

New technology adoption: Part II

In part one of this series (*August*) we discussed the adoption life cycle and the model for understanding the acceptance of new products. We discussed the five stages of product adoption across its life cycle and the personalities and gaps associated with each stage.

The five stages—innovators, early adopters, early majority, late majority and laggards—each have certain unique buyer traits and, therefore, require different product/service appeals prior to acceptance at each stage. Besides the requirement of an innovation seller to know that five stages do exist and exactly what those characterizations of each stage are, an additional set of four barriers called gaps, or chasms, must also be dealt with successfully. The gap of major concern and the one most formidable and unforgiving in the product transition is the second step in the evolution of a product introduction. This is the gap between the early adopters and the early majority. It is dangerous in many ways but the most important aspect about it to understand is that it typically goes unrecognized.

The main reasons this transition can go unnoticed is that with both groups the customer list and order size can appear the same.

Three coating products come to mind when considering this phenomenon that occurs in the gap between the early adopters and the early majority: electrocoat, powder coatings and nanotechnologies.

In the electrocoat (E-coat), powder and nanotechnologies, we witnessed the ability of these product concepts to appeal to the early adopters' characteristics for several similar reasons. The main driver was that they all had breakthrough potential written all over them. Additionally, they all appealed to the visionary's sense of the future. Lastly, they provided an exciting new menu from which to inform the industry. Further, E-coat and powder coatings appealed to the familiar such as the current practice of applying coatings to metal substrates—powder via electrostatic spray and E-Coat to the dip-and-drain process for applying primers. Both are very familiar and accepted practices.

These same two—powder coatings and E-coat—cross over the gap from early adopters and appeal to the early majority as well but in different ways. The early majority is pragmatic, seeks incremental improvements, is risk averse, sees a long haul business opportunity and is reasonably price sensitive, all of which fits the two technologies very

Do the paint, coatings, adhesives and sealants industries fall into the Adoption Life Cycle? The second of a two-part series.

EARLY ADOPTERS

Characteristics

- Visionaries
- Strong insights
- Risk temperament
- Charismatic
- Business dreamers
- Look for breakthroughs
- Price insensitive
- They alert the industry
- Easy to sell
- Hard to please
- In a hurry

EARLY MAJORITY

Characteristics

- Pragmatic
- Bulk of business volume
- Seek incremental improvements
- Low risk takers
- Need safety nets
- Loyal
- Hard to win over
- Care about suppliers
- In it for the long haul
- Barrier ~ references
- Likes to see competition
- Reasonable price sensitive

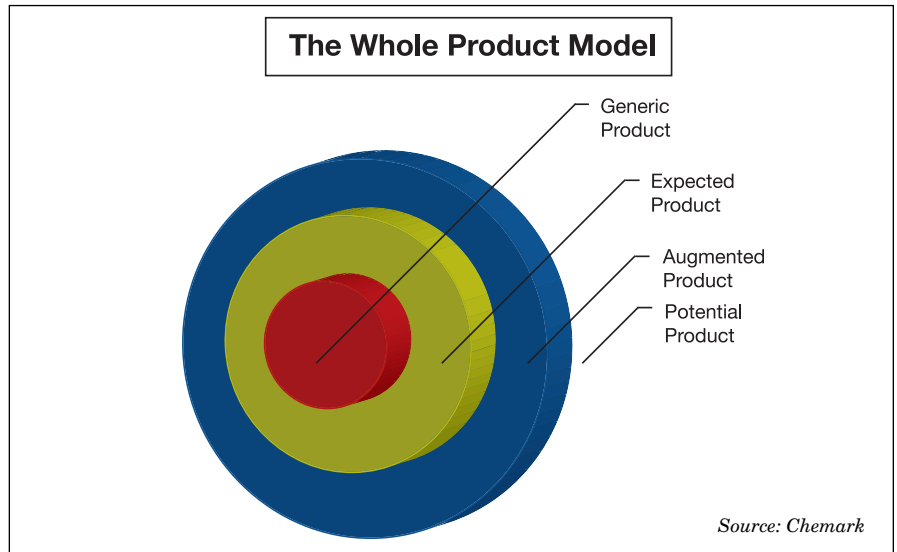
Source: Chemark

well. One can easily see in *Table 1* below that nanotechnologies have not moved out of the innovators stage as yet because it has not reached an acceptable comfort level and the early adopters have not envisioned the real benefits and resolution to unmet needs as yet.

Electrocoat systems were initially introduced to a high-level of acceptance by an enthused end-user customer base and bolstered by a supplier of not only the coatings that were to be used in the E-Coat tank, but also PPG foresaw the need for continuing process education and improvement. As a result they created a total system, including the engineering, equipment and service as well as the coating to insure complete control at the very critical innovator/early adopter stages.

Powder coatings had a similar model initially being offered as a system by The Polymer Corporation (now Rohm & Haas), which included engineering, equipment and the powder coatings to prospective customers. Both PPG and Polymer sold off their equipment and engineering profit centers once their respective processes were accepted and reached an acceptable adolescence level of volume, thus passing into the early majority stage of product acceptability.

Nanotechnology, stabilized enzymes and mold/mildew preventive peptides—the latter two being offered by RSL Corporation—are in their critical innovation/early adopter stages, requiring heavy front-end investments and significant and controlled evaluation time to



meet profitable goal levels.

Lastly, according to marketing guru, Theodore Levitt one must consider the concept of the "whole product."

The model (*see diagram above*) indicates that there is a gap between the marketing promise made to the customer—the compelling value proposition—and the ability of the actual shipped product to fulfill that promise. To prevail over that gap, the product/service must be augmented by a variety of services and ancillary products to become the whole product.

There are four different perceptions of a product:

- *Generic*: what's shipped in the gallon of paint;
- *Expected*: the product the buyer of that gallon of paint thought they were buying;

- *Augmented*: this is the product made robust to provide the maximum chance of achieving the buyer objective;
- *Potential*: room for growth as more ancillary products and greater customer-specific enhancements to the system of marketing a gallon of paint are made.

The fight for share and overall position begins in the middle with the generic product. However, as marketplaces develop, products in the center become more commoditized and the fight shifts increasingly to the outer circles.

How the whole product concept overlays the adoption life cycle is the point where being able to successfully leap the critical gaps takes place. Chemark will follow on with this topic in upcoming columns. **CW**

See Chemark's ad this month on page 81.

TABLE 1.

TECHNOLOGIES	COMFORT LEVEL (1-10)—INITIAL	UNMET NEEDS MET (1-10)—POTENTIAL
Electrocoat	8	10
Powder Coatings	5	7
Nanotechnologies	1	3

Source: Chemark