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NEXT GEN TRANSFORMATION AT ROTOPLAS

It was a bright, sunny morning in Mexico City, Mexico, in February 2019. Carlos (Charly) Rojas, vice president of solutions and services, gazed out his office window deep in thought. He represented the second generation in his family business, Grupo Rotoplas, a leading manufacturer of residential water tanks with business in Mexico and Latin America. The company operated 24 production plants serving customers in 12 countries. Rojas was concerned that he had not been able to implement his strategic vision of transforming Rotoplas from traditional manufacturing to an innovative service business and leading provider of fresh water solutions. Rojas saw an opportunity to make a difference in the world by providing millions of people with access to potable water. His father, Carlos Rojas Mota Velasco, CEO and founder of the company, supported his vision. But even with CEO support, Rojas had not been able to execute his plan. His father asked him to meet for a talk. As he thought about the achievements and challenges of his entrepreneurial approach, he wondered how his project could continue.

Rotoplas: A Capsule History

Rojas came from an entrepreneurial family. His grandfather had started a shipping business in 1955. His father and uncles had grown up working for the business or had started their own companies in different industries. Rotoplas was founded in 1978, and his father acquired control of the company a few years later.

Initially, Rotoplas manufactured a wide range of products for many industries. Under the father's leadership, the company focused on producing plastic car parts. Over time, the company identified more attractive opportunities and shifted to manufacturing residential water tanks.

Some water tanks called cisterns were installed at individual homes to capture and hold rainwater. Cisterns were the primary source of water for residential and commercial buildings in areas without municipal water systems. The use of cisterns prevailed throughout much of rural Mexico as well as in other Central American, South American, and Caribbean countries. Many cisterns were produced with asbestos, a heavy material that was easily damaged. The use of asbestos had met criticism due to significant health concerns. On the other hand, plastic was inexpensive, lightweight, easy to install, and durable. Rotoplas plastic cisterns quickly earned a national

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reputation and established the company as a recognized brand. The company distributed cisterns through hardware and other retail stores. Upon purchase, customers could install a cistern or hire a contractor to do so (see **Exhibit 1**).

Growing Up in the Family Business

The line between family and business was never clearly drawn. Growing up, Rojas spent most weekends playing sports with his father. Even when Rojas was a child, they talked about business between games. It was always clear that the father's dream was for Rojas to run the business someday.

Rojas reflected on his childhood thoughts about the family business. "Fortunately enough, joining the family business is the thing that I really wanted to do, because it was a business that focused on generating wellbeing for society and the environment by providing water solutions to people, so I really loved the purpose."

As a child, Rojas worked at the factory and even operated the machines. Eventually, the family entrepreneurial spirit surfaced, and he became interested in starting a business. In high school, he launched a business installing cisterns for Rotoplas customers. This early entrepreneurial experience helped shape his later thinking.

Rojas continued to work in the family business while earning a Bachelor of Science degree in engineering from Tec de Monterrey. After college, he joined Rotoplas full-time and managed eight manufacturing facilities in Mexico and Guatemala. He worked closely with his father and later attributed much of what he knew about the business directly to what he had learned from his father. Their relationship strengthened, and both considered the time working together enjoyable. The only downside was that there seemed no separation between family and business. Father and son always talked about work—at home, at the office, or at a restaurant eating dinner. Although they worked together harmoniously, Rojas often felt confused about whether he was talking to his father or his boss.

Taking a Break from the Family Business

Soon both recognized that everyone would benefit from the son gaining experience and perspective outside Rotoplas. "My father is the president of an NGO that supports Mexicans to earn Master of Business Administration (MBA) degrees, and he supports around 500 students a year," Rojas recalled. At his father's suggestion, he decided to earn an MBA and applied to Babson College, enrolling in fall 2009. In summer 2010 between the first and second year of the MBA program, Rojas worked as an intern at Starbucks headquarters in Seattle, Washington. This provided an opportunity to work in a completely different industry for an entrepreneurial company that had experienced double-digit annual growth in sales and store locations nearly every year since launch.

By 2011, the year Rojas completed his MBA, Rotoplas revenue surpassed $300 million. The business served primarily the Mexican market, focused on traditional product lines of residential cisterns and pipes. Returning to the family business after the entrepreneurial environments at Babson and Starbucks, Rojas felt ready to develop and implement innovations on his own.

He viewed his return to the company as a shock to the organizational culture at Rotoplas. The CEO and his team considered themselves entrepreneurial, but their innovations had taken place some time ago. The company now focused on incremental product development and changes to operating practices. Innovation was not embedded in the culture. As the company grew, systematic practices and processes had become ingrained, focused on delivering performance and profitability through existing products. Rotoplas had a successful track record that supported this approach. Questioning the need for change was a common response by executives and senior managers, when asked about introducing new products or services.

Rojas explained his thinking. “While I was at Babson, I was reflecting for two years. That's a lot of time to come up with crazy ideas! Coming back, I really wanted to drive change, but Rotoplas was doing very well the way it was. I didn't want to take away anyone’s job. I thought to myself, why don't I do it from a new position where I'll be able to try new things? I can design and execute new initiatives myself, then try to have the company follow.”

Rojas and his father decided to create a position as head of a new division called business development. They both understood that new ideas could be disruptive to existing operations if introduced throughout the company. Thus, if ideas could be developed and tested in a separate division, then demonstrate positive results aligned with existing strategy, it might be easier to integrate changes across the organization.

Rojas found it a challenge, even with the new business development division in place. He knew what he wanted to accomplish, but it took more than a good business plan to turn ideas into reality. Successful execution, especially if it impacted other divisions, required deep understanding of leadership dynamics. A key roadblock was that executives and managers were apprehensive that new ideas could threaten the status quo. Many long-time employees felt uncomfortable with change and the methods Rojas used to implement his ideas.

Rojas noted his relationship with his father had begun to shift. He believed his father was proud of him as a son, but he also knew his father worried about him in his new leadership role. The father understood the potential for negative outcomes of innovation including failure. He supported his son’s ideas but did not want implementation to risk the company’s core business. Rojas explained. “I was bringing disruptive ideas that worried my father, because disruptive ideas in a company really shake the ground, especially for employees who are in their comfort zone. And some of these ideas were disruptive enough to generate a question whether it's the best bang (allocation of resources) for the company, and whether it's the best strategy.”

Rojas hesitated to share with his father everything that he believed needed to change, based on what he had observed. After all, his father was the one who had built the business from the ground up. Fortunately, the two shared a strong relationship, so while their business interaction experienced some strain, their personal relationship remained strong.

A Roller Coaster Ride

Feeling resistance building in the company, Rojas decided the best approach for innovation was to focus on developing products and services outside the scope of the company's core business. At the end of 2011, he started a rainwater harvesting business in partnership with the Brazilian government. This new segment took off immediately. For Rojas, this opportunity addressed an important non-financial need, his strong desire for the business to have critical social impact by providing fresh, potable water to millions of people, in this case in rural Brazil.

> I started to look for new business opportunities with former classmates, and then this one came up in Brazil, where they were doing rainwater harvesting solutions with concrete products that just took too long to build. They were doing around 10,000 units a year. We proposed to the government that we could multiply these capabilities tenfold with plastic solutions. We worked with the government and built nine manufacturing facilities in 18 months. We were at 100,000 units within a year. I realized that we were really fighting poverty, as we were getting four times more water, or water in much better quality, to people's homes. This helped kids go to school more often. They were able to get more meals a day. Families used to spend 40% of the household income buying water. But with our new solutions, they could spend that 40% on other things. And so it was huge for me.

Between 2012 and 2014, the project in Brazil accounted for 75% of Rotoplas growth and contributed 42% of revenue in 2014. Noting the growth, Rojas surmised that government contracts represented a future opportunity.

Meanwhile, the core business was expanding into a new sector: custom integrated water solutions for government agencies and for large industrial and agricultural concerns. This new segment was growing fast and reached over 25% of total company revenue by 2014. The core business of manufacturing water tanks grew by approximately 5% (see **Exhibit 2** and **Exhibit 3**). Taking advantage of this momentum, the company went public in 2014. This move generated financial resources for continued growth.

Everything was moving in the right direction until a financial crisis hit Brazil. The government withdrew funding, and initiatives in Brazil were no longer feasible. Within 12 months, Rotoplas sales in Brazil dropped more than 80%. Fortunately, the core business in Mexico was not affected. However, many IPO investors were business colleagues or family friends. The inability to deliver on promises made to investors concerned Rojas and his father, forcing both to recommit to a long-term, value-creating relationship with investors.

Back to the Drawing Board

As the financial crisis unfolded in Brazil, Rojas saw that building partnerships with governments was not an attractive strategy for the future. There were too many external factors neither he nor the company could control, so Rotoplas abandoned current and future plans for government partnerships. The experience provided a valuable lesson and confirmed that experimenting with new ideas outside of the core business worked well, because it allowed the core business to remain insulated from a crisis.

Next, Rojas moved forward with an idea generated years ago from the cistern tank installation business in high school. He knew that Mexicans consumed the most bottled water per capita in the world because many did not have access to safe drinking water (see **Exhibit 4**). Delivering gallons of water in disposable plastic containers every day was expensive and not environmentally friendly. A service model that empowered people to purify their own water, transforming non-drinkable water to potable water, could help fight poverty and change lives. Rojas thought about selling individual water purifiers, but quickly realized the upfront cost would be prohibitive for most people. Instead, he developed a subscription model in which Rotoplas owned, installed, and serviced the equipment while customers paid a low-cost, monthly fee for unlimited access to fresh water. Rojas knew he had an idea that could change the world, and his father agreed. Rojas explained how he came up with the idea. "This was actually something that I was doing when I was in high school to get my beer money. I would go and knock on doors and tell homeowners that I could upgrade their water solutions. Users could enjoy water without having to worry about maintenance. No one is really an expert in water, and they don't want to become an expert. So why not have a company that's an expert in water help service your home?"

Executing the idea required analysis. Transitioning from a manufacturer selling through distributors to a direct-to-consumer service model meant disrupting existing distributor relationships and creating a new business process. In order to manage the risk, Rojas launched a new division called Rotoplas Labs that was external to core operations. As the new business model began to grow, Rojas wanted to integrate it into the legacy organization to launch formally and scale the service.

Almost immediately, he faced numerous challenges. Most importantly, the metrics, key activities, and processes were drastically different from the Rotoplas existing manufacturing and distribution business model. As a result, it was difficult to integrate Rotoplas Labs into the parent company systems. Among differences were the following:

1. The existing business was driven by the manufacturing process. The metrics were internally focused (manufacturing and distribution cost efficiencies). The new business was customer-centric with more external metrics (pricing, customer acquisition costs, purchase/consumption rates, etc.).

2. The new business had a different cash cycle, including upfront investment in company-owned equipment used by consumers in their homes. This resulted in a long-term payout versus the shorter inventory cycle of the legacy business.
3. The new business included a large number of business-to-consumer transactions, like accepting small credit and debit card payments, versus the legacy use of a business-to-business billing cycle.
4. The new business realized profits on a longer time horizon but represented opportunities for recurring profits, once the cost of company-owned equipment was recouped. The core business realized profits at point-of-sale to distributors but did not offer recurring sales to end users.

The practices and processes to operate Rotoplas Labs as a direct-to-consumer business were foreign to long-time staff at Rotoplas. Although Rojas knew he had his father's support, he found it difficult to explain new ideas to the staff and wondered if they were simply not putting in the effort to adapt to the change.

Navigating Relationships

Having been around his father and the business since he was a child, Rojas knew his father's leadership style well: traditional and authoritative. He had observed that this leadership style worked well in the manufacturing environment. He believed transitioning to a service model required a more collaborative leadership style in order to build a consumer-centric culture.

Rojas and his father had always maintained a loving, supportive relationship on a personal level. On a business level, Rojas found it difficult, as his initiative clashed with the company culture. Employees were confused. They understood the father-son relationship and knew Rojas was a partner in the business, but their CEO boss was telling them to do something different. Rojas knew his father trusted him and wanted him to find his own path. He appreciated his father for letting him experiment and take risks. The challenge now was to find a way forward while maintaining a good business and personal relationship with his father.

After serious reflection, Rojas felt he needed to work on himself first. He started reading. A book that stuck with him was on non-violent communications. He also worked with a coach and started to practice meditation. His new habits helped him get a clear vision of himself and how he could be more effective in achieving his goals.

What's Next?

Rojas was at a crossroads. His second big initiative in his family business was at stake. Even though he was the son of the founder and CEO, the company was not implementing his plan. His father was also at a loss, wanting his son to succeed but unsure how to help. Rojas walked across the hall to enter his father's office wondering what the next step should be for himself, his father, and the business.

Exhibit 1
Rotoplas Cisterns

Source: Rotoplas cisterns on a roof and outdoors for public use. Photos provided by the company.

Exhibit 2
Water Solutions Breakdown of Sales, EBITDA, and Margins

	Years ended on December 31		
	2014	**2013**	**2012**
	(amounts in millions of pesos, except percentages)		
Individual Water Solutions			
Net sales	4,850.5	4,963.2	4,636.2
EBITDA	687.2	732.9	621.1
EBITDA margin (%)	*14.1%*	*14.8%*	*13.4%*
Integrated Water Solutions			
Net sales	1,701.3	448.6	43.8
EBITDA	172.3	72.5	5.3
EBITDA margin (%)	*10.1%*	*16.2%*	*12.1%*

	Years ended on December 31		
	2014	**2013**	**2012**
	(amounts in millions of pesos, except percentages)		
Total			
Net sales	6,551.8	5,411.8	4,680.0
EBITDA	859.5	805.4	626.4
EBITDA margin (%)	*13.1%*	*14.9%*	*13.4%*

Source: Information provided by the company, Rotoplas *Annual Report 2014*.

Exhibit 3
Net Sales by Geographic Market 2012-2014

	Year ended December 31		
	2014	**2013**	**2012**
Sales in geographic markets	(sales in millions of pesos)		
Mexico	3,067.9	2,627.5	2,595.8
Brazil	2,756.3	2,036.5	1,395.1
Others	727.5	747.8	689.1
Total	**6,551.8**	**5,411.8**	**4,680.0**

	Year ended December 31		
	2014	**2013**	**2012**
	(sales in millions of pesos)		
Mexico			
Net Sales	3,067.9	2,627.5	2,595.8
EBITDA	543.6	469.2	407.9
EBITDA margin (%)	17.7%	17.9%	15.7%
Brazil			
Net Sales	2,756.3	2,036.5	1,395.1
EBITDA	293.4	313.1	174.2
EBITDA margin (%)	10.6%	15.4%	12.5%
Others			
Net Sales	727.5	747.8	689.1
EBITDA	22.5	23.1	44.2
EBITDA margin (%)	3.1%	3.1%	6.4%
Total			
Net Sales	6,551.8	5,411.8	4,680.0
EBITDA	859.5	805.4	626.4
EBITDA margin (%)	13.1%	14.9%	13.4%

Source: Information provided by the company, Rotoplas *Annual Report 2014*.

Exhibit 4
Global Bottled Water Market-Per Capita Consumption by Leading Countries

GLOBAL BOTTLED WATER MARKET
Per Capita Consumption by Leading Countries
2012 – 2017

2017		Gallons Per Capita	
Rank	Countries	2012	2017
1	Mexico	62.2	67.2
2	Thailand	46.9	57.5
3	Italy	47.7	48.2
4	United States	30.9	42.1
5	Germany	36.6	37.9
6	France	35.8	36.4
7	Belgium-Luxembourg	34.6	35.1
8	United Arab Emirates	25.3	33.9
9	Spain	30.9	32.6
10	Indonesia	20.1	30.9
11	Saudi Arabia	27.8	30.5
12	China, Hong Kong SAR	25.3	29.5
13	Hungary	28.4	29.2
14	Korea, Republic of	20.1	28.5
15	Brazil	23.2	27.7
16	Poland	21.3	25.6
17	Argentina	28.2	24.9
18	Austria	25.3	24.6
19	Pacific Islands	21.3	24.4
20	Switzerland	25.0	24.3
	Global Average	10.3	13.2

Source: Beverage Marketing Corporation

Source: International Bottled Water Association (IBWA). Accessed 07/18/2022 online at https://bottledwater.org/wp-content/uploads/2020/03/BMC2017_BWR_StatsArticle.pdf. Image provided with the permission of Beverage Marketing Corporation of New York, www.beveragemarketing.com.