### **BEYOND SELLING MEDICINES**

by

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#### PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

### MASTER OF BUSINESS ADMINISTRATION

In the Executive MBA Program of the Faculty of Business Administration

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# Approval

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# **Executive Summary**

#### Overview

Novartis is one of the largest pharmaceutical companies in the world, based in Switzerland, and operating in more than 140 countries worldwide. It is a leading pharmaceutical provider for diseases such as high blood pressure, diabetes, hypertension and cancer, to list a few. Its medicines reach more than 1.1 billion people each year. Our client is Novartis Brazil, a subsidiary operating in a fast growth emerging market.

In order to build brand loyalty as well as to create additional revenue, Novartis Brazil has created a health program "Vale Mais Saude" (Valley Plus Health, VMS) which allow its members to enjoy price discount on prescription drugs and other potential benefits. The channel they currently use is mainly a call center which becomes a bottleneck because its limited capacity and expensive upkeep, which has resulted the program in a money losing position. Determined to put the program back on the winning track, Novartis is exploring new options to expand this program to increase its offerings to the user; potentially by partnering with other service providers to cross sell a wider range of products and services as the immediate step. The VMS program initially was probably only aiming at increase Novartis' drug sales as well as building loyal user bases. However we see enormous opportunity to move Novartis' market position beyond just selling medicines, but selling solutions meet various health care needs. The short term

goal for this long term vision is to collaborate with other service providers and package good products for the program users.

Today there are around 250,000 users enrolled in the VMS program, who mostly have chronicle diseases and rely on Novartis medicines, and the number is still steadily growing. The program database contains all these users' disease history and contact information, this information can be utilized to target specific user groups as well as the primary means to reach the users for marketing and communication purpose. Novartis delivers membership brochures to pharmacies where patients could pick up and register through the call centre.

Novartis has been considering mainly two partnership programs Novartis is considering for additional revenue generation. One is to collaborate with banks to created co-branded credit cards to its members, who could get additional discount or loyalty reward, while Novartis could partial benefit from the interest on the credit card. The other is to affiliate with other health insurance providers to cross-sell their products and services and share the revenue or charge a referral fee.

Novartis has already identified potential partners in banks and insurance providers, and scheduled meetings to request for proposal. These meetings are part of our project and team members from Brazil would attend these meetings with Novartis. Our task in this project is to collect proposals from these potential partners and analyse the feasibility for collaboration. If these partnership turned out to be successful both from user reception and revenue generation, Novartis can build on these partnership to solidify this program to sell beyond medicines.

#### Challenges

Pharmaceutical industry is highly regulated, and there are many restrictions in terms of how company can market their products. Although it might vary from country to country, Brazil has recently tightened the rules on drug companies' influence on physicians on how they prescribe medicines. Thus, it's even more challenging for the drug companies to advertise additional products and services they are selling through partners.

Other than regulation, reputation and brand image are also at risk when introducing new products and services, especially the ones from a 3<sup>rd</sup> party provider. The quality of the product and customer service might not be on par with Novartis' standards. Physicians might also think twice to prescribe Novartis medicine to patients if that implies the patients would be exposed to other various unsolicited commercial offers from Novartis' partners.

The drug company itself is risk averse with so much R&D investment and people's life at stake. The VMS program has not created the expected profit for a few years, but any internal discussion on broaden its offerings with outside vendors has been quietly resisted, especially from senior level.

The unfavourable financial market conditions prompted Brazilian government to demand banks to lower consumer interest rate shortly after our project started. Interest rate has been traditionally very high in Brazil, and interest rate on credit card could be as high as 20% per month, comparing to the normal 20% per annum in North America. The new rate cut put a stop on all co-branded program for the banks while they reviewing the impact to their bottom line. For Novartis, it lost a potential revenue source, at least at the

time being, and needs to focus solely on insurance partnership program to generate additional revenue.

However the scheduled meetings with insurance providers did not materialize on time, we did not receive any proposal until a couple weeks before our scheduled final presentation. This demonstrates that we are dealing with the real problem for the real client in the real world, where anything could change and we just need to adjust accordingly.

#### Approach

Our main goal is to evaluate the affiliate partnership with other providers to package value proposition solution and offer it to the registered users. We think it's important to understand the pharmaceutical industry as a whole and Novartis' long term vision so that we can answer questions like: How competitive is this industry? Does Novartis already have a competitive advantage over its competitors? As well as how strategic is the success of this program to Novartis? We did this through industry structural analysis, to gain a better understanding of the Novartis position in the industry and its strategy to support that position and future growth.

A follow-up question to Novartis' long term strategy is inherently related to the future and trend of the Pharmaceutical industry. Considering it's a highly regulated industry, not one player has figured out how to grow the business beyond just making and selling molecules, how to penetrate into other health related products and services and create a full package or solution to end users. Diversification has obvious been a popular

choice for some pharmaceutical companies, but the resulted different product lines do not deliver a congruent and holistic solution to end user. How to create a health package not only include medicine, but also diagnostic tool, physician consultation, dietary supplements and much more? More importantly, how to deliver such experience in the ever-evolving online channels?

We tried to address these questions through a trend forecast analysis to understand the feasibility of this long term strategy, whether the technology will evolve to the degree to support both the channel and the product of such program? What other new innovation might be included into a holistic solution and how is the Pharmaceutical industry going to change the way people treat their illnesses?

We also took a flexible approach in terms of the scope of this project. Since we are dealing with the real world problem, nothing is set in stone and things can change and often change fast. We devised a plan B in case any major projected milestone got stalled, and it did happen when we didn't receive partner proposal months later than expected, the plan B essentially allow us to step back and look at the big picture, and assess the program from long term perspective. This way we can still deliver value to our clients even when the original plan falls apart.

Since we are working as a virtual team with members from different country, we decided to have Brazilian team members to server as relationship managers, who keep in contact with client, join partner meetings and collect first-hand information. Other team member based in Canada, Mexico and the United States will serve as analysts to do research and analysis based on the data collected. Together the team would meet online weekly to brainstorm, exchange information and finalize the project.

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#### Analysis and Recommendation

Through our industry analysis, we found the pharmaceutical industry is highly competitive and profitable at the same time. It has extreme high barrier for new entrants due to the high cost of R&D to develop new drugs and length process to have them approved. Therefore, only selected few big players can play this game and competitions among them are fierce. Firms are constantly looking for a competitive advantage over others.

Being in a profitable industry doesn't automatically translate to competitiveness. Although Novartis is the leading patented medicine maker for a few popular diseases such as diabetes and high blood pressure, and positioned itself as focused diversified in areas such as generic drugs, eye care and consumer products[Figure 1], based on financial performance, it has not created a willingness to buy or low cost advantage [Figure 2]. This finding has vindicated the need to think outside of the box strategically, looking for lower cost might not get very far despite the low power of supplier, as most cost is incurred during R&D and approval phases which do not allow cutting corners; an innovative program which brings a total solution to patience in terms of medicine and related service and products, could definitely boost the willingness to buy and thus create a competitive advantage over others.

The industry is projected to grow steadily overall, and rapidly in emerging markets. The global sales is expected to grow 60% to 1.6 \$trillion in 2020 from about 1 \$trillion in 2011 [Figure 3]. Ground breaking technological innovations especially on genome and stem cell are accelerating in an unprecedented pace [Figure 4]. Information and manufacturing technologies are also lending themselves to better, leaner and quicker

delivery from research to cure. Instead of getting same medicine to everyone, it'll be possible to have customized drugs tailored specifically to patient's biological system to make it more effective. Personalized medicine is the future of this industry, though there need to be a good infrastructure to manage and deliver it to the end users. We think the program Novartis is trying to take to the next level could be well suited to lay down the ground work for an efficient network of channels to connect Pharmaceutical, physicians and other service providers to the end users. It's an excellent strategic move to both get ahead of competition and embrace the future.

In balance with the challenges the program is facing, we have devises a plan consists of gradual phases to build on its own success so that it won't incur massive investment up front, and allow quick implementation to stay ahead of competition.

#### Proposal Proposal

Phase 1:

- With minimum investment, leverage existing client base and partners' channels to deliver additional products and services.
- Focus on partnering with insurance providers only.
- Create differentiated insurance plans with benefits related to health that would be attractive to current clients.
- Profit generation by sharing revenue from insurance plans sales through existing customer contact channels.

Phase 2:

- Partner with other products and services providers offering value-added products, such as fitness membership, eye care, and nutritional supplements.
- Prepare customized packages based on each channel to be offered with discounts to target clients.
- Receive a percentage of the sales made through the program.

Phase 3:

- Invest to expand and enhance current channels, especially online, in social media and mobile devices.
- Partner with new service providers based on new channels.
- Create reward/loyalty program to increase sales.
- Grow the program client base.
- Offer the benefits to prospects out of the client list.

### Benchmark

Our benchmark is mainly at a business model level. We looked at Business to Business and Business to Consumer models and compared with other companies in different verticals. We think the two major areas Novartis could apply to VMS program are online advertising and direct sale, especially in the later phases when online channel becomes prominent.

Online advertising for health related products and services on VMS's web portal could garner additional revenues.

With more products offered in VMS, we could see its online channel become a specialized version of Amazon, a platform focused on consumer health care and lifestyle needs. The advantages of Amazon business model include:

- Availability of demographic and behavioural data about customers allows direct marketing and personalized services.
- Personalization enabled retailers to use dynamic pricing, whereby prices were changed based on demand (i.e., the value placed on the product or service by a target customer) or supply (e.g., product availability) conditions.
- Receive cash from sales in a day, but only pay for inventory after 60 days.

Novartis could also establish above advantages when it consolidates all its channels to Internet-based in the later phases, which is what we would recommend.

#### Financial projection

Based on a set of assumptions [Table 2], which are in line with the demographic of the users registered in VMS program, as well as going market conditions. We have projected the revenue and operational cost in the next 5 years [Table 3, 4] for phase1 implementation. The key takeaways are:

- Projected revenue will cover legacy base costs after 2.5 years
- Strong revenue generation with over 16 million BRL net present value in 5 years
- Total project net present value of about 60.3 million BRL in 5 years
- Impressive sales units increase from 320,000 units to 2.1 million units.

We have also done a sensitivity analysis and identified 4 sensitivity pillars, they represent the key items to be monitored throughout the process because these items would have strong influence on the projected revenue.

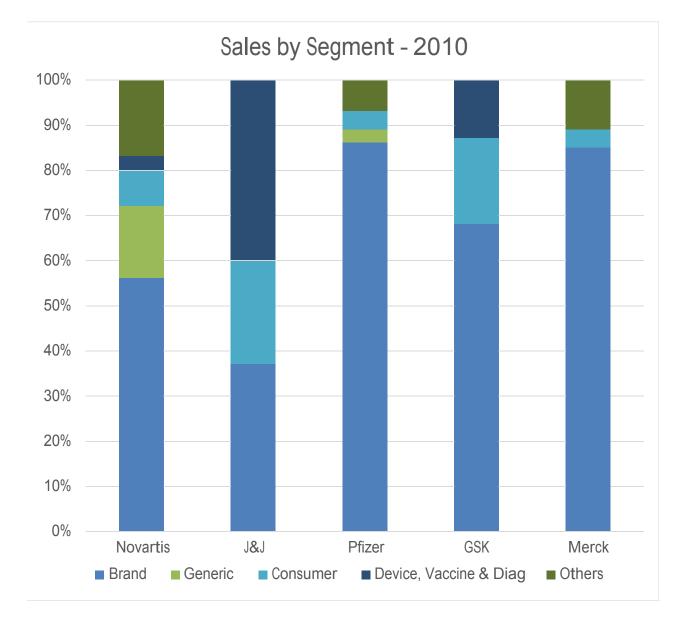
- Sales rate: This item has 24.9% impact on the project revenue in 5 years. The business case is assuming a sales rate of about 10%.
- Sales rate (call center inbound): Sales rate for call center inbound is the second most sensitive item with 19.8% weight.
- Offer rate (call center inbound): Offer rate for call center inbound contributes 11.5%.
- Churn: This item represents the customer early termination rate. The assumption in the model for this item is 2.5%. This item has a significant sensitivity factor of about -11.5%.

There are other sensitivity factors that are also important; however the project management should focus on these four major items. We recommended developing monthly KPI reports to monitor the trend of these pillars to ensure project success.

#### Final recommendation

In terms of final recommendation for this project, it is not about choosing one insurance provider over another. These partners are not mutually exclusive, and on paper all 3 proposals from 3 insurance provider are quite similar in terms of the component and cost. Our recommendation comes in the form of the phased approached business model and accompanied analysis and projection, and we believe this model is feasible and will contribute to the long-term strategy – selling beyond medicines.

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Figure 1 - Novartis focused diversification strategy comparing to competitors

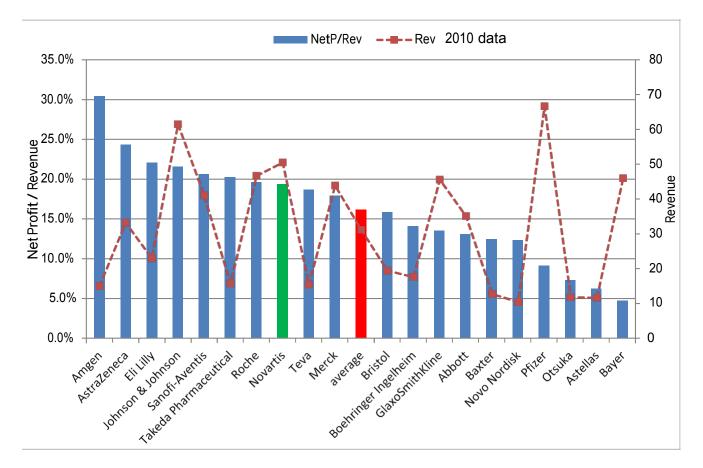


Figure 2 - Novartis has no competitive advantage based on its financial performance comparing to competitors

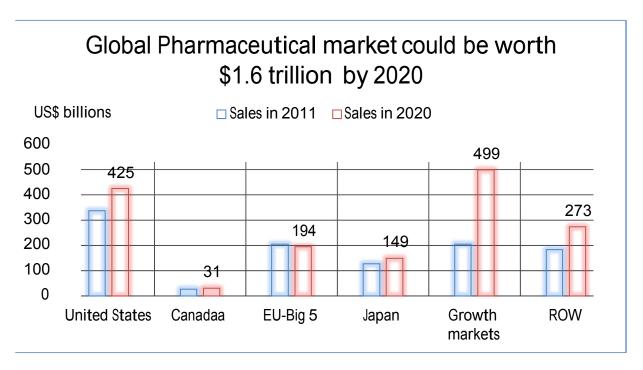


Figure 3 – Projected industry growth

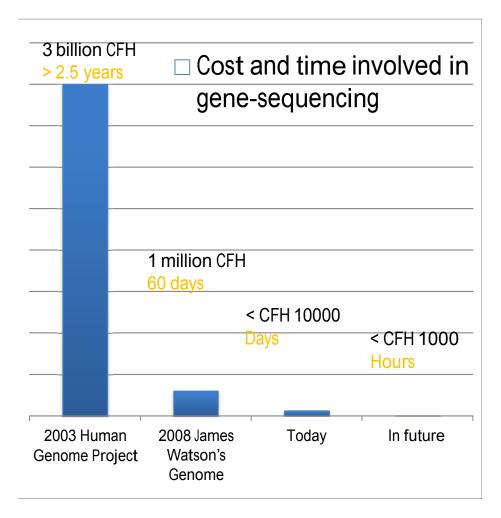


Figure 4 - Cost projection for gene-sequencing (Source: Roche Personalized Healthcare)

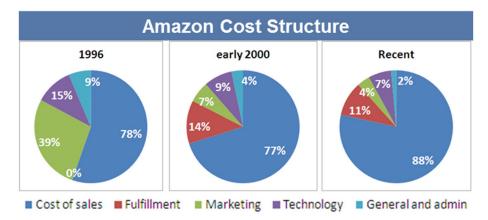


Figure 5 – Historical cost structure for Amazon

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Threat of Potential Entrants *	<ul> <li>High entry barrier due to:</li> <li>Long lead time for drugs with high cost of R&amp;D (Novartis invested \$9.5B in R&amp;D in 2011)</li> <li>High investment in marketing (Novartis expenses with marketing and sales was \$15B in 2011)</li> <li>Strong regulation, varying in each country.</li> </ul>	Low - Moderate
Power of Buyers	<ul> <li>Loss of brand loyalty as medical practitioners are forced to become cost conscious and consider prescribing generic rather than brand drugs</li> <li>Growth of managed care (and the information it provides) is expected to continue deteriorating the profitability of big pharmaceuticals regardless of the outcome of regulation</li> </ul>	Moderate - High
Power of Substitutes	<ul> <li>Cheap generics</li> <li>Consumer suspicion of drugs leads to increasing use of alternative remedies</li> <li>Biotechnology and combinational chemistry further reduce lead times to market</li> </ul>	Moderate - High
Power of Suppliers	• Global sourcing – low cost raw materials	Low
Competitive Rivalry *	<ul> <li>High exit barrier: high cost of R&amp;D</li> <li>M&amp;A to continue consolidation</li> <li>* Government is a complement: it affects the Rivalry and Potential Entrants with regulation</li> </ul>	High

Table 1 – Porter's five forces analysis for pharmaceutical industry

Inbound Sales - Convert		Offer			Sales	Convertion
income calls	# of calls	Rate	Offer	Sales Rate	(units)	rate
New consumers	25.000	20%	5.000	10%	500	2,00%
Customer support	35.000	20%	7.000	10%	700	2,00%
Total	60.000		12.000		1.200	
Outbound Sales - Convert New users in database				Assumptions		
	Database Opt in	24.500	100%			
	1	417	2%	Churn (monthly)	2,5%	
	2	1.103	5%	PA Full cost Avg. # of PA	8.000	
	3	882	4%	p.y.	31	
	4	10.119	41%	Email	0,01	
	5	2.254	9%	SMS	0,12	
	6	7.301	30%	Direct Mail	1,90	
	7	74	0%	VMS Margin	20%	
	8 (w/o permission)	2.352	10%		Revenue (p/un.)	VMS Revenue (p/u)
		Sales	Conversio	Inbound	20,00	4,00
Channel (interact)	Offer Rate			Outbound	20,00	4,00
Email SMS	8%		0,80% 0,00%	Cross Selling	10,00	2,00
Direct Mail	10%	10%		Benchmark (source: Metlife	and Ace)	
Phone	30%	10%	3,00%		)	
				Active Convertion %	3%- 3,5%	
Outbound Sales - Convert existing users in database				Active PA (# of contacts)	2.500	
	Database Opt	1.500.00		Receptive PA (#		
	in 1	0	100% 2%	of contacts) Receptive	1.300 8%	
L	1	I	<u>~</u> /0	Receptive	070	

	25.500		Convertion rate	
			%	
2	67.500	5%		
 3	54.000	4%		
 4	619.500	41%		
 5	138.000	9%		
 6	447.000	30%		
7	4.500	0%		
8 (w/o permission)	144.000	10%		

Table 2-Financial model assumptions

Revenue	Year 1	Year 2	Year 3	Year 4	Year 5	Total 5 yrs
Total Sales unit	319.965	1.096.740	1.534.568	1.858.497	2.110.000	6.919.770
Total Revenue R\$	6.157.247	19.145.877	24.192.242	27.691.989	30.399.228	107.586.583
VMS Results						
Revenue R\$ (inbound)	342.132	856.144	1.235.485	1.515.438	1.722.042	5.671.241
Revenue R\$ (outbound						
new)	137.839	511.144	804.879	1.021.656	1.181.636	3.657.154
Revenue R\$ (outbound		1 00 4 102	1 400 0 (0	1 105 510	016 014	
legacy)	703.068	1.904.102	1.498.260	1.105.713	816.014	6.027.157
Revenue R\$ (cross selling)	48.411	557.785	1.299.824	1.895.591	2.360.153	6.161.765
Total VMS Revenue R\$	1.231.449	3.829.175	4.838.448	5.538.398	6.079.846	21.517.317

Table 3 – Revenue projection in 5 years

Operational Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Total 5 yrs
Inbound						
# Total Inbound Costs	654.545	654.545	654.545	654.545	654.545	3.272.727
Outbound (New)						
Total Outbound New						
Costs	1.358.787	1.358.787	1.358.787	1.358.787	1.358.787	6.793.937
Outbound (Legacy)						
Total Outbound						
Legacy Costs	6.929.354					6.929.354
Cross Selling						
# Total Cross selling						
Costs	253.579	1.229.945	1.449.275	1.495.723	1.530.001	5.958.523

Table 4 – Operation cost projection in 5 years