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Innovatronix, Inc.

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This is a case study of a medium-sized electronics firm in the Philippines. Its objectives are (a) to provide discussion material showing the need for a more defined strategy and marketing plan, as a business grows from a small to a medium sized firm; (b) to illustrate the need for innovative managers to have a well trained staff that can also carry out different functions, including marketing, effectively; and (c) to illustrate that companies can be quite successful targeting the domestic market, that the export market is not the only avenue to profitability.

Mr. Ramon Castillo, President of Innovatronix, has gone a long way. Not only from his small town in Aklan to the big city, but more importantly, from a struggling electronics company in 1987 to a stable firm in less than a decade. The company was now at an important stage when Mr. Castillo had to determine whether the marketing efforts of the firm was optimal, or could be improved. And if the latter, how? Much of the growth in sales of Innovatronix in its first eight years was due to the fact that "great products have great markets", and so minimal sales effort in the past had still resulted in expanding markets. But the time of reckoning was at hand. "We must still have a large untapped market out there", Mr. Castillo thought. What is the best way to capture it?"

1. The company

Innovatronix, Inc., owned and managed by Mr. Castillo, started as a single proprietorship in 1987 and was incorporated in 1991. The company produces innovative electronic products - thus the coined name Innovatronix - for consumer and industrial use. The office and factory are located in Barangay Mambugan, Antipolo, Rizal.

The two main lines of the firm are consumer products which make up 80% of gross sales; and the engineering contracting group services, the remaining 20%. As a result of innovative product development by Mr. Castillo and his engineering staff, the company has continuously expanded its product lines as well as its sales.

Consumer products currently include automatic voltage regulators (AVRs), electronic ballasts, appliance protectors from power outtages called POD (Power-On Delay), automated night switches, electronic scoreboards, electronic timers, electronic flashers and CPIS (chess piece identification system). By 1995, the company's workforce had expanded from 40 to 80, and its sales volume had reached P30 million.[1]

Although the engineering services group makes up one third of Innovatronix's current manpower, it contributes only 10% to gross revenue. But this pool of technical skills is at the heart of the company's product development:

> "The reason why I maintain the engineering services group is that our in-house electronic designs uses this group to develop the consumer products that we now produce and will produce in the future. They are not strictly an R & D cost centre, they are in fact a profit centre for the company", states Mr. Castillo.

[1] The exchange rate between the Philippine peso and the U.S. dollar is P 26 = $ 1

This group of engineers also develops custom-made equipment, and process monitors or controllers for industrial companies, particularly those in the semi-conductor industry. In addition to the 11 employees in the Engineering division, Innovatronix has 7 personnel in Finance; 3 in Marketing; 20 in Production and 2 in Stores. Included under Finance are purchasing personnel, drivers and janitors. The function of the Stores division is the warehousing of the raw materials and finished products.

2. The products

Innovatronix produces five types of Automatic Voltage Regulators (AVR), equipped with Power-On Delay as protection against brownouts. The latter feature delays the electrical connection upon power resumption, until the power line stabilises. Other Power-On Delay (POD) products have been developed by the company: AIRPOD for airconditioners, POD 5 (5 amperes) and POD 10 (10 amperes). The features of these PODs are explained by Mr. Castillo:

> "When a brownout takes place, the electric current surges in the first five seconds. This surge in power can destroy your appliances. What POD does is to delay the entry of the electricity into the appliance for 35 seconds, a time lag which allows the current to stabilise.
> The simplicity of POD's use is its greatest appeal, other than its low cost. It only needs to be plugged into an outlet. Then the cord of the appliance is plugged into the POD outlet, after which you can forget about it. You no longer have to unplug your refrigerators, air-conditioners and other appliances after a brownout and then plug them in again when the current returns."

The electronic ballast produced by the firm is an improvement on the regular magnetic choke-type ballast, which results in a longer life span for lamps and in power savings of 35% to 55%. Unlike the conventional type of ballast, this product needs no starter. The company also produces automatic night switches, electronic devices which automatically turn on the light at daybreak and turn it off at night without the use of a switch.

Another product of Innovatronix is called No Frost. This is an electronic controller which is designed to improve the on-off cycle of the refrigerator. Mr. Castillo explains this product:

> "The No Frost is a product for the refrigerator which will delay the defrosting cycle from once every two weeks to once every two months. Although the sales of this product is presently small, I think this product has a bright future in terms of prospective sales."

The winker or electronic control flasher is another important product of the company, aimed at only one market: the lantern makers of Pampanga. Mr. Castillo proudly relates how he added this to his product line, and how the company's successful efforts to reduce production costs have paid off:

> "The Flasher is actually an original Filipino invention - ours. Before our flasher came out, Pampanga lantern makers used to import mechanical flashers from the US under the "Eagle" brand. Then we came out with an electronic version of that, virtually wiping out and making obsolete the orginal American flashers.
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> "When we first came out with those flashers, we were selling them for P52 each. Currently, because of improved manufacturing efficiency, we are now selling them at P22 each. Improvements in efficiency were necessary because there were so many small firms that started manufacturing flashers, copying our design. By successfully reducing our cost of production, we were able to reduce the price of flashers by 50% within four years. What is surprising is that we are making even more money from this product now, in spite of the lower selling price.
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> "Our previous profit margin was P12 for every P52 flasher sold, with the difference of P40 representing the production cost. Now, for every P22 flasher we sell, we make about P10 profit. So in percentage terms we are making more money now, even if we are selling the product for a lower price. I see this as an indication that our efficiency is getting better. Our sales volume has also increased. Before we used to sell 5,000-15,000 flashers every season. Currently, we are selling about 100,000 every season.

> "Although the lantern makers are our only market, it is a very big market. When someone told me about the large market, it was hard for me to believe this. But when the orders started coming in, I realised it was truly a big market. There are about 22 small manufacturers in Pampanga, which on the average, produce 2,000 - 3,000 lanterns each a year. Each lantern requires 3 or 4 flashers. These figures will show you how large the demand for flashers is from this one market."

Two other products developed by Innovatronix are The Tronix Dancing Lights and the Three-Channel Lamp Cluster, products purchased by entertainment places like disco pubs. The Dancing Lights are made to flicker in synchronisation with the music. The other product is a set of three lights that blink alternately in sequence.

3. Ramon Castillo, 34

Ramon Castillo's interest in electronics started in Philippine Science High School, where he was inspired and encouraged by his electronics teacher, a University of the Philippines electrical engineering graduate, to pursue a career in electrical engineering. Before he met this mentor, he was bent on following his father's footsteps in medicine, but discovered his true interest and special talent in time. After graduating with a B. S. in Electrical Engineering at the University of the Philippines, and placing 6th in the board exams, Mr. Castillo landed his first job at Intel Philippines, a multinational firm producing computer components and integrated circuits.

At Intel, he started out as design automation engineer, and worked up the corporate ladder to senior design engineer. The pay was good, the benefits were good, and Intel provided Mr. Castillo with opportunities for training in major international electronics centres in Hong Kong, Singapore, the United States and Malaysia. However, after four years with the company, Mr. Castillo decided to leave and set up his own business:

> "I felt that I could help the country by leaving Intel and putting up my own business. If I wanted to be an employee all my life, I probably would have stuck it out with Intel. When I resigned, I left with the blessings of my boss, and up to now, I still have good rapport with Intel's top managers.
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> "I believe in this country. We are one of the most talented people, but many go overseas for greener pastures. If we all follow this mentality, the Philippines will forever lag behind its neighbours because the country will be losing its best people. This is one reason why I put up this business. To show them what we can do. Even without much money. I had no money at the start. What is really needed to succeed is dedication and discipline."

The reasons for setting up his own company were not clearly defined at the start, but later these reasons were codified into the following IX Guiding Principles[2] of the company :

1. We believe in lifetime employment opportunities for everyone.
2. We believe in providing opportunities for both professional and financial growth for each and everybody, with the help of the individual himself.
3. We strongly encourage people to suggest new ideas for our continuous growth. Ideas do not only come from the top but also from below.
4. We believe that changes are inevitable. We must continue to promote, adapt and accept changes for our continuous growth.

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[2] "IX" stands doubly for (a) the roman number for nine, referring to the nine Guiding Principles of Innovatronix, and (b) Mr. Castillo's play on words, using IX as a short name for his product Tronix.

5. We nurture and promote honesty, loyalty, concern for our property, excellence, thrift, unity and camaraderie as our prime virtues.
6. We believe in sharing. Our bonuses and increases depend on the company's performance and our own individual performances.
7. We believe in quality. Let IX and quality be synonymous.
8. We believe that business has a social obligation. We commit ourselves to helping the country and fellow Filipinos.
9. We believe in Total Customer Satisfaction. We will work to ensure this. We survive and grow because of this.

4. The early years of the company

Mr. Castillo set up Innovatronix after leaving Intel in 1987, with P200,000 as starting capital. He was 27 years old then. The money for starting the business came from his savings and loans from his mother, his brother and his best friend. The early years were difficult, and it was never sure whether the firm would still be there the next year, as Mr. Castillo struggled with the growing pains of a new firm:

> "I worked alone for 6 months, then eventually hired one technician to assist me. The first six months of our existence was extremely terrible. My gross income, I remember after 6 months was P462. Even at 1987 pesos, that was very small, considering that I was paying P2,000 for rent.
>
> "I had no business plan when I started. I just felt that there was a need for the skills that I had. So for the next 2 - 3 years, we were on a hand-to-mouth existence. I remember that when I bought a second PC, to add to the one that I originally had, I had a terrible time with cash flow. It was very tight. Anyway, we were able to survive."

Mr. Castillo experienced the great heart-breaker that other new firms normally go through - the firm's lack of a track-record made it hard to break into the market. Without a track-record, banks will not lend to you and companies will not contract you to do work for them. Fortunately, the first break that Innovatronix direly needed came - from Mr. Castillo's former employer, Intel. Although Intel was a highly automated company, its automation was confined to individual production stations. Intel needed an automated link between stations which would automatically load and unload computer chips into these machines. Intel contracted Mr. Castillo's company to design and produce this machine. Once the work was completed, Innovatronix had its first feather on its cap, and this opened the doors for new clients, new contracts.

Another major contract bagged by the company in its early years was the design of a personal-computer controlled feedmill for a large-scale swine farm of the Ileto family. For this project, Innovatronix designed a system of hoppers on which individual feed ingredients are stored. These hoppers have computer-controlled gates, from which measured quantities of ingredients are poured into a mixer. The PC computer was then programmed to formulate hundreds of combinations of ingredients, in order to come up with the least-cost feed, appropriate to any specified stage in the pig's life. Various reports could be generated through this system, giving information on which feed ingredients need replenishment and the amounts needed, total feed consumption, costings, and other relevant information. "A system similar to this, if imported, is estimated to cost six times more than the system designed by Innovatronix", states Mr. Castillo.

5. Marketing and sales

The strategy followed by Innovatronix is : to go into a market that is big enough for them, but too small for big electronics manufacturing companies to go into. Thus, Mr. Castillo's firm did not venture into very popular electronic consumer products likes TVs and stereos, but has carved its own niche in designing and producing a wide range of consumer and industrial products not produced by the bigger companies. "We are not yet competitive enough to compete in the field of TVs and stereos. But with our present products, our efficiency levels compared to 5 years ago, have dramatically improved," says Mr. Castillo. For example, the reduced cost of producing flashers has allowed the firm to reduce the price from P52 per flasher to only P 40. Sales increased from P 1.35 million in 1990 to P18.3 million in 1995, a 251% average annual growth rate in the past five years. Of the different products sold by the company in 1995, AVRs made up the lion's share of gross sales, P6 million; followed by engineering services, P3 million; and display boards, P3 million (See Table 1). Although sales of No Frost are small compared to the total, they have a large market potential.

Table 1: Innovatronix, Inc. sales, by product line (in thousand Pesos)

Product Line	1990	1991	1992	1993	1994	1995
Engineering	1200	1600	5000	3000	3000	3000
Power On Delays (POD)	50	100	1000	5000	2000	2000
AVRs	0	0	0	100	800	6000
Ballasts	0	0	0	0	100	2000
Display boards	0	0	0	500	1000	3000
No Frost	0	0	0	0	100	500
Winkers	100	800	1200	1500	2500	1800
Total	1350	2500	7200	10100	8500	18300

Note: The high level of sales in 1993 of PODs was due to the power crisis in that year, which had resulted in repeated brownouts.

6. Competition

Although Innovatronix has competitors in all of their products, both local and Taiwanese, Mr. Castillo does not fear competition. "What is important", he says "is to come out with new products, and to continue to find ways to improve cost efficiency." Through the improvement of its designs, the development of systems, and the reduction of materials cost, the firm has been able to compete, both with domestic producers and with imported brands. "We continually assess and revise the design of our products. Our AVR, for example, is now on its 6th revision, " states Mr. Castillo.

The main competitor in the firm's production and sales of scoreboards is Seiko. "But what we sell at P29,000, they sell at P250,000", notes Mr. Castillo. "With this price difference, I consider myself in a totally different market. We are getting 100% of that market. They are all purchasing from us because our price is about one tenth of the imported brand." The No Frost product, on the other hand, has no close substitute, and therefore has no competitor. For the AVRs, 30% of those in the market are imported. There are 18 local manufacturers.

> "Right now, we are getting 50% of the AVR market. We know this through interviews with the dealers, who carry our brands as well as other brands. It might even become bigger. We are trying to drive everyone out of competition by pricing them out of the market."

While the flasher made for the Pampanga lantern makers has been copied by other small electronic companies, Innovatronix has been able to continually cut the cost of producing these flashers. This is the same competitive strategy the firm uses in all its product lines.

"In all our products, our prices are competitive. And since competition develops excellence in our company, we welcome competition", says Mr. Castillo. "Our pricing strategy is to price our products below the prices of our competitors."

A major factor that has greatly reduced production cost for the company is an innovative purchasing-bidding scheme conceptualised by Mr. Castillo. This is how it works. The company asks several favoured suppliers, currently four, to bid for specific raw materials to be purchased by the company. Through a transparent bidding system, the lowest bidder gets the contract to supply the firm. Those who don't win a contract now can try bidding again in the next quarter. Through such a system, Innovatronix has been able to source its raw materials cheaply, and has thus persistently reduced its cost of production. The firm targets a reduction in materials cost by 10% per annum. Raw material prices have dropped by an average of 20% as a result of this bidding system.

"Labour cost in the production of consumer and industrial products is only 5 to 10 percent of total cost. Thus, improvements in labour productivity will have little impact in cost reduction. The more significant cost is the cost of raw materials, which constitute about 30% of total cost. So to the extent that we can reduce raw material costs, this will have an important impact on our product pricing and profitability", says Mr. Castillo.

7. The market and the distribution system

The market for Innovatronix electronic ballasts consists of industrial users in the Philippines. The three biggest buyers of this product are the 7-11 convenience stores; D.M. Consunji, Inc. (a large construction company); and three electrical suppliers. For consumer products like AVRs, computer stores serve as dealers for the company. The Power-On Delay products, on the other hand, are sold through deparment stores like Shoemart and Abenson.

While Innovatronix products in Metro Manila are sold directly to department stores, provincial sales are sold through a mail order system. The mail order company which Mr. Castillo set up has 12 dealers nationwide. Dealers are compensated at 20% to 30% of the suggested retail price.

"Even if we are not making big money, as long as we are getting a larger market share, we are happy", states Mr. Castillo. "Among our strategies to increase our market share are quick delivery response, quick production response. This means that when our dealers order now, we should be able to deliver that same afternoon. And the quality of our products of course determines how large our share of the market will be".

8. Promotion and advertising of Innovatronix products

The management of Innovatronix realises that the sales of its consumer products depend on consumer awareness about the product, awareness about its lower cost relative to competitors, and awareness about its advantageous, innovative features which differentiate it from other products. Consumers will have to know about the brandname TRONIX, and should be made to associate this name with good quality, low priced electronic products. Mr. Castillo knew this, and saw the importance of advertising and promotions for his company.

The company currently allots P50,000 a month for promotions and advertising. This covers the cost of printing brochures which are distributed to the company's dealers, and for the print ads of the firm. Company brochures cost less than P1,000 a month, at P1 to P2 per brochure (see Exhibits 1, 2 and 3). Print ads appear twice a month, rotated among the three major newspapers, the Star, the Bulletin and the Inquirer.

> "Right now, the cost of advertising in the newspapers is very high. Advertising costs have increased recently, largely because of the Expanded Value Added Tax. Our ads used to cost P24,000 for our 1/4 page ads. Those same ads now cost P32,000, resulting in a price increase of about 30%. This makes our advertising expense very costly.
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> "So I plan to come out with a directive to our ad agency, to come out with a new design for our ad that will bring our cost down to P22,000. That of course means we will have to make our advertisements a bit smaller. Anyway, it can still be comprehensive, with the smaller size. P32,000 a month for one ad! I don't feel like spending P64,000 a month on advertising. Or maybe, I am not yet in the proper frame of mind to spend P64,000. The previous amounts of P24,000 for one ad, P48,000 a month, took time for me to accept, and now these much higher prices...." reflects Mr. Castillo.

He, however, accepts the reality that he has to spend more on advertising, if he is to keep up the momentum of his company. He plans to increase his advertising budget by half a million. How does he intend to allocate this amount?

> "That additional amount would not be enough for TV advertising. Half a million for TV is not enough. We would probably go into movie ads. And still continue our print ads. In the movies, advertising is good, because you have a captive audience. People cannot change channels. They have no choice but to watch the ad - unless they decide to go to the Comfort Room or close their eyes. Actually, we haven't tried this advertising strategy yet. But I believe that our half a million will allow us to run the ad for 3 months at 12 theaters, and that the impact on sales will be positive, " says Mr. Castillo.

9. Future plans

Mr. Castillo has other ideas that are expected to expand his markets, which he explains thus:

> "I'll probably go into a joint venture. That is, if the conditions are not too taxing on us, or too lopsided. I'll ask a big company to invest in my company. I am specifically looking at DM Consunji, Inc., one of our present clients. A joint venture would be mutually advantageous for us. Why? First, it will give us a ready, captured market for electronic ballasts, because this is a large construction company. For DM Consunji, their investment in our company will pay off, and I can assure them that their investment in the company will be profitable.
> "I am willing to lose shares in the company. Anything that will help us grow, and will help our country is fine with me".

The international market is also another possibility in the future. Innovatronics is currently eyeing the export market. The company is, in effect, already exporting in small quantities. The firm's products are bought locally, and then exported.

> "This is what has given me the idea - our domestic buyers selling our products in the export market. For example, one of our customers exports our AVRs to Guam, about 100 units a month. Shell Co. recently bought 8 scoreboards from us to be sold to Brunei. Three other companies bought scoreboards from us to be sent to Dubai. About 2 years ago, we exported chess clocks to Switzerland for $50,000. It's so easy actually for people to say, why don't you go into exports? But looking into it, I don't know where to start.
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> We've been to local trade fairs - we've been to Cebu, Bacolod, other places. But we haven't participated in any international trade fairs yet. I don't think we can afford it yet. I think my frame of mind is not ready for it yet," says Mr. Castillo.

Some new products are planned by the company this year. One is a clock and temperature indicator, which the firm plans to sell to billboard makers - similar to the type seen in the US, indicating the time and the current temperature.

> "Another product we plan to develop on a custom-made basis, because we feel there is a market for it, based on the many inquiries we have been receiving - is some sort of an electronic clock with a siren. This is normally required in a large warehousing environment, or in municipal halls, where an alarm will sound automatically at specified hours - e.g., 12:00, 1:00.
> "Then we are coming out with the market for fire exit signs and emergency power lights. We have had a lot of inquiries on that end. We feel the current prices are outrageous - P3,000 each, for the type that doesn't even have a back-up power during a power failure. As we know, this back-up power is very important because normally, when you need it like when there is a fire, that's the time there is no power. Our version will have the back-up power needed, and will probably cost less than half the present product cost.

Mr. Castillo decided that, with all the production ideas in his mind, he could not have the time nor the proper perspective to plan an optimal promotion strategy for the company. He decided to call his college buddy, Virgilio Fortez, to act as marketing consultant for the firm.

Exhibit 1: Brochure of Electronic Ballast

Exhibit 2: Brochure of no frost

Exhibit 3: Brochure of Power On Delay (POD)

Annex:
Company profile and related documentation