

A Prince & Prince Market Report

# Florists Broadly Adopt Social Media . . . Payoff Somewhat Nil . . . Now What?

Insight from the Prince & Prince U.S. Retail Florist Tracking Survey

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#### **EXECUTIVE SUMMARY**

Florist shops throughout the U.S. have broadly adopted social media, as about half utilize Facebook and/ or Twitter in their communication with potential customers. The level of adoption varies by U.S. region, by size of business, and by age of florist shop owner, with highest rates of adoption shown in the New England and the Lower South Atlantic regions, among the largest-sized operations (annual sales over \$1 million), and among the youngest shop owners (under age 35). Although florist adoption of social media is broad, other modes of florist communication show greater levels of adoption, such as a web site, and an 800-number service.

Response modeling via structural equation modeling (SEM) reveals the impact of florist adoption of four modes of communication, including social media, e-mail promotions, web site, and "open house" events, on florist business success (sales growth, profitability, and florist self-rating). SEM results vary by florist market segment. For the florist market overall, SEM results show that all four modes of communication have a small, but statistically significant positive impact on business success. However, for smaller-sized shops with annual sales of \$250,000 or less (about half of all florist shops), florist adoption of social media has no significant impact on business success, whereas the other modes do. For larger-sized shops (annual sales over \$500,000), social media and open house events are both significant drivers to business success, but the impact of open house events on business success is about 50% larger than the impact of social media are both significant drivers to business and social media are both significant drivers to business and social media are both significant drivers to business and social media are both significant drivers to business and social media are both significant drivers to business and social media are both significant drivers to business success, but e-mail dominates, as its impact on business success is more than 50% larger than the impact of social media.

Collectively, given the florist industry's broad adoption of social media, it has yet to fully deliver on its promise to florists, especially among smaller-sized shops. Currently, social media may be considered "over-hyped" in the florist industry, as other modes of florist communication (both traditional and technological) are larger drivers to business success for key florist market segments. This report provides florist shops with valid market information and analysis for florists to benchmark their own communication strategies and improve efficiency. P&P intends to track these florist communication trends, including adoption of social media, and update the SEM response models with future P&P florist survey data.

# Florists Broadly Adopt Social Media . . . Payoff Somewhat Nil . . . Now What?

Insight from the Prince & Prince U.S. Retail Florist Tracking Survey Drs. Tom & Tim Prince, Prince & Prince, Inc., Columbus, OH, U.S.A.

Special Note: This feature article is based on market research findings from the Prince & Prince (P&P) Seminar, "The U.S. Retail Florist Tracking Survey, 2011 Edition". The social media metric is one of over 200 florist operational, marketing, and business metrics surveyed by P&P, and highlighted in the seminar, now available to members of the floral industry and allied trade. For the 2011 survey, the P&P florist tracking research was sponsored by several companies and organizations that operate in the U.S. floral industry. P&P thank the sponsors for their support in making this research update possible, providing benefit for the entire floral industry.

The U.S. floral market and floral trade press are currently "a buzz" with discussion about "social media" (e.g. Facebook, Twitter, etc.), and how this relatively new medium may be useful to floral retailers. While the claims for social media are far reaching, currently there is scant market data available that attests to the successful outcomes of florist shops that have adopted social media in their business operations.

In this exclusive reporting, Prince & Prince (P&P) present a 2011 profile of florist adoption of social media in the U.S. overall, and across ten U.S. regions, as well as social media adoption by size of the florist business, and by age of florist shop owner. These findings were excerpted from the P&P seminar, "The P&P U.S. Retail Florist Tracking Survey, 2011 Edition" (Prince & Prince, 2011; see Table 1), and provide the floral industry a descriptive profile of social media usage by florist shops in the U.S.

While there is undoubtedly interest in the level of adoption of social media by the U.S. florist industry, of greater importance, at least to individual florist shops, is how the adoption of this new media might affect floral sales, florist profitability, and the overall

# Table 1. Seminar Topics Covered in the P&P U.S. Retail Florist Tracking Survey (2011 On-Site and "Seminar on CD" Editions)

- Florist Study Objectives
- Survey Data Reliability
- Characteristics of Florist Respondents (U.S. Regions, Urbanization, Age of Owner)
- Florist Sales Profile
- Florist Sales Growth Profile
- Florist Profitability Profile
- Single vs. Multiple Shops Profile
- Other Business Activities of Florists (Garden Center, Grower, Gift Shop, Event Planning Activities)
- Type-of-Sales Profile
- In-Store (In-Person) Sales
- Wire Order Sales ( and Out-Going Wire Transactions)
- Web/ Internet Sales
- Sympathy (Funeral) Sales
- Commercial (B to B) Sales
- Wedding and Party Sales
- Florist Product Mix Cut Flowers, Potted Plants, Bedding Plants, Silks & Drieds, Fruit/ Food Baskets, and Gift-Shop Items – Percent of Sales
- Florist Cut Flower Mix Roses, Basic Flowers, Novelty Flowers, Tropical Flowers, and Filler Flowers – Percent of Cut Sales
- Florist Cut Form Mix Arrangements, Hand-Tied Bouquets, Loose Bouquets & Bunches, Single-Stems, & Body Flowers – Percent of Cut Flower Sales
- Florist Potted Plant Mix Planters/ Dish Gardens, Flowering Pots, and Foliage Pots – Percent of Potted Plant Sales
- Product Momentum Trends (Products where predicted usage will increase by 10% or more in the coming year.)
- Rose Momentum (5 rose categories)
- Rose Source Momentum (6 country-oforigin categories)
- Basic Cut Momentum (8 categories)

- Novelty Cut Momentum (32 categories)
- Tropical Cut Momentum (12 categories)
- Filler Flower Momentum (12 categories)
- Potted Plant Momentum (20 categories)
- Hardgoods/ Gift-Shop Item Momentum (32 gift-item categories)
- Direct Buying (by-passing local wholesalers; roses, other cuts, potted plants, and gift-shop items)
- Florists' Reasons for Buying Fresh Cut Flowers Direct (8 categories)
- Florists' Internet Purchasing
- Florists' Cut-Flower Guarantees
- Florists' Delivery Fees & Delivery Services (6 metrics)
- Florists' Designer Certification
- Other Service Offerings (12 metrics, including social media metric, and florist communication modes)
- Florist Management & Operations (20 metrics)
- Florists' Future Prospects (self ratings)
- Florist Success/ Growth Strategies (database modeling to uncover florist strategies driving success)

Above survey metrics (200+) segmented by 10 U.S. Census regions, five florist sales levels, five "urbanization level of market(s) served" groups, and five ageof-owner groups. Survey metrics tracked from 2003 (over 1,000 randomly-selected florists), to 2005 (over 1,000 randomly-selected florists), and to 2011 (nearly 900 randomlyselected florists). Findings reveal overall florist industry trends over time, and trends for specific florist segments. success of the florist business. Thus, in addition to providing a descriptive profile of florist adoption of social media, P&P also examine, through the development of several structural equation models, SEM (Byrne, 2001; Wothke, 2010), the impact of florist adoption of social media on florist business success (e.g. sales growth, profitability, and florists' future prospects), in comparison with adoption of other modes of florist communication/ contact with their customers<sup>1</sup>. Comparisons of these SEM model results reveal the limitations of social media as a singular driver to florist business success, and also uncover the strengths of traditional and other technological modes of florist communication. Overall, these P&P market statistics on adoption of social media by florist shops, and the P&P model-based findings, provide the U.S. florist industry salient market information for possible future investment in social media, as well as other modes of florist communication with their customers.

### **Profile of Social Media Adoption by Florist Shops in the U.S.**

In the 2011 Prince & Prince U.S. Retail Florist Tracking Survey, comprising nearly 900 randomly-selected florist shops nationwide, about 45% indicated that their florist shop was "On Facebook/ Twitter". This survey question about social media adoption<sup>2</sup> was new to the 2011 survey, and had not been queried in prior P&P national florist surveys conducted in 1998, 2003, and 2005. This statistic (45%) represents a sizeable proportion of florists that have adopted social media (nearly one-half of shops nationwide in 2011). The format of the question, however, does not allow for the determination of individual florist adoption rates for Facebook and/or Twitter separately. Facebook and Twitter are the two largest social media "empires" in the U.S. with the largest number of followers.

<sup>2</sup> P&P view adoption of "social media", (Facebook/ Twitter) as separate from having a company web site. Prince & Prince, Inc. PO Box 2465 Columbus, OH 43216-2465 614-299-4050 FloralMktResearch@att.net

<sup>&</sup>lt;sup>1</sup> Prince & Prince (P&P) regularly use SEM in their floral industry research in defining the key determinants to customer satisfaction/ purchasing loyalty, and in defining the underlying factor structure of various survey measurements. See report by P&P (2007) for another industry example of SEM analysis.



Figure 1 shows social media adoption by florist shops across ten Census regions of the U.S in 2011. The differences in the rate of adoption across the ten regions are statistically significant. Florist shops in the New England region show the highest rate of adopting social media, with just over 60% of shops in that region adopting, and the Lower South Atlantic region also shows a relatively high rate of adoption (52%). Somewhat lower rates of adoption are shown in the East South Central (39%) and Upper South Atlantic regions (41%), as well as the East North Central (Great Lakes) region (42%). Other regions show social media adoption similar to the overall average (45%).

Florist adoption of social media by level of annual sales is shown in Figure 2. The differences in the level of adoption of social media across the florist sales categories are statistically significant, and the adoption level *increases* directly with increasing size



of the florist business. For shops with the lowest level of sales, under \$100,000, rate of adoption is lowest, at 30%. For more "mainstream" florists, with annual sales between \$250,000 to \$500,000, adoption of social media is nearly half (48%), and for the largest-sized shops, with annual sales over \$1 million, adoption of social media expands to 77%.

Adoption of social media by age of the florist shop owner is shown in Figure 3. The differences in the rate of adoption across the owner age categories are statistically significant, and the adoption rate *decreases* directly with increasing age of the florist shop owner. For the youngest shop owners (under the age of 35), adoption of social media is highest, at 71%. For "middle-aged" florist shop owners (aged 45 to 54), adoption of social media is a little more than half (53%). And for the eldest florist shop owners (aged 65 or older), adoption of social media drops to about one-fifth (21%). While the



adoption profile by florist age in Figure 3 appears strong, the overall U.S. florist industry owner age profile is currently skewed toward older age groups, which brings the overall adoption average down to 45%. In the 2011 P&P florist survey, just over one-half of the florist shop owners were aged 55 or older, and only about 5% were under the age of 35.

## Florist Adoption of Other Modes of Communication/ Customer Contact

In addition to assessing florist adoption of social media, the P&P florist survey also measures adoption of other modes of florist communication/ customer contact, including e-mail/ promotional reminders, web site, having a customer newsletter, traditional florist "open house" events, and 800-number services (Figure 4). The florist web site has been most strongly adopted, with nearly 80% of florist shops nationwide now having their own web site. However, adoption of social media shows a respectable



third-place ranking at 45%, below "our own 800-number" at 64%. Nearly one-third of florists participate in "open house" events, and 28% use e-mail/ promotional reminders to inform their customers. Less than 10% of florist shops use customer newsletters to communicate with their customers.

# **P&P SEM Model Development: Impact of Florist Adoption of** Communication Modes on Florist Business Success

To determine economic benefits to the florist business of adopting different modes of communication, P&P conceptualized, developed, and tested several structural equation models (SEM) from selected data from the 2011 P&P U.S. Retail Florist Tracking Survey. The final structural model<sup>3</sup> is shown in Figure 5 and it depicts the

<sup>&</sup>lt;sup>3</sup> The structural model in Figure 5 is transformed into several equations that are solved simultaneously when fitting the model to the covariance matrix of the collected survey data.

*relative impact of four communication modes on florist business success* (from the six shown in Figure 4). Preliminary model testing indicated that florist adoption of the customer newsletter (7%) was too low to establish reliable model estimates, and *adoption of "Our Own 800-Number" (64%) had no statistically significant impact on florist success in preliminary testing.* Both were dropped from the final model for parsimony.

The P&P SEM model in Figure 5 posits an *outcome factor*, that P&P calls *Florist Business Success*<sup>4</sup>, that is measured by three inter-correlated attributes from the survey: 1) Florist Annual Sales Growth/ Declines (percentage data), 2) Florist Profitability/ Loss (percentage data), and Florists Future Prospects (florist 5-point self-rating of future business prospects: excellent, good, fair, poor, or very poor)<sup>5</sup>. While there are undoubtedly many possible measures of business success, P&P purport that these three measures broadly and collectively define success for the florist business. The degree of contribution of each of these three attributes to the success factor is denoted by *factor loadings*, represented as arrows emanating from the success factor to each attribute<sup>6</sup>.

The P&P SEM model also posits four *predictor variables* (florist modes of communication/ customer contact) that directly impact (e.g. drive) Florist Business Success: 1) adoption of Social Media (On Facebook/ Twitter), 2) adoption of E-mail/ Promotional Reminders, 3) adoption of Own Web Site, and 4) adoption of Open House Events. In Figure 5, the directional drivers to the success factor are denoted by arrows emanating from each of the four communication modes to the success factor. With an understanding of technology that underlies some of these communication modes, it is not surprising that our preliminary testing of the four modes revealed a low to moderate level

<sup>&</sup>lt;sup>4</sup> Note that for each measured attribute underlying the factor is an estimate of measurement error for each attribute. Thus, the outcome factor, florist business success, is theoretically measured without error. This feature of SEM provides for more accurate estimation of the driver parameters, the predictors of success.

<sup>&</sup>lt;sup>5</sup> Measurement means (range): year over year sales growth, -4.3% (-30% to +21%); profit/loss before taxes, -1.4% (-30% to +26%); future prospects rating, 3.6 (1 to 5).

<sup>&</sup>lt;sup>6</sup> The arrows emanate from the factor to the attributes, not vice-versa. The underlying theory is that the directly unobservable factor, florist business success, currently exists in the florist market, and the manifest survey attributes (e.g. sales growth, profitability, etc.) just tap that pre-existing factor. Thus, the factor gives rise to the survey attribute scores, hence the direction of the arrows from the factor to the attributes.

of correlation among their adoption (i.e. their adoption is not statistically independent). These associations among the four communication modes (correlations to be estimated) are indicated in the model with double-headed arrows.



All arrows in Figure 5 are *parameters* in the SEM model to be estimated from the florist survey data (about 900 florists), including the communication mode impact (driver) parameters, the correlations among the communication modes, the loadings on the success factor, measurement errors in the three attributes underlying the success factor, and the residual error (e.g. variance not explained by the model). The model parameters were estimated using maximum likelihood (ML) estimation. ML is less sensitive than other estimation methods to violations of normality in the data (e.g. violate the normal distribution assumption of each measured attribute), a condition that is generally more prevalent in marketing-type data<sup>7</sup>.

#### **P&P SEM Model Results (All Florists)**

The parameter estimates for the P&P SEM model for all florists (in the P&P survey) are shown in Figure 6. When evaluating SEM models, one first examines the overall fit of the model to the data. There are three popular and often referenced model-fit measures used to assess overall SEM model fit: 1) the Discrepancy Statistic<sup>8</sup> divided by its degrees of freedom (df); values around 5 or less indicate a good-fit model (*Byrne*, 2001), 2) the Comparative Fit Index; values close to 1.0 indicate very good model fit (*Bentler*, 1990), and 3) the Root Mean Square Error of Approximation, or RMSEA; values less than 0.05 indicate very good fit, values as high as 0.08 represent reasonable fit (*Browne and Cudeck*, 1993), values ranging from 0.08 to 0.10 indicate mediocre fit, and those greater than 0.10 indicate poor fit (*MacCallum et al*, 1996). These model fit statistics for the P&P SEM model are shown at the bottom of Figure 6, and according to these statistics, the P&P SEM model reveals *very good fit* with the florist survey data, as determined by all three model-fit measures.

<sup>&</sup>lt;sup>7</sup> The model in Figure 5 was subsequently estimated using Browne's (1984) asymptotic distribution-free (ADF) estimator, which makes minimal distributional assumptions of the data. The model fit statistics and model parameters for the ADF estimation were nearly identical to the ML estimation shown in this report.

<sup>&</sup>lt;sup>8</sup>The discrepancy measure compares the sample covariance matrix of the survey data (boxes in Fig. 5) with *the implied model covariance matrix* computed from the model structure and all the model parameters. The smaller the discrepancy statistic, the better the fit of the model to the survey data.

The next criteria for evaluating SEM models are the measurement properties of the factor(s) in the model (e.g. the Florist Business Success factor), which are denoted by the level of the *loadings* on the factor. The SEM loadings may obtain a value between 0 (no association) and 1.0 (perfect association), with higher loadings representing greater association between the measured attributes (e.g. sales growth, profitability, future prospects) and the factor (e.g. Florist Business Success). In general, loadings in the 0.8 to 0.9 range or higher represent "excellent" association with the factor, those in the 0.6 to 0.7 range represent "good" association, those in the 0.4 to 0.5 range represent "fair" association, and loadings lower than 0.4 represent "weak" association. Overall, the factor loadings provide indicators as to how well the components (factors) of an SEM model are measured. In the P&P SEM model, the loadings for florist sales growth, profitability, and future prospects are 0.78, 0.66, and 0.52, respectively. All three loadings are statistically significant. Thus, the Florist Business Success factor has fairly good measurement properties, since the underlying attributes have loadings ranging from nearly excellent, to good, and to fair association with the factor.

From the previous model evaluation, P&P conclude that the SEM model in Figure 6 is a *very plausible model*, as the overall fit of the model to the survey data is very good, and the measurement properties of the Florist Business Success factor are good. However, the impact of the four communication modes in the model explain only 10% of the variation in the Florist Business Success factor (see *Squared Multiple Correlation* at the bottom of Figure 6). While this level of "explanatory power" for the outcome factor of the SEM model may seem small, even by survey research standards, it needs to be put into a much larger context. In the P&P U.S. Retail Florist Tracking Seminar, P&P identify over fifteen florist marketing, management, and business operational metrics that have significant (and sometimes sizeable) correlation to the Florist Business Success factor nationwide<sup>9</sup>. And P&P do not claim, in their prior florist market research, to have

<sup>&</sup>lt;sup>9</sup> A large-scale, all-encompassing SEM model of florist business success (with numerous product/ service, marketing, management, and operational factors) has yet to be formally developed and tested by P&P.

measured all the major determinants of success of the retail florist business. Thus, given that P&P research context, the 10% explanatory power of the four modes of florist



communication with business success may be considered quite reasonable. Clearly, there is "a lot going on" in the marketing, management, and operations of a retail florist shop that ultimately leads to business success (e.g. there is no "magic bullet").

The driver parameters in Figure 6 show the *relative impact of each florist communication mode on the Florist Business Success factor*, with larger values denoting a larger impact (driver) to florist success. All driver parameters shown in Figure 6 are small, positive (expected direction) and statistically significant (meaning that their score is significantly different than zero; zero denotes no effect). While florist adoption of e-mail/ promotional reminders shows the largest relative impact on success (0.15), followed by open houses (0.14), and social media the least (0.10), the differences among the driver parameters are minimal for the florist market overall. Thus, for the florist market nationally, all four modes of communication/ contact with their customers, including social media, yield a small positive impact on florist business success. This suggests that florist shops that adopt the four communication modes will generally lead to a small increase in business success (a few additional percentage points in sales growth, a couple of percentage points added in profitability, and slight increases in the future prospects rating, on average), compared to florist shops without adopting.

Comparing the driver parameters in Figure 6 with the level of florist adoption of each communication mode (Figure 4) reveals a telling story: industry adoption of a particular communication mode has little to do with the level of business success that it may potentially generate. Members of the florist industry may be "following the pack" with regard to adoption of specific modes of communication without evidence as to the economic benefits of that adoption, which can lead to inefficiencies in the industry.

To gain a fuller understanding of the impact of florist adoption of communication modes on business success, P&P developed *grouped SEM models* for specific florist market segments, including three florist annual sales groups and two owner-age groups<sup>10</sup>.

<sup>&</sup>lt;sup>10</sup> SEM statistical programs are capable of modeling data from multiple groups (or samples) *simultaneously*, allowing for many different types of model analyses.

#### Florists with Annual Sales of \$250,000 or Less

The results for the P&P SEM model for smaller-sized florist shops (annual sales of \$250,000 or less) is shown in Figure 7. The measurement properties of the Florist Business Success factor for this model are good. The size of the parameters of the



four communication modes are similar to the overall florist market model, except that the impact of adopting social media on business success is lower. In fact, for the smallersized florist shop, the social media driver to business success is non-significant (it does not differ significantly from zero), whereas all of the other driver parameters in Figure 7 are statistically significant. This finding, that florist adoption of social media has no significant impact on business success for the smaller-sized florist business, is particularly disappointing, since the mantra of social media has largely been its usefulness for the small-business operator. For smaller-sized florists, adoption of social media ranges from 30% to 44% (Figure 2), yet this adoption yields no statistically significant impact on business success, according to P&P SEM analysis of nearly 500 randomly-selected small-sized florist shops throughout the U.S.

#### Florists with Annual Sales Between \$250,001 and \$500,000

The results for the P&P SEM model for the mid-sized florist business (annual sales between \$250,001 and \$500,000) are shown in Figure 8. This model reveals results that are quite different than our prior two models. Again, the measurement properties of the Florist Business Success factor in this model are fine. Of the four communication modes in Figure 8, only two, social media and open house events, have impact (driver) parameters that are small, but statistically significant (0.14 and 0.15, respectively). For this mid-sized florist group, adoption of e-mail/ promotional reminders and own web site show no statistically significant impact on florist business success. With the moderate-sized florist shop, social media becomes a small, but significant driver to florist business success. The driver parameters in Figure 8 also suggest that with these moderate-sized shops, florists' successful adoption of social media largely cannibalizes the impacts of web site and e-mail adoption on florist business success (a case for possible dis-investment or re-allocation of resources for these two communication modes). The driver parameter for open house events, however, remains unchanged at 0.15. In fact, across all prior P&P SEM models, adoption of the more traditional florist

open house event has shown a rather consistent impact on florist business success. P&P conclude that for the moderate-sized florist operation, adoption of both social media and open-house events will likely have a small positive payoff for the florist business.



#### Florists with Annual Sales Over \$500,000

The P&P SEM model results for the largest-sized florist businesses, with annual sales over \$500,000, are shown in Figure 9. The measurement properties of the Florist



Business Success factor for this model are good. Again, of the four communication modes in Figure 9, only two, social media, and open house events, have statistically significant positive impact on florist business success. Both negatively signed impact (driver) scores in Figure 9 for e-mail and web site modes are not statistically significant at the 90% confidence level, hence, they do not differ from zero, e.g. no effect. This lack of any positive impact on business success for web site and e-mail communication modes, however, may suggest that larger florists temper their involvement with these modes, and/or re-allocate resources to the more successful communication modes.

While the social media impact score on business success is highest for these large-sized florists (0.18), compared to smaller-sized florists, this score is bested by the larger impact score for open house events (0.27). For these large-sized florist shops, the impact score on success for open house events is about 50% larger than the impact score for social media. P&P examined the level of adoption of florist open house events across the three florist annual sales groups, and noted that its adoption does not change much across the sales groups (30%, small-sized shops; 34%, moderate-sized shops; 32%, large-sized shops). These model findings on open house events may change that adoption profile.

In summary, for the largest-sized florist shops, adoption of open house events has the largest relative impact on florist business success of all communication modes surveyed by P&P, followed by adoption of social media. In this era of hyped communications (e-mails, blogs, tweets, instant messages, etc.) it is interesting to reveal a research finding that shows a traditional mode of communication, that of a florist open house event (with face-to-face contact and communication with potential customers), has a larger impact on florist business success than the newer, more technologically-based modes of communication. What's old is sometimes new again, and effective! From a P&P florist research perspective, adoption of open house events and social media will likely yield the biggest payoff for the largest-sized florist operations.

#### Florists with Owners Under the Age of 45

The P&P SEM model results for florist shop owners under the age of 45 are

shown in Figure 10. The measurement properties of the Florist Business Success factor



for this model are good. For this younger-aged florist group, two of the four communication modes, social media and especially e-mail promotions, are statistically significant drivers to florist success, with e-mail promotions being the larger driver. In fact, for these younger-aged shop owners, the driver score for e-mail promotions is more than 50% larger than the driver score for social media. For this group, florist adoption of web site and open house events are not significant drivers to florist business success. Of the various models and florist groups profiled in this report, this is the first florist group where the adoption of open house events does *not* yield a statistically significant impact on florist business success, and the first group where e-mail promotion is clearly the dominant driver to florist business success (of the four modes), likely cannibalizing the effect of the shop web site. This model finding suggests that these younger-aged florists are likely using e-mail promotions (in tandem with social media) more effectively than older-aged florists, and/ or that their customer base is more receptive to these e-mail promotions. Overall, these model results suggest that younger-aged florist shop owners who adopt e-mail promotion and social media will likely obtain a payoff for their efforts.

#### Florists with Owner Age of 45 and Older

The P&P SEM model results for florist shop owners aged 45 and older are shown in Figure 11. For this older-aged florist segment, all four modes of communication show small, yet statistically significant impact scores on florist success, with adoption of web site being the relatively strongest driver, and adoption of social media being the relatively weakest driver. This model is most similar to the overall florist market model shown in Figure 6, with the exception of the web site being a slightly stronger driver to success for this older-aged florist segment. Thus, for the more mature florist owner segment, adoption of all four modes of communication will likely yield a small positive payoff in increased business success.



P&P intends to track florist adoption of social media (and possible "learning curve" effects), and adoption of other communication modes by florists in future P&P florist tracking surveys (next survey planned for 2015).

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## Literature Cited

Bentler, P.M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238-246.

Browne, M.W. (1984). Asymptotically distribution-free methods for the analysis of covariance structures. *British Journal of Mathematical and Statistical Psychology*, 37, 62-83.

Browne, M.W. and Cudeck, R. (1993). Alternative ways of assessing model fit. In Bollen, K.A. and Long, J.S. [Eds.] *Testing structural equation models*. Newbury Park, CA: Sage, 136-162.

Byrne, B.M. (2001). *Structural Equation Modeling With AMOS, Basic Concepts, Applications, and Programming*. Mahwah, NJ: Lawrence Erlbaum Associates.

MacCallum, R.C., Browne, M.W., and Sugawara, H.M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, *1*, *130-149*.

Prince, T.L., and Prince, T.A. (2007). *Florists' Perceptions of Supplier Cut-Flower Quality*. (Report on FloralMarketResearch.com) Columbus, OH: Prince & Prince, Inc.

Prince, T.L., and Prince, T.A. (2011). *The Prince & Prince U.S. Retail Florist Tracking Survey*. (On-Site Seminar and CD) Columbus, OH: Prince & Prince, Inc.

Wothke, W. (2010). *Introduction to Structural Equation Modeling Course Notes*. Cary, NC: SAS Institute Inc.

#### About the Prince & Prince U.S. Retail Florist Tracking Survey, 2011 Edition. This

comprehensive florist marketing research is provided through either a one-day, on-site seminar presentation to a management team, or through the purchase of the "P&P Seminar on CD" (about 1,000 slides). The P&P florist research is a valuable marketing resource for the entire floral industry. The P&P tracking survey provides current market information and historical trends on over 200 florist shop metrics including the following: 1) U.S. retail florist sales and financial metrics (sales categories, sales growth, profitability, florist future prospects), 2) types of florist shop sales (e.g. in-store, wire, Web/ Internet, weddings/parties, sympathy, commercial), 3) florist product mix (cut flower mix, cut form mix, potted plant mix, silk and drieds, and hardgoods/gift shop items), 4 florist marketing & service offerings (14 measures), 5) recent resource allocations to operations (20 measures), 6) direct buying activity (by-passing local wholesalers) and reasons for direct buying, and 7) florist demand (usage) trends for 5 rose classes, 6 rose sources (country of origin), 8 basic cut flowers, 32 novelty cut flowers, 12 filler cut flowers, 12 tropical cut flowers, 20 potted flowering/green plants, and florist demand trends for more than 30 hardgood/gift shop items. The seminar and CD is based on survey responses from over 1,000 randomly-selected florist shops throughout the U.S. in 2003, and in 2005, and nearly 900 shops in 2011. Extensive trend comparisons are made among the numerous survey metrics across the study years. Information in the on-site seminar and CD is segmented by ten U.S. regions, urbanization level of market served, age of shop owner, and size of business to identify specific florist segments leading or trailing the overall U.S. trends.

**<u>Regional Definition</u>**: The ten regions of the U.S., and the states that comprise each region are the following: *New England* (CT, MA, ME, NH, RI, VT), *Middle Atlantic* (NJ, NY, PA), *East North Central* (IL, IN, MI, OH, WI), *West North Central* (IA, KS, MN, MO, NE, ND, SD), *Upper South Atlantic* (DC, DE, MD, NC, VA, WV), Lower South Atlantic (FL, GA, SC), *East South Central* (AL, KY, MS, TN), West South Central (AR, LA, OK, TX), *Mountain* (AZ, CO, ID, MT, NM, NV, UT, WY), and *Pacific* (AK, CA, HI, OR, WA).

<u>About the Authors.</u> Drs. Tom and Tim Prince, formerly of The Ohio State University, are brothers and co-founders of Prince & Prince, Inc., a leading marketing research specialist in the floral and green plant industries. Prince & Prince has completed more than 50 major marketing research reports for the floral and floral-related industries in the U.S., and has also conducted floral marketing research in Canada, the United Kingdom, Holland, Germany, and Spain. They conceptualize, design, and implement market research studies and product tests for floral and green-plant suppliers, plant breeders, floral importers, wholesale florists, retail florists, and industry associations. For more information about their specialized floral marketing research, contact Prince & Prince.

<u>*Related Links:*</u> The Prince & Prince U.S. Consumer Floral Tracking Survey, 2014 Edition http://www.floralmarketresearch.com/details.htm