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Measuring nonprofit marketing strategy performance: the case of museum stores

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Abstract

Marketing activities in museum stores offer significant opportunities to evaluate distinct strategies and their related performance in a nonprofit setting. Whereas the museum store was originally intended to provide financial support for the institution with which it was associated, it now provides an educational or mission-related opportunity as well. This research identifies financial and educational museum store strategies and then measures effectiveness in terms of those strategies, providing a measurement for perceived educational performance based on findings from museum stores in America. Implications for museum marketers, museum retailers, nonprofit marketers, and retail marketers involved with social causes are presented.

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1. Introduction

While measuring the performance of marketing strategies has been undertaken in numerous contexts, it presents unique challenges and illuminating possibilities for nonprofit organizations. Profit-oriented firms generally evaluate their performance using financial measures (Morgan et al., 2002; Sheth and Sisodia, 2002). However, in the nonprofit world, where the goal of the organization is likely to be nonfinancial (Gallagher and Weinberg, 1991), the measurement of the performance of marketing strategies needs to be accomplished in terms of total effectiveness (Morgan et al., 2002; Sheth and Sisodia, 2002), which means a nonprofit organization's performance should be evaluated in both financial and nonfinancial terms. Some nonprofit marketing strategies are designed to raise funds with which to further the objectives of the organization (Kotler and Andreasen, 1996), while other marketing strategies directly target the overall objective. Investigation of this phenomenon is needed in order to gain an understanding of the relationships

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between a marketing strategy designed to raise funds for nonprofits, a marketing strategy with a goal of furthering the nonprofit organization's altruistic objectives and their respective performance measures. Additionally, development of means for measuring the nonfinancial performance in nonprofits is needed.

This research seeks to study this problem in museums in America, and in particular, the unique hybrid of retailing and museums—the museum store. The number and size of museum retail operations are escalating, and museums are increasingly relying on them as a source of funding (Lovelock and Weinberg, 1989), especially in a time when federal support for many museums is deteriorating (Dess, 1998; Hughes and Luksetich, 1999). Museum stores provide an opportunity to identify and distinguish a marketing strategy that is associated purely with the financial or fundraising objectives of the museum as well as a strategy that may be perceived as running counter to the financial strategy of the museum—that of education. This research establishes two unique objectives for the American museum: (1) to raise funds and (2) to educate the public. These objectives are manifested by two specific marketing strategies (financial and educational) that are identified by the literature. Measures of performance in terms of these two strategies are identified, and a comprehensive measurement

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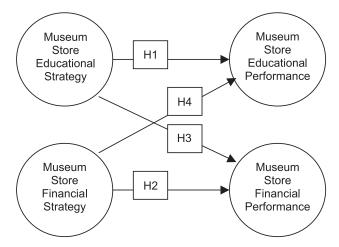


Fig.1. Museum store strategy and performance objectives.

vehicle for educational performance for museum stores is developed. Finally, as shown in Fig. 1, the relationships between the two strategies and the two performance measures are examined.

2. Museum strategies and objectives

The overall marketing of museums (McLean, 1994) and the marketing of the arts in general (DiMaggio, 1986; Mokwa et al., 1980) have been discussed in the literature as has the application of marketing management to nonprofits in general and museums in particular (Kotler and Kotler, 1998; Kotler and Andreasen, 1996). The focus of much of the marketing initiative literature is aimed at increasing or managing membership (Wilson and Jones, 1984), increasing admissions (Lovelock and Weinberg, 1989), fund raising in terms of donations, market orientation as a means to the end (Ames, 1988) and museums as a service (McLean, 1994). With the exception of McLean (1994), the literature generally does not address the link between the museum mission and its specific marketing strategies. Voss and Voss (2000) measured the strategic orientation of nonprofit theatres against financial data and attendance measures. Hein (1998) discussed the broad scope of how learning occurs in museums, but noted that it is extremely difficult, if not impossible, to measure in traditional terms. Overall, however, empirical linkages between specific strategies, such as an educational strategy on the part of the museum, and subsequent performance are missing.

Museums are nonprofit institutions that educate people as well as collect and conserve objects (American Association of Museums [AAM], 2000; Alexander, 1996; McLean, 1994; Ames, 1988; Wilson, 1988; Yorke and Jones, 1984). They may also facilitate research, serve as cultural centers (AAM, 2000), and even provide entertainment (Burgers, 1992). They are centered on the objects they collect and conserve (Kotler and Kotler, 1998; McLean,

1994) and, in America, uniformly have an educational mission (AAM, 2000; Hein, 1998). Therefore, the nonprofit American museums are engaged in activities that are educational and therefore in the public interest, or for a social good, and marketing efforts undertaken on the behalf of the museums fall within the scope of social or nonprofit marketing (Kotler and Zaltman, 1971; Levy, 1969).

While museums in America seek to fulfill their educational objectives, their need for financial support has grown more acute since the 1970s (Galambos, 1993; DiMaggio, 1986). Marketing efforts aimed at financially supporting museums have resulted in the increasing size and scope of museum store operations (Kotler and Kotler, 1998; Museum Stores Association [MSA], 2000), restaurants (Ames, 1988), site rental, fund raising (Kotler and Andreasen, 1996), ticket and admissions marketing (Ames, 1991), membership drives, and more "market"-oriented exhibits (Kotler and Kotler, 1998).

3. Museum store marketing strategies

Although the museum store was originally conceived as a means of generating financial contributions to museums (Lovelock and Weinberg, 1989), they necessarily fulfill a part of the museum's overall objectives, particularly that of education (Theobald, 2000). Therefore, museum stores have dual objectives, financial and educational, and as such have strategies that are intended to meet one or the other of these objectives or both. Based on extant literature, several tactics connected either to an educational or to a financial marketing strategy have been identified and are shown in Table 1.

Since retailing is considered to be a form of services marketing, these tactics are organized using the seven P's framework of services marketing (Booms and Bitner, 1981) for discussion purposes. Relevant tactics within the constraints of the literature available are identified. Any tactic associated with both strategies is purposely not included.

Table 1
Tactical components of educational and financial museum retail strategies

The 7 P's	Educational tactics	Financial tactics
Product	High degree of relatedness/educational value of products Reproductions in the assortment Unique/custom-made product assortment (Theobald, 2000;	Private label assortment Souvenir product assortment (Bennett and Gabriel, 2000; Theobald, 2000; 2000; Littrell et al., 1993)
Price	Wilson, 1988) Demand pricing below normal markup (Ansari et al., 1996; Lovelock and Weinberg, 1989)	High/low pricing Permanent markdowns Competitive pricing Discounts calculated into initial markup (Lovelock and Weinberg, 1989)
Place		Placement of retail stores near entrances or exits to the museum (Theobald, 2000)
Promotion	Educational descriptions and/or educational text in catalogs, websites, and direct mail (Drumwright, 1996)	Promotional activities designed to specifically increase store visitation (Grewal et al., 1998)
People/ Participants	Interpretive training Incentives for and evaluation of educational training or interpretation skills Store management with professional museum experience and/or training (Theobald, 2000; Berman and West, 1998)	Selling skills training Store management with professional retail business experience and/or training Store management rewarded for financial performance (Berman and West, 1998; Lusch and Serpkenci, 1990; Jaworski, 1988)
Process	Providing educational literature Product development process includes curatorial staff Educational audience research Educational demonstrations in the museum store (Theobald, 2000; Alexander, 1996)	POS merchandise management system Market research activities (MSA, 1999; Murphy, 1980, Peterson, 1980)
Physical evidence	Store design, fixturing and/or display involves museum curators Atmospherics highly related to the collection Educational cues in advertising, on bags, tags and product inserts. (Kumar and Karande, 2000; Theobald, 2000; Bitner, 1992)	High percentage of museum space devoted to retail stores Store design, fixturing and/or display is planned for convenience, ease of shopping and maximizing sales (Kumar and Karande, 2000; Lord and Lundregan 1999; Dabholkar et al., 1996)

3.1. Product tactics

Differing degrees of relationship exist between museum stores' product assortments and museums' collections (MSA, 2000). The relationship to a museum's collection can take the form of merchandise reflecting a historical period, artists whose works are displayed, the museum's artistic category, the museum buildings or location (Theobald, 2000). The degree of educational orientation is manifested by the degree to which the educational nature of the product mix reflects the collection and the educational value of the products. Within the context of product relatedness to the museum, reproductions of the museum collection itself (Theobald, 2000; Wilson, 1988) and unique custom-made products are identified as tactics associated with an educational strategy. Many museums use "private-labeling" programs that allow museum stores to carry mass-produced products with the museum's label and therefore maintain an appearance of being related to the museum itself without incurring large development costs. These products, such as key chains, mugs, pencils, and the like, have little educational value. Using the museum label to increase sales by relying on the name or "brand" of the museum, in part due to the fact that products associated with a good cause sell better (Bennett and Gabriel, 2000), is therefore identified as a tactic associated with a financial strategy. The addition of the museum's logo on a product may have a prestige appeal to consumers, or serve as a tourist souvenir that would increase revenues without directly enhancing the museum's educational objective. In fact, because museums are tourist destinations (AAM, 1984), and tourist-related products have a high incidence of relatedness to the site (Littrell et al., 1993), souvenirs often form part of the museum store's product assortment but do not necessarily have any educational value strictly as a result of their connection to the site (Theobald, 2000). Like the private label products, souvenir items tend to be developed or purchased for resale with the objective of fulfilling the customer's need for a memento, rather than a desire for additional information or an enriching educational experience. Because souvenirs have little, if any, educational value or intent, the incidence of souvenirtype products in the product assortment is a manifestation of the financial objectives and strategy of the museum. The presence of souvenirs serves largely to capitalize financially on the customer's need for mementos of a visit.

3.2. Price tactics

Museum stores tend to use some variation of "high/low" pricing with the frequency and the depth of the differences between high and low pricing varying widely. Markdowns are designed to liquidate overstocks, damages, or slow-moving inventory and generally reflect the desire to increase inventory turnover (Lovelock and Weinberg, 1989); thus, they are undertaken with financial objectives in mind and represent a financial tactic. Pricing methods (cost, competition, or demand) used by museum stores are generally based on the cost method (Theobald, 2000). Demand pricing at below customary markup levels may occur when the cost of the product is so prohibitively expensive that it

will never be sold if the normal markup is applied. This often occurs in curatorially driven products (Lovelock and Weinberg, 1989) that are educationally significant but have little customer demand. Nonprofits in general have an objective of pricing such that they maximize the number of users (Ansari et al., 1996) or, in the case of the museum, increase access to the collection. Therefore, demand pricing at lower than normal markups would be a tactic associated with an educational strategy. The competitive pricing method is important if there is competitive pressure and would be a tactic associated with a financial strategy (Lovelock and Weinberg, 1989). Membership and staff discounts should be taken into account when the level of markup is set if a museum store wishes to achieve its financial objectives (Lovelock and Weinberg, 1989), and museum stores that take discounts into consideration when setting prices will most likely have a financial orientation.

3.3. Place/distribution tactic

Museum stores have traditionally been placed inside or adjacent to the museum collection. Consequently, space for the museum store has been exhibition space in the past or could be in the future (Wilson, 1988). The choice of space is often constrained particularly in museums that have added stores after the exhibition building was completed. It is generally thought that a museum store that is placed near the exit (or entrance) of the museum will maximize financial potential (Theobald, 2000) and therefore is seen as a financial tactic.

3.4. Promotion tactics

Promotion of a store name and image as a "brand" in itself has been linked to the decision to shop and intent to purchase (Grewal et al., 1998). Hence, promotional activities that are specifically designed to increase store visitation or store purchase are indicative of a financial strategy. Advertising that includes a social message tends not to promote sales, but results in the public becoming aware and interested in the specific cause (Drumwright, 1996)—the social message or cause in the case of museums is education. Therefore, museum stores that include educational descriptions of their merchandise in catalogs, direct mail pieces, and on museum store websites, or devote some of their space to educational purposes are using a tactic that is an indicator of an educational strategy.

3.5. People/participants tactics

Theobald (2000) contends that related products are not educational without museum store staff interpretation. Therefore, evidence of interpretive training is treated as a tactic associated with an educational strategy. Conversely, training in sales-making techniques or "salesmanship" is indicative of a financial strategy. Incentives and/or moti-

vational tools such as commissions and bonuses are used in the retail environment and are effective at increasing sales, profits, or other specifically targeted actions (Lusch and Serpkenci, 1990). In general, evaluations of results in the nonprofit environment will reinforce actions that result in improvements or consistency in the positively evaluated results (Berman and West, 1998). Therefore, evidence of incentives that reward sales and/or profit (contribution) for sales staff or store management are tactics associated with a financial strategy and evidence of bonuses or other incentives for educational information disbursement relate to an educational strategy. Since effective financial store management has been shown to be critically important in the financial performance of the retail store (Lusch and Serpkenci, 1990), it is most likely that the presence of a professional retailer in a museum store is a tactic associated with a financial strategy. Conversely, museums that are more educationally oriented will most likely have store managers with nonretail, even educational, or museum experience. Further, the performance appraisal measurements used have a significant effect on both individual and marketing performance in financial terms (Jaworski, 1988).

3.6. Process tactics

Museum stores that have a point-of-sale (POS) system for managing inventory and tracking sales (MSA, 1999) are more financially oriented, as there is limited educational value to this type of merchandise management tool. In contrast, the process of always giving educational product literature with a customer's purchase would be consistent with an educational orientation and strategy (Theobald, 2000). This would also hold for product development (including licensing, manufacture, and/or packaging) that involves curatorial staff in addition to merchandising staff (Theobald, 2000). Market research activities, unless they specifically investigate educational experiences, are financial strategy tactics, as they are aimed at increasing the amount and nature of business (Murphy, 1980; Peterson, 1980). Customer research that seeks to determine educational learning or experience measurement would logically be associated with an educational strategy (Alexander, 1996). Educational demonstrations are a learning tool used in museums (Alexander, 1996) and are focused on educational objectives.

3.7. Physical evidence tactics

Atmospherics create retail environments that are unique to a store and therefore form part of the firm's retailing strategy (Kumar and Karande, 2000). Physical evidence has a strong influence on the communication of the firm's image and purpose (Bitner, 1992). Therefore, the use of atmospherics that reflect the educational objectives of the museum, normally by their relatedness to the collection, are seen as educational tactics. The physical appearance of the store,

including signage, fixtures, and displays, provides clues to orientation in their content, design, and process of development. The involvement of curatorial professionals in the signage, fixturing, and display are evidence of an educational strategy (Theobald, 2000). Conversely, the convenience of the store with respect to making purchases (Dabholkar et al., 1996) is focused on maximizing profits; therefore, museum store design for shopping convenience and accessibility by the customer is a tactic associated with a financial strategy. Physical evidence of educational cues in advertising, on bags, on tags, or on product inserts relates to an educational strategy (Theobald, 2000). The "physical evidence" of a retail store also includes its size (Lord and Lundregan, 1999) and is related to level of performance (Lord and Lundregan, 1999). The allocating of greater percentages of museum space to retailing is part of the financial strategy of the museum.

4. Museum store performance

Measurement of the effectiveness of a marketing program should reflect the overall strategy and objectives of the organization (Kaplan and Norton, 2001; Slater et al., 1997), which in the case of the museum store means measurement of both educational and financial performance. A strong educational museum store retail strategy should result in strong educational performance. Similarly, a strong financial museum store retail strategy should result in a strong financial performance. Hence:

Hypothesis 1: There is a positive and direct effect of an educational museum marketing strategy on the educational performance of museum retailers.

Hypothesis 2: There is a positive and direct effect of a financial museum marketing strategy on the financial performance of museum retailers.

While an educational strategy is predicted to result in positive educational performance, it is also possible that it could yield a statistically significant positive financial result as well. An educational marketing strategy that offers a more unique product assortment, more customer-driven pricing, an interactively trained sales force, and high identification with the museum through educational material and cues gains a distinctive marketing competency when compared to nonmuseum retailers. Distinctive marketing competencies are related to competitive advantage and positive financial performance (Conant et al., 1993). In retailing, indications are that perceived value and store image positively influence purchase intentions (Grewal et al., 1998). The unique set of attributes offered in the museum retail marketing mix when combined with the fact that the museum is supporting a good cause (Bennett and Gabriel, 2000) gives the museum store a nonreplicatable competitive

advantage and presumably a positive store image, which again should result in positive performance (Conant et al., 1993). The evidence of the educational mission also makes the museum store experience part of the entire museum experience (Alexander, 1996). This should drive a greater legitimacy for the museum store and help to develop a perception of customer trust in purchasing products. Additionally, Voss and Voss (2000) found that mission-driven strategies in the nonprofit theatre business were related to financial performance. Therefore, the following hypothesis is offered:

Hypothesis 3: There is a positive and direct effect of an educational museum marketing strategy on the financial performance of museum retailers.

Interestingly, anecdotal evidence from museum store management is contradictory on this point, with opinions fairly evenly divided between a negative and a positive relationship involving the educational strategy and financial performance.

However, there is no literature that the authors are aware of that indicates that a nonprofit financial strategy will have a direct impact on educational performance. Most nonprofit literature supports the idea that nonprofit organizations achieve their missions as a result of raising funds that are subsequently used to implement the mission (Kotler and Andreasen, 1996). Indeed, some museum retailers give anecdotal evidence that financially oriented marketing decisions are sometimes made with minimal reference to the overall mission of the museum, or the mission of the museum is seen as an impediment in terms of a constraint to an effective financial marketing strategy. However, since the visitor to the museum store is most often a visitor to the museum itself (Theobald, 2000) and the store lies within the context of the museum, there is a high likelihood that the customer is not separating the store experience from the museum collection experience. Therefore, product choices that are made in order to increase revenues may also serve to educate even though that is not their primary intention. For example, products with high souvenir value and low prices may sell extremely well and raise considerable funds for the museum. In the process of acquiring these items, the customers become more familiar with the museum, are reminded of their visit, and remember more about what they have seen and experienced in the museum. Souvenirs that remind a visitor of their experience may result in repeat visits to the museum or in word of mouth that inspires museum visitation on the part of other people, or even additional research about the collection. Because of the unexplored nature of the relationship between financial strategies and mission-based performance on the part of nonprofits the following hypothesis is offered:

Hypothesis 4: There is an ambiguous effect of a financial museum marketing strategy on the educational performance of museum retailers.

5. Methodology

The educational and financial strategy variables utilize the tactics discussed above (and as presented in Table 1) as indicators of one or the other strategy. The tactics are measured using 7-point Likert scales. Prior to the actual use, the strategic indicators were presented to two museum retailing consultants, an MSA board member who is also a museum store manager, and two museum consultants in order to help insure validity.

Overall financial performance is measured in terms of sales per square foot which offers comparability and validity as a measurement based on its consistent use in the evaluation of financial retail performance (Kumar and Karande, 2000). Net profit or contribution figures that could have been helpful financial measurements (Theobald, 2000) were often not available or were calculated inconsistently.

Measuring educational performance is more problematic than measuring financial performance. The literature, both practical and academic, is sparse in terms of measuring learning in the museum setting. Ideally, pre- and posttesting are the ideal evaluators of learning (Bransford et al., 1999). However, this is extremely difficult to measure because the educational experience in the museum is most often an individual learning process, where learning is often spontaneous (AAM, 1984) or casual (Hein, 1998). Indeed, in the case of an educational product bought at a museum store, the learning may take place long after the visitor leaves the museum or gives a purchased item as a gift.

Therefore, the measurement of educational performance must necessarily be subjective and based on perceptions. Subjective measures of performance will allow a more robust analysis of the educational construct due to the inherent measurement limitations (Fine et al., 2000). Both objective and subjective measures of nonprofit performance have been used successfully (Voss and Voss, 2000). Subjective performance measures have been shown to be a valid means of measuring performance, and have particular value when measuring the multidimensional nature of organizational performance (Dess and Robinson, 1984).

The measurement of the perception of educational performance developed for this study was created based on the guidelines established by Churchill (1979). This process began with the development of a pool of subjective measures of educational performance drawn from individual interviews with the managers of museum retailing organizations associated with well-established museums with a variety of subject matter along with an interview with an MSA board member and two consultants to museum retailers. The interviews resulted in a list of 12 attributes (Table 2) which the interviewees reviewed for inclusiveness. These attributes were formed into statements that were measured using a 7-point Likert scale.

Seven-point Likert scales were also used to measure the indicators of financial and educational marketing strategies. The survey instrument was pretested with a random sample

Table 2

Construct scale items

Museum store educational tactic

Educational demonstrations in the museum store (edst1)

Educational descriptions and/or educational text in catalogs, websites, and direct mail (edst2)

Interpretive training (edst3)

Store management with professional museum experience and/or training (edst4)

Product development process includes curatorial staff (edst5)

Audience/educational research in the museum store (edst6)

Atmospherics highly related to the collection (edst7)

Unique/custom-made product assortment (edst8)

Providing educational literature—eliminated from final analysis

Sales staff are evaluated on their knowledge of the museum's collection eliminated from final analysis

Sales staff are evaluated on their ability to talk about the collection with visitors—eliminated from final analysis

High degree of relatedness of products to the collection—eliminated from final analysis

Reproductions in the assortment—eliminated from final analysis Educational cues in advertising, on bags, tags and product inserts—

Museum store financial tactic

eliminated from final analysis

POS merchandise management system (fnst1)

Promotional activities designed to specifically increase store visitation (fnst2)

Store management rewarded for financial performance (fnst3)

Selling skills training (first4)

Store management with professional retail business experience and/or training (first5)

Market research activities (fnst6)

Competitive pricing—eliminated from final analysis

High percentage of museum space devoted to retail stores—eliminated from final analysis

Private label assortment—eliminated from final analysis

Museum store educational performance

The store helps visitors understand the museum's collection/subject matter better (edpf1)

The store promotes visitor appreciation for the museum's collection/subject matter (edpf2)

The store promotes visitor knowledge about the museum's collection/ subject matter (edpf3)

The store causes visitors to be more excited and enthusiastic about the subject matter of the museum's collection (edpf4)

The store exposes visitors to the subject matter of the museum's collection (edpf5)

The store helps visitors to learn about the museum's collection/subject matter (edpf6)

The museum has greater educational outreach because people purchase items in the store (edpf7)

The store gives visitors additional access to the subject matter of the museum's collection (edpf8)

The store causes visitors to want to learn more about the subject matter of the museum's collection—eliminated from final analysis

The store has greatly increased visitor awareness regarding the subject matter of the museum's collection—eliminated from final analysis

 ${\it Museum\ store\ financial\ performance}$

Sales per square foot-logged (logsaft)

of 89 museums in the United States (AAM, 2001). Of the 89 museums approached with the sample survey, 14 responded (15.7% response rate). The museum store manager was identified as the key respondent, and each respondent was debriefed after completing the survey. Because of the pretest, adjustments were made in the scale items to reflect the elimination of inappropriate, confusing, or redundant items. The educational strategy construct scale was reduced from 15 items to 14, the financial strategy scale was reduced from 15 items to only 9 items, and the educational performance scale was reduced from 12 to 10 items. All scales demonstrated appropriate psychometric properties and were considered appropriate for use in the final study.

6. Results

After the pretested museums were withdrawn from the population of 7962 nonprofit museums in the United States (AAM, 2001) a random sample of 1593 museums was identified. Of that sample, 47.1% (or 751 museums) self-qualified themselves as having a shop, store, or some type of retailing presence. Of that number, 178 returned responses generating 165 useable responses giving an effective response rate of 21.9%. Museum visitation ranged from 175 to 3,250,000 per year. Store sales ranged from \$250 to \$5,396,245 annually while the square footage of the retail space varied from 5 to 14,000. Other demographic data that were collected indicated that 53% of the museums were historical in nature when compared with 12 other categories of museums. Seventy percent of the museums were indoors, while 17% were outdoors and 13% were a mix of both. Most of the museums charged admission (58%), while 33% did not charge admission, and 9% asked for donations. Education ranked as the most important reason most people visited museums followed, respectively, by entertainment, recreation, and social reasons. Museum store managers' average salary was most commonly \$20,000 to \$29,999 annually, and 80% of the managers were women. They averaged 10.8 years of retail experience, 7.7 years of museum experience and 7.3 years of museum store experience.

Respondent reliability was examined by comparing the reported visitation on the surveys with the reported visitation in the AAM (2001) listing. Consistency between the respondent's reported data and the published secondary data resulted in an alpha statistic of .9629, which indicates a high degree of reliability (Carmines and Zeller, 1979).

Of the 165 useable responses, 14 did not give either sales or square feet of retail space. When sales and square feet were regressed on visitation (which all respondents gave), there was no appreciable difference between the two adjusted R^2 . As a result, the mean value for the dependent variable of sales per square foot was substituted for those cases with missing values (Hair et al., 1998).

The fact that not all museums were open every month of the year posed a potential comparability question. Museums in the sample were open from 4 months per year to a full year; 77.4% were open all year. Because this research is intended to be representative of museum retailing in America, no adjustments to the figures were made, and all reporting museums were included in the study. No seasonally affected "raw data," i.e., sales or visitation, are being used in the study. Rather, transformed data, specifically sales per square foot, was felt to be the appropriate unit of analysis to measure financial performance. When this performance measure was further examined, skewing was found; therefore, the variable was converted into logarithms for the final model. Financial performance was therefore a single-item measure using logged sales per square foot. Finally, nonresponse bias was eliminated as a data problem by determining that no significant difference with respect to key variables was found between the 25 earliest and the 25 latest respondents.

6.1. Study construct scales

There were four important constructs involved in this study as shown in Fig. 1. In order to test the hypotheses, it was necessary to subject the important study construct scales (educational strategy, financial strategy, and educational performance) to confirmatory factor analysis (CFA). Financial performance was measured using a single item; therefore, it was not included in the CFA. Modification indices were studied and several of the items for each of the construct scales were found to be problematic. Significant correlations for error terms and high correlations for items with other items/scales are indications of problems. These problems may reflect systematic biases like social desirability bias or potential item redundancies. As a result, several items were eliminated from the scales and the CFA was rerun. The final scale items are shown in Table 2 along with the eliminated items. The Cronbach alpha coefficient for the final 8-item educational strategy scale was .7530, with no improvement in reliability with the elimination of any items. The alpha for the final 6-item financial strategy scale was .7370, and there was no improvement here as well in reliability with the elimination of any additional items. Finally, the alpha for the 8item educational performance scale was an impressive .9272, and there was no improvement indicated with the elimination of any additional items. The CFA results indicated strong fit measures for all of the important study construct scales with scores above .90 for all relevant measures (see Fig. 2). Goodness-of-fit measures reflect the adequacy of the proposed model (the proposed factor structure) in relation to a baseline model (no factor structure), and levels above .90 are indications of good fit. Consequently, the measures are considered to be psychometrically sound and appropriate for structural equations modeling.

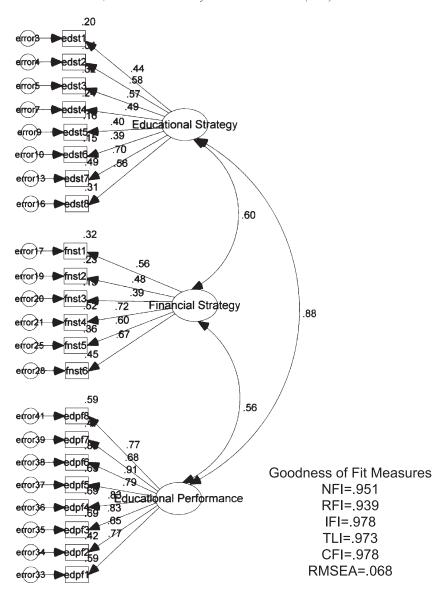


Fig. 2. Confirmatory factor analysis results for study construct scales.

6.2. Hypothesis testing

In order to test the various study hypotheses, structural equations modeling was employed using AMOS 4.0. The four study constructs were tested with the linkages shown in Fig. 1. The results are found in Fig. 3. The model performs quite well and effectively facilitates the testing of the various study hypotheses. It is worth noting that the squared correlation for educational performance is quite high at .77. The squared correlation for financial performance as measured by logged sales per square foot is also significant at .21, which suggests that there may be other potential drivers of performance that have not yet been taken into consideration in the model.

The first hypothesis posited a positive and direct effect for educational strategy on educational performance. Examining the direct effect pathway for the structural equation model, one finds that clear support is provided for this hypothesis. The pathway is significant (.84, P<.001), and the indication is that for this sample of museum retailers, educational strategy does indeed have a positive causal effect upon educational performance. The hypothesis (Hypothesis 1) was supported. The same was found for the causal linkage between financial strategy and financial performance. The standardized regression weight for the pathway was significant and positive (.54, P<.001), indicating that financial strategy does have a positive effect upon financial performance. Hypothesis 2 was supported.

Hypothesis 3 proposed a significant positive effect of educational strategy on financial performance; however, the data here indicated a significant negative effect (-0.19, P<.01). This hypothesis was not supported. The indication is that the following of this educational strategy will detract from financial performance. Hypothesis 3 was therefore not

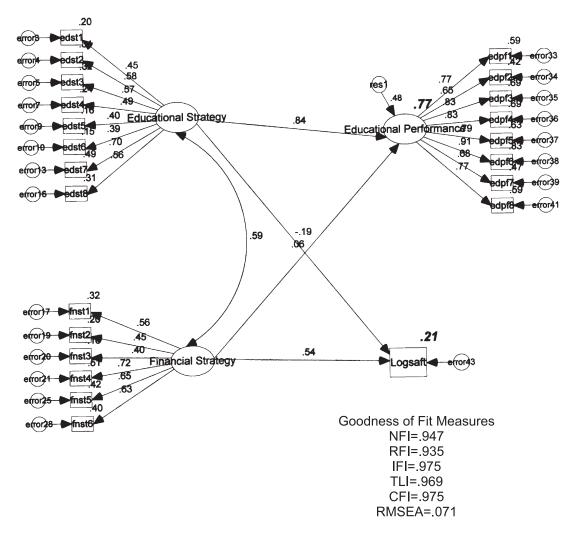


Fig. 3. Museum retailing strategies and performance (N=165).

supported. Finally, Hypothesis 4 suggested an ambiguous effect for the impact of financial strategy upon educational performance, and although the path coefficient was positive (.06), it was not found to be significant. Therefore, there was support for Hypothesis 4. The indication is that following this financial strategy will not have an impact on educational performance.

7. Implications and conclusions

The results of this research, particularly the identification of a nonfinancial performance measure, are significant for museum store managers, museum administrators, retail managers in general, nonprofit marketers, and academic researchers. Measures of an array of tactics associated with marketing strategies that are related to both a nonfinancial objective (education) and a financial objective were identified and were shown to be significant predictors of their respective performance measures. An educational (mission related) strategy was identified, tactical indicators of that

strategy were defined, and it was found that an educational marketing strategy had a significant positive effect on the achievement of the mission. In an area of nonprofit marketing that was initially developed only to provide financial support to museums, it is noteworthy that there is a finding of significant educational performance occurring as a result of an educational marketing strategy.

Additionally, it was found that the educational strategy had a small but statistically significant negative effect on financial performance, contrary to the literature and in agreement with some of the anecdotal information from practitioners. This finding runs counter to the findings of Voss and Voss (2000) in the nonprofit theatre venue and may indicate that the effect of mission-based strategies in nonprofits is circumstantial. Many of the significant educational tactics in museum stores are collection based, and do not reflect a market orientation on the part of the museum. These tactics include "product development process includes the curatorial staff," for example, which could have the curatorial staff causing the museum store to carry an educational product that is not very saleable. This has

implications for managing internal conflicts between museum staff members with purely educational or financial objectives. Cross-functional involvement between curators in the development of new products and the training of store staff, the retail manager, and the educational staff is vital for optimizing the overall educational mission but needs to be controlled in such a manner that it also enhances the financial performance of the museum store as well.

Indeed, museum administrators need to understand the linkages between financial and educational considerations in their overall museum store strategy. The museum and museum store management must carefully balance the financial and educational strategies. Hence, the museum's best interests are served if the museum store is included as part of the overall strategic planning of the museum, which may mean a cultural shift for some museums. The idea that the museum store is merely a source of revenues that can be used to support the museum is shortsighted, since the museum store is part of the overall means of achieving the museum's educational goals. Internal marketing on the part of the museum store management, directed towards the entire stakeholder population of the museum, needs to occur. Examples of cross-functional involvement include the training of museum store staff with respect to the museum's collection, curatorial involvement with product development, curatorial involvement with signing and packaging, and collaborative efforts to install or enhance interactive interpretive demonstrations in the museum store. Museum store managers that have professional retail training or experience are more likely to be associated with stronger financial performance; therefore museums that hire store managers with that background need to be aware of a need to develop a sensitivity to the museum's overall educational mission.

The financial marketing strategy had the predicted ambiguous effect on educational performance. This is important in the nonprofit museum setting because it indicates that a financial marketing strategy does not impede the achievement of an altruistic, in this case educational, objective. This is particularly significant in the case of museums where the raising of money, particularly in the museum store, has been seen by some stakeholders as a distasteful, embarrassing, nonelitist activity that endangers the optimal museum experience.

The overriding implication of this study is that marketing activities undertaken by nonprofits may have both mission-related and financially related results and that by pursuing both educational and financial marketing strategies in a balanced manner the organization may be able to achieve optimal performance. In fact, the museum should be able to control the educational or financial outcomes depending upon which marketing strategy they emphasize.

Implications extend to the discussion of nonprofit marketing. The notion that nonprofit marketing is solely fund raising in support of a social cause is not supported.

Furthermore, the idea that nonprofit marketing merely uses marketing tools to enhance social causes is also limited. The findings of this study indicate that the picture of social marketing is more complex and that relationships between social marketing strategies, whether financial or altruistic, will have results that are mixed in terms of performance.

Museum store managers have several specific tactics at their disposal that have been identified as being important components of a particular strategy, and as such affect financial as well as educational performance. Measuring mission-related performance at the store level becomes an important tool for the museum store manager. On the other hand, some of the specific tactics that have been identified are not applicable to all museum stores, such as the purchase, installation, and use of a fully integrated POS system, for example, which will not necessarily result in high financial performance for all museums.

For retail managers outside of the nonprofit environment there are implications from this study as well. If the mission of the retail firm is in any respect nonfinancial in nature, then the firm needs to be measuring results in both financial and nonfinancial terms and realizing that strategies that are financially driven can result in both financial and nonfinancial performance. Therefore, retail firms would be well served to measure performance in more than just financial terms.

7.1. Limitations and future research

There are many opportunities for further research and extensions of this study. For example, if the educational performance measure is to become a viable scale for measurement, it needs to undergo retesting and reassessment (Churchill, 1979). Further testing with respect to certain covariates, particularly that of museum size as measured by visitation would also be helpful, but the sample size precluded such tests here. Other potential covariates include age of the museum, location in tourist or metropolitan regions, and the subject matter of the collection.

This research specifically sought to identify variables that were indicators of financial or educational strategies. Indicators of strategies that were both financial and educational at the same time were found in the literature and not used in this research because they were not clearly identifiable as being either purely educational or financial. Identification of additional tactics would be meaningful for practitioners and researchers.

For nonprofits in general, it would be helpful to know how the dynamics found in this study apply. Do the relationships between mission-driven and financially driven strategies and performances apply for other nonprofits, or only for museum stores? In fact, within the museum itself, do these findings exist outside of the museum store? Do other activities of the museum such as site rental, food service, and admissions marketing exhibit similar patterns?

This research has looked at museum stores from a strategic internal perspective. However, the external environment and the customer's perspective need to be taken into account. For example, how does competition affect these findings? How do customers rate educational performance? Indeed, customer behavior with respect to museums stores has not been academically researched in any respect. What are the motivations for customers to shop at museum stores: tourism (souvenirs), education, extending the experience, altruism, contributions to the "cause," filling a personal need for the product or gift giving? What are the customer motivations for visiting the museum store? Is it based on the visit to the museum, the recommendation of museum guides or special products that can be bought there?

Most of the discussion about nonprofit retailing is concerned with museums. In what other nonprofit environments can retail activities also fulfill both financial and mission driven objectives? Obviously, a research can and should be undertaken. Further research should result in findings that will aid in the understanding of not only museum retail marketing, but retail marketing and nonprofit marketing as well.

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