

E-Commerce Model

(Selling replacement windows on-line)

Background

The production of vinyl residential replacement windows and doors is a highly fragmented industry. With low barriers to entry, there are few dominant manufacturers that can claim substantial market share in broad market segments. Currently, the industry is in a maturity phase and experiencing serious pricing pressure as windows become more of a commodity than a differentiated offering satisfying specific consumer needs.

Many manufacturers are pursuing a variety of window upgrades to differentiate their products and maintain a higher profit margin. High performance glazing, multiple color selection, and composite designs are just some of the many additions to the traditional replacement window line. These options push retail prices higher as manufacturers try to educate consumers about the value added benefits.

Through the growth phase of the vinyl window industry, simple and traditional distribution lines could satisfy the consumer. To replace a window, one simply contacted an expert in home remodeling or a specialist in window replacement. That professional visits the home, demonstrates the product and services, and installs the windows. Sophisticated professionals offer financing services and other incentives to expedite the remodeling products and services. Large companies typically purchased windows directly from the manufacturer. Small professionals would likely use a wholesale distributor who could support the logistical aspects of the remodeling effort.

In today's mature market, distribution channels are not as defined. With the advent of the large "big box" home centers, the consumer has more choices in product and services. And, with a mass communication system like the Internet, today's consumer is more educated about products, performance, and pricing. These two factors alone have created new channels and new services that continue to compete with the traditional channels of years past. And, these two factors may create new opportunities for manufacturers and window professionals to market higher margin windows to the right consumer.



What's wrong with the Traditional Channel?

Vinyl Replacement Window Professionals (“Dealers”) can be found in a variety of sizes and sophistication. The Large Dealers may have sophisticated lead generation operations, multiple locations, showrooms, sales staff, warehousing and loading docks. The smallest professionals are typically more entrepreneurial and work out of their home. With few employees, small dealers typically perform most or all of the work themselves. No matter the size, window dealers have two things in common. They must maintain substantial cash flow and consistently generate new qualified consumer. The ability to satisfy these key factors separates the successful dealer from a failing one.

In the past, dealers competed with each other. A home owner wishing to replace their windows would contact one or more dealers. The final decision was made on reputation, product offering, selling effort, and pricing. A successful dealer priced their products and services to cover costs and retain a suitable profit margin. Depending on the dealer, costs could include lead generation, sales salaries and commissions, installer’s salaries, administrative costs, and product costs. Adding in a profit margin elevates the retail price of a replacement window to more than 3 times the wholesale cost. The consumer, presented a “job quote”, knows little about these costs.

Mass home improvement merchandisers like Home Depot and Lowe’s (“Big Boxes”) have changed the consumer’s perception of the traditional dealer. The Big Boxes initially attracted Do-It-Yourself (“DIY”) customers. These are people who had the knowledge and wherewithal to complete home improvements on their own. DIY customers would purchase the products from the Big Box, transport the product to their homes, and complete the installation. In the early days of Big Boxes, distributors and dealers felt little threat as they considered DIY customers removed from their target market. They continued to pursue the customer who needed a professional to provide the product and installation service. But as the Big Boxes grew, so did their products and services. Today, the Big Boxes offer installation services for a wide variety of products and special order products whose quality and features narrow the gap with those offered by dealers. They have improved their warehouse floor plan with well lit and informational showroom displays. And, they have created Internet sites with pricing and product information available to anyone with an Internet connection. The result is a formidable mass merchandising entity with readily available products and services at affordable prices.

Some dealers could see into the future and tried to attach themselves to the Big Boxes. This concept, commonly referred to as Sell, Furnish, and Install (“SFI”), seemed like a perfect match. With SFI, the Big Boxes could attract a higher quality customer. This customer was not a DIY’er and demanded a more sophisticated and customized product. Dealers saw a benefit by capitalizing on the massive advertising and lead generation possible with a Big Box. Even though the Big Boxes took a percentage of every sale from the SFI Dealer, the dealer could lower their lead costs and maintain their margins by partnering with the Big Box.

Though SFI programs started up with tremendous promise and success, it was short lived. The problem was the increasing awareness of the consumer. Consumer surveys on home improvement purchasing decisions rank “price” well below product selection and quality, But, “price” became the ultimate demise of the SFI programs. A consumer could easily obtain the advertised stock prices of windows and installation services available through the Big Box. When purchasing through the SFI Dealer consumers were paying more than 3 times as much. Though the quality and performance were considerably higher, the consumer could not equate the added cost to the added value of the product.

As a result, many Big Boxes began to place price restrictions on the SFI dealer. The Big Boxes attempted to satisfy the educated consumer and retain their “low pricing” philosophy by controlling the dealer’s ability to maximize profit. The results were disappointing. Today, most Big Boxes offer few if any SFI programs and those that do are not enjoying the success that they once hoped for. Most SFI dealers have reverted back to the traditional methods of the window replacement channel and see more and more competition from the Big Box and their installed services programs.

Dealers are now facing additional challenges. To compete with the mass advertising of the Big Boxes, they need to spend more effort in acquiring qualified leads. On top of that, the one magical method of generating those leads has been taken away. Telemarketing, once the forte of most dealers, has been legislated out of the mix of effective lead generation. Dealers now must adapt their marketing efforts to more traditional and sometimes more expensive means of acquisition. Though always presented with this challenge, the Dealer is finding it increasingly difficult to market their product in the traditional ways.

Does the Channel Disappear?

It is in the manufacturer’s best interest to maintain the dealer distribution channel. Without this channel, a manufacturer must compete in the two remaining channels of wholesale distribution or retail (“Big Boxes”). Manufacturer’s typically enjoy larger margins in the dealer channel and limit their exposure to customer changes. The loss of one or two dealers to a manufacturer with 100 dealers is not as severe as a manufacturer with only has one or two large customers.

Dealers are also trying to maintain the channel. They are asking for more and more support from the manufacturer to offset the costs involved with lead acquisition. Manufacturers with a wide target area and national exposure may find it easier to support such an effort as mass media advertising becomes more cost effective for larger markets. But, as stated before, there are few manufacturers of this size. For small to mid size manufacturers the demands of their customers will result in increased wholesale pricing which in turn will lead to a higher cost to the consumer. Higher costs to consumers that are increasingly wary of home improvement dealers will be unacceptable. And it is this paradox that will lead to the eventual downsizing of the Dealer channel. If this trend continues, small dealers will be forced to purchase products from Wholesale distributors and large dealers will become the highly sought after targets of every manufacturer.

Dealers of this importance will no doubt wield tremendous power in pricing, product, and service negotiations. A manufacturer who continues to specialize and solely target the dealer channel will eventually face the same issues of manufacturers that pursue large customers in the other channels; high customer demands and lower margins.

What Role Does the Dealer Play?

Dealers will continue to ask for more assistance in supporting their business. Through rebates, advertising, co-op allowances, or other avenues, the Dealer will continue to demand more support as they see it more difficult to compete with the Big Box and attract qualified consumers. If a manufacturer were to provide this support, one must ask what value does the Dealer add to the channel?

In the traditional model, the dealer performed the sales and marketing functions to garner the customer. They installed and serviced the product in a post sale environment. In fact, most dealers rarely used the manufacturer's name or brand in their advertising. Their focus is marketing their company at the local level (this is one of the reasons there is little brand awareness in the vinyl window industry). The manufacturer served as a dependable supplier and provided products that satisfied the customer's needs. That relationship is changing. As the manufacturer takes on more of the responsibility of selling and marketing the product, the Dealers role is diminished to only installation and post sale service. In fact, in many cases, the manufacturer takes on the role of warranty and post sale service. When a Dealer goes out of business, it is the manufacturer that picks up the field service issues for windows under warranty.

So, should manufacturer's just press forward and take on all responsibilities of a dealer? If they are going to generate leads for the Dealers, shouldn't they go one step farther and sell and install them as well? No. Few manufacturer's have the expertise, money, manpower, and local relationship that is required to perform all of the sales and marketing efforts required to successful manufacture, sell, and install their product. A manufacturer needs to find a way to effectively mass market the features of their products to an educated consumer and allow the dealer to interface with the customer on the local level while maintaining the margins at both ends of the channel. If a manufacturer can develop this successful model, the channel will survive.

E-Commerce Model

The Internet has leveled the playing field in many industries. No longer is mass merchandising only for the large corporations. Who would have thought that a small custom computer company could sell more home computer systems than IBM? Dell computer is totally based on Internet sales and they outsell everyone. Who would have thought that travel agents and stock brokers grip on their industries would slip into the hands of day traders and Expedia.com. And, who would have thought that over 65% of all automobile purchases were started with an online session. Besides email, people use the Internet mainly for product and service information (marketing and sales). "Don't send someone to my house, don't call me on the phone, give me your web site address

and I'll look you up" is heard more and more from consumers. The Internet has changed the way we do business and it can change the way we support the Dealer channel.

A sizable segment of the overall home improvement market is being neglected. This market is comprised of highly informed and educated consumers who may or may not be a DIY'er. Price is not their number one motivator and they are more sophisticated in their purchase decision. They do not want a salesman coming to their home. They will not sign on the first night. They take a long time to make their decision and will do a lot of research before they buy. They are educated and savvy and want control of the decision and the purchasing process in their hands. They use the Internet as their research tool and if they can buy their specific product online, they will. This consumer is sometimes referred to as the BIY'er (Buy-It-Yourself). They will buy the product, find an installer, and act as a General Contractor on their own window installation.

Today, there is only one place for a BIY'er to purchase a vinyl replacement window; The Big Box. The Big Box has the pricing, the installed services, the special order systems, and the Internet site. It's a menu of products and services from which to choose and is ideally suited for this consumer with one exception. The Big Box has a difficult time providing high end, high quality, and high performance windows. They can sell stock products and special order sales, but the sophisticated, high end windows, is not their specialty. Why? For one, the personnel in the store are not highly trained in the window industry. Secondly, they place such high demands on their vendors and suppliers, that these manufacturers do not have the ability to provide such high end products and remain profitable. Suppliers to the Big Boxes concentrate on the high volume, low margin products, because it is those products in most demand at a Big Box. The model that can satisfy the neglected BIY'er with a high quality product not offered at a Big Box, at a price acceptable by the consumer, will find a successful and profitable future in an untapped market segment. But the manufacturer will need the help from the Dealer Channel.

E-COMMERCE MODEL, THE NEW MODEL FOR BIY CONSUMERS

A new online web site is perfectly suited to support this new channel.

http://newmedia.pageimaging.com/jancor_WOL/home/home.asp

[username = jancor](#)

[password = craig](#)

This new model does not depend solely on this web site. In fact, this model involves all facets of the selling process that the traditional channel encompasses, while improving on the cost and efficiency of the efforts adding the most cost to the process.

Detailed research was recently on the feasibility of “Selling Replacement Windows On-Line.” The results of this research showed people would not likely buy windows through e-commerce without being totally educated on the products and services. They also wanted to touch and feel the product prior to purchase to measure the product quality. The new model satisfied these concerns by combining the ease of online transactions and information flow with traditional methods of product demonstration.

Overview of the Web site

The E-commerce web site for this new BIY'er is highly informative. The site serves as the information center for the entire program. It includes detailed information on:

- How the E-commerce site works.
- Project planning.
- Measuring.
- Product knowledge.
- Options available.
- Installation.
- Warranty.
- Energy Performance and Savings.
- Post installation care.

The E-commerce site also includes a customizing area where users can choose a variety of window options and immediately display the results on the screen. An energy calculator and professional listing service are part of the informative process. Order entry is done through a Secure Socket Link to protect the user's privacy and vital information.

The site also features a zip code function to restrict the availability of the service to specific regions or zip codes. The administrator may target certain areas where adequate support is in place to support the E-commerce model. Or, the admin may want to prevent the site from operating in areas where successful dealers are presently operating.

E-Commerce Model: Step-by-Step

FIRST: Drive the Prospect to the Product

The prospect needs to be aware that the products and services from an On-Line service are available. This can be accomplished through traditional methods:

- direct mail
- television
- radio
- newsprint
- periodicals

Internet marketing is vital to online visits through the use of many outlets:

- search engines
- directory listings
- free links
- click through advertising
- banner ads

The traditional methods take a broader approach and become more cost effective with a wide region or territory. The Internet methods can be quite focused in their target, and usually does not fluctuate with volume.

THE USER IS IN CONTROL

Once a prospect visits the home page, they are in complete control to complete the task of window replacement. The user has control over the five major steps of window replacement:

- Product Selection
- Measuring of rough openings
- Purchasing
- Logistics
- Installation.

After evaluating the information, the user commits to the site and begins the process of window replacement. The user may commit to performing every step of the process, or allow professionals to complete parts of the job they deem to be too difficult. Refer to the flow chart at the end of this paper for a graphically representation of the seven step process.

Step 1: Product Selection

The user has two options for this part of the process:

- Contact an online professional for an in-home consultation.
- Guide themselves through the many DIY services available.

Should the user choose the in-home consultation, they are presented with a list of professionals who are capable of providing an in-home consultation (this choice is the traditional dealer channel). The Dealer chosen for this service will demonstrate the product, present the home owner with a quote, and the on-line selling aspect is removed from the process. *In this respect, the On-Line system merely provided a qualified lead to the professional dealer.*

Should the user decide to research the product themselves, they have many avenues from which to choose. They may wish to undertake any or all tasks to satisfy their need for product knowledge:

- Detailed online information
- Free standing, self-guided displays.
- Customized sample.

The detailed online information allows the user to see the many options of the windows with an interactive product display.

Step 2: Sample Demonstration

To physically touch and feel the product through a self-guided demonstration, free standing kiosks will be positioned in public areas close the user's home address. These kiosks will demonstrate the energy saving glass with fully operational samples and a complete line of window styles and colors. Display locations are presented to the user through a zip code lookup, along with driving instructions, and a brief overview of the kiosk. Locations for these kiosks may include shopping malls, grocery stores, hardware stores, or other retail locations.

Users have a third option as well. A customized sample size window is sent to their home. A small deposit of \$100 is required for this service. When the sample is returned, this cost is credited back to their credit card. The sample will have the color, grid, and glass options the user desires for the job. A special sample case will be developed to cushion the shipment and ease the return of the item.

Step 3: Measuring

Once the product decision is made, the user has a choice of how to obtain sizing information. They may:

1. Do it themselves
2. Have a friend or family member complete the task.
3. Contact on online professional.

If user wishes to contact an online professional, names of local companies willing to measure the rough openings is available at the website. This could include a number of contractors, small dealers, or one large dealer that has territorial exclusivity. If the user chooses the online professional, they will be charged a nominal fee for the visit. This will be credited to any future purchase of windows that result from this service. Should the user not purchase the windows through the E-commerce model, the Dealer is reimbursed for the time and effort.

Step 4: Quote Request

Once the measurements have been completed the user will request a quote. The user enters all of the information through the Web site along with their name, address, and phone number.

The Manufacturer's site administrator receives the information. The admin checks to be sure the service is available in the user's location. If so, the admin prepares a quote for the order and sends it by mail to user's home address along with a variety of sales items, including brochures, testimonials, etc.

Step 5: Payment

Once the user receives the quote and decides to purchase the windows, they simply enter the website and reference the number of the delivered quote. Then, through a traditional credit card exchange, the user purchases the windows.

The purchase price of the products is the MSRP. The Manufacturer keeps 50% and gives the dealer 50%. The dealer has now earned half of the MSRP through very little time and monetary investment. *Step 6* will require more dealer involvement.

Step 6: Logistics

The user has two choices on the transportation and delivery of the product. Once ordered from the manufacturer, the product will be shipped in traditional means to a nearby participating dealer. The user may either drive to that location and pick up the windows (no extra charge) or have the dealer deliver the windows to their home (possibly a small drop charge).

Step 7: Installation

The user has three choices here. They may:

- Install the windows themselves.
- Have a friend or relative install them.
- Hire an authorized installer from the list of installation professionals.

Again, if the user chooses the third option, they will access a list of professionals that are willing to install their windows. The user will make arrangements with these professionals and pay them separately from the purchase of the window systems.

JOB COMPLETION

Once the windows are installed the model is complete. The job was processed wholly by a Dealer through a traditional model or managed by the consumer in the new E-commerce model.

MONEY MATTERS

The E-commerce provides consumer choices and savings while maintaining profit margins for the Manufacturer and Dealer.

Figure 1 shows a basic breakdown on costs and profit in the price of a \$900 dealer style window. With an E-commerce site, the BIY'er has the option to remove some, or all of the items from the equation. By performing certain tasks on their own, tremendous savings are available to the savvy BIY'er. This savings is not taken from the Dealer or Manufacturer as the profit and wholesale price is retained.

Figure 1: Through the Traditional Channel a Dealer Window may cost a home owner \$900.00.

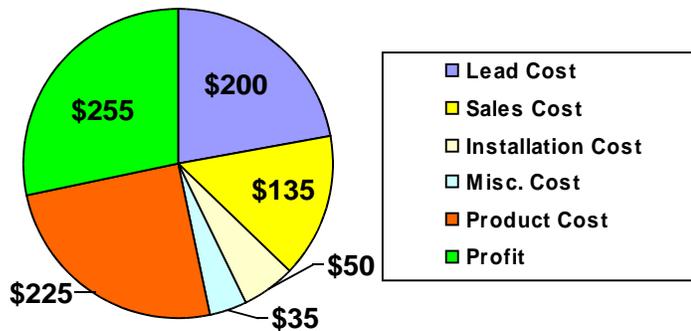
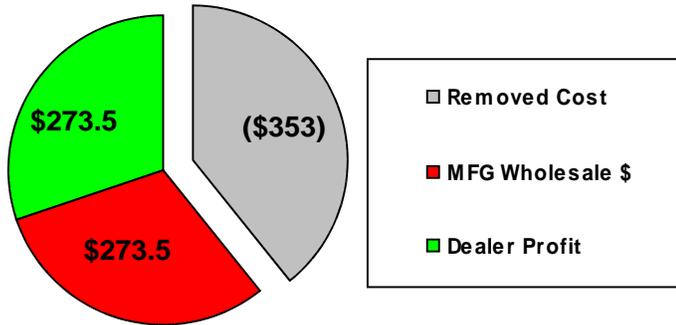


Figure 2: With E-Commerce, this same window may cost only \$547.00 with the manufacturer and dealer improving their profit margins.



This E-commerce model overcomes the BIY consumer objection to the large discrepancies in window pricing between the Big Box and Dealer. In our example, the Dealer Window has many improved performance and warranty benefits over the Big Box window (Figure 3).

Figure3: Comparison of a Dealer Window to a Home Center Window

	Big Box Window	Dealer Window
Type and Size	7000 Series DH, 94 UI	Quantum2 DH, 94 UI
Extrusions	Thin profiles	Heavy Duty Profiles
Color	Bright White	Euro White
I.G. Unit	¾” Insulated Glass	7/8” Insulated Glass
Glazing	DS, Low-E Argon	2-DS, Low-E, Krypton, HM 88 Film (Power-Q)
Warranty	Lifetime Warranty	Lifetime Warranty
Window R-value	R-value 2.5	R-value 5
Foam insulation	Fiberglass bat insulated frame	Injected foam filled frames
Lift Rail	Single wall lift rail	Double wall lift rail
Balance system	½” constant force balance	¾” constant force balance
Bead type	External glazing	Internal glazing
Security	Standard cam lock	Stealth ergonomic lock
Fuel Savings Guarantee		49% Fuel Savings Pledge
Breakage Warranty		Glass Breakage Warranty
Retail Price	\$249.00	\$900

By calculating all costs associated with a Big Box unit, the price difference is \$571.00 (Figure 4). Is a consumer willing to spend an extra \$571.00 for the added features of the Dealer window?

Figure 4: Total Cost to the Consumer

	Big Box Window	Dealer Window
Retail Price	\$249.00	\$900
Shipping to Job Site	\$5 (\$50 drop for 10 units)	Included in the price
Installation	\$75	Included in the price
Total Retail Price	\$329.00	\$900
		(\$571.00 more than Big Box)

By eliminating certain costs built into the dealer price, the difference between the Big Box Window and Dealer Window is narrower; \$218 (Figure 2: \$547 - \$329). Will the customer see the \$218 value in the Dealer Window by shopping online? This gap could be further reduced with less expensive windows designed with key differentiating features. Most important, the Dealer must realize that giving up control of the job does not mean they give up the profit margin of the traditional channel (Figure 5).

Figure 5: Comparison Pricing and Profits for Dealer per window

	Traditional	Traditional (If Lead Acquisition Costs rise 4%)	On-Line Sales
Multiplier	.41	.41	.50
Cost to Consumer	\$900	\$900	\$547
Cost of Sale	645	679	273.50
Dealer Profit	255	221	273.50
Installation	<included>	<included>	\$10
Total Dealer Profit	255	221	283.50

This E-Commerce model allows the manufacturer to cover the added costs of advertising, web site operation, and maintaining local displays with an improved wholesale price. In the example in Figure 6, a manufacturer would have an added \$49.23 per window to cover the additional costs and still maintain the same wholesale price in the traditional channel.

Figure 6: Comparison Pricing and Profits for the Manufacturer per window

	Traditional	On-Line Sales
List Price	\$547.00	\$547.00
Wholesale Price	\$224.27	\$273.50
Added Sales Cost	\$0	(\$49.23)
NET Wholesale Price	\$224.27	\$224.27

The E-Commerce Model

As shown in the previous examples and descriptions, one can see the Ecommerce model is not radically different from the traditional model. This new method merely shifts the burden of lead generation, sales, and marketing, to a lower cost alternative and passes that savings down the sales chain to the end user (the Big Box success). Both manufacturer and Dealer maintain healthy margins on the products. The new model allows the Dealer to reap the biggest rewards. With minimal participation (i.e. receiving the order from the manufacturer and delivering it to the homeowner) the Dealer can enjoy the same cash flow as the traditional method. On top of that, the Dealer has the ability to gain some additional profits through installation services that may be provided and has now created a new relationship with a buyer of home improvement products. This new relationship may lead to added sales of other home improvement products offered by the Dealer.

With a mature fragmented market where competition is increasing and price is decreasing, manufacturers must find different ways to improve their market share in every channel while maintaining acceptable profit margins. This new E-commerce model is just one way to support the Dealer channel by injecting a traditional supply chain with modern, efficient technology.

E-Commerce Model

