



“The World Washer” Whirlpool Enters the Indian Market

Abstract

This is a comprehensive study of the introduction of an automatic washing machine, the World Washer, into the Indian market, by Whirlpool Corporation in 1990. Conceived as an important part of Whirlpool's global strategy in the late nineteen eighties, it was designed for the emerging markets of Mexico, Brazil and India. It failed dramatically and resulted in Whirlpool having to purchase obsolete twin tub technology from Korea for their next product launch in India.

This paper attempts to describe the existing market at the time of the launch, 1988-1990, Whirlpool's global strategy and the part played by their design departments, where strategy and design meet, and to analyze the reasons for the World Washer's failure. As Heskett¹ says, "An invention is not an innovation until it creates value for the company, which means it needs to be accepted by the user."

Whirlpool's World Washer – A Strategy for world domination

“Being an international company – selling globally, having global brands or operations in different countries – isn't enough. Everybody is going global, but hardly anyone understands what it means.”

David Whitwam, CEO, Whirlpool Corp. 1994²

Did Whitwam understand what it meant to go global in 1989 when he embarked on an ambitious global expansion with the objective of becoming a world market leader in home appliances? In the same interview, he said “We want to be able to take the best capabilities we have and leverage them in all our companies worldwide”. His strategy was based on platform technology. Although he had never run a multinational company until Whirlpool bought Philips in 1989³, he believed that the only way to gain lasting competitive advantage was to leverage their capabilities around the world, so that the company as a whole was greater than the sum of its parts.⁴

And that the means to achieve his vision of an integrated international company, was through intensive efforts to understand and respond to genuine customer needs and through products and services that earned long-term customer loyalty. In Heskett's words, he claimed to believe in innovation creating value for both the company and the customer.

His concept of the World Washer, a single washing machine that could be sold anywhere, was based on this vision to integrate Whirlpool's geographical businesses to leverage expertise across product lines and national borders. According to Whitwam,

*Today products are being designed to ensure that a wide variety of models can be built on the same basic platform... Varying consumer preferences require us to have regional manufacturing centers. But even though the features ... vary from market to market, much of the technology and manufacturing processes involved are similar.*⁵

Given this strategy, Whirlpool planned to base all its products, wherever they were built or assembled, on common platforms. These platforms would produce the standard components that were at the heart of the product, across markets. Customization could then be done to suit individual or regional preferences, with design changes in form, dimension, controls – the parts the user saw – to fulfill consumer's needs. Rigorous quality and environmental standards would have to be met for each country. Whitwam believed this move to platform technology would bring a \$200 million annual savings in design and component costs by the year 2000.⁶



Photo: Indian family shown with variety of clothing styles.

In 1987, after deciding that the best way to enter the Asian market was through joint ventures⁷ as they would allow the company to quickly establish a manufacturing presence, they collaborated with TVS Sundaram Clayton⁸, to launch the World Washer under the brand name TVS Whirlpool. Convinced that rising incomes and aspirations amongst the growing middleclass would generate substantial demand for home appliances during a briefing session by an external consultant⁹, India was extremely attractive to Whitwam with its nascent washing machine market and low base.¹⁰ Rapid growth was forecast. Washing machines sold in Europe or the United States were considered unsuitable for the emerging markets eyed by Whirlpool. The World Washer, designed as a small stripped down automatic machine targeted to meet the needs of developing such as Brazil, Mexico and India, was the first product launched. Capable of washing 5kg loads, compared to the 2.5kg washers generally sold in India, the machine boasted

electro-mechanical controls and a sturdy design to cope with the rigors of the Indian environment.

A combination of Prahalad's exhortation about billions of consumers waiting out there and Lewitt's assertion that they were all just like Aunt Mary at home in Benton Harbor, MI with her washer dryer combo in the basement, seemed like the proverbial pot of gold at the end of the global rainbow. Whirlpool waited for the World Washer to fly out of the showrooms. It went down the drain instead.

The Indian partner, Mr. Srinivasan, a scion of the TVS family, wanted the machine to evoke the image of the traditional Indian washing stone, and therefore requested a design change. A sloping lid instead of the original flat lid. This delayed production from 1989 to August 1990, by which time the market had begun to boom. By December 1990, only 1800 World Washers had been produced, even fewer sold. The price, Rs. 9000, which was high relative to monthly disposable incomes, was only one factor. Unanticipated design problems emerged. Saris, typically 6 to 9 yards long depending on the region, and of silk, cotton or nylon depending on the season, would catch and tear in the small gap between the agitator and the drum. This was a major issue in the South, TVS Whirlpool's main market as it was the TVS group's home base, as not only were saris worn more frequently than the north, but the men wore cotton lungis, a sarong type wrap, as well as mundus and angavestrams, all items nothing more than long pieces of fabric.

Then, many machines were damaged while being delivered to dealer showrooms. Suppliers of components were found to be unreliable in meeting the quality standards and delivery deadlines. Soon, the joint venture was facing serious financial problems and Whirlpool was forced to take over total control of the venture and intended to launch under the "Whirlpool" brand name. The challenge for Whirlpool was to turnaround the business and to firmly establish its position in India despite the intensifying competition from Japanese and European manufacturers.

Dr Pia Honold,¹¹ a psychologist at the Center for User Interface Design, Siemens AG offers two key preconditions for a product to be accepted in a new market,

"First, you have to ascertain which standards have already been established by the competition. The product won't be accepted if it doesn't live up to those standards. Secondly, you have to look at the environment in which the product will be used."

The competition and the environment in India in 1990

The washing machine market was divided into three segments in the late 1980's:

Manual Washers were the biggest sellers. They had neither timer controls nor programming capabilities and no spin-dry function. They were produced by small-scale manufacturers and retailed at around Rs. 3,000.

Videocon introduced India's first washing machine in 1988. This was a Twin Tub Washing Machine in collaboration with Matsushita Electric Industrial Co. Ltd., Japan with the "intent to liberate the Indian housewife from the daily back-breaking, time-consuming drudgery of washing clothes by hand".¹² They priced it at Rs 6000 and began a marketing campaign to educate the Indian consumer about the benefits of a washing machine. The Videocon machines were made sturdier to counter voltage fluctuations and were fitted with plastic tubs to avoid corrosion. The first model was the V-NA-200T, a 3kg capacity semi-automatic machine in response to the prevailing habit of scrubbing clothes before they are loaded in the machine. Six months later it introduced a fully automatic model in the market. By 1990, sales of VIL washing machines were up to 100,000 units approximately 50% of the forecasted demand in 1990-91¹³.



Fully automatic machines, which cost Rs 9,000 in 1990, were affordable to only a tiny segment of the population. Their production initially depended on imported kits, on which high import duties were levied. A joint venture between IFB and Bosch of Germany began marketing fully automatic front-loading washers at approximately the same time that the TVS Whirlpool World Washer was launched.

Left: Whirlpool's semi automatic washing machine.

Demographic Classifications

India officially classifies its population in five groups, based on annual household income (based on year 1995-96 indices). These groups are: Lower Income; three subgroups of Middle Income; and Higher Income. However, the rupee income classifications by themselves do not present a realistic picture of market potential for a foreign business enterprise, because of significant differences in purchase power parities of various currencies. In fact, the Indian rupee has a very high purchase power parity compared to its international exchange value. For instance, while the exchange rate of one US dollar is 48.50¹⁴ Rupees, the domestic purchasing power of a US dollar in the US is closer to the purchasing power of Rs 6 in India, for equivalent needs and services. As a result, India ranks fifth in the world, on purchase power parity terms, despite being having low per capita national income (US\$ 340 per capita).

Consumer Classes

Even discounting the purchase power parity factor, income classifications do not serve as an effective indicator of ownership and consumption trends in the economy. Accordingly, the National Council for Applied Economic Research (NCAER), India's premier economic research institution, has released an alternative classification system based on consumption indicators, which is more relevant for ascertaining consumption patterns of various classes of goods.

There are five classes of consumer households, ranging from the destitute to the highly affluent, which differ considerably in their consumption behavior and ownership patterns across various categories of goods. These classes exist in urban as well as rural households both, and consumption trends may differ significantly between similar income households in urban and rural areas.

Structure of the Indian Consumer Market

<i>Consumer Classes (Annual income Rs)</i>	(in millions of households)			<i>Change</i>
	<i>1996</i>	<i>2001</i>	<i>2007</i>	
The rich (Rs.215, 000 and more) ¹⁵	1.2	2	6.2	416 %
The Consuming Class (Rs. 45-215,000)	32.5	54.6	90.9	179 %
The Climbers (Rs. 22-45, 000)	54.1	71.6	74.1	37 %
The Aspirants (Rs.16-22, 000)	44	28.1	15.3	-65 %
The Destitute (below Rs. 16,000)	33.2	3.4	12.8	-61 %
Total	164.8	180.7	199.2	21 %

Source: NCAER

The target market segments considered for aspiration and lifestyle goods are the 35 million homes representing the consuming classes and the rich, or some 150 million people. It was the roughly 80 million households that comprise the upper aspiring to lower consuming that so excited the global market when they decided to enter the Indian market in the early 1990's.

It was not until 1992, when the Indian market first began to open up post liberalization, that the MNCs started taking a closer look at the purchasing power of the country's middle class. Inevitably, the first thing they saw was the massive volume of this potential market, rather than its cultural idiosyncrasies.

Three New Delhi homemakers were interviewed, Mrs Bina Gupta, Mrs Sheila Jain and Mrs Rama Rastogi. Both Mrs Gupta and Mrs Jain's family income place them in the topmost category of household as per the NCAER reports. This category is called "Rich" and is an annual income of "Rs 215,000 and up". At no point did they talk about price being a factor in their purchase decisions. Instead they focused on water consumption and conservation, variability in electric supply, domestic help issues and detergent savings. If these issues influence the "Rich", we can only extrapolate their impact on the middle classes for whom price is yet one more factor, not the only one. Mrs Rastogi, wife of a fixed income civil servant has owned a basic washer since the late seventies. Though money was short, they scrimped to make this purchase eyeing future savings on domestic help wages. She too focused her discussion on water shortages, recycling used water and variability in power supply. Infrastructure in India has an inherent variability in areas such as water shortages, power cuts, fluctuations in load and voltage that influence product choices and purchase decisions.

Discussion

Whirlpool was one of many who rushed in to India over the past decade, agog at the potential of billions of new consumers who had been liberated from planned economies and protectionist barriers. But as the initial euphoria waned, there was a growing realization that the billions of consumers had not reciprocated the multinationals' embrace; that local competitors were stronger than expected; and competition for the top tier of the market was fierce, as major players from around the world competed for the same limited pie. Their stance is rapidly evolving from one of "exploration," "investment," and "establishing a beachhead," to more prosaic reasons such as "generating a return," "growing long term sales volume," and "building a dominant position." ¹⁶

The three to five percent of consumers in emerging markets exemplified by Mrs Gupta and Mrs Jain who have global preferences and purchasing power no longer suffice as the only target market. Instead, they must delve deeper into the local consumer base in order to deliver on the promise of tapping into billion-consumer markets. This calls for a shift in emphasis from the "global" to the "local" consumer, and from globally standardized to locally adapted products.

Variability of the infrastructure is tangibly manifest in the quality of products that arrive on the market. They have been through a sourcing, production, and delivery system that at every stage is subject to non standardized treatment. Delivering on the central promise of branding, consistent quality over time, is a difficult task in such an environment. But it is precisely this variability in the environment that puts a premium on brands that are able to deliver consistency. In order to deliver consistent quality, products need to be designed to cope with variability. Typically, products from developed markets are designed for fairly standardized usage and handling conditions, and do not tolerate wide environmental variance. Whirlpool found that, in India, its machines needed to be designed to restart from the point in the washing cycle where they had left off when the power and/or water was interrupted, rather than return to the start as they are designed to do in developed markets where uninterrupted power and water supply are taken for granted.

Most multinationals have long resisted targeting the local consumer, preferring instead to transplant offerings that were developed for their traditional developed markets¹⁷. Three reasons are often cited for the reticence to localize. First, it is argued that the mass market in any single emerging economy is not large enough to justify the effort and cost of localization. Second, multinational managers rationalize, emerging market consumers are growing more affluent by the day and are becoming more like their affluent-market counterparts in terms of preferences and purchasing power. As a result, they argue, they are better off offering globally standardized products and waiting for the consumers to evolve towards these. Finally, it is argued that to adapt to local market conditions in every emerging economy will undermine core assumptions about standardization that are fundamental to the success of multinationals.

The culprit behind such thinking is Theodore Levitt's classic article Globalization of Markets that appeared in HBR in 1993. Levitt espoused that different cultural preferences are the vestiges of the past, and that the peoples of the

globe are becoming more and more alike, and, in general, needs and wants are becoming homogenized. The article stated that consumers throughout the world are increasingly motivated by the same desires to modernity, quality, and value: they all want a quality product at a low price. New technology and standardized methods of production have made global marketing programs feasible. Says Levitt: "*Only global companies will achieve long-term success by concentrating on what everyone wants rather than worrying about the details of what everyone thinks they might like.*" He believed that market segments in a particular market are not unique, but share commonalities with other segments elsewhere: "*Everywhere, everything gets more and more like everything else as the world's preference structure is relentlessly homogenized.*" Companies must learn to operate as if the world were one large market, ignoring superficial regional and national differences and selling the same products in the same way throughout the world. According to Levitt, companies need to look for similarities instead of differences in the markets in which they operate. Wither the user?

A full decade has passed since Levitt's globalization proposition was issued. What are companies such as Whirlpool doing today? Have they standardized or adapted? In general, conventional wisdom has it that industrial goods are the most likely to be successful in any globalization strategy as are modern technologically advanced consumer durables. Traditional consumer nondurable products are the most likely to require customization due to national tastes and habits¹⁸ and significant differences exist between countries with regard to their perception of a consumer non-durable product. In fact, we discover, as Whirlpool did, that conventional wisdom flies in the face of real experience. Customers are as likely to have individual preferences by country for consumer durables such as major home appliances. As Naisbitt comments appropriately: "The more homogeneous our lifestyles become, the more steadfastly we shall cling to our deeper values—religion, language, art and literature. As our outer worlds grow more similar, we will increasingly treasure the traditions that spring from within," what he calls cultural nationalism¹⁹.

Whirlpool and the future

So what does this mean for Whirlpool? Just how much should they adapt products to different markets? On the one hand, adaptation allows a firm to tailor its offering to the particular likes and dislikes of consumers in different countries. A consumer in Japan may have different priorities than a consumer in Canada, even for an ostensibly similar product. On the other hand, adaptation can be expensive, particularly from a product development and manufacturing point-of-view. The efficiency advantages that come from standardizing the production process may be lost if too many versions of the product must be made for too many individual markets.

The flexibility of modern manufacturing methods, however, has made the adaptation strategy more attractive, allowing customization to markets without substantial cost disadvantages. One contribution to this adaptation with efficiency mix is platform development. Used for the past twenty years in industries such as automobiles, trucks, tractors, trains, and domestic appliances, the concept is now seeing broader usage in other manufacturing situations. One such application is to washing machines, as in the Whirlpool case.

"Simplification and customization are the two main ideas behind the drive to organizing product development around 'platforms'²⁰. What firms try to do is establish a basic framework, or platform, that is common to all the versions of the product that it makes. Features can then be added or deleted, depending on individual market or even individual customer tastes. Conceivably, this could eventually lead to an ability to customize products on a case-by-case basis. The secret is not only in flexible manufacturing systems but in the product development process—simplifying the design of the product so that the big, expensive to manufacture pieces are similar across offerings while the customizable pieces are easily substituting one for another.

For Whirlpool, the design effort fits a difficult situation. The company initiated a project to create a "world washer"²¹ that could be sold in most markets, the "Mercedes Benz of laundry." The problem was a basic difference between washing machines in Europe and the United States. In Europe, front-loading machines are the standard while in the U.S. top-loading machines dominate the market. The front-loaders have a number of advantages in terms of efficiency and environmental concerns (use less energy, less water, less soap), in addition to a gentler action that is kinder to clothing. They have traditionally been a hard sell in the U.S., however, because of capacity concerns. U.S. consumers simply like machines that hold more clothes. Even so, front-loaders have gone from virtually zero market-share to five

percent in the U.S. over the last decade, and that percentage is expected to increase. Whirlpool wanted to be a player in this growing market.

Thus, it formed a project team to develop a front-loading washer that could be sold in both Europe and the U.S. The 65-person team included engineers, designers, marketing specialists, and production specialists from Germany, Italy, and the U.S. The result was the Duet, a front-loader introduced in the U.S. in fall 2001 with a capacity 10-15 percent larger than a typical U.S. top-loader. The European version of the washer, called the Dreamspace, will launch in summer 2002 with slightly different size, styling, and spin and wash cycles. The Dreamspace will hold nearly twice as many clothes as a typical European front-loader. The same basic machine will sell in Asia, and Whirlpool expects to sell 600,000 of the \$1,300 washers per year.

This information is based on an article written in April 2002 in the Financial Times by Peter Marsh. Is history repeating itself? Or has Whirlpool invested too heavily, both financially and emotionally in the World Washer concept?

The assumptions behind the original world washer lumped “developing markets” as one category. Mexico, Brazil and India may all be developing markets but only in India are six to nine yards of five feet wide fabric considered daily wear not seen on the streets of Rio or Tijuana. Lewitt may state that preferences for quality may converge globally but if fundamental differences in clothing styles occur, the implication is that cultures are not homogenizing. The Brazilian who designed the world washer never perhaps visited India or looked at their women on the street. Complex user research is not required to figure what clothing styles are used and how they impact the design of the product. A test of a single sari in the machine would have prevented the damage done by the early launch. A sari was not even required, a bolt of fabric from any store would suffice.

Are the assumptions about this century’s world washer lumping Europe and the US together? Or Europe as one amorphous market? Or is it that the investment has been made in the platform based strategy has been too much for too long and Whirlpool will continue to reinvent product concepts to “capitalize” on it.

Whirlpool Corporation prides itself on its customer focused product development and conducts extensive user research using the right ethnographic tools. Three global design centers to focus on Europe, Latin America and the USA. New product development and design centres have been opened since in China and India. Recent articles quote Whitwam on user centered design,

“Develop innovation as a core competency,” Whitwam urged kitchen/bath designers and dealers. To achieve this goal, “a consumer-centered strategy is required. You must be our strategic partners to reach our collective customers. Innovation is the centerpiece of customer loyalty. Customer-focused brands and a customer-focused reputation are two means of driving significant customer loyalty. [...] Critical to the whole scheme is innovative, quality products “that fit the brands you handle and add value to your offerings.”²²

Is this conversion to customer centric design developed only after years of mistakes on other shores, based on the strategies that created successes in the home market? One concern would be whether, like embracing the trend of Levitt’s Globalisation, Prahalad’s emerging market, standardization and platform technology as cost cutting, is this just another jump on a new brandwagon—user centered design as strategy to corporate success?

Will this conversion last, will it be successful or is it a “stockmarket” conversion? What happens to the new world washer? That remains to be seen.

- ¹ Heskett, J. Class Lecture Design Planning and Market Forces, February 2003 - paraphrasing
- ² The Right Way to Go Global –An Interview with Whirlpool CEO David Whitwam, Maruca, R.F., Harvard Business Review, March-April 1994, pp 135-145
- ³ Whirlpool Corporation's Global Strategy - Case study by Professor. Inkpen, Andrew C., Thunderbird, the American Graduate School of International Management. 2000.
- ⁴ Maruca, p.137
- ⁵ Maruca, p.136
- ⁶ Whirlpool Corporation, Annual Report, 1997
- ⁷ Inkpen,
- ⁸ A family owned auto components and two wheeler manufacturing conglomerate. This paper will not discuss whether they were the right choice for partnership but will touch upon family owned business management practices as they relate to product design.
- ⁹ C.K. Prahalad
- ¹⁰ Whirlpool: The first venture into India, Philippe Lasserre Jocelyn Probert, INSEAD, 1997
- ¹¹ taken from www.siemens.de
- ¹² <http://www.videoconinternational.com/corpor06.htm>
- ¹³ CIER Market Forecasts and Indicators , Centre for Industrial and Economic Research, New Delhi
- ¹⁴ December 2002, ABN Amro Bank, New Delhi
- ¹⁵ In 1996, a MarCom Specialist for Hewlett Packard India earned Rs 287,000 annually and she lived at home with no overheads, would she have bought a machine? No. So, should there be further segmentation of the "Rich"?
- ¹⁶ www.whirlpool.com
- ¹⁷ Batra, Rajeev (1999), "Marketing Issues and Challenges in Transitional Economies," in Marketing Issues in Transitional Economies, Rajeev Batra, ed, Kluwer Academic Publishers, Boston: MA, 3-35.
- ¹⁸ Philip Cateora, International Marketing Dryden Press 1993
- ¹⁹ John Naisbitt and Patricia Aburdene, Megatrends 2000: Ten New Directions for the 1990's Avon Books: New York, 1990
- ²⁰ Marsh, Peter. "How Platform Development Works," Financial Times, April 29, 2002, p6
- ²¹ Marsh, Peter. "The World's Wash Day," Financial Times, April 29, 2002, p6
- ²² "Innovation Drives Customer Loyalty", Remich, Norman -August 2002 on www.ammagazine.com -