

Banorte's human resources, marketing, and operations departments have come together to initiate different programs to encourage behavior change, showing that the bank clearly recognizes the value of information and motivation.

Social marketing tools have been shown to be effective vehicles for encouraging behavior changes. Research suggests that one of the most critical aspects of using social marketing tools for that purpose is to understand that different types of motivation require different promotional strategies. In particular, actions that have public visibility carry with them different motivations and barriers than those that are not under public scrutiny. Frequency is another factor; actions that need to become a day-to-day habit may require different encouragement strategies than those that occur infrequently. Therefore, it is critical to first identify the behavior and the motivating factors of the audience in order to tailor specific messages to influence behavior change. Research supports the following strategies for encouraging conservation behavior changes, as detailed in the following content adapted from a *Human Ecology Review* article^[xi]:

Identifying the behavior and the target audience

- Understanding the barriers and benefits that resonate with that audience
- Asking people to make a commitment to undertake the behavior" (a verbal or written commitment greatly enhances the likelihood of behavior change)
- Reducing the barriers to the behavior (such as the lack of information)
- Providing vivid, meaningful procedural information about the action (be specific and provide "how-to" steps)
- Reminding people of the ways the action conforms to their view of themselves
- Advertising appropriate social norms that complement the behavior
- Asking people to practice the behavior with the safety and support of a peer group
- Showing people how easy the behavior is and what the consequences will be
- Offering small incentives to enable people to start the behavior (Extrinsic incentives have been shown to be helpful in encouraging people to start a new behavior. However, these extrinsic incentives cannot be removed because if they are, the behavior is not likely to continue. Therefore, conservation behavior change scholars suggest that incentives such as intrinsic satisfaction, particularly participation satisfaction such as positive feelings coming from belonging in a community, might be the intrinsic incentives that would enable behavior changes to last. |xii|
- Reminding people how satisfying they find participating in the behavior
- Providing feedback on the progress being made based on the number of people conducting the action
- Profiling success stories and opinion leaders who have adopted the behavior

During these steps, defined CSR performance goals are starting to be integrated into performance reviews and management plans, fully taking into account the distinction between and values of both intrinsic vs. extrinsic rewards discussed above.

Steps Nine through Twelve: Continuous Monitoring, Communication, and Improvement

The first eight steps are building blocks that will enable Banorte to arrive at these final four steps, at which point the bank is in a position to continuously monitor and track results over time and to communicate success. Optimal monitoring and tracking of progress requires dedicated staff time to perform tracking on a scheduled basis. At this time, IT engagement involves continuous innovation of the systems. On the human capital development side, the bank is also in the position to measure and track CSR performance progress since CSR performance goals are fully integrated into the performance reviews and management plans. As mentioned before, communicating success is a key component to effective change

management. During these steps, model behaviors are identified and visibly recognized. Internally, the company's vision and goals are articulated by the CEO and/or the CSR managing director, and employees are also kept informed of the progress through periodic reports. Externally, Banorte publicizes successes and articulates its CSR goals (such as in GRI reports) to both promote accountability and demonstrate its CSR commitments.

Finally, the last two steps involve documenting best practices and lessons learned with the goals of both reducing the learning curves of other similar initiatives (for example, paperless learnings can apply to waste management and energy efficiency initiatives) and finding ways to continuously improve the current initiative.

Paperless Initiative Key Takeaways

As is clear, reducing paper consumption requires a deliberate effort, combining both human capital and technological expertise in an integrated planning process that will achieve maximum impact across all corners of the organization, from the front-line cleaning and maintenance staff (who are often involved in collecting paper) all the way to the CEO and board of the organization. By properly capitalizing on these efforts, reducing and eliminating paper consumption has the potential to save millions of pesos each year, as evidenced by many of the institutions that have undergone this process already. However, in order to get paper reduction right and to have the greatest chance for success in other waste reduction and energy efficiency initiatives, Banorte must invest now—in the people, the systems, and the process. As previously stated, this process has already begun under the leadership of the CEO and the board's support of the CSR managing director and her team.

Most critical (and an area that requires thoughtful planning) is the role of the IT department in moving these initiatives forward, making sure that the systems are there to roll out a paper and waste reduction strategy and that this reduction can be measured across the organization. The ability of the IT personnel to utilize their expertise in this area and to learn about best practices and systems is key. This must be complemented by strong communication across departments. To this point, it is very easy for one part of an organization to roll out an initiative without the full knowledge and understanding of others. In the case of Banorte, the work of the call center piloting many paper and waste reduction strategies is a good thing and provides helpful learning about how grassroots efforts take hold, especially with a large population of student employees. However, in creating a wider strategy across the organization, departments must have a solid infrastructure so that they can constantly learn from each other and openly communicate not only what is working but—even more importantly—what is not. This requires constant dialogue with high-level champions at the departmental level, but also additional opportunities to learn directly from employees, and for the most knowledgeable employees to teach others in the organization.

As discussed earlier, implementing these strategies sooner rather than later will affect the success not only of the paperless initiative but of the entire scope of the CSR initiatives. While

external marketing and communication is key to celebrating success, the creation of these internal communication channels will be key to truly building CSR into Banorte's organizational DNA. This will take additional efforts to truly understand the motivations, desires, and goals of employees (not only as an HR function, but also in collaboration with IT, material resources, operations, and all other departments involved).

Finally, Banorte should not be afraid to partner with others who are already moving forward with innovative best practices. Banorte, if it chooses to, has the leverage to grow the market for FSC paper, for example, and in time to create the standards that others will look to for guidance. As such, the best practices in this paper are only examples of what are possible for paper reduction. Banorte is encouraged to keep learning, a value that will drive forward Banorte's efforts in the future.

Case Study: PyMEs Initiative

Case Study: PyMEs CSR Education Initiative

Introduction

Global awareness and increased participation in CSR measures have started to transform the way that countries interact, governments plan, and businesses form partnerships. Banorte recognizes the opportunity to integrate CSR into its financial products and services as a way to have paramount impact on Mexico's economic development, to competitively respond to market leadership pressures, and to create differentiated and accessible products and services that minimize environmental risks. This case study highlights the way in which Banorte can achieve these goals by focusing CSR pilot initiatives in their PyMEs department, which serves Mexico's small and medium enterprises. For the purposes of this case study and to avoid confusion, the Spanish term *PyMEs* will refer to the department within Banorte while *SMEs* will be the actual client businesses that Banorte serves.

SMEs represent a major driver of economic growth in Mexico. According to Mexico's Chamber of Commerce (Secretaria Economia), micro, small, and medium enterprises (MSMEs) accounted for 99.8% of all Mexican enterprises in 2009. Additionally, MSMEs generate 52% of the GDP and account for 72% of formal employment in Mexico. However, despite the volume of MSMEs, this sector is still considered underbanked due to the risky nature of these businesses.

Why the PyMEs Department?

In the last couple of years, Banorte has created the PyMEs department to capture additional market share by leveraging unique partnerships, such as with the IFC, which has allowed Banorte to offset potential default risk as a way to promote access to finance for this burgeoning customer segment. Banorte serves this segment by providing different kinds of financial, saving, technology, and insurance solutions tailored specifically to SMEs. Their products range from checking accounts and credit cards to point-of-sale terminals and webbased systems to reduce administrative and operating costs to pay the employees' salaries. Recently Banorte created "Solucion Integral PyMEs," a bundle of financial products that allows SMEs to acquire several products under one contract, thereby reducing the hurdles of dealing with different contracts for each service.

According to the study developed by Grupo Inmark for Banorte in 2008 over a base of 1,038 SMEs, 57% of Banorte's SME clients have revenues over \$400,000 while 29.9% have revenues over \$1,000,000 each year. Additionally, in 2010, President Calderon recognized Banorte as a leader in providing finance for SMEs. The challenge, however, is maintaining the competitive position through product differentiation.

While Banorte has experienced significant success in serving its SME clients, continuous product differentiation is key to maintaining this advantage in a competitive financial market. CSR products and services provide an opportunity to further differentiate the bank's product offerings by addressing some of the significant environmental and economic challenges SMEs face, as detailed below:

- The Mexican government is tightening environmental regulation on SMEs because they
 constitute one of the biggest pollution sources in Mexico.
- Electricity prices are rising in Mexico, which makes production and distribution costs higher. This decreases SME profitability and competitiveness in both the short and long term.
- Larger corporations are trending toward greening their supply chains, and it is natural
 for these companies to look down their value chains and demand compliance among
 their suppliers.

For the PyMEs department, CSR then becomes an opportunity for client development and retention. By developing products and services that help SMEs minimize environmental risks, generate cost-savings solutions, and prepare SMEs to capture economic and business opportunities, Banorte is able to generate new value for its clients while also enhancing the quality of the bank's loan portfolio.

Opportunities and Challenges for the PyMEs Department

While SMEs have much to gain from a CSR strategy, successfully convincing SMEs of the value of CSR remains a significant challenge for the PyMEs department. This challenge pertains to the specific nature of SMEs, whose size, lack of scale, and comparative lack of liquidity make it difficult for them to embrace the concept of CSR as something that has measurable short-term positive impacts on their profitability.

On the one hand, some of the SMEs' reasons for resisting the implementation of a CSR strategy are legitimate. For example, IFC's market assessment reveals that making SMEs pay for an energy audit is simply too expensive to justify. On the other hand, the myth that CSR is only applicable to large corporations and is unrelated to an SME's strategy or bottom line needs to be debunked. The opportunity—and the challenge—for Banorte is to create awareness about the benefits of CSR for SMEs, to make technical expertise financially accessible, and to promote products and services that are relevant to the growth and competitiveness of this sector. By doing these things, Banorte will address cultural challenges and further differentiate Banorte's products and brand as a bank that is committed to paving the way for a better, more sustainable future for SMEs.

CSR Education Initiative

PyMEs CSR education not only addresses the issues mentioned above but also exemplifies an external initiative that incorporates the four management principles and produces organizational learning that can be applied to other initiatives and areas within the bank.

The following case study aims to:

 Analyze CSR education in order to learn from its strengths and address potential challenges

- Dive into PyMEs initiatives directly related to the department's vision and expressed in terms of a three-stage focused CSR strategy
- Demonstrate the contagion effect and the ability to extrapolate lessons learned and leverage capabilities developed to other CSR initiatives across the bank

What is CSR Education?

Banorte's PyMEs CSR education initiative takes on the challenge of addressing SMEs' misconceptions about CSR. The objective of the initiative is to create awareness and introduce SMEs' to CSR not as something that only big corporations can effectively implement but as something that is feasible for SMEs and can positively affect their bottom line in many ways.

The PyMEs CSR education initiative relies upon two communication channels that have been developed so far to effectively reach out to SMEs: the PyMEs website (PyMEs Circle) and PyMEs events. The website houses CSR concepts including general benefits of CSR and cases that are meant to expose SMEs to different, successful applications of CSR strategies among SMEs. The PyMEs events are dynamic interactions in which PyMEs staff along with outside management experts present the bank's "Integrated Bundled Products" along with particular CSR cases of other Mexican SMEs. Although these two channels need further development, they are Banorte's first formal approaches to engage with its stakeholders and educate them about CSR. In addition to these two channels as well as targeted e-mail campaigns, Banorte leverages the development of partnerships to educate SMEs about CSR. Figure 12 presents the current developments of the CSR Education initiative and its two main focus areas: channel development and partnership development.

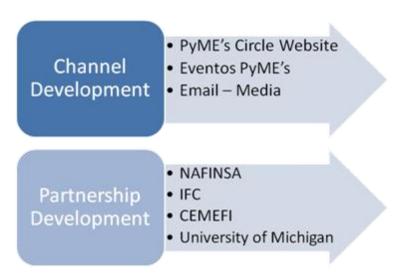


Figure 12. Current developments of the CSR education initiative

CSR Education: SWOT and Learnings

The Team took a deeper look into what made PyMEs CSR education faster to adopt than other low-hanging fruit initiatives. In order to accomplish this, we specifically looked into how the key strengths of the initiatives can be leveraged to address challenges and threats and take

advantage of opportunities necessary for the successful development of the initiative. The following analysis, represented in Figure 2 and discussed in detail below, provides specific insights on current strengths, challenges, opportunities, and threats. Later on we will also extrapolate these learnings to other areas of Banorte that are dedicated to innovative product and service development and are key to the development of a comprehensive three-year strategy.

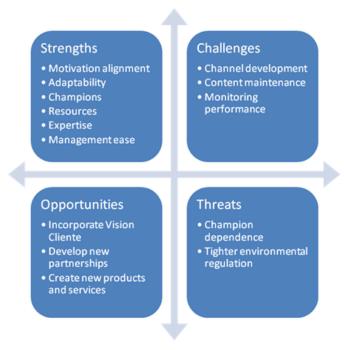


Figure 13. SWOT analysis: CSR education initiative

SWOT Strengths

Motivation Alignment

CSR education is essentially creating awareness about a need that SMEs didn't know that they had. By doing so, there is an alignment of motivation or incentives: each party benefits through the success of the other party. Banorte is creating a foundation to build services and products out of a new product category, sustainability, and reducing the riskiness of its loan portfolio, which allows the bank to extend more loans. On the other hand, SMEs are becoming more competitive in both a national and international context, mitigating reputational risks within their decision making and becoming more attractive to receive better financing terms and conditions.

Adaptability

Banorte's PyMEs department was established about two years ago and has been able to cover a lot of ground by positioning Banorte as a market leader through its innovative "Bundled Products." The success of this product being achieved in such a short amount of time is a testament to how this new department uses its ability to adapt quickly to new situations, and

how that flexibility has translated into adopting and implementing new initiatives such as the CSR education program.

Champions

The CSR program has several champions who are dedicated to pushing this initiative forward. Lic. Andres Aymes clearly understands the value of CSR for his department and the future opportunities that it will bring. In fact, Aymes sees this as the first step of ultimately preparing SMEs for supplier positions for larger corporations greening their supply chains. CSR is not just a business driver, it makes Banorte clients relevant in the future. Mayra Hernandez, Banorte's CSR managing director, has also played a substantial role in making sure that PyMEs CSR education has progressed. Lastly, the University of Michigan has also championed this initiative throughout a five-week internship dedicated specifically to identifying case studies and working on articulating the business case alongside the PyMEs department's leadership.

Resources

The partnerships formed so far with both the IFC as well as the Erb Institute at the University of Michigan provide both financial and academic resources. Banorte and IFC have been structuring a guarantee fund under the conditions that Banorte builds up its CSR commitment. The idea is that IFC funds will reduce the risk of lending to SMEs in Mexico. IFC will also support up to 30% of CSR initiative costs that are outsourced, such as advisory costs. This provides greater incentive for innovation and encourages the undertaking of new initiatives.

Expertise

CSR education content depends on the understanding of best practices, how Banorte defines CSR within the organization, and the exposure to materials that communicate the business case for SMEs. Banorte created a summer internship position that utilized its ongoing relationship with the University of Michigan, dedicating five weeks to developing PyMEs circle material and providing recommendations for maintaining a dynamic web page. Having this expertise on board was essential to the success of this initiative.

Management Ease

Another factor that made CSR education quick to adopt within PyMEs is that it was simple and the objectives were clear. There were not a lot of standard operating procedures that slowed down the process, and each person involved (from PyMEs, marketing, and IT) knew their role within the process and was able to execute accordingly.

SWOT Challenges

Channel Development

The overall success of the PyMEs CSR education initiative not only depends on the messaging but also on the amount and kind of exposure SMEs have to CSR. While two channels have been developed, there are still many other ways in which PyMEs can reach their clients in order to bring about CSR awareness. One of the channels that has been extremely underutilized is the PyMEs sales force. The challenge in utilizing this channel lies in identifying the proper incentives

that would encourage the sales force to develop and integrate CSR expertise into their client interactions. The PyMEs sales force has an intense and personal relationship with SMEs. Since the sales force are seen as trusted advisors and an extension of the bank, it is imperative that they are trained in the basics of CSR and what it means for the department's strategy as well as the benefits it provides to the customer. By developing this communication channel, the bank is simultaneously developing internal expertise.

Content Maintenance

It is unlikely that there will be one person solely dedicated to generating CSR content, as there was during the pilot process. A challenge to maintaining success is updating CSR content (materials, cases, brochures, etc.) and further developing a website (and other channels) that engage SMEs in new ways.

Monitoring Performance

Although the goals are clear, the PyMEs department has not developed milestones or metrics to identify the actual success in bringing awareness to SMEs. Recommendations on what to measure are provided in the next section.

SWOT Threats

Champion Dependence

It is extremely important to have a CSR coordinator who oversees current CSR initiatives. This ensures the steady progress and integration of the program and addresses any challenges within the implementation process as a third-party champion. On the other hand, a dependence can begin to develop on the person who is holding the department accountable, and without that external force the CSR initiative might not be given priority or reach its full potential.

Tighter Environmental Regulation

In general, environmental regulation presents a risk to SMEs because it means that the Mexican government will have a greater say in what decisions SMEs can and cannot make in order to run their businesses. Since the government is largely unpredictable, it is important for Banorte to be in tune with political changes, to update material according to these changes, and to prepare its client base for tackling these issues so that they can be competitive in the future. This presents itself both as a threat as well as an opportunity.

SWOT Opportunities

Incorporate Vision Cliente

Exposing SMEs to CSR is a "one-way conversation" with Banorte doing all of the talking. However, as SMEs become more curious about CSR and how it might apply to their businesses, it is important to capture their areas of interest. The idea behind Vision Cliente, the bank's CRM strategy, is to be client focused and let customers drive the products and services that they need. A priority for PyMEs is to expose SMEs to the right information in the right channel while listening in order to develop a "two-way conversation." This interaction can take on many forms, which will be elaborated on later in the report.

Develop New Partnerships

Partnerships between businesses and nonprofit organizations (NGOs) are an increasingly prominent element of CSR implementation. This is primarily because of the ability to leverage the strengths of this cross-sector partnership to fill in gaps of knowledge and know-how. Banorte already has the client base but might need to outsource expertise when it comes to specific CSR topics. This will allow Banorte to penetrate the market faster and get SMEs the information they need in order to make decisions regarding CSR within their companies.

Create New Products and Services

PyMEs leadership does not see PyMEs CSR education as just education. It is meant to drive SMEs to act—and eventually, to adopt CSR practices within their businesses. Vision Cliente, as previously mentioned, will prioritize areas of interests for further dissemination of material. Capturing market trends will then lead to product or service offerings surrounding these needs.

PyMEs Initiatives: Developing Strategic Options

A link to success, as mentioned previously, is the ability of PyMEs leadership to see CSR initiatives as going beyond just education for its own sake. In actuality, PyMEs CSR education is creating an environment in which other initiatives will be easier to adopt, and will eventually lead to creating products and services that incorporate CSR strategies. In the following section, the Team will develop PyMEs strategic options that build upon the three-stage CSR strategy: foundation, capacity building, and integrated innovation.

Banorte's three-stage CSR strategy applied to PyMEs is:

- 1. Laying a foundation to bring **awareness**, addressing the misconceptions of CSR and creating interest in CSR themes
- 2. Capacity building develops CSR **expertise** according to client interest areas and fosters a two-way conversation in which the clients are active participants
- 3. Integrated innovation, at which point SMEs **adopt** specific CSR strategies as either products or services that increase revenue or cut costs

Over the following section we describe how this three-stage strategy applies to PyMEs CSR education.

Strategic Options: Key Identified Initiatives

CSR Education

The CSR education initiative intends to educate SMEs about CSR in order to distinguish and promote Banorte's CSR activities as well as stimulate demand from the value-added services offered by the PyMEs department. In order to do this, we are considering three different stages through which the different SMEs must navigate in order for the CSR concept to permeate into their everyday operations. Figure 14 shows how the CSR education initiative cuts across all these three stages.

Foundation Capacity Building Integrated Innovation PyME's CSR Education

Figure 14. PyMEs CSR education initiative three-stage outlook

Foundation: Building Awareness

In order for CSR to permeate through the SMEs, Banorte first has to create awareness and tear down the three pre-established misconceptions about CSR within SMEs. This awareness building is the key component of the foundation stage (the initiative's current state). Creating awareness is a complex process through which the CSR concepts adopted by Banorte are initially transmitted to its SME clients. During this initial approach, SMEs are exposed for the first time to the concept of CSR.

Capacity Building: Knowledge Creation

The CSR challenge is to find the nexus of business opportunity and social responsibility and then to align the CSR initiative with the business strategy in a compelling way that would provide financial returns for the company. The capacity-building stage is about the creation of CSR knowledge to establish a deeper understanding of the business case within SMEs. CEMEFI, which offers significant CSR expertise and credibility, will play a key role in providing training and facilitating CSR knowledge creation within SMEs. CEMEFI and Banorte's evolving partnership will be critical to the success of this stage.

Integrated Innovation: Initiative Adoption

It has been proven that knowledge permeation of a particular concept has to be done over an extended period of time. Building on the foundation and capacity-building stages, SMEs begin to adopt CSR ideas. However, for this initiative to be sustainable, efforts pursued in the first two stages must be continuously refreshed. The rest of this section introduces several PyMEs initiatives that reinforce the concepts that facilitate movement toward this integrated innovation stage. For example, the PyMEs CSR education initiative establishes synergies with the CSR knowledge-sharing initiative, which provides the breeding ground for SMEs to express their concerns and state their doubts and for Banorte to capture these conversations and react accordingly and in a timely manner to provide the SMEs with innovative solutions.

Before introducing those initiatives, here are a number of recommendations for the bank to consider as it moves along the path of CSR education:

- Further develop channels of communication. This could include development in the areas of centro PyMEs (marketing material), PyMEs conferences, branches, sales force, webinars (for greater outreach), and more.
- Implement sales force training by CEMEFI (use feedback from knowledge sharing to identify opportunities for improvement in CSR education).
- Use IT and social marketing to make Banorte's website more appealing.
- Update CSR information, changing it from static to dynamic.
- Consult the IFC SME toolkit from the World Business Council for Sustainable Development.
- Tailor-made approaches are needed for small and microenterprises in comparison to medium-sized enterprises.

There are three other initiatives that emerge within the PyMEs department that can leverage the key organizational learnings of the PyMEs CSR education initiative. Below we describe how these initiatives fit within Banorte's three-stage CSR strategy.

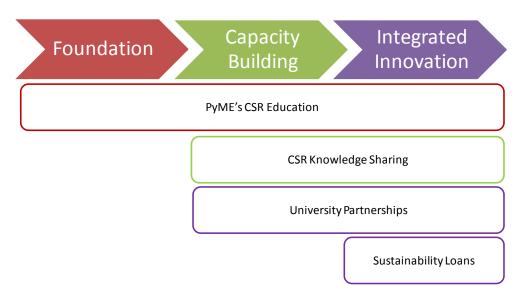


Figure 15. Emerging initiatives from the CSR department applicable across different stages

CSR Knowledge Sharing

CSR knowledge sharing is a unique platform that reinforces the Vision Cliente model to become closer to the client, to better understand his or her needs, and to provide solutions for those needs. Specifically, CSR knowledge sharing has two components, one that touches on the capacity-building stage and another that deals with the integrated innovation stage.

Capacity Building: Creation of Interactive Platforms

As part of the capacity-building stage, CSR knowledge sharing aims to create interactive platforms that extract information from SMEs, much like the marketing intelligence arm would do. The true aim is to instigate a two-way conversation that allows SMEs to open up about their interests.

Integrated Innovation: SMEs Communicating CSR Successes and Best Practices

The other component of CSR knowledge sharing is to engage SMEs that have already incorporated CSR strategies within their business to then share their successes and lessons learned with their peers. To accomplish this, PyMEs would have to establish incentives such as: deeper discounts, better terms, exposure (marketing), and public recognition. Although this may seem like a costly venture, it is essentially a marketing strategy to "pull" SMEs out of the capacity-building stage and into the integrated innovation stage in which they begin to adopt CSR practices. SMEs become the best spokespeople for other SMEs as watching one's peers succeed is the ultimate motivator to adopt similar strategies. The lesson here is to let your clients do the talking because their experience and sincerity will be far more convincing than anything else.

The Team recommends implementing the following strategies in order to achieve this.

- Build on current IT and social marketing expertise to build an interactive website interface
- Use eventos PyMEs to brainstorm with SMEs about CSR
- No need to reinvent the wheel, there are websites, guidelines, and toolkits that can be used as learning tools for SMEs (e.g., the IFC SME Toolkit, the Amex open forum, etc.)
- Establish feedback mechanisms like surveys or focus groups to gain knowledge of customer understanding, gaps of understanding, and areas in which SMEs believe CSR is applicable to them
- Train salesforce through CEMEFI accreditation
- Measure program success. Examples of metrics and analytics include:
 - # of CSR inquiries per event
 - o # of e-mails about CSR
 - # of clicks on CSR webpage/case studies
 - # of CSR inquiries via Centro PyMEs

SME Toolkit: Excerpt from IFC SME Toolkit Ixviii

The SME Toolkit developed by the IFC is a web-based platform that provides solutions for Small Businesses in Emerging Markets. It uses the latest information and communication technologies to help small and medium enterprises in emerging markets learn sustainable business management practices^{lxix}. The SME Toolkit provides over 40,000 articles around different topics of specific interest to SME's. Additionally, it provides free online training and workshops, worksheets, and other useful tools and software essential to the operation of an SME^{lxx}. To date, the Toolkit has been translated into 15 languages (Arabic, Bengali, English, French, Hindi,

Indonesian, Macedonian, Mongolian, Nepali, Portuguese, Russian, Spanish, Ukrainian, Urdu and Vietnamese) and will have 29 regional and sector sites as of FY07. Collectively, the sites attract over 270,000 visitors per month, 75% of which come from developing countries. Regionally, the SME Toolkit is distributed through partnerships with local organizations that can translate the product into national language(s), add relevant content such as business regulations, sources of financing, and business directories and distribute the localized versions to SMEs in their markets^{lxxi}.

American Express:

Open Forum, a media platform developed by American Express for SME's, was launched in 2007. Open Forum is an online resource and social networking hub for small-business owners and entrepreneurs searching for practical information and tips for industry experts. It leverages social media to engage in a conversation with SME's to understand the information they need.

Open Forum has two basic areas: Idea Hub and Connectodex. Idea Hub is a virtual trading knowledge sharing platform between industry experts and SME's. Connectodex is a networking tool that allows SME's to find potential business partners, connect with them, share what their business does or do business.

By understanding what OPEN card members are looking for through social media American Express has been able to tailor the content of the Open Forum website generating a 350% growth in unique visitors year over year. Among the benefits to American Express OPEN from the OPEN Forum initiative are: building brand equity, acquiring new customers, and building loyalty of existing customers.

Sustainability Loan

As SMEs begin to adopt CSR-related products, the creation of a sustainability loan (a loan that offers customers a percent rate reduction for qualified "green" investments) is an opportunity to be implemented during the integrated innovation stage. Energy efficiency projects became less attractive after electricity prices declined by 15%–20% in early 2009, mainly due to the government's stimulus program. Subsequently, tariff revenue shortfalls in 2009 have lead to price increases during 2010 that provided a boost to this kind of project. Ixxiii

In June of 2010, the annual headline inflation in Mexico was 3.7%, the fifth highest among the thirty-two countries comprising the Organization for Economic Cooperation and Development (OECD). In the case of Mexico, the annual inflation was due mainly to the 4.7% increase in energy prices, while food increased 1.3%. Ixxiii

Providing the loans to pursue energy efficiency projects would enable Banorte to benefit from societal recognition as well as additional reduction in SME default risk due to the increased

savings generated by reduced energy consumption. Reduction of default risk comes because the cash flow from implementation of efficiency measures often completely or partially covers necessary financing costs, allowing investments to pay for themselves over time. Usually most of an SME's energy consumption is fixed cost, so cash flow resulting from energy savings is typically less risky than the core business of the SME.

According to a recent innovative program for greening the supply chain of major manufacturers in Mexico through energy efficiency projects developed by Lyon and Van Hoof, "the average SME participant in the program generated projects that had a payback period of roughly eight months, generated a net present value of over \$150,000, saved 1,900 cubic meters of water each year, saved 42,000kwh/year of electricity, reduced carbon dioxide emissions by 61 tons/year, and cut waste disposal by 1455 tons."

In order to develop this product, Banorte has to develop the expertise to identify which SMEs would be eligible for this type of loan. This expertise could be developed either internally within a sustainable business sector or it could be outsourced through the creation of additional partnerships with institutions such as WRI-New Ventures or CONAE/CONUEE.

There are, however, some low-hanging fruits that could be implemented right away. Instead of implementing an integral energy efficiency audit and building up the knowledge to identify those SMEs, there are a number of quick wins that could be achieved by identifying and replacing equipment or technologies that are proven to be energy inefficient and could considerably reduce energy costs. "Potential savings can be unlocked through simple measures, such as retrofitting or replacing old equipment with new technologies and including energy saving targets into long-term performance strategies". This would provide a standardized solution that would allow Banorte a better implementation of the program as well as a reduction on the default risk associated with this type of loan.

Bradesco: Social and Environmental Products

Brazilian banks, such as Bradesco, apply social and environmental risk assessment along with loans as a way to adjust credit risk and build their social and environmental credit lines. "Specifically, Bradesco has introduced 31 social-environmental lines of credit in 2008, which has amounted to an investment portfolio of \$1.26 billion." Examples of these products are the CDC Solar Heater (which provides a credit line for solar heating equipment and is certified by Inmetro), Proesco (which provides financing for energy efficiency projects that create energy savings and replace fossil fuels with renewable sources (in partnership with Bank for Economic and Social Development-BNDES)), and Credit Line Santa Catarina Floods (which provides special conditions, terms, and fees for SMEs that have suffered loss due to natural disasters).

University Partnerships

In addition to the partnerships developed with CEMEFI as part of the capacity-building stage, university partnerships, an area already in development, can be helpful to enhance Banorte's

ability to address specific SME needs in a cost-effective manner in this stage. In the integrated innovation stage, these partnerships can be a source of fresh ideas and the pipeline for the development of future leaders.

Banorte's current interest and stake in university partnerships is multifold. First, students have become an important talent pool for Banorte's call centers, especially since the bank is consolidating the centers in Monterrey. Second, Banorte has engaged students—both nationally and internationally—from top programs to share and develop their expertise through a formal internship program. Third, Banorte has been searching for a way to participate in the student consumer segment as a way to expand its reach and services, gaining access to a market that has not been a strong suit of theirs in the past. It is believed that creating loyalty now will help sustain those relationships as students move into their professional lives later on. Lastly, Monterrey Tech students performed an environmental assessment as part of the DUIS (development) project led by Banorte's asset recovery department. These interactions have not only benefitted Banorte's business but have also created opportunities for students to engage in experiential learning. The PyMEs initiatives that pertain to University partnerships draw on past experience to involve students in making an impact on society, promoting professional development, and gaining better access to top talent in Mexico.

Although the types of projects that Banorte could propose to universities are diverse (anything from case competitions to business plan assessments to energy audits), there are some fundamental learnings we have taken from PyMEs CSR education that act as a guide.

First, the Team found that the partnerships that PyMEs has primarily engaged (e.g., with IFC, NAFINSA, and potentially CEMEFI), have been able to thrive as autonomous self-sustaining initiatives once the initial expectations were set through a careful and deliberate planning process. For university partnerships to work for students, the bank, and SMEs, it is important for Banorte to fully define the scope of the project in collaboration with university leadership and selected SME clients. For this reason, it is recommended that Banorte position the project within already-established university structures such as a current class, master's project, or other forcredit opportunity. This will ensure that students, who may be working in a fairly autonomous manner with an SME, will have the advantage of both academic and institutional support and an additional level of accountability as they undertake this high-impact assignment with Banorte's clients.

Second, it is best to pilot these projects in an area where Banorte already has a strong relationship and reputation with the local universities. Monterrey creates the ideal opportunity to be the focal point for several projects including a call center, internships, and student consulting—especially if Banorte wants to create strong brand awareness for a potential target segment.

Lastly, it is essential to align incentives between the bank, SMEs, universities, and students. The table below demonstrates what those incentives could be and how the bank could approach any of the already-mentioned stakeholders.

Incentive Alignment						
Banorte	SME		Univers	sity	Studen	t
Promoting experience learning as a way create value an	ay to	Access to institution's	1.	Link to Banorte (reinforces	1.	Professional skills development
service for clier increase client	ots, 2. loyalty,	resources Access to top talent/mind power	2.	institution's quality of academics) Access to new	2.	Ability to make a difference (high-impact projects)
and grow client 2. Learn about stu as a customer		of students Ability to solve business problems		teaching tools (live case and high-impact potential)	3.	Deeper understanding of business and environmental challenges
segment(e.g., university prod 3. Identify top tale		Facilitates access to credit	3.	Engages students through experiential learning	4.	in Mexico Opportunity to serve local communities
recruiting purp (internships or	oses		4.	Tailor learning through credit	5.	Opportunity to network with bank employees
jobs/rotational programs) 4. Establish partno			5.	Sets program apart from other universities		(possible internship/job)
with universitie showing comm to these institu and to higher e	itment tions		6.	Creates student career opportunities		

Table 7. Incentives for different stakeholders in the university partnership initiative

Additional Best Practices: Partnership Development

Goldman Sachs' 10,000 Women Initiative (described below) is an innovative example of how an institution can leverage the expertise and power of universities (and other learning institutions) to best serve SME businesses and develop new markets for the bank's services. This initiative specifically focuses on women in emerging markets. However, this example provides key learnings that are directly applicable to partnership development at Banorte.

Goldman Sachs: The 10,000 Women Initiative lxxvi

(Excerpts from Goldman Sachs: The 10,000 Women Initiative, Harvard Business School, June 20, 2009)

In 2008 Goldman Sachs launched an initiative to provide practical business and management education to ten thousand women around the globe in an attempt to address issues raised by globalization. Goldman Sachs wanted to show their stakeholders that they were willing to commit to a big idea and extend the benefits of globalization to those who had been previously excluded.

"What we do as Goldman Sachs is put capital behind people and ideas; and we are a catalyst for economic growth. So, for Goldman Sachs to engage in a serious philanthropic initiative, we knew it had to be authentic, connected to what we do and to our culture, and we had to own it. That meant it could not be a matter of simply writing checks; our people had to be engaged."

Goldman Sachs realized that their contribution to the growth of the SME sector through women's education would provide the highest social return on investment plus an increase in the country's economic growth. According to Lawrence Summers, chief economist at the World Bank (1992), "Educating girls probably yields a higher rate of return than any other investment available in the developing world."

By partnering with the Global Business School Network (GBSN), Goldman Sachs was able to identify academic partners among top Western universities and business schools as well as developing country partner schools. One year later (in May of 2009), Goldman Sachs had partnered with thirty-four academic institutions, and approximately 1,700 women have enrolled in or graduated from certificate programs. Today, as stated by Ngozi Okonjo-Iweala, managing director of the World Bank: "10,000 Women is not a program, it is a movement."

The initiative gives Goldman Sachs an opportunity to deepen relationships and goodwill within the countries as well as a better understanding of the potential growth in BRIC countries. Also, the initiative was designed to engage Goldman Sachs people, creating an advantage for the firm in recruiting and retaining talent.

PyMEs Key Takeaways

Banorte's PyMEs department is an exceptional area in which to pilot CSR initiatives to bring about great organizational learnings that will make it easier to replicate in other areas of the bank. This is attributed to the entrepreneurial nature and horizontal structure of the department and its abilities to reinforce Vision Cliente objectives to be closer to the client, understand the client's needs, and adapt quickly to become first movers in this customer segment in order to strengthen its competitive advantage.

PyMEs initiatives begin with the low-hanging fruit of PyMES CSR education, which provides continuous exposure to CSR themes throughout the three-stage CSR strategy: foundation, capacity building, and integrated innovation. Insights and recommendations throughout the CSR education case study reveal the importance of channel development, partnership engagement, and the role of metrics.

First, channel development is essential in creating dynamic platforms in which to articulate CSR both internally and externally. An underutilized channel, and perhaps the most important, is the PyMEs sales force. By nature of the department and customer segment, the sales force has a close relationship with SMEs and are best equipped to convey the applicability and benefits in a compelling way. Banorte is further aligning incentives to include drivers such as growth, risk mitigation, and management quality to serve the SME market in ways that will make the bank more relevant in an increasingly globalized world.

Second, partnerships are a great way to build internal expertise that will create a competitive advantage through enhanced learning, culture change, and efficiencies in internal processes. Partnerships are also a great way to outsource expertise, which builds stronger ties to the community, greater outreach, and faster incorporation of social and environmental products. The IFC, a bank shareholder with extensive expertise and SME resources, as well as CEMEFI and local and international universities are all examples of partnerships that Banorte should continue to utilize to train internal staff and customers on CSR-related topics. Overall, lessons learned from PyMEs' current partnerships demonstrate that clearly communicated goals, roles, and responsibilities that leverage the strengths of each party to achieve measureable outcomes is essential to a successful CSR strategy.

Lastly, the three-stage CSR strategy for PyMEs initiatives provides significant cross-departmental and cross-functional learning. This learning represents the kind of contagion necessary to roll out initiatives as part of a comprehensive CSR strategy. In the following section, we will discuss this contagion as it relates to both the paperless and the PyMEs case studies. Before discussing this contagion and offering our final recommendations and conclusions, it is as essential to stress the importance of defining metrics for the PyMEs CSR education initiative as it is for the paperless initiative. Metrics serve a number of purposes, but their primary purpose is to track and monitor projects in order to improve their performance, benchmark against industry trends and best practices, and communicate (internally and externally) the progress of Banorte's work and impact on SMEs. These metrics will allow Banorte to better articulate the business case for CSR and promote transparency and accountability in the bank's relationships with its stakeholders, furthering the adoption of CSR by SME clients.

Organizational Learning for the Future

The goal of the two case studies is twofold: 1) to showcase how this integrated planning template can be utilized for two sets of initiatives that have gained traction over the past year (paperless and PyMEs), and specifically to address challenges and opportunities over the short, medium, and long term, and 2) for planning at the bank to show how these two sets of initiatives and the planning guidance itself can lead to greater organizational learning across the entire portfolio of current and future CSR initiatives. While we think these planning case studies are applicable for all initiatives, the planning process is especially helpful for the energy efficiency/waste reduction initiatives (going paperless) and for the creation of more sustainable products and services (PyMEs).

Mapping Contagion Effects

In the next two sections, we map out the two case studies and provide examples of how key learnings from these two case studies can be harvested and learned across a number of different CSR initiatives. These initiatives are grouped by initiatives that are directly related to the core strategies of paperless or PyMEs initiatives, initiatives that have direct key learnings around the two case studies, and finally, those initiatives in which key learnings from the case studies will be essential for wider success across the organization, as shown in the graphic below:

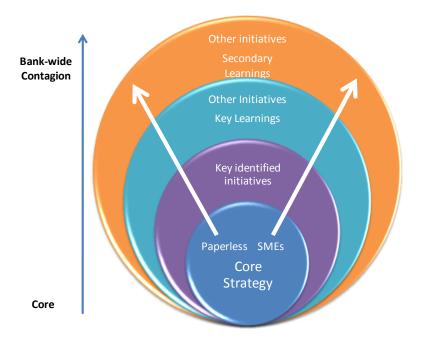


Figure 16. Contagion effect model for paperless and PyMEs

Paperless Contagion Effects

The following table shows the paperless initiative contagion portfolio. The initiatives receiving contagion effects are categorized into groups: directly related, key learnings, and secondary learning.

Contagion Effect	Initiative	Key Learnings
	Energy Tracking/ Reduction Hardware and Software	Initial planning and task management has already taken place around tracking individual paper and printing usage either at the desktop or linked to the printers themselves. The Team sees the two key turning points: the selection of the tracking and monitoring software in-between year 1-2 and the full implementation by the end of year 2. Having these systems in place and in use will be especially critical in moving to the integrated innovation stage.
	Supplier Education	Supplier education has already begun, namely, planning and thinking about the motivations of suppliers and vendors and how Banorte is able to capture its buyer power to create change as it relates to more sustainable paper products. The key turning point in the chart is in the middle of year two, when the bank is able to fully incorporate covenants into supplier contracts and to measure and track these changes. In addition, as the bank develops external teams and coalitions, this initiative will also gain impact and momentum.
Directly Related	Default Fonts	While originally identified as a low-hanging fruit/quick win, the Team has come to realize that changing default fonts requires significant education and culture change within the organization. We see two inflection points: the first at the end of the foundation stage when a plan is in place that follows systems that allow the bank to track individual default settings (e.g., duplex) and the second at the end of year two when education and training teams across the banks are in place to reinforce the message of the savings of switching fonts.
Diri	Data Processing and Storage Virtualization	Efforts are already underway to digitize documents and determine which documents require paper copies for compliance purposes. We see the digitization solutions to be finalized by the end of the foundation stage and then to be fully operational with full processes in place across the bank by the end of the second year.
	CSR Content: Road Shows	As noted above, CSR Content is already well underway with the publication of the GRI report, with the incorporation of CSR content into a previous road show in June, and with the upcoming road show in which CSR themes will play a dominant role. As such, we see the current moment as a key turning point in the evolution of the external reporting of CSR work, a reflection of the success of this initiative. As it relates to the paperless initiative, we see the middle of the second year as an additional turning point as the bank will be able to include a more refined tracking of performance indicators around going paperless because of

Contagion Effect	Initiative	Key Learnings				
		the use of tracking systems being fully implemented (as well as other waste reduction/energy efficiency Indicators). A final turning point will be at the end of year two, when the bank will be able to start preparing some of the outcomes from the systems integration, setting new goals while also starting to track fulfillment of previous goals.				
	CSR Crowd Sourcing	The paperless initiative provides lessons for a multidirectional conversation with stakeholders. In continuing to understand stakeholder interests and motivations, the paperless initiative provides an opportunity to pilot crowd sourcing techniques in order to generate new ideas, provide organizational learning opportunities, and create a culture of empowerment through CSR initiatives.				
	New Government Banking Services	As a core competency of the bank, serving government entities can be enhanced by both new products and services that have energy efficiency and/or waste/reduction components. The expertise gained in the paperless initiative and the understanding of the complexities of creating and tracking metrics will be helpful to large government agencies. For example, creating these measurements could benefit the Solida projects by assisting in the creation of an energy-efficient government town outside of Cuernavaca.				
Key Learning	CSR E-Learning Platform	While Banorte continues to develop a number of e-learning tools for employees, the paperless initiative will provide key organizational learnings throughout the organization about awareness, knowledge, and interest in CSR issues that will be critical to design an effective CSR e-Learning platform. The green teams especially will be a helpful internal test market in designing the appropriate learning tools.				
	Energy Supply and HVAC systems	As Banorte continues to investigate opportunities for energy-efficient branches and alternative energy supplies, the paperless initiative and the associated definition and measurement of key performance indicators will influence the infrastructure necessary to monitor and control energy supplies and usage.				
	HR Career Paths	As Banorte's human resources departments continues to define career paths, the paperless initiative provides an opportunity to engage employees, to pilot both monetary and nonmonetary incentive structures, and to generally find ways to empower staff at all levels of the organization through opportunities to contribute to the organization's CSR goals.				
	Jornadas de Integración	As Banorte rolls out Acciones (formerly Jornadas de Integración) to the entire bank, the human resources				

Contagion Effect	Initiative	Key Learnings
	(Acciones) Bank Rollout	department can keep in mind the kinds of lessons learned around culture change and engaging employees in new ways. Paperless and energy efficiency/waste reduction green teams can in turn learn about successes and challenges in motivating employees.
	SME/Business Services Monitoring	Again, opportunities may present themselves to provide paperless services to business clients, both small business and larger institutional clients. This represents an opportunity to share Banorte's internal learning with external clients and organizations, making it both a profit-generating and relationship-building product.
	New Data/Call Center	The development of a new centralized call center in Monterrey provides opportunities to test new paperless and energy efficiency/waste reduction strategies and also to engage younger student employees as paperless champions who may be more open to a paperless environment.
20	Credit Card that Tracks Environmental Footprint	The learning associated with defining and measuring performance indicators could be applied for new credit card products that allow consumers and businesses to measure their own impact.
Secondary Learning	Union Engagement	As mentioned in discussions with the COO and senior leadership, staff engagement opportunities through the paperless initiatives and the creation of organization-wide green teams provide an opportunity to leverage Banorte's strong relationship with the union to partner with union members through the CSR program to create relevant training and educational opportunities. This relationship can be expanded to include the union more generally in other financial and nonfinancial institutions where the union is present.

Table 8. Paperless initiative contagion portfolio

PyMEs Contagion Effects

Main Initiative: PyMES CSR Education

Value Proposition: In this section, we reveal how PyMEs CSR education becomes a foundational block for developing transferable capabilities that can be leveraged during the implementation of other CSR initiatives along the three-year strategy. These CSR initiatives intend to reinforce Vision Cliente as a way to better capture Banorte's customer needs, build partnerships that create opportunities to hone internal and external expertise, and, ultimately, innovate value-adding products and services around CSR themes that prepare clients for the increasing environmental and social pressures. Essentially, it is the transferring of these capabilities that creates a "contagion effect" across the bank by applying these developed expertise to direct initiatives, key learnings, and secondary learnings.

This commitment is backed up with best practices, national and international standards, and strategic partnerships to guarantee that doing business with Banorte means greater opportunities to grow through sustainable strategies.

Direct initiatives are the four initiatives that have spawned from PyMEs CSR education and are intended to pilot the PyMEs department. These initiatives touch upon each of the three stages and build capabilities in:

- Multichannel development to bring CSR awareness both internally and externally
- Knowledge-sharing platforms to engage customers in new and innovative ways
- Incentive alignment with diverse stakeholders
- Partnership engagement to either insource or outsource CSR expertise around central themes identified by SMEs (customer segments)

Key learnings initiatives build upon the capabilities developed above and apply them to initiatives that are similar but not necessarily part of PyMEs. These initiatives will then create secondary learnings that will ultimately allow Banorte to:

- Access new markets by engaging customer segments in new ways and creating innovative products and services around their needs. Potential markets include students, NGOs, and lowincome families.
- Take advantage of internal expertise to influence a national sustainability movement through stakeholder education. An example of this is using the influence of ABM to educate suppliers on adopting more sustainable practices.
- Leverage partnership capabilities in order to build focused partnerships abroad, such as with Banco do Brasil, China Development Bank, and Shorebank International.
- Create funds that support the social and environmental strategies of the bank by utilizing
 internal expertise in green supply chain management as well as the bank's expertise in valuing
 women customers as both valuable to business and crucial in the development of Mexico's
 economy.

The contagion portfolio is broken down into initiatives by category: direct, key learning, or secondary learning initiative. A brief description of each initiative's "key learnings" is given below.

Contagion Effect	Initiative	PyMEs
rectly Related	CSR Knowledge Sharing	CSR education focuses on training sales force and exploiting other communication channels, in order to expose SMEs to CSR themes. CSR knowledge sharing builds on this training, content, and channel development and engages SMEs in a two-way conversation.
Dire	University	This develops experience in partnership engagement and
_	Partnerships	the ability to leverage external resources to provide value-

Contagion Effect	Initiative	PyMEs
		add services for PyMEs. Examples of engagement skills are incentive alignment, clear communication of roles and goals of projects, and identification of opportunities to either insource or outsource expertise.
	Sustainability Loans	Sustainability loans require capabilities to audit or assess the social and/or environmental risks of SMEs, which forms the basis for a new credit process.
Key Learning	Credit for NGOs	Banorte can leverage PyMEs skills in providing new products and services to underbanked customer segments. Specifically, Banorte can leverage capabilities to identify and segment NGO customers, develop communication channels to capture market intelligence, assess social, environmental, and economic risks, and engage with new partners to better serve these customers.
	University Products	Banorte has created several opportunities in which to gain exposure to this new market as well as build brand equity, such as through the university partnerships initiatives, employment in call centers, and the development of internships with national and international institutions. The university products initiative leverages these learnings to create new products and services according to market needs and ultimately steal market share from their competitors.
	CSR Crowd Sourcing	CSR crowd sourcing is a compliment to already-established communication channels like events, the sales force, and the website, and acts as a means to establish feedback loops with internal and external stakeholders. This will give insights into their understanding of CSR concepts and the ways in which these stakeholders identify with certain CSR strategies. This is an extension of CSR knowledge sharing in that it explicitly asks for stakeholder participation to reveal potential value-add services that could be developed in the integrated innovation stage.
	CSR E-Learning	CSR e-learning is another channel through which the CSR message and knowledge can be transferred. It is a tool to pass from the foundation stage to the capacity-building stage. CSR E-learning can be applied both internally and externally in building expertise or partnering with other organizations to respond quickly to market demands on specific CSR knowledge. Banorte will therefore reap the benefit of transmitting a message to many people in an effective and cost-efficient way. This message can be tailored and even personalized with minor changes, allowing Banorte to maintain a CSR culture by periodically reminding people of Banorte's stance on CSR.

Contagion Effect	Initiative	PyMEs
	Union Engagement	At this point, the CSR education initiative has developed certain expertise in how to approach different publics and tailor the messages to their specific interests to convey the benefits of CSR. Through the development of CSR education, Banorte will have educated its sales force as an effective channel, therefore learning how to successfully address the public within the banking sector to engage in joint CSR efforts. This will allow Banorte to target a pool of talent from the banking industry, create a two-way conversation that may lead to the generation of new ideas, and learn what the competition is doing and how the competition is addressing key CSR issues.
	ABM Supplier Education	The CSR education initiative develops internal expertise around certain CSR themes—such as supply chain. By leveraging this expertise, Banorte will be able to influence other banking institutions to combine buyer power and generate the demand for a market that provides more sustainable products (e.g., recycled paper).
	SME Environmental Reporting/ Monitoring	The increasingly strong relationship between Banorte and the IFC requires SMEs to be held accountable for their environmental performance, promoting an internal baseline environmental audit. SMEs are also aware of the benefits of CSR and now must be held accountable for recording information as this will provide Banorte the opportunity to learn best practices and to identify the most socially and environmentally responsible SMEs. This can lead to a variety of benefits such as demonstrating compliance among a customer base, using best practices among the client base as a contagion factor for other SMEs, or the utilization of this as a base for assisting SMEs with the creation of their own sustainability reports.
	IFC-backed Mortgages	This is another IFC focus area, besides SMEs, in order to better serve vulnerable customer segments within Mexico. At this point, Banorte has engaged with IFC on many different fronts: as a stakeholder, as part of structuring guarantee funds for SMEs, possibly providing funding for outsourced CSR services, and potentially as updating CSR content based on their SME toolkit. Basically, Banorte is continuing to strengthen this relationship and apply lessons learned from previous product and service development, such as social and environmental assessments, in order to offset the risk of lending to these markets.
Secon dary Learni ngs	Socially Responsible Investment Fund	Having already developed partnerships with nonprofit- oriented institutions like CEMEFI and developed expertise on SME monitoring, Banorte will be able to pinpoint specific

Contagion Effect	Initiative	PyMEs
	Partnerships with Banco do Brasil and China Development Bank	candidates eligible to participate in the SRI. Further engaging with these specific socially responsible enterprises will allow Banorte to learn about best practices in different industries that can be transferred to other SMEs. By further developing these types of partnerships, Banorte will be able to learn about sustainability from leading institutions. Fostering the creation of exchange learning programs will allow Banorte to access key knowledge and learn about best practices both in sustainability and in the SME sector.

As Banorte moves along the path toward integrated innovation of CSR, it may be helpful to see an example of a financial institution that has made significant progress in developing a holistic CSR strategy built upon many of the different aspects presented in this report. Itau-Unibanco (Itaú) is the largest South American bank and has received extensive recognition for its innovative approach to CSR.

Making Sustainability Happen: Itau-Unibanco

On June 3, 2010, Itaú-Unibanco was named emerging market sustainable bank of the year at the Sustainable Banking Conference organized jointly by the Financial Times and the IFC. Additionally, Itaú-Unibanco was named most sustainable bank for the sixth consecutive year in the prestigious annual ranking of Latin America's "Most Sustainable Large Banks," conducted by Management & Excellence SA (Sao Paulo, Madrid) and LatinFinance (Miami, New York, and London). Below are several key CSR characteristics, products, and services that have contributed to Itaú-Unibanco's success and awards:

- 1. Itaú has adhered to several international standards, gives the bank legitimacy and accountability toward their multiple stakeholders. Among these standards are: UNEP-FI, Equator Principles, Global Compact, Carbon Disclosure Project, Greenhouse Gas Protocol, Latin American Sustainability Financial Forum, and Principles for Responsible Investment, among others Levilie.
- 2. A Social and environmental risk analysis has been incorporated into its credit policy. Corporate customer asset management contracts have specific clauses regarding environmental responsibility. "Since 2007, Itaú, as per its Socio-Environmental Risk Policy for Credit, adopts socio-environmental criteria in the analysis of credit operations above R\$5 million for corporate customers in the Brazilian conglomerate. The objective is to go beyond socio-environmental risk identification and compliance with legal requirements, i.e., build a relationship with our clients and convey an inclusive positioning, multiplier and developer of good social environmental practices."
- 3. Regarding internal capacity building, Itaú pursues several different initiatives, engaging with employees on several different fronts. In 2008, Itaú held two sessions of an event called "Sustainability Dialogues," which was meant for employees that wanted to deepen their understanding on

sustainability issues. Itaú also provides training to managers on sustainable finance and has implemented a sustainability module within their e-learning platform.

- 4. Regarding capacity building through partnerships, the bank recognizes the complexity embedded in sustainability and thus relies on several partnerships to provide adequate knowledge to its employees. Among these partnerships are: the Brazilian Foundation for Sustainable Development, Institute of Social and Ethical Accountability, and Ethos Institute of Corporate Social Responsibility (GRES)^{lxxxi}.
- 5. Socio-environmental criteria are increasingly inserted into performance evaluations. In this way, Itaú encourages its employees to think about specific ways in which sustainability concepts could be incorporated into their products.
- 6. Regarding supply chain, "Itaú Unibanco also makes use of its procurement capacity of about R\$8.5 billion a year to encourage suppliers to adopt socio-environmental practices. Contracts include restrictions and penalties for child labor, forced labor, and any kind of discrimination."
- 7. Itaú created a customer council that meets quarterly and provides suggestions and criticism to the institution regarding the quality of the bank's customer service in order to improve the bank's community engagement.
- 8. In addition to the monitoring required by the international standards (to which Itaú has already adhered), in 2006 the bank implemented AccountAbility 1000 (AA1000), a standard which requires tracking of specific socio-environmental metrics.
- 9. A credit line of US\$150 million has been established for SMEs in automated leasing operations. In promoting SME operational efficiency, Itaú has partnered with Itaútec, Microsoft, and the magazine *Pequenas Empresas Grandes Negocios* on "the Extreme Makeover project," which promotes the transformation of companies through changes in the areas of technology and financial management. Itauxiii
- 10. Unibanco created the Sustainability Leaders, a group that gathers thirty-five employees from several areas aiming at disseminating the concept throughout the organization and at implementing projects in their own sectors. Leaders are distributed in twelve working groups (GTs) and one study group, coordinated by the Sustainability area. Each GT prepared its action plan including a design of strategies, formulation of policies, and small daily action steps. |xxxiv|

Conclusion

Over the course of this study, we have provided a clear and measurable strategic planning process and a specific plan for two key initiatives (Paperless and PyMes), and have explained how these initiatives have significant learning potential across a range of additional internal and external initiatives. The sum of this research and guidance is an actionable plan for building competency in CSR strategy over a three-year timeframe and beyond, moving toward a stage in which CSR is fully integrated into Banorte's DNA, a source of business growth, constant learning, and innovation while at the same time helping to address the most critical social and environmental issues facing Banorte's organization, the Mexican society, and the world. Below we have included key recommendations as they relate to the three stages of a CSR strategy presented above: **foundation, capacity building, and integrated innovation**. These lessons are applicable to the Paperless and PyMEs initiatives, and to the CSR strategy overall.

Foundation

- Invest early in staffing and resources, especially technologies that help track and manage resource
 usage and performance. Before identifying new systems, it is important to assess existing or
 proposed solutions to ensure that CSR-related efforts are fully integrated and to avoid duplication of
 efforts.
- Define the business case using the four pillars (community commitment, environmental responsibility, value chain, and equality and governance) to understand how each CSR initiative aligns with the interests and motivations of different groups of stakeholders. Clear metrics not only help monitor, adjust, and improve initiatives but also align incentives and establish a common language for promoting internal accountability and the bank's commitment.
- Establish a communication plan that includes building multidirectional feedback channels. This involves continuous alignment between the marketing, HR, and operations departments as well as identifying champions early in order to build green teams. The Team has continued to stress the alignment of the HR and marketing departments to create thoughtful and strategic communication internally in order to engage and empower internal stakeholders. Having representatives from each department dedicated to working on CSR efforts will make a huge difference.

Capacity Building

- Proactively form partnerships (including social and environmental NGOs) as a way to build internal
 expertise or leverage external expertise, expand communication channels, create innovative
 products and services for underserved markets, and mitigate potential risks (reputational or
 regulatory) to avoid bad press around sensitive societal problems.
- Training and feedback is an iterative process. The more you invest in understanding internal and
 external stakeholder needs, motivations, interests, and education around CSR and treat CSR as an
 empowerment tool, the higher the return-on-investment you will get from the training programs.
 Internally, utilize the green teams (formed in the foundation stage) as a bridge to both disseminate
 information and to channel feedback from all employees. Externally, recognize the role of client-

facing staff (such as the sales force) and the rich customer knowledge they possess. The more you can capture those conversations, the better your results will be.

• Make sure to recognize the role of frontline staff in furthering the bank's CSR agenda. While direction comes from the top, change management must include everyone from the cleaning attendants and assistants up to the CEO. Especially in the case of paper and waste reduction and energy efficiency initiatives, the knowledge and buy-in of these frontline employees in addition to the senior-level management is critical to making sure that CSR truly sticks in the organization.

Integrated Innovation

- With continuously growing leadership in CSR comes greater responsibility to share these lessons and best practices both at home and among partner organizations. Unlike some of the well-established organizations in the United States, if existing organizations don't effectively move forward Banorte's CSR objectives, the bank may have to create these coalitions/organizations itself. While there may be international organizations available, it may be more effective and powerful in some cases to partner with local organizations in order to drive the bank's CSR goals forward.
- If Banorte continues to improve and has established infrastructures and capacity to adapt, competition will no longer stand in its way.
- We encourage Banorte to enjoy the success and recognition while continuing to improve and share the bank's successes with internal and external stakeholders.

Further Areas of Research and Next Steps

While the goal of the Team's research has been to provide a three-year strategic roadmap, we recognize that there are many additional areas of research that are outside the purview of this report. These include local regulatory compliance issues, international standards, and business development opportunities not discussed within. While not all addressed explicitly, these issues have informed our work and are critical to the development of CSR at Banorte. A number of these areas are actively being addressed, and some will drive new areas of CSR growth in the future.

However, we have focused the attention of our research and this report on a holistic and organic organizational strategy, specifically, the conditions necessary for CSR to take hold within the bank so as to encourage a way of thinking that will allow Banorte to better understand and articulate the business case for CSR, a business case that will itself be a catalyst for growth over time. As we have shown, this is an iterative process and one that will continue to develop through careful planning. It is our hope that the bank will integrate this way of thinking as a helpful framework as it evaluates the many additional CSR opportunities and initiatives now and in the future.

While much within this report has been shared with the bank during the course of our work together, it is clear that there are many opportunities for further development in the near future, building on the work of the current master's project Team. Specifically, as part of the learning that the organization continues to engage in, it will be critical to do more targeted research both in crafting departmental

strategies and in developing a number of the initiatives that the bank has co-created with the Michigan Team. Below is a list of additional next step opportunities for further research and development that the Team has identified through conversations with the CSR managing director and our own assessments.

- Sustainable branch and building development
- Greening the supply chain
 - o internally as part of the areas discussed in this report
 - externally with clients who themselves can realize internal and external opportunities by incorporating CSR
- Development of measuring GHG emissions as part of metrics and tracking
- Social and environmental risk impact assessment, using both the current tool and additional resources to further develop a sustainability scorecard
- Focused departmental and business unit CSR strategies
- CSR learning as part of the merger integration strategy between Banorte and Ixe

We see all of these opportunities as possible areas of collaboration between Banorte and future student researchers from the Erb Institute. As our Team completes its work with the bank, we hope this collaborative learning will continue between the University of Michigan and Banorte.

The Impact of Our Collaboration

One of the most satisfying aspects of our work has been to see how much Banorte has been able to accomplish even in the short amount of time that our Team has worked with the bank. It has been very encouraging to see how CSR has been a priority that is embraced by the CEO, board, and senior leadership. Below is a selection of impacts that have taken place over the past year.

- Development of 4 Pillars: In the fall of 2010, Banorte released its first GRI report, which
 received a B+ rating. This report discussed initial progress and commitments and featured the
 four pillars as a critical organizing framework for the bank's CSR agenda.
- Paperless Reduction Rollout: With the Michigan Team's encouragement and under the leadership and guidance of the CSR managing director, Banorte's COO and material resources team have set clear goals and commitments of reducing paper use in 2011 by 15%. As part of this work, the Banorte team has identified CSR champions in several departments including IT, marketing, and operations who are committed to collaborating on this initiative and in the future on other waste reduction and energy efficiency initiatives. The following additional paperless steps have also begun to take hold:
 - Movement to change default fonts
 - Call center pilot

- Duplex printing capable printers
- **CSR Initiatives Pipeline:** A number of the initiatives that have been identified with the bank have begun to be implemented. While some of these ideas preceded the Michigan Team's involvement, there is a measurable CSR pipeline with many new opportunities being explored.
- **PyMEs CSR Education Case Study**: As part of the summer work of Marcos Mancini (a member of the master's project Team), the PyMEs department has continued to grow its capabilities around CSR education. They now feature a PyMEs-specific CSR case study on their departmental website, developed with Marcos' guidance.

In addition to these internal initiatives, Banorte has also begun to see external recognition for its efforts around CSR. Some may view this kind of recognition as the result of good marketing. But based on our experience working with the bank, we see this initial recognition as a representative of the authentic progress the bank has begun to demonstrate in moving forward with its CSR work. These include:

- A declaration of sustainability within Banorte's mission and values statement
- A GRI report with B+ grade
- The invitation of Banorte's CSR managing director to the exclusive CSR program at Harvard University
- The recognition of Banorte as the eighteenth most sustainable bank in Mexico (Grupo Mundo Ejecutivo)
- The recognition of Banorte as a leader of the SME sector by President Calderon
- A "Best Places to Work" recognition

Final Thoughts

In the end, the University of Michigan Team provided key resources, next steps, and new ideas leveraging our own expertise and the resources of the University of Michigan's academic community to present the bank with a comprehensive CSR strategy. While this work has contributed to the selected impacts we have presented above, the most significant personal impact of our work has been the shared learning process itself that Banorte has engaged in with the University of Michigan Team. This learning has been a joint effort, a true co-creation to research and identify the best strategic path for the success of CSR at Banorte. This desire to learn more and to invest in this learning is a key strength of Banorte's leadership and organization. The idea of a "learning organization" is a concept that has been extensively studied by management and organizational scholars over the past twenty years, and it is key to the success of Banorte's CSR strategy.

Based on our knowledge, Banorte's desire to learn comes from the specific path that the bank has taken throughout its history, where much of its growth has come through the acquisition of other institutions. Learning and integrating the best practices and divisions of these organizations has required the bank to grow this competency in order to thrive, under the thoughtful guidance and vision of Don Roberto Gonzalez Barerra, the bank's chairman.

In his book *The Fifth Discipline* (Senge 1990), leading management guru and MIT Professor Peter Senge defines a learning organization as a place "where people continually expand their capacity to create the

results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together [...] At the heart of a learning organization is a shift of mind—from seeing ourselves as separate from the world to connected to the world, from seeing problems as caused by someone or something "out there" to seeing how our own actions create the problems we experience."

Senge specifically speaks about the importance of "systems thinking," the idea that organizations must bring a cross-discipline approach to learning that both combines and challenges the way organizations think and function, specifically developing an authentic "shared vision" that is truly embraced across the organization, "mental models" that "focus on the openness needed to unearth shortcomings in our present ways," "team learning," and finally "personal mastery," which "fosters the personal motivation to continually learn how our actions affect our world." From our experience, this way of thinking and learning, presented throughout this report, is intrinsic to Banorte's way of approaching its business but *must* be adopted as part of its comprehensive CSR strategy. More than anything else, our recommendation for Banorte is to take this competency for learning and continue to use this sense of shared learning (that we have personally experienced) as ignition for a multidirectional learning across all levels of Banorte's organization in order to truly create a successful CSR strategy.

Throughout the Team's work, the bank's leadership has invested heavily in us so that we could learn together with the bank. Our Team has been given access to all aspects of the organization. To this end, the executive team has made themselves available to us, providing incredible hospitality, warmth, and of course, time through our trips to Mexico City, their visits to Ann Arbor, and innumerable phone and video conferences. Special recognition of course goes to Mayra Hernandez, Banorte's managing director, who has championed our work and provided guidance to us at every step of the way, to the bank's CEO, Alejandro Valenzuela del Rio, who has shown great courage in his ability to promote CSR as part of the bank's strategic agenda, to Fausto Hernandez Pintado, managing director of strategic initiatives, and the entire CSR Executive Steering Committee, who have welcomed us into the bank during this collaboration. More than anything, Banorte's passion to invest in its learning will serve it well as it embarks on the path toward CSR leadership in Mexico, Latin America, and globally. We are forever grateful to have had the opportunity to learn along with them.

Glossary

Low Hanging Fruit: Corporate Social Responsibility initiative considered to have high impact over society or Banorte's operations, low cost, low risk and high feasibility of implementation.

GRI: The Global Reporting Initiative (GRI) is a network-based organization that pioneered the world's most widely used sustainability reporting framework ramework.

SWOT: Analytical framework based on the identification of Strengths, Weaknesses, Opportunities and Threats.

ROI: Return on Investment. Financial ratio (Gains from Investment – Cost from Investment)/(Cost from Investment) used to evaluate performance/efficiency of investments.

S&P 500: "An index of 500 stocks chosen for market size, liquidity and industry grouping, among other factors. The S&P 500 is designed to be a leading indicator of U.S. equities and is meant to reflect the risk/return characteristics of the large cap universe."

M&A: Mergers and Acquisitions, "A general term used to refer to the consolidation of companies. A merger is a combination of two companies to form a new company, while an acquisition is the purchase of one company by another in which no new company is formed." kxxxix

BRIC: Acronym given to the economies of Brazil, Russia, India and China.

Guarantee funds: Financial mechanisms which facilitate access to finance by offsetting the risk the bank takes on by extending loans to customers.

Reference

¹ Banorte: Background. Web [list specific site in all cases like this]. 2010.

[&]quot;Guthrie, Amy. "Mexico's Banorte, Ixe Hope To Better Compete With Foreign Banks." WSJ Online. November 18, 2010. Retrieved from http://online.wsj.com/article/BT-CO-20101118-706491.html.

iii Banorte. GRI Report. 2010.

^{iv} Calderon, Cajiga and Felipe, Juan. "El Concepto de Responsabilidad Social Empresarial." Cemefi: RSE: Que es ESR?. Web. 2010.

^v FundingUniverse. "Company Histories: Grupo Financiero Banorte SA." Web. December 14, 2010.

vi Bonini, Koller, and Mirvis. "Valuing Social Responsibility Programs." *McKinsey Finance*. Summer 2009. Number 32. Perspective on Corporate Finance and Strategy.

vii Pava, Moses L. "Why Corporations Should Not Abandon Social Responsibility." *Journal of Business Ethics* (2008) 83:805-812.

viii Interview with marketing research department. March 9, 2010. Banorte. Mexico City, Mexico.

^{ix} Pava, Moses L. "Why Corporations Should Not Abandon Social Responsibility." *Journal of Business Ethics* (2008) 83:805-812.

^x Vogel, David. "The Market For Virture: The Impact of Corporate Social Responsibility." *Multinational Monitor*. January/February 2006, pp. 37–41.

xi Pava, Moses L. "Why Corporations Should Not Abandon Social Responsibility." *Journal of Business Ethics* (2008) 83:805-812.

xii Interview with David Suarez, direct of investor relations. March 8, 2010. Mexico City, Mexico.

xiii Interview with Luis Fernando, director of risk and recovery department. March 8, 2010. Mexico City, Mexico.

^{xiv} Kanter, Rosabeth M. and Reisen De Pinho, Ricardo. Banco Real: Banking on Sustainability. Case study. Boston: Harvard Business School Publishing, 2008. Print.

xv Sustainability Report 2009 (Engish) p35.

wi Great Place to Work, Best Companies List, Retrieved from: http://www.greatplacetowork.com/what we do/lists-mx-mexicowomen.htm, January 31, 2011.

xvii JP Morgan, Winning Women, Retrieved from: http://careers.jpmorgan.com/student/jpmorgan/careers/winningwomen, January 31, 2011.

xviii Rangan, V. Kasturi and Garcia-Cuellar, Regina. Grupo Bimbo: Growth and Social Responsibility. Case study. Boston: Harvard Business School Publishing, 2009. Print.

xix Bradesco, 2009 Bradesco Sustainability Report

xx Bradesco, Sustainability Report (English) 2008, p98-99

^{xxi} American Express Company, 2007/2008 Corporate Citizenship Report, p34.

xxii Bradesco, Bradesco Sustainability Report (English) 2008, p. 50

http://portal.lacaixa.es/infocorporativa/responsabilidadcorporativa/sociedad_en.html#, January 31, 2011

http://www.jpmorganchase.com/corporate/Corporate-Responsibility/corporate-philanthropy.htm, January 31, 2011.

- xxvii "Mexico." CIA The World Factbook. 7 Dec. 2010. Web. 16 Dec. 2010. https://www.cia.gov/library/publications/the-world-factbook/geos/mx.html.
- xxviii "Mexico." CIA The World Factbook. 7 Dec. 2010. Web. 16 Dec. 2010.
- ^{xxix} Rangan, V. Kasturi and Garcia-Cuellar, Regina. Grupo Bimbo: Growth and Social Responsibility. Case study. Boston: Harvard Business School Publishing, 2009. Print.
- xxx CNN Expansion.com. Retrieved from: http://www.cnnexpansion.com/economia/2009/10/27/el-40-de-mexicanos-reto-para-la-banca Web. 16 Dec. 2010
- xxxi Interview with David Suarez, direct of investor relations. March 8, 2010. Mexico City, Mexico.
- varii NRDC: "From Copenhagen Accord to Climate Action: Tracking National Commitments to Curb Global Warming." NRDC: Natural Resources Defense Council. Jan. 2010. Web. 16 Dec. 2010. http://www.nrdc.org/international/copenhagenaccords/>.
- xxxiiii Broder, John M. "http://www.nytimes.com/2010/12/12/science/earth/12climate.html?_r=1." *New York Times.* 11 Dec. 2010. Web. 16 Dec. 2010.
- xxxiv Collins, James C., and Jerry I. Porras. "Building." Building Your Company's Vision, 1996: 65-77.
- xxxv Cynthia H. Staul, Alan J. Cimorelli, and Alice H. Chow. "A New Approach to Environmental

Decision Analysis: Multi-Criteria Integrated Resource Assessment (MIRA)," *Bulletin of Science*, Technology & Society, Vol. 22, No. 6, December 2002, 443-459. See pages 445 and 448 for an application of AHP principles by researchers from the US Environmental Protection Agency.

- This original figure of P\$14,868,487 is based on data provided to the Team by the COO team in May 2010. We have computed the savings based on the difference in total spending and figures provided by the Material Resources group in October 2010 for administrative and bank copy and stationery stocks.
- xxxvii Bevins, Vincent. "University's font choice cuts ink use." March 29, 2010. *The Guardian (online)*. Retrieved from http://www.guardian.co.uk/sustainable-business/font-cuts-printing-costs.
- xxxviii Based on total yearly toner expenditures of P\$3,788,106/per year. Source: COO office (May 2010).
- Whitepaper "Examining the Cost and Value of Documents." HP, 2004, p. 3. Retrieved from www.finestar.com/otherImages/CaseStudies/cost-of-documents.pdf.
- xl Sarantis, Heather. Business Guide to Paper Reduction. ForestEthics, 2002. See pp. 16–24 for Bank of America Case Study.

xxiii La Caixa, Welfare Projects, Retrieved from:

xxiv Wal-Mart Mexico, Social Responsibility and Sustainable Development Report (English), p37

xxv JP Morgan Chase, Global Philanthropy, Retrieved from:

xxvi World dataBank: World Development Indicators (WDI) & Global Development Finance (GDF) (2010). World Bank Data By Country, on Mexico. Web. 16 Dec. 2010.

http://www.environmentalpaper.org/PAPER-statistics.html.

- See http://www.edf.org/papercalculator. This assumes no post-consumer content in current paper source and an average weight of a sheet of paper of 1/100 of a lb. Total pieces of paper (2009) branch sources [500*(238,464)] and administrative sources [500*(92,091)] for a total number of pages of 165,277,500 sheets or 1,652,775 lbs. See Appendix I for additional details as well as cost savings calculations.
- xliv See Preton Ltd, White paper: "Environmental issues associated with toner and ink usage" March 2010. P 7. Retrieved from www.preton.com/pdf/PretonSaver envi whitePaperFinal 1403010.pdf
- xlv From JP Morgan Chase, Corporate Responsibility Report (2009).
- xlvi From American Express Sustainability Report (2007). P. 50.
- xivii Itau Unibanco Annual Sustainability Report (2009), pp. 61, 80–81.
- xlviii La Caixa, GRI Report (2006)
- xlix Bradesco CSR Report (2009), p. 45.

2008), Harvard Business Online, http://harvardbusinessonline.hbsp.harvard.edu, P11.

^{xli}Bailey, Andrew. ITC Imaging, "Document Management Return on Investment (ROI) Analysis" Retrieved from http://www.itcimaging.com/v7/index.php?option=com_content&view=article&id=92:document-management-return-on-investment-roi-analysis&catid=88:cabinet-ng&Itemid=66.

xiii As quoted on the Environmental Paper Organization paper facts. "The pulp and paper industry is the single largest consumer of water used in industrial activities in OECD countries and is the third greatest industrial greenhouse gas emitter, after the chemical and steel industries (OECD Environmental Outlook, p. 218)" Retrieved from

¹ Rosabeth Moss Kanter and Ricardo Reisen de Pinho. "Banco Real: Banking on Sustainability" HBS No. 9-305-100 (Boston: Harvard Business School Publishing,

Heather Sarantis, Business Guide to Paper Reduction. ForestEthics, 2002.

iii See Bank of America Sustainability Report (2007–2008), p. 28.

Bank of America Sustainability Report (2007–2008), p. 27.

liv ForestEthics, p. 22.

^{Iv} Based on conversations with Rick Plewa, Comerica Bank, November 2010. Green IT Case Study and Deloitte Presentation. Website and Comerica GRI report.

^{Ivi} Bevins, Vincent. "University's font choice cuts ink use." *Guardian.co.uk*, March 29, 2010, On-line ed.

Bevins, Vincent. "University's font choice cuts ink use." *Guardian.co.uk*, March 29, 2010, On-line ed.

Lacy, Peter, Tim Cooper, Rob Hayward, and Lisa Neuberger. *A New Era of Sustainability*. UN Global Compact-Accenture, June 2010.

lix Bevins, Vincent. "University's font choice cuts ink use." *Guardian.co.uk*, March 29, 2010, On-line ed.

Monroe, Martha C. "Two Avenues for Encouraging Conservation Behaviors." *Human Ecology Review*, 2003: Vol. 10, No. 2.

http://www.economia.gob.mx/swb/es/economia/p Contacto PyME Accessed December 2010.

http://www.economia.gob.mx/swb/es/economia/p Contacto PyME Accessed December 2010.

International Finance Corporation, IFC, http://www.ifc.org/ifcext/sme.nsf/Content/SME_Toolkit. Accessed December 2010.

http://www.csreurope.org/data/files/For news/pr me If banking study nov 2010 eng.pdf. Accessed December 2010.

http://www.itauunibanco.com.br/relatoriodesustentabilidade/2009/ra/index.htm. Accessed January 2011

http://www.ftconferences.com/userfiles/file/Emerging%20Markets%20Sustainable%20Bank%20of%20the%20Year%202009.pdf. Accessed December 2010.

http://www.ftconferences.com/userfiles/file/Emerging%20Markets%20Sustainable%20Bank%20of%20t he%20Year%202009.pdf. Accessed December 2010.

Monroe, Martha C. "Two Avenues for Encouraging Conservation Behaviors." *Human Ecology Review*, 2003: Vol. 10, No. 2.

Monroe, Martha C. "Two Avenues for Encouraging Conservation Behaviors." *Human Ecology Review*, 2003: Vol. 10, No. 2.

^{lxiii} Contacto PyME, Ministerio de Economia. 2010.

lxiv Contacto PyME, Ministerio de Economia. 2010.

kv Grupo Inmark, Comportamiento Financiero de las PyMEs, Mexico 2008.

IFC, Market assessment for the promotion of Energy Efficiency in Mexico.

^{lxvii} Ida E. Berger, Peggy H. Cunningham, Minette E. Drumwright. California Management Review 132-158, 2007

lxix Idem lxv

lxx Idem lxv

lxxi Idem lxv

IFC, Market assessment for the promotion of Energy Efficiency in Mexico

El Economista, Mexico entre los países de mas inflación, http://eleconomista.com.mx/economia-global/2010/08/03/mexico-entre-paises-mas-inflacion-ocde. Accessed December 2010.

http://www.thomas P. Lyon and Bart van Hoof. "Evaluating Mexico's Green Supply Chains Program." August 2009.

bxxv Bradesco. "2008 Sustainability Report." Web. December 14, 2010

laxvi Christopher Marquis, V. Kasturi Rangan, Catherine Ross, Goldman Sachs: The 10,000 Women Initiative. Harvard Business School. June 20, 2009.

^{lxxvii} CSR Europe; Management & Excellence America Latina,

ltau Unibanco, Relatorio Anual de Sustentabilidade.

lxxix Financial Times.

lxxx Financial Times.

^{lxxxi} Idem xv

^{lxxxii} Idem lxv

http://www.itauunibanco.com.br/relatoriodesustentabilidade/. Accessed December 2010.

^{lxxxiv} Idem lxv

bxxxv See Peter M. Senge, *The Fifth Discipline*. Doubleday, 1990. Reprinted as an essay, "The Fifth Discipline: The Art and Practice of the Learning Organization" (41). P. 484 and 490.

lxxxvi The Fifth Dimension. P. 490.

lxxxviii Global Reporting Initiative, What is GRI?, Retrieved from:

http://www.globalreporting.org/AboutGRI/WhatIsGRI/, February 3 2011.

lnvestopedia, Standard & Poor's 500 Index – S&P 500, Retrieved from:

http://www.investopedia.com/terms/s/sp500.asp, February 3 2011

lixxxix Investopedia, Mergers and Acquisitions, Retrieved from:

http://www.investopedia.com/terms/m/mergersandacquisitions.asp, February 3 2011

Appendix

Appendix A. CSR Drivers Definition

Source: Bonini, Koller, and Mirvis. "Valuing social responsibility programs." *McKinsey Finance*. Summer 2009. Number 32. Perspective on Corporate Finance and Strategy.

thibit 1	Value in environmental, social, and governance (ESG) programs				
uantifiable value	Growth	New markets	 Access to new markets through exposure from ESG programs 		
social, and governance		New products	Offerings to meet unmet social needs and increase differentiation		
programs create financial value for a company in ways that		New customers/market share	Engagement with consumers, familiarity with their expectations and behavior		
the market already assesses.		Innovation	Cutting-edge technology and innovative products/services for unmet social or environmental needs; possibility of using these products/services for business purposes—eg, patents, proprietary knowledge		
		Reputation/differentiation	Higher brand loyalty, reputation, and goodwill with stakeholders		
	Returns on capital	Operational efficiency	Bottom-line cost savings through environmental operations and practices— eg, energy and water efficiency, reduced need for raw materials		
		Workforce efficiency	 Higher employee morale through ESG; lower costs related to turnover or recruitment 		
		Reputation/price premium	Better workforce skills and increased productivity through participation in ESG activities Improved reputation that makes customers more willing to pay		
			price increase or premium		
	Risk management	Regulatory risk	Lower level of risk by complying with regulatory requirements, industry standards, and demands of nongovernmental organizations		
		Public support	Ability to conduct operations, enter new markets, reduce local resistance		
		Supply chain	Ability to secure consistent, long-term, and sustainable access to safe, high-quality raw materials/products by engaging in community welfare and development		
		Risk to reputation	Avoidance of negative publicity and boycotts		
	Management quality	Leadership development	Development of employees' quality and leadership skills through participation in ESG programs		
		Adaptability	Ability to adapt to changing political and social situations by engaging local communities		
		Long-term strategic view	Long-term strategy encompassing ESG issues		

Appendix B. Mexico's Climate Change Policy Objectives (COP 15)

Source: "NRDC: From Copenhagen Accord to Climate Action: Tracking National Commitments to Curb Global Warming." *NRDC: Natural Resources Defense Council*. Jan. 2010.

http://www.nrdc.org/international/copenhagenaccords/. Accessed 16 Dec. 2010.

Currently the eleventh largest emitter, Mexico accounts for approximately 2% of the world's emissions at 683 million metric tons of carbon dioxide equivalent (CO_2e). Per capita emissions are 6.6 metric tons, ranking Mexico the 80^{th} highest in the world.

Action Commitment: Mexico announced a target to reduce its greenhouse gas emissions up to 30% compared to business-as-usual levels by 2020 and 50% by 2050, provided there is adequate financial and technological support. Mexico has also committed to cut carbon dioxide emissions 51 million tons by 2012.

	Policy Ob	pjectives
Action Area	Commitment	Programs and Policies to Achieve Commitment
EMISSIONS REDUCTION	 Reduce national greenhouse gas emissions up to 30% compared to business-as-usual levels by 2020 Reduce national carbon dioxide emissions 51 million tons by 2012 	 Mexico's Special Program for Climate Change 2009–2012 includes 105 objectives and 295 goals to slow the growth of carbon emissions, with emphasis on energy efficiency (including greater co-generation by industrial sources), renewable energy production, and prevention of deforestation as priorities.
		 The General Climate Bill proposes the gradual elimination of subsidies to fossil fuels in the transport sector, mandatory vehicle inspections and application of strict emissions standards, a Mexican Green Fund for national mitigation and adaptation actions, and a National Registry for Carbon Emissions and a Carbon Emissions Market to buy and sell carbon credits nationally and internationally.
		 State-owned oil company PEMEX is building Mexico's first large-scale cogeneration plant, among other efficiency improvements.
		 A pilot project by PEMEX will introduce ethanol blends to gasoline in Guadalajara city.
		 The Urban Transportation Transformation Project will expand public transportation and increase the number of integrated mass transit corridors to cut 2 million tons of emissions by 2017.
		 A large-scale compact fluorescent lamp retrofit program will replace 70 million inefficient light bulbs between 2009 and 2012.
		 Mexico will generate 2,500 megawatts of wind power and promote a standard for commercial and residential solar water heat between 2008 and 2016.
		 Mexico will strengthen other national energy conservation programs, including increasing use of solar water heaters, implementing rural electrification projects with renewable energy, and implementing "green mortgages" to install eco- friendly appliances.
CLEAN ENERGY DEPLOYMENT	 Increase the share of non-fossil fuels in primary energy consumption between 7% and 17% by 2030 Double the installed capacity for renewable energy generation from 3.3% to 7.6% by 2012 (excludes hydroelectric projects greater than 30MW) 	 Under the new Renewable Energy and Energy Transition Financing Law, the Federal Electricity Commission must purchase energy generated from co-generation, self-supply, or small-scale production and pay a compensation that includes the cost of the electricity generation. The Renewable Energy Law creates political incentives that open the door to private sector investment in renewable energy, facilitates Clean Development Mechanism projects

	that reduce emissions, and educates policymakers and the public.
	 The new law creates the Fund for Energy Transition, initially worth about \$222 million, to promote the use of renewable energy and support projects that comply with the objectives of Mexico's National Renewable Energy Strategy.
	 A policy-based loan for \$400 million from the Inter- American Development Bank to jumpstart investment in renewable energy and energy efficiency. This includes the Fund for Energy Transition, expanding participation in carbon markets and new programs to finance green energy through national development banks.
	 The Special Program for Renewable Energy sets national targets for wind, mini-hydro, geothermal, and biomass by 2012.
	 The General Climate Bill proposes to increase the target for non-fossil fuel electricity generation to 40% by 2030.
DEFORESTATION	 Mexico's deforestation programs include payment for ecosystem services, natural protected areas, wildlife management units, forest pest control, and sustainable forest management. It has also invested in reforestation through the ProArbol Program.
	 Mexico is submitting plans to reduce emissions from deforestation and degradation for funding by World Bank.
	 The General Climate Bill proposes to achieve a net rate of deforestation of zero in a maximum of three years.
ADAPTATION	 Mexico's Special Program on Climate Change has an adaptation policy to address impacts in agriculture, forestry, water resources, and coastal areas in three stages from 2008 to 2050.
	 The General Climate Bill proposes to undertake the following actions: climate vulnerability/risk maps by 2012; National Plan on Land Use and Urban Development that accounts for climate change; adaptation funding at three levels of government to help especially vulnerable informal human settlements; and develop a climate monitoring system, including an early warning system, by 2012.

Appendix C. Results of Visioning Exercise



Environmental ____ Responsibility



Community Commitment



Equality & Sovernance Value Chain Equality &





- Paper printing on both sides
- •Revision of list of suppliers to ensure CSR compliance
- •New energy systems + cooling (systems)
- •6 (focus points) of standardization of maintenance and operations in branches
- Paperless in committees
- Banorte Foundation
- •Savings: Paper Water Energy



- Solar cells
- Reforestation
- programming financing
- Carbon Accounting
- •Products focused to better the environment and sustainable development



- •Jornadas de Integracion
- Scholarships for education
- Support natural disasters (through foundation disaster fund) (x3)
- •Scholarships for financial education (x2)
- Support to diverse communities in the country



- •Initiatives of community assistance that are led by employees
- Development of branch and community Scholarships and Awards: Financial and Environmental
- •Help potential projects that help the development of
- ·Social support for communities of high poverty
- Strong support for non-banked segment (45 million)
- Environmental research funding



- •Mujeres Banorte (x3)
- •Flexible work hours
- Help for Mexicans
- •Reporting to BMV and CNBV regarding corporate governance
- Support to rural areas
- More involvement of the CSR committee in these subjects



- •University Banorte where they teach and certify in areas of social responsibility (GUM)
- •Foster a culture of belonging in the staff
- •Reports and market information about complying with GRI/inclusive in the social responsibility indexes
- •Education Program for employees
- •Hiring focus on groups of minorities and handicaps



- •Credit Facile easy credit program
- •DUIS



- •Program for high social impact in 4 areas: Education, Poverty, Nutrition, and Environment
- •To be the most innovative business in Mexico in the issues of social responsibility
- •Education in CSR for employees (x2)
- •Credit incentives for environmentally responsible
- •Retention of talent for commitment to sustainable development of Mexicans and their country
- •To look for values in products



Appendix D. Results of SWOT Analysis

SWOT: Equality and Governance

Strengths

- Vision Cliente-moving bank from silo to integrated model
- Hiring locally to avoid transportation costEthical guidelines better than national law
- Diverse CSR team

Weaknesses (Challenges)

- Communications needs to come from the top down and permeate both vertically and horizontally
- Internal policy does not encourage training for better retention of talent
- Little sense of belonging from employees might reduce employee retention
- Increase communication on benefits from compensation package vs monthly salaries
- Improve "Camapana de Valores" initiatives

~

- Bank "Sindicato"
- Vision Cliente
- Role of senior management to drive CSR
- Operations department as enable for CSR
- Create better performance assessments for supporting departments
- Career training and program to identify leaders
- Develop internal CSR metrics

• Some employees leave because they find better opportunities (e.g. Compensation package vs salary)

Opportunities

Threats

SWOT: Community Commitment

Strengths

Weaknesses (Challenges)

- Jornadas de Integracion Pilot
- 1% of Banorte profits go to Foundation

- Little/no communication between Foundation and HR pilot
- Foundation philosophy on anonymous giving vs expanding role with visibility is a tension
- Lack of experience working with universities and establishing exchange programs
- Scalability of Jornadas de Integracion across bank
- Role of community engagement: workplace vs family time
- NGO's don't seem to be identified for partnership
- Low motivation by employees during planning HR pilot



- Strategic giving at Foundation, including employee involvement and leveraging government relations
- Call center consolidation —engaging students (research, scholarships and awards, job opportunities, and products)
- DIF-addressing regional diversity through Foundation
- Foundation could work with Territorial Directors to better reach employees at branch level
- Leverage CSR expectations from middle income segment to come up with initiatives.
- Other banks, such as Banamex, Bancomer, and nonfinancial institutions like Walmart and Coca Cola that have high visibility in social work
- Visibility of Foundation-not being recognized for good deeds

Opportunities

Threats

SWOT: Environmental Responsibility

Strengths

- Exclusion list-casinos, alcohol, etc is equivalent or exceeds IFC protocol
- Banorte is known for having secure on-line transactions (no frauds in last 6 years)
- Paperless model went from a fixed annual contract to one with more flexibility immediate action taken
- Several low-hanging fruits have been identified (paper, electricity, water management and car fleet project to reduce fuel consumption) although adoption by employees and clients presents a challenge

Weaknesses (Challenges)

- Redoing credit manual-looking to google for SMEs getting in trouble (especially the larger Medium companies)
- Several low-hanging fruits have been identified (paper, electricity, and water management) although adoption by employees and clients presents a challenge
- Banorte is not known as the most technologically advanced



- Strong relationship to encourage/facilitate projects in RE or EE
- Be trendsetter in environmental policies through strong relations with key govt leaders
- Create monitoring/tracking of environmental projects
- Adopting GRI and Equator Principles and Standards
- Green IT initiatives-desktop energy reduction, overall server and system energy savings/solutions
- Gap in external communication, ie government policies which talk the talk but don't walk the walk-possible effects this would have on investments and community buy-in/impact/effectiveness
- Head start of Brazilian banks which makes them more competitive in comparison to Mexican banks who are late comers
- Complying to many standards at once might generate standard fatigue and an undesired effect on the buy in of the standards and principles embedded by employees

Opportunities

Threats

SWOT: Value Chain

Strengths

- Recovery's model in recuperation and investments: ability to recognize profitability while acknowledging new kinds of risk
- MARNOS partnership (real estate development)
- Mujer Banorte: image as the Bank for Women
 IFC partnership: a demonstrated commitment
- Credit Facil: easy credit program

Weaknesses (Challenges)

- Inability to develop overall compliance standards for suppliers
- Lack of influence in product design for those with direct contact with clients (territories)
- Lack of communication from bottom-up



- MARNOS: green real estate development
- Low-income housing with green features
- Social responsibility in mortgage lending
- DUIS: environmental studies with universities
- ABM: supplier CSR education
- PYMES Circle: RE and EE education
- Educate employees on innovation in CSR
- 45 million unbanked/underserved segment: possible linkages with Compartamos
- Cost incurred by generating demand for sustainable products
- Proxy voting against Banorte if it doesn't adopt certain CSR projects
- Banamex-strong image as the people's bank
- Taking on bigger projects: Banorte may have to comply with greater regulations than Bancomer
- Market decides on affordability of being "green"

Opportunities

Threats

Appendix E. Banorte CSR Initiatives Portfolio

"Low-hanging Fruit" Initiatives

Initiatives	Equality & Governance	Community Commitment	Environmental Responsibility	Value Chain
1. University scholarship recruiting	Х	Χ		Х
2. Switching default font			Х	Х
3. Union engagement	Х	Χ		
4. Bank-supported SME student consulting		Х		Х
5. "PyMEs Circle" CSR education		Х	Х	Χ
6. Campaign for hiring women	Х	Х		

Longer-term High-impact Initiatives: Start Now

Initiatives	Equality & Governance	Community Commitment	Environmental Responsibility	Value Chain
Public lighting	Х		Х	Х
Green social housing and infrastructure projects		Х	Х	Х
IFC-backing for distressed mortgages		Х		Χ
Energy consumption reduction software			Χ	Χ
"PyMEs Circle"-supported CSR knowledge sharing		Χ	Х	Х
Environmental and scientific partnerships with universities		Χ	Х	Х
ABM supplier education		Χ	Χ	
DIF collaboration		Χ		
Credit for clean energy technology		Χ	Χ	Χ
Information/speaker day led by Banorte's Foundation	Х	Χ	Х	
New microcredit initiative		Х		Χ
CSR crowd-sourcing	Х	Х	Х	Χ
Carbon finance projects for SMEs		Χ	Х	Χ

Current Initiatives

Initiatives	Equality & Governance	Community Commitment	Environmental Responsibility	Value Chain
IFC Solida		Χ	Χ	Χ
Green car loans		Χ	Χ	Χ
CSR content in investor road shows		Χ	Х	Χ
IFC guarantees for PyMEs		Χ		Χ
New products for government banking		Χ		Χ
External paperless		Χ	Х	Χ
University consulting engagements		Χ		Χ
E-learning platform	Х		Χ	
Joint Venture with Water Capital		Χ	Χ	Χ
Mobile banking		Χ		Χ
Bank-wide rollout of Jornadas de		Χ	Χ	
Integracion	^	^	^	
Green real estate development fund	ate development fund		Χ	Χ
Internal paper reduction	Χ		Χ	
HR career paths	Χ			
Data processing and storage			Х	Х
virtualization				
Energy supply and air-conditioning			Х	
systems				
Disaster recovery planning		Χ		Х
HECO: collaboration tools	Х		Х	
Business service monitoring		Χ		Х
Data center facilities			X	Х
Banorte shuttles	Χ		Χ	

Other Initiatives

Initiatives	Equality & Governance	Community Commitment	Environmental Responsibility	Value Chain
Credits and banking for NGOs		X		Χ
Products with social/environmental giving opportunities		Х	Х	Х
University products		Χ		Χ
Alliance with Banco do Brasil	Х			
Alliance with China Development Bank	Х			
Scholarships and/or awards based on CSR performance	Х		Х	
INB SEC carbon disclosure knowledge			Х	
Microinsurance		Х		Χ
Socially Responsible Investing Fund		Х	Х	Χ
Funding of environmental research		Х	Х	
Credit card that tracks environmental footprint		Х	Х	Х
Reforestation financing		Х	Х	Х
SME: environmental reporting/monitoring		Х	Х	Х

Appendix F. Initiative Prioritization Tool

The initiative prioritization tool utilizes a variation of the analytic hierarchy process as a fundamental mathematical methodology to prioritize the different CSR initiatives considered. The analytic hierarchy process (AHP) was developed by Saaty in 1986 and is perhaps the most widely used decision-making approach in the world today (Gass).

AHP has been applied in a wide variety of applications—multiobjective decision making being just one (Gass). According to Gass, AHP has three primary functions:

- Structuring Complexity: Because of the multiple interactions between environmental, social, and economic subsystems, a sustainable approach to a particular problem tends to be of an inherently complex nature. AHP allows the creation of a structure framework to analyze complex sustainability issues to be faced in CSR.
- Measurement on a Ratio Scale: Through its mathematical approach, AHP prioritizes the different alternatives with a ratio scale according to the relative importance assigned to the different set of variables.
- Synthesis: AHP allows the many dimensions that are inherent to sustainability issues to be synthesized in a simple way.

As with the AHP methodology, our mathematical model compares different variables in a pair-wise mode and through mathematical procedures is able to convert individual pair-wise preferences into scale weights.

As described by Winston (Winston and Albrigth), to obtain the weights for the various objectives, we begin by forming a matrix A, known as the pair-wise comparison matrix. This initial matrix was established with both the main variables as the subvariables considered in the model (Table 1).

			Variables		
	Investment	Implementation	Time	Risk	Impact
	Initial CAPEX	Champions	Time to launch	Compliance	Financial
	Maintenance	Infrastructure	Time- constrained initiatives	Reporting	IFC
	Labor	Human Capital		Market	Market Success
SubVariables	Opportunity Cost	Organizational planning		Strategic	Outreach
		Cultural competency		Legal	Performance
		Expertise		Regulatory	Consumption Reduction
		Partnerships in place		Environmental	
				Political	
				Reputational	

Table 1. Variables and subvariables

Matrix A is established considering both the variables and subvariables listed in Table 1. Initial Matrix A for the variables would be:

	Investment	Implementation	Time	Risk	Impact
Investment					
Implementation					
Time					
Risk					
Impact					

Figure 1. Matrix A

In order to complete Matrix A we consider the following: The entry in row I and column j of A, labeled a_{ij} , indicates how much more (or less) important objective i is than objective j to the decision maker, where importance is measured on an integer value from 1 to 9 (Winston and Albrigth), with each number having the interpretation shown in Table 2.

Interpretation of Values in the Pair-wise Comparison Matrix A		
Value of a _{ij}	Interpretation	
1	Objectives I and j are equally important	
3	Objective I is slightly more important than j	
5	Objective I is strongly more important than j	
7	Objective I is very strongly more important than j	
9	Objective I is absolutely more important than j	

Table 2. Interpretation of values in the Pair-wise Comparison Matrix A

The entries in Matrix A have a built-in pair-wise consistency because it is required that $a_{ij} = 1/a_{ji}$ for each I and j.

The mathematical as described in (Winston and Albrigth), is to create a normalized matrix A_{norm} in which all fields are on a 1 based. By establishing A_{norm} it is possible to establish then the relative weighting of each variable/subvariable according to the relative importance established in Matrix A.

Determining the Score for Each Initiative

Each CSR initiative has a corresponding CSR score that is derived from the mathematical equation expressed in Equation 1.

$$CSR_Score = Inv \cdot \sum (SV \cdot R) + Im \cdot \sum (SV \cdot R) + Tm \cdot \sum (SV \cdot R) + Rk \cdot \sum (SV \cdot R) + It \cdot \sum (SV \cdot R)$$
Equation 1. CSR Score

Where:

Inv = Investment

Im = Impact

Tm = Time

Rk = Risk

It = Impact

SV = Sub Variable Weight

R = User Rating

The user rating is a value that the user of the tools establishes for each initiative under each of the different subvariables. Therefore, for the investment variable, the user would rate each subvariable (initial CAPEX, maintenance, labor, opportunity, and cost) for a particular initiative on a scale of 1 to 5 as it is described in Table 3.

Variable Category	"1"	"5"
Investment	Requires a large amount of initial	Requires little to no investment
	investment to get started	to get started
Implementation	Requires significant new capacity	Ability to easily leverage existing
	to get started	capacities to get started
Time	Time to launch is greater than 3	Time to launch is less than 1
	years	quarter
Risk	Risk is considerable and requires	Risk is minimal or nonexistent
	mitigation resources	
Impact	Impact is minimal or nonexistent	Impact is maximized

Table 3. Subvariable rating

Determining the Best Initiative

The outcome of the model is the CSR score. The CSR score will always rate the best initiatives with a higher value independently of the relative importance given to the different variables and subvariables. In this way, the initiatives with the highest CSR score will be the initiatives to prioritize whether the company is looking for the low-hanging fruit (high impact, low cost, low risk, high ease of implementation, short implementation time) or long-term initiatives (low risk, high impact).

Appendix G. Evaluation and Prioritization Tool: Variable Definitions

Investment

Initial CAPEX	Capital expenditure required at time 0 to start project
Ongoing	Fixed and variable costs such as equipment, technology, etc. (excludes human
Maintenance	capital)
Labor	Additional human capital requirements necessary to implement and oversee
	initiative, including but not limited to hiring additional personnel or training current
	staff
Opportunity	Next best alternative use of capital, foregone opportunities or initiatives
Cost	

A scale of 1 to 5, where 1 = least favorable and 5 = most favorable

Implementation

Champions	Key CSR team member or high-level employee with interest/clear responsibility for ensuring success of initiatives
Infrastructure	Technology (e.g., IT), software (e.g., tracking metrics), media (both internal and external)
Involvement	Employee hours necessary for implementation; potential for employee buy-in at
level/Human	different levels
Capital	
Organization/	Cross-departmental planning and partnering if necessary
Planning	
Cultural	Ability to align initiative with organizational strengths and values, both at corporate
Competency	and individual level
Expertise	Specific skill set necessary for project possessed by internal staff
Partnerships	External partnerships that can be leveraged in order to effectively implement initiative

A scale of 1 to 5, where 1 = least favorable and 5 = most favorable

Time

Time to Launch	Estimated time between decision-point to pursue project and project kickoff.
Time-	Initiative designed with distinct beginning and end in mind (e.g., promotion, or "one-
Constrained	off" nonrecurring event) (sometimes not applicable)
Initiatives	

5=Less than 1 Qtr; **4**=1 Qtr–6 months; **3**=6 months–1 yr; **2**=1 yr–3 yrs; **1**=greater than 3 yrs

Risk

Compliance	Nonlegal but binding standards
Reporting	Ability to quantify and disclose outcomes of initiatives
(transparency)	
Market	Investor or market risk affecting feasibility of implementation of initiative

Strategic	Risk of internal failure of the initiative
Legal/Regulatory	Initiative that is elected becomes a legal requirement and therefore lessens in value or innovation is impossible because of regulatory or legal limitations (e.g., types of joint ventures allowed)
Environment	Unforeseen climate events leading to failure of initiative
Competitive	Competitors steal and/or improve model and get greater exposure/credit for Banorte's innovation
Political	Initiative differs from change in direction in public policy that is unforeseen at outset of initiative
Reputation	Initiative leads to negative environmental and social scrutiny (e.g., green-washing)

A scale of 1 to 5, where 1 = least favorable and 5 =most favorable

Impact

Financial	Cost savings or net income resulting from project, as measured by NPV and IRR
IFC	Ability to meet IFC requirements and encourage additional investments
Market Success	Increased market share, etc; saved/earned/market share/investor power (pull)
Outreach	Number of people served; estimated number of internal and/or external
	stakeholders impacted
Performance	Internal employee-based results such as morale, retention, acquisition, fewer sick
	days, promotions, etc.
Consumption	Natural resource savings such as energy (CO ₂ , Kwh), water, and waste reduction
Reduction	

A scale of 1 to 5, where 1 = least favorable and 5 = most favorable

Appendix H. Banorte's Mission and Value and Proposed Low-hanging Fruit

Banorte's Mission and Values

Banorte's Mission

- •Meeting the financial needs of our customers through a high quality personal service, given with kindness and efficiency.
- •Preserving the integrity and quality of all our operations, especially in the handling of deposits and capital of the group.
- •Increasing levels of performance that will serve as support to the depositors, shareholders and reinvestment basis for the Group.
- •Be responsible as citizens and as an institution, seek the leadership in those communities we serve.
- •Being, as a company, a source of serious and just work, in order to treat each of our employees with the highest sense of equality and equity

Banorte's Values

- Ethics
- Responsibility
- Confidence
- Teamwork
- Spirit of service
- Honesty
- Justice
- Austerity
- $\bullet \, \mathsf{Performance} \\$
- •Integrity

Low-hanging Fruit: Paperless Initiative

Why?

•Mission: Efficiency in serving clients

•Value: Austerity i.e. cost-savings

•Community Commitment: Customer security

•Implementation: Easy to pilot •International industry standard

•Cultural change: resource reduction & energy efficiency

How?

Low-hanging fruit initiative: switching default font. Additional Steps:

- Double sided printing as default
- Communication around not printing (e-mail tags)
- •Assessment of what does/doesn't need printing
- Recycling

What?

Internal and external paper and ink reduction

Key Facts

- •60% of printing cost comes from the use of ink
- •Switching fonts -> 30% cost reduction

Banorte spends:

\$14,868,487 on paper \$3,788,106 on toner

(pesos per year)

1 ton of recycled paper saves 17 trees

Example: Bank of America

Double-sided printing initiative after 1 year:

- •\$1 million USD in savings
- •18% reduction in photocopy
- •32% reduction in printed paper

Low-hanging Fruit: University Partnerships

Why?

- Mission & Values: "Justice" and "Austerity"
- Existing university partnerships in place
- Banorte's PyMEs leadership position in Mexico
- Low-cost way to pilot new ideas + serving new market segments
- Reputation and brand image
- Leadership development
 - Access to best future employees
 - Diversity
 - Encourage new customers

How?

Low Hanging Fruit Initiatives: SME consulting engagements

- Case competitions, university scholarships
 - Selection processes that communicate Banorte's values & commitment
- Technical and environmental assessment projects Additional Steps:
 - •Partner with Mexican University clubs
 - •Reach out to student association leadership
 - •Replicate PyMEs Great Place to Work contract model
 - ·Leverage campus outreach efforts
 - •Involve school administration and professors in selection process

What?

University engagements with focus on diversity

Key Facts

Opportunity to:

- leverage current University relationships
- reach out to additional universities such as UMA

Bradesco Strong university partnerships and training opportunities:

highly diverse workforce and leadership positions

Low-hanging Fruit: Union Engagement

Why?

- •Mission: "Equality" and "Equity"
- •Values: "Confidence" and "Team Work"
- •Leverage strong union relationships and enthusiasm of Union Director
- •Step toward CSR culture/behavior change at all levels in organization
- •Internal education on CSR topics with possibility of replication
- •First mover recognition for Banorte
- •Stakeholder engagement
- •Strategic step to encourage performance metrics with union

How?

Partner with Director of Union

- •Questionnaire to all union members on CSR topics.
- •Work with Marketing to develop materials targeting unionized employees to educate them on CSR
- •Distribute materials through union partnership
- •Trainings developed by union and Banorte together

What?

- •CSR training materials and sessions (in collaboration with union)
- •Trainings and feedback loop for union to be involved in CSR initiative
- •Promotion of waste reduction and energy efficiency

Key Facts

Union relationship ExampleGrupo Bimbo:

- maintains a close relationship with the representatives of its associates
- offers ample training (especially to new personnel)
- organize monthly meetings to keep associates up to date on the direction of the company.
- "This gives us a competitive advantage since we can get immediate feedback on any change in our production systems."

Low-hanging Fruit: Women Diversity Initiative

Why?

•Mission:

- Performance
- Equality and equity
- Responsible
- Leadership
- Leveraging strengths:
 - Banorte women executive leadership
 - Competitive advantage in serving women (Mujer Banorte)

•Values:

Responsibility

• Performance

Justice and Integrity

- •Brand building:
 - Outreach to new women as employees and clients

How?

- •Highlight accomplished women within Banorte
 - Leverage existing Banorte marketing expertise
 - Use social media
 - Create or sponsor networking opportunities and conferences featuring Banorte women executives
- •Internal mentoring program
 - women executives to future women leaders

What?

Campaign to recognize and increase the role of women within Banorte

Goal: diversity that reflects the needs of their clients

Key Facts

Compartamos

Gender equality initiatives and deliberate strategy inclusion as best place to work in Mexico for Women

JP Morgan Chase Web and social media women recruitment campaign

Low-hanging Fruit: PyMEs CSR Education

Why?

- Mission: "Financial needs of our customers to drive Performance"
- Vision: "Spirit of Service"
- Implementation: **Enhance** current platform at low-cost
- Competency: Leverage PyMEs and Vision Cliente
- Cultural awareness: Reduce costs and increase profits
- Leadership development: Introduce successful and innovative examples, form partnerships, increase awareness
- •Reputation and brand image

What?

Provide a value-add service for PyMEs so that they can incorporate CSR practices within their business models to drive profits, reduce costs, etc.

How?

Low-hanging fruit initiative: Incorporating CSR Content Additional Steps:

- •Conduct surveys and obtain feedback on CSR
- •Exemplify innovative solutions and success factors
- Create marketing materials (slides, brochures, internet)
- Synergies with PyMEs CSR knowledge sharing
- •Pioneer new products and services around PyMEs needs

Key Facts

PyMEs is:

- Banorte's fastest growing segment
- Key differentiator for Banorte

Appendix I. Calculation of Banorte Potential Cost Savings Based on 2009 Baseline

- 1. It is important to note that 2009 may *not* represent the appropriate baseline if reductions in year over year baseline figures for that year are based on unique declines in the world economy and a resulting decline in business. As such, 2009 is for representative purposes only and may not be the preferred realistic baseline.
- 2. All data below is based on the numbers reported as of October 2010 in the Proyecto Paperless Update Presentation prepared by the staff of the Dirección General de Servicios Corporativos

Category	Total Savings @ 50% of 2009 (in Mexican Pesos)
Branch Paper	\$4,457,486
Administrative Paper	\$1,732,530.20
Total Savings	\$6,190,016.20

Table 4. Potential cost savings based on paper reduction using a 2009 baseline (All \$ are in Pesos)

SUCURSALES	PZAS	Sheets	COSTO	Cost per sheet		
Norte	47,074	23,537,000	\$1,760,096	0.0748		
Centro	35,664	17,832,000	\$1,348,713	0.0756		
México Norte	29,214	14,607,000	\$1,091,925	0.0748		
México Sur	28,641	14,320,500	\$1,071,709	0.0748		
Occidente	23,008	11,504,000	\$857,946	0.0746		
Noroeste	21,967	10,983,500	\$818,519	0.0745		
Frontera	15,602	7,801,000	\$579,976	0.0743		
Peninsular	13,472	6,736,000	\$499,601	0.0742		
Sur	12,765	6,382,500	\$475,410	0.0745		
Istmo	11,057	5,528,500	\$411,079	0.0744		
Otros	0	0	\$ -	NA		
Total general	238,464	59,616,000	\$8,914,972			
50% reduction of paper	119,232	77,655,500	\$4,457,486			

Table 5. Branch paper cost reduction calculations (All \$ are in Pesos)

	Papel Carta			Papel Oficio			Total		
	Sheets	Cost/Sheet	Costo	Sheets	Cost/Sheet	Costo	Sheets	Sheets	Costo
2009	44,006,000	\$0.0745	\$3,277,631.67	2,039,500	\$0.0919	\$187,428.72	46,045,500		\$3,465,060.39
50% Reduction (1 yr)	22,003,000	\$0.0745	\$1,638,815.84	1,019,750	\$0.0919	\$93,714.36			\$1,732,530.20

Table 6. Administrative paper cost reduction calculations (All \$ are in Pesos)

Appendix J. SME ROI Calculator (Imaging Technology Consulting)

Source: Andrew Bailey, ITC Imaging. "Document Management Return on Investment (ROI) Analysis." Retrieved from http://www.itcimaging.com/v7/index.php?option=com_content&view=article&id=92:document-management-return-on-investment-roi-analysis&catid=88:cabinet-ng&Itemid=66.

Daily Labor Costs for a paper based document management system	Exa	mple	Time Spent		Cost
What is the average hourly salary?	\$	15			
How many people handle documents?		7			
How many times does each person retrieve a document daily?		10			
How long does it take to retrieve a paper document? (minutes)		3	210	\$	52.50
How many new documents are generated a day?		20			
How long does it take to file a paper document? (minutes)		3	60	\$	15.00
How many paper copies are generated per day?		60	0.05		3
Daily total costs for a paper based system				\$	70.50
Monthly total costs for a paper based system (20 working days/month)				\$	1,410.00
How much do you spend for off-site storage monthly?	\$	100		L.	
How many filing cabinets (12 sqft/cabinet - \$15/year/sqft)		10	120	\$	150
How much do you spend on filing supplies per month?	\$	50		\$	50
Monthly costs for maintenance				\$	200
Annual cost to maintain paper based document management system				\$	19,320
Implementation cost for a 5 user document management system				L.	
Software (5 concurrent users)				\$	5,000
Server with 200 GB of storage				\$	2,000
Scanners (3 mid range scanners at \$500 each)				\$	1,500
Training and Setup				\$	2,000
Total Cost				\$	10,500
Daily Labor Costs for an electronic document management system					
What is the average hourly salary?	\$	15			
How many people handle documents?		7			
How many times does each person retrieve or file a document daily?		10			
How long does it take to retrieve a paper document? (minutes)		0.5	35	\$	8.75
How many new documents are generated a day?		10			
How long does it take to file a paper document? (minutes)		0.5	5	\$	1.25
How many paper copies are generated per day?		0	0.05		0
Daily total costs for a paper based system				\$	10.00
Monthly total costs for an EDMS (20 working days/month)				\$	200.00
Annual software maintenance contract (20% of software purchase)				\$	1,000.0
Annual cost to maintain an electronic document management system				\$	3,505
Monthly savings				\$	1,318
Months to payoff					8

Source: Imaging Technology Consulting

Table 7. Document management return on investment (ROI) analysis

Appendix K. Description of Environmental Defense Fund Paper Calculator Values

Source: http://www.edf.org/papercalculator/

Danalina Danas					
Baseline Paper					
Uncoated Freesheet (e.g. copy paper)					
1652320 pounds					
0%					
3,053 tons					
24,698 million BTU's					
16,415 million BTU's					
21,042 pounds					
4,859,579 lbs CO ₂ equiv.					
7,268 pounds					
4,482 pounds					
2,231 pounds					
2,482 pounds					
304 pounds					
18,356,333 gallons					
6,077 pounds					
17,683 pounds					
16,361 pounds					
69 pounds					
1,576,902 pounds					

Table 8. Paper calculator values

Wood Use

Wood use measures the amount of wood required to produce a given amount of paper. The number of typical trees assumes a mix of hardwoods and softwoods six to eight inches in diameter and forty feet tall. Calculated collaboratively by Conservatree and Environmental Defense based on data from Tom Soder, Pulp & Paper Technology Program, University of Maine, as reported in *Recycled Papers: The Essential Guide* by Claudia G. Thompson (the MIT Press, 1992).

The Baseline Paper uses 3,054 tons, the equivalent of about 21,380 trees.

Net Energy

The paper calculator includes an energy credit for energy that is created by burning paper—or the methane that decomposing paper creates—at the end of its life. The net energy measurement takes the total amount of energy required to make the paper over its life cycle and subtracts this energy credit. If most of the energy used to make

the paper is purchased, then the energy credit might make the net energy lower than the purchased energy. The average US household uses 91 million BTUs of energy in a year.

The Baseline Paper uses 24,704 million BTUs, the equivalent of about 271 homes/year.

Purchased Energy

A subset of total energy, purchased energy measures how much energy comes from purchased electricity and other fuels. The unit of measure is British Thermal Units (BTUs). The average US household uses 91 million BTUs of energy in a year.

The Baseline Paper uses 16,420 million BTUs, the equivalent of about 180 homes/year.

Sulfur Dioxide (SO₂)

Sulfur dioxide is a chemical compound produced when boilers burn fuel that contains sulfur. Of the fuels used in the paper industry, oil and coal generally contain the highest quantities of sulfur. Sulfur dioxide contributes to air pollution problems like acid rain and smog. The average eighteen-wheel truck emits 5.5 pounds of SO_2 in a year.

The Baseline Paper uses 21,048 pounds, the equivalent of about 3,827 18-wheelers/year.

Greenhouse Gases

Greenhouse gases, including carbon dioxide (CO_2) from burning fossil fuels and methane from paper decomposing in landfills, contribute to climate change by trapping energy from the sun in the earth's atmosphere. The unit of measure is in CO_2 equivalents. The average car emits 11,013 pounds of CO_2 in a year.

The Baseline Paper uses 4,860,917 lbs CO₂ equiv., the equivalent of about 441 cars/year.

Nitrogen Oxides (NOx)

Nitrogen Oxides (NOx, which include NO and NO_2) are products of the combustion of fuels that contain nitrogen. Nitrogen Oxides contribute to acid rain and can react with volatile organic compounds and sunlight in the lower atmosphere to form ozone, a key component of urban smog. The average eighteen-wheel truck emits 261 pounds of NOx in a year.

The Baseline Paper uses 7,270 pounds, the equivalent of about 28 18-wheelers/year.

Particulates

Particulates are small particles generated during combustion that pose a range of health risks, including asthma and other respiratory problems, when inhaled. The average urban bus emits 11.2 pounds of particulate matter in a year.

The Baseline Paper uses 4,484 pounds, the equivalent of about 400 <u>buses/year</u>.

Hazardous Air Pollutants (HAP)

Hazardous air pollutants are any of a group of 188 substances identified in the 1990 Clear Air Act amendments because of their toxicity.

• The Baseline Paper uses 2,231 pounds per year.

Volatile Organic Compounds (VOCs)

Volatile organic compounds (VOCs) are a broad class of organic gases, such as vapors from solvent and gasoline. VOCs react with nitrogen oxides (NOx) in the atmosphere to form ground-level ozone, the major component of smog and a severe lung irritant.

• The Baseline Paper uses 2,482 pounds per year.

Total Reduced Sulfur (TRS)

Total reduced sulfur compounds cause the odor associated with kraft pulp mills. Exposure to TRS emissions has been linked to symptoms including headaches, watery eyes, nasal problems, and breathing difficulties.

• The Baseline Paper uses 304 pounds per year.

Wastewater

Wastewater measures the amount of process water that is treated and discharged to a mill's receiving waters. Wastewater volume indicates both the amount of fresh water needed in production and the potential impact of wastewater discharges on the receiving waters. One Olympic-sized swimming pool holds 660,430 gallons.

The Baseline Paper uses 18,361,388 gallons per year, the equivalent of about 28 swimming pools.

Biochemical Oxygen Demand (BOD)

Biochemical oxygen demand (BOD) measures the amount of oxygen that microorganisms consume to degrade the organic material in the wastewater. Discharging wastewater with high levels of BOD can result in oxygen depletion in the receiving waters, which can adversely affect fish and other organisms. The average home discharges 186 pounds of BOD in a year.

• The Baseline Paper uses 6,079 pounds, the **equivalent of about 33** homes/year.

Total Suspended Solids (TSS)

Total suspended solids (TSS) measure solid material suspended in mill effluent, which can adversely affect bottom-living organisms upon settling in receiving waters and can carry toxic heavy metals and organic compounds into the environment. The average home discharges 207 pounds of total suspended solids in a year.

• The Baseline Paper uses 17,688 pounds, the equivalent of about 85 homes/year.

Chemical Oxygen Demand (COD)

Chemical oxygen demand (COD) measures the amount of oxidizable organic matter in the mill's effluent. Since wastewater treatment removes most of the organic material that would be degraded naturally in the receiving waters, the COD of the final effluent provides information about the quantity of more persistent substances discharged into the receiving water. The average home discharges 465 pounds of COD in a year.

• The Baseline Paper uses 16,366 pounds, the **equivalent of about 35** homes/year.

Adsorbable Organic Halogens (AOX)

Adsorbable organic halogens (AOX) are an indirect measure of the quantity of chlorinated organic compounds in mill effluent, many of which are toxic and may persist in the environment.

• The Baseline Paper uses 69 pounds per year.

Solid Waste

Solid waste includes sludge and other wastes generated during pulp and paper manufacturing, and used paper disposed of in landfills and incinerators. One fully-loaded garbage truck weighs an average of 28,000 pounds (based on a rear-loader residential garbage truck).

The Baseline Paper uses 1,577,336 pounds, the equivalent of about 56 garbage trucks

Appendix L. Keys to Effective Green Teams

Source: Tam, Tina. "Microsoft Green Experience and Lessons Learned." PowerPoint presentation, shared with Mayra Hernandez, 2010.

1) Establish structure/goals to help guide the direction of the organization from the start

- The core team should have a diverse set of strengths: strong social marketing/communication skills, a business skill set for building the business case/value proposition, and process engineering/six-sigma experience are all essential.
- Establish a way to measure impact, such as through defining six-sigma key performance indicators.
- Start with a low-hanging fruit/quick win to build the momentum and morale.
- Having champions is critical, but it is equally important to build a scalable and sustainable organization that will continue to succeed as the organization grows.
- 2) Recognize that all initiatives and actions need to be backed by a business case/value proposition.
- 3) The green team must have effective communication channels with senior management as well as the rest of the workforce. Some examples include:
 - A communication plan with the senior management team detailing the frequency and format of meetings and other communications
 - To organize green team activities and encourage involvement from employees, an intranet site and logo could make it more "real"
 - An effective two-way feedback channel, ideally a tool similar to an intranet page, where employees can submit their ideas (i.e., crowd sourcing)
 - Online discussion list/blog to encourage discussions and ideas
 - E-newsletter with clear, tailored messages, especially focusing on building procedural knowledge (e.g., steps to take to save paper, how to get involved)
 - Consistent e-mail communication to keep everyone informed
 - Follow-up with every person; ensure everyone feels he/she is heard
 - Overall clear messaging on how to get involved
 - Seize moments such as successes even if they seem small in order to build and continue momentum
 - In-person events such as speaker events, volunteer opportunities, or celebration parties are also important
- 4) Ultimately, it is essential to study different models and find the one that fits the bank's culture best.