



Think *breakthrough*

Achieve the *extraordinary*

December 2006

Interview with Abdul Gaffar



Abdul Gaffar, former Vice President, Growth Technology Development for the Colgate-Palmolive Company. In 2005 he was presented with the Heroes of Chemistry award by the American Chemical Society. He received this honor for the development of the technology for Colgate Total toothpaste (TP), a first FDA approved therapeutic TP. In 2001 he was inducted into the NJ Inventors Hall of Fame. He has been issued 145 patents. He retired in 2006 and currently advises private equity firms. Abdul can be reached at PharmHealth Technologies INC. Telephone: 609-895-0051, Email: amq200@verizon.com.

Interviewed by Doug Berger, Managing Partner, INNOVATE LLC.

Doug: We are going to start by talking through a new product which Colgate successfully introduced about a year ago. Please describe that product.

Abdul: Colgate introduced a very unique product called Max Fresh™. Max Fresh is a new type of toothpaste which delivers the conventional therapeutic benefit, but has an added emotional pleasure benefit. Normally, people are not very excited about toothpaste, because brushing is a boring activity. We wanted to create a pleasurable, exciting experience. Max Fresh contains dissolvable strips, which deliver active sensations in the mouth at different times.

This technology was based on managing contradictions. The first contradiction was that it should be strong but dissolve fast. We developed a chemistry which resisted dissolution during all of the processing, yet dissolved when you put it in your mouth. Although it needed to dissolve quickly, it also needed to remain active for a long period of time after brushing, eating, drinking, etc., and the actives needed to release at different times. One of the problems with toothpaste is that most actives are spit out.

Doug: Looking back, what were the critical success factors?

Abdul: I can divide it into steps. In step one, we tried to understand the customer need and really scope out the opportunity. We knew that consumers were bored with brushing. A signal for something different and something offering a unique benefit turned out to be very important. At the same time, the consumer wants to emotionally attach to the signal. We found that people were using our product primarily because it was being sold by people of authority who were saying that it was good for your mouth and teeth.

While it may have been effective for cavities, the consumer didn't see the benefit. When we initially looked at consumer trends, it seemed as though everybody was looking for some pleasure principle in addition to maintaining their normal routine. We needed to connect them with that emotional piece which would allow them to use the product.

We had done this with Total™, our toothpaste that offered 12 hour cavity protection. The message of our first commercial, which first ran in the U.K., was, "After I brush, it keeps working while dancing, playing, eating, and drinking." Let me tell you a funny story which demonstrates the point. About two months post-launch, I was flying to London. When I went through customs and passport control an officer asked, "Where do you work?" I said, "Colgate." She pointed to her teeth and said, "It's still working." When she said that, I knew we had gotten it right. That was the really significant insight.

The second step was determining whether this could be a significant business opportunity. Was the world waiting for something like this? The traditional marketing tools we had initially been using could not differentiate between a really different and a really bad product. We needed to be able to see the future first. We created a virtual product and benefit story and performed an AccuPoll. AccuPoll (located in Irvine, CA) is a tool by which you can electronically show the product and concept to 4,000 to 5,000 customers around the country and get their feedback. They then tell you if this is a product that they would buy, or if it should be killed. They rate the product from A to D. We scored A+'s, so theoretically, we knew this could be a significant opportunity of \$100 million or more.

Then we added an engineering team and looked at technology. We started by asking questions. Can we do it? Is it practical? We had to find key technology partners in filmmaking, high-speed cutting, and active ingredients. We accomplished all of this and developed some product prototypes within the first six months.

The team now expanded to about 28 people from marketing, finance, R&D and engineering. They were focused only on this. We had full support from senior management who reviewed the team work every other month.

Once we made a prototype, we went back to AccuPoll and did a BASES sales predictor test. From both the financial numbers and the product preference it looked like we had what was going to be a very successful product.

The third step was to put together a rapid evaluation team. We developed a series of rapid prototypes on everything from product aesthetic, active ingredients, how they should look, packaging, etc. Everything was pulled together.

Doug: How was your approach to Max Fresh different?

Abdul: To refine the design we had multiple sessions which all of the team members attended, myself included. People would sample the product, and in focus groups, give us feedback. Every time we heard from a customer, we went back, incorporated some of the comments and redesigned. Here is a simple example of where we felt we needed to redesign the technology. One of my marketing colleagues kept one of the products in his car. It was very hot in his Acura. When he opened the product, some of the strip was dissolving. From that day forward we always said we had to meet the "Acura test." It wasn't as though we had to question how many people would put the product in a hot Acura; we just knew that we needed to address the issues. There were many iterations.

Doug: When products fail there tends to be a line of thinking called, the benefits outweigh the objections. There seems to be a different kind of thinking in what you're saying which is, we must address the objections.

Abdul: Absolutely. Also, as a technologist, I found out through talking to real customers, that 70% of people buy products for irrational vs. rational reasons. Focusing on the functional benefit is important, but not sufficient. You need also to address the

emotional piece, which is critical to people making a purchase. They have to feel that it gives them both the pleasure and the benefit.

We also knew that we had to break the patterns of previous failures. With our Simply White™ gel, we were seeing great consumer response to the concept. Colgate got carried away with a great product concept but actual performance didn't live up to the story. Some people didn't believe the product evaluations because they convinced themselves the story was so strong. The paintbrush technology failed in the market place.

Doug: What were some of the problems you encountered?

Abdul: One of the problems you run into in doing something like this is the disruption of normal organization structure. The way to overcome this is to separate those activities which are required for managing current product and product flow, which would include improvement. You need to create an innovation group who will catalyze the flow of new opportunities. Separating an innovation group from those who manage the current product flow; communicating at the early stages; getting approval from the senior management, who actually can then become a champion of this type of activity, all help you to overcome organization barriers.

We did not want this group to have a monopoly on innovation. We rotated people from this group into traditional product development. This became a very good way of training staff to become more entrepreneurial. There was a lot of risk involved, but people were assured that if they went through this rotation, and were successful, they would be rewarded differently. At the same time, if they failed they would still have job security.

The equipment and technology were very capital intensive. We were worried that we wouldn't be able to go global, but, in fact, we were able to develop some key partners in China and in Asia who eventually would provide low-cost manufacturing. In the early stages, however, everything was sourced from the United States.

At times, senior management felt we were spending too much time and too much money iterating and refining the product and its total commercialization approach.

Doug: At what indicators did the Colgate executives look to determine next levels of resource investments? Were the results of the AccuPoll sufficient for executives to believe that they really should invest big?

Abdul: I would say there were several factors. There was rigorous analysis of both the market and financial opportunity. During each review with the division president and his team every other month, we laid out the difficulties and the solutions in the opportunity. The executives were very helpful. The margins were very attractive.

We were able to lock up our intellectual property and the technology platform. Colgate Total is a similar story. Its patent is due to expire next year, but so far, nobody has been able to copy our delivery system. Thousands of polymer people have tried, but they have a polymer which keeps the material in the mouth for only 12 hours. With the Listerine Pocket Pack™, on the other hand, there were so many knockoffs, the business wound up going down. The Pocket Pak technology was generic and was introduced in Japan in early 90s.

Doug: Every executive has aspects of this area of innovation about which they are passionate. What are the few things that have been at your own emotional core around the whole area of innovation and which have kept you going?

Abdul: I always looked at the things which were important for global work or health. I always felt that every project which I worked on, once we made it successful, would make a difference. One of the things that I wanted was for the technology to fulfill the global need of prevention of oral diseases. A lot of people still cannot afford basic toothpaste.

When we were trying to get approval in the U.S., regulators asked what the financial benefit to society was. I had written about the impact of this in Innovation magazine; that it could be ten or fifteen billion dollars in the reduction of avoidable dental offices visits. It is very fulfilling not only to be generating shareholder value, but to be impacting oral health worldwide, as well.

Before I retired, I spent a lot of time relating a healthy mouth to a healthy body. I spent time working with opinion leaders to show the connection between improving oral health and sustaining body health. It was very fulfilling. Hopefully, this is an area in which eventually we will make a difference. I spent a lot of time convincing upper management that we should own that connection, too. If you own the mouth, you can own the linkage of the mouth to the body.

Doug: You mentioned oral health in the lesser developed countries. Are there some very new approaches that are in the market, or are coming into the market, for oral health?

Abdul: Colgate has a very good school-based program, which we provide in all of the developing countries. For most of those kids, probably the only oral health they're getting is through the school. Our chairman is very passionate about this, because it's a way of delivering the social benefit.

The second program, in which we work with the World Health Organization, is to deliver low-cost, effective toothpaste.

Doug: What other point would you like to make directly to our readership?

Abdul: When you are innovating, you cannot do everything internally. Everybody has to work on open innovation. Ideas, products, etc, are developed worldwide. How do you capture that, and accelerate the process? It's a different principle of operating. The traditional hierarchical structure is not really flexible enough to accommodate this. The PC industry is a great example. There are perhaps 150 new and different technologies, products and components in a PC. You have to have a fluid enough organization to capture that.

Lastly, you need to balance between groups of people who are focusing on a flow of new opportunity versus managing traditional product development. Without that, you have no way of creating innovation at the speed which the global system is demanding. That's a very important factor and a very difficult thing to do within a traditional organization structure.

Doug: Abdul, thank you for your generosity in sharing your insights, your experience and yourself.

Velcro Points

1. Prototype with customers your understanding of your customers needs.
2. Ongoing review of successes and failures to keep the learnings fresh and alive.
3. Avoid the "hubris trap" of believing your own benefits story.
4. Establish open boundaries between innovation opportunities and current product extensions.