

Evergreen Growth: Crafting a Marketing Blueprint for Michigan's Christmas Tree Farms

Final Report Prepared For:



Michigan Christmas Tree Association (MCTA)

Prepared By:



Hope College

Kevin Chastagner, Ph.D.

Lauren Berkshire Hearit, Ph.D.

Human Subjects Approval

Hope College Human Subjects Review Board, HSRB #25-015.

Publication Date

July 2026

Acknowledgements

The authors would like to thank the Michigan Christmas Tree Association (MCTA) for the financial support for this project. Additionally, the members of the MCTA, and the staff and faculty of Michigan State University (MSU) and MSU Extension who work on Christmas trees have been very open with their time and expertise in helping the authors better understand the industry. The authors would also like to thank Gary Chastagner for his continual feedback throughout the project. We would also like to thank Chris Kooiker, Matt Adkins, and Tom Smith for their help as a test group with the evaluation of our focus group protocol. Additionally, Jackie Nickel provided invaluable expertise in reviewing the survey from the perspective of a marketing executive. The authors also appreciate the support from the Department of Economics and Business at Hope College and their Chair Stacy Jackson for the flexibility to do this work, as well as providing additional funding to help support student engagement with this project and summer pay for the authors. Finally, we'd like to thank our student research assistants, Elsie Craig, Peter Standaert, and Avrielle Ralston for their contributions to this work, and our thinking.

Table of Contents

Introduction.....	6
Project Goals and Objectives.....	6
A Note on Interpreting the Findings of this Report.....	7
Report Structure.....	8
1. Background and Study Purpose.....	8
2. Methodology	12
2.1 Focus groups.....	12
2.2 Instrument development	14
2.3 Sampling, data collection, and quality screening	15
2.4 Data analysis.....	16
3. Results and Discussion.....	16
3.1 Sample profile.....	16
3.2 Market structure: tree types, plans, and loyalty	18
3.3 The openness–intention gap	20
3.4 What separates the open from the rest.....	22
3.5 Extended models, robustness, and bootstrapping.....	32
3.6 Life stage and family	34
3.7 How real and artificial buyers differ	36
3.8 Channels, discovery, spending, and timing	38
3.9 Switching behavior and the lapsed-buyer market	41
3.10 Four attitude-based buyer personas.....	41
4. Limitations	45
5. Implications	46
6. Future Directions: Consumer Life-Cycle Analysis	50
References.....	51
Appendix A. Focus-Group Thematic Detail	54
Appendix B. Practitioner Report.....	61
Appendix C. MCTA Summer Meeting Presentation	62

List of Tables

Table 1. Socio-demographics of the analytic sample (N = 316).	17
Table 2. Most recent tree displayed, next-season plan, and consumer segments (N = 316).	19
Table 3. Construct validity: correlations of the openness item with the attitude battery (artificial buyers).	22
Table 4. Primary logistic regression model of openness (artificial buyers, N = 233; robust SEs; pseudo-R ² = .274).	23
Table 5. Barriers to incorporating a real tree among artificial buyers (N = 233): endorsement and differentiation of the willing.	30
Table 6. Model comparison (all N = 233 artificial buyers).	33
Table 7. Recommended extended model (primary specification + speed orientation + ambiance motivation; N = 233; pseudo-R ² = .328).	33
Table 8. Robustness of the primary model across outcome codings (artificial buyers).	34
Table 9. Children at home vs. none: key measures (full sample N = 316 unless noted).	36
Table 10. Post-purchase concern ratings (1–5): artificial vs. real buyers (N = 284).	37
Table 11. Motivation ratings (1–5): artificial vs. real buyers (N = 284).	38
Table 12. Real-tree purchase and discovery channels (real buyers, N = 51).	39
Table 13. Purchase timing: actual vs. preferred window (real buyers).	40
Table 14. Price distributions and break-even arithmetic.	40
Table 15. Psychographic personas with robustness grades (full sample, N = 316).	44

List of Figures

Figure 1. Sample derivation and instrument branching.....	15
Figure 2. Distribution of the openness item, full sample and artificial buyers, with the ≥ 4 openness cut.	21
Figure 3. The openness–intention gap among artificial buyers.	21
Figure 4. Primary openness model: average marginal effects with 95% CIs.	24
Figure 5. Barrier endorsement versus openness differentiation. Setup is the only barrier that survives the multivariate decomposition (AME –16.8 pp, $p = .010$).	30
Figure 6. Bootstrap selection-stability results.....	34

Introduction

This report has been prepared for the Michigan Christmas Tree Association, to provide a final report on the 2024-2026 grant, *Evergreen Growth*. This grant was funded by the MCTA as a two-year project, and included two phases of data collection: focus groups in Southwest and Northern Michigan, and a state-wide consumer behavior survey. This report highlights the key findings of this project, as well as resources and tools growers within the MCTA can use in their own marketing efforts.

In addition to the two years of funding from the MCTA, which enabled the compensation of research participants and two undergraduate students, we have received additional funding from our home department, the Department of Economics & Business at Hope College, which compensated us for time spent summer 2024, summer 2025, and summer 2026, as well as funding a second student research assistant.

Our original proposal, submitted in December 2023, was written for completion within a single year. As we progressed through the MCTA grant application process, we learned during conversations with Amy Start, Executive Director of the Michigan Christmas Tree Association, that we would need to split funding over two years based on the grant funding amounts available per year. Therefore, in year 1, we were able to fund the focus groups, and during year 2, we were able to fund the state-wide survey of Michigan Christmas tree consumers.

The following section outlines our original proposal goals and objectives, providing details about when and how we met these goals.

Project Goals and Objectives

This project was initially proposed as a two-phased approach, and contained three primary objectives. **All three objectives were met**, as detailed below.

Objective 1: To collect primary data on Michigan Christmas tree consumers (*funded by round 1 of MCTA grant*). **Met.**

In order to collect this data, we recruited focus group participants living within the state of Michigan, particularly in West and Lower Northern Michigan. Participants were a mix of live Christmas tree purchasers and non-purchasers. These focus groups identified factors that influenced consumers when they make decisions about the choose-and-cut and retailer Christmas tree experience. The focus groups are described in Section 2.1, below. Participants were recruited in early spring and summer, 2025.

Objective 2: To develop and disseminate a state-wide survey on Christmas tree consumers in the Fall of 2025 (*funded by round 2 of MCTA grant*). **Met.**

Using data from Objective 1, we used the emergent themes from the focus group series to inform the development of a survey for consumers within Michigan. This survey quantitatively evaluated purchasing and marketing factors in a wider, more generalizable market. The results from this

state-wide survey were analyzed, and key findings and results from the survey are detailed in Section 3, Results and Discussion, below. The survey was disseminated in November, 2026.

Objective 3: To develop and provide a blueprint for growers to further customize and develop their own marketing strategies (*funded by round 2 of MCTA grant*). **Met.**

The findings from this project have been disseminated in multiple ways:

- First, preliminary results were presented at the IUFRO International Christmas Tree Research and Extension Conference in North Carolina on June 8th, 2026.
- Second, this work has been presented to growers in Michigan at the 2026 MCTA Summer Meeting.
- Third, this grant report is paired with a practitioner report for consumption by growers and retailers.
- Fourth, using results from the focus groups and survey, we created a website for MCTA members. This interactive website allows growers to work at their own pace, think through their marketing goals, and seeks to incorporate major findings (e.g., ways to reduce friction for individuals and families visiting Christmas tree growers for the first time, potential messaging themes around “supporting local,” the importance of search engine optimization and how that has changed in an age of AI, which age demographics might be more helpful to target than others, etc.). That website can be accessed at evergreengrowthmi.org. This website was disseminated at our presentation during the summer meeting of the Michigan Christmas Tree Association.
- Finally, the authors expect to write for the Great Lakes Christmas Tree Journal about the findings in order to reach the broader region.

A Note on Interpreting the Findings of this Report

It is worth noting that this is a social science study. We are dealing with individuals who are self-reporting behaviors. This can lead to some messiness, and while the results we have reported here do have both reliability and validity, we want to underscore the importance of cautious interpretation. While social science research does identify truths, patterns, and behaviors of individuals, a weakness is that social science research often relies on self-reported data. In other words, participants describe their own behaviors to us, we, as researchers, do not observe that behavior “out in the wild.” Over time, researchers have found individuals may over or under report certain behaviors, to try to adhere to a more “idealized” version of themselves, or might report what they *wish* they did, rather than the true reality of their behavior.

The best practice is what Proctor and Gamble calls “shop along’s,” where researchers will go to the store (or, in this case, the Christmas tree farm) with the consumer. These studies, however, can be very difficult to recruit participants and are costly (both in terms of compensating the research participant, and the researcher’s time), yet are different in that they contain observational data. This allows for slightly stronger validity.

Our study is based on self-reported behavior, which means there is an inherent messiness in this data. While we have paid careful attention to both reliability and validity, we did want to draw this to the reader's attention.

Finally, we also have a word of caution around interpreting results. While first conducting focus groups to gain a better, deeper understanding is the best method to inform the creation of a survey, and does have real implications for growers, these focus groups used a rather limited data set of participants living in the State of Michigan. We would encourage growers, and those reading this report, to be sure to consider both the focus group and survey findings, as well as to read the discussion and practical implications.

These practices are especially important given the draw of trying to interpret single quotes from the focus groups without the broader context of the conversations that led to the themes identified in this report. This allows for a fuller picture, and allows growers and retailers to make more informed decisions without overly interpreting this data. For this reason, **the focus groups in this report are presented as the groundwork that shaped the survey rather than as standalone findings, and the survey results should be read as the primary, generalizable test of the themes those conversations raised.**

Report Structure

This report opens with the study's background and the prior research that motivated it. The methodology that follows describes focus groups that generated consumer themes which were then used for the following section, the statewide survey. The results section profiles Michigan's tree buyers, identifies what distinguishes artificial-tree buyers who are open to a real tree, and details how real-tree buyers shop. The report then draws these findings into a set of practical, grower- and retailer-facing implications, followed by directions for future work. Readers who want the bottom-line recommendations can turn directly to the Implications.

We have also included several appendices. Appendix A contains a selection of quotes related to each of the themes identified in the focus groups, Appendix B contains the practitioner report and Appendix C contains the PowerPoint shared at the 2026 MCTA Summer Meeting, and focuses heavily on the key findings and implications of this study. Someone who is looking for key takeaways would be best served by skipping directly to Appendix A, the practitioner report and or Appendix c, the presentation of the results.

1. Background and Study Purpose

Christmas tree growers and retailers face challenges in understanding their current consumers, potential consumers, and the marketing work involved. Due to the short selling cycle and the seasonal nature of the industry, there are limited opportunities to connect with consumers which can reduce the information that a grower or retailer has access to about their consumers. Additionally, the seasonal nature means that the development cycle of marketing initiatives is functionally limited to one chance a year to see a return. The combination of these two pieces

increases the value of more systematic data on consumers to help better target marketing and increase the likelihood of success.

The 1980s and the 1990s saw a focus on consumer characteristics, especially perceptions of real versus artificial trees (e.g., Hamlett et al., 1989; Hildebrandt, 1991). Hamlett et al. (1989) modeled certain consumer characteristics and how those may predict those who are more likely to display real trees. They find that people who are Christian, practice other secular Christmas observances, have children, and stay at home for Christmas are more likely to display a Christmas tree, either real or artificial, and that people who are younger, white, have higher incomes, and live in a single-family dwelling are more likely to display a real tree. A number of these factors are further supported by work looking at market demand elasticities (Davis & Wohlgenant, 1993). Furthermore, Hildebrandt (1991) finds that appearance and longevity are key motivating factors for consumers to purchase artificial trees.

Florkowski and Lindstrom (1995) look at consumer perceptions of live trees and find that, in general, respondents to their survey prefer live trees but there are certain aspects of live trees that present trade-offs which consumers factor into their decision around live versus artificial. For example, more respondents are concerned about the perceived messiness of live trees. This is one of the core areas that consumers continue to talk about when considering a choice between a real tree and an artificial tree in their home, a concern echoed in the focus groups conducted for this study (see Section 2.1). Florkowski and Lindstrom (1995) also find that key perception differences may be able to be explained through basic demographics, suggesting that retailers may be able to rely on noticeable characteristics rather than less observable characteristics like education or income. This leads the authors to point out opportunities for specialized services, like delivery and clean up, to meet the needs of some niche customers.

Work from around this time also focuses a lot on the characteristics of the tree itself. Florkowski et al. (1992) find that consumers of choose-and-cut Christmas trees have strong preferences regarding the shape, density, and height of the tree. From their work, they provided recommendations to growers like focusing on shearing to improve the shape and density of the trees being sold on choose-and-cut farms. Outside of general tree shape, Davis (1993) breaks consumer preferences down further by looking at the species of tree that the consumer is interested in and then evaluating how much the consumer cares about the shape characteristics of the tree. One of the core findings of this work is that more knowledgeable consumers, in relation to tree species, are willing to pay more, suggesting that educating consumers may be of particular interest to sellers.

Extending on some of the prior work's focus on specific consumer characteristics and the potential challenges for the marketing of real trees, Behe et al. (2005) look at the potential for marketing table-top Christmas trees. They find consumers valued the species of tree the most, followed by decoration and/or color, with price coming in last. While the importance of price varied by age the results of their work suggest the potential revenue generator that table-top Christmas trees could be.

Outside of consumer characteristics there has been some work looking at channels for reaching consumers. Hinson et al. (1992) look at the potential of local advertising through a TV spot and a flyer. The authors found a relatively low number of consumers influenced by their campaign overall but did find specific pieces to be potentially effective. Both promotional activities resulted in more diverse consumers. Additionally, the authors found that their flyer, which included a map and coupon, promoted shopping closer to home based on the map, while the TV ad may have enticed customers to drive further to find one of the program's farms. There are more discussions of channels that take place in state and regional association meetings but there remains limited scholarly research in this area.

Larson's (2004) work directly addresses the 4P's from marketing, product, price, place, and promotion. Larson's work integrates a lot of the prior marketing research around Christmas trees and provides specific recommendations to sellers. Pulling from research on consumer behavior and Christmas trees, Larson suggests a range of strategies around the product by tagging trees with harvest dates and putting up signs suggesting there are limits to the number of trees each family can have. For pricing, Larson encourages sellers to consider the quality signals that come from price choices as well as how raising or lowering prices can be handled. Promotion tactics range from donation opportunities to the use of signage. Larson makes strong recommendations for place by cautioning growers to be careful about retail outlets to partner with by making sure they can add value for consumers. Additionally, sellers should consider the layout and atmosphere of the location where consumers are purchasing the trees.

One of the more recent publications in Christmas tree marketing is from Pierskalla et al. (2023, 2024) and looks at the role of real trees versus artificial trees on restorative quality (recovery from mental fatigue). Integrating work on the benefits of being in nature on health and well-being, the authors show that real/outdoor tree displays have a higher restorative quality compared to artificial/indoor tree displays, especially for consumers who did not have a tree, either real or artificial, in their home. This work adds to the literature that looks at the role of atmosphere and experience in Christmas tree purchasing.

Beyond this tree-specific work, a broader body of consumer-behavior research helps explain why such preferences initially form, and ultimately persist. Marketers face a challenge in understanding how to effectively appeal to consumers with wildly different preferences. The challenge is compounded by the fact that consumers are not logical. Instead, research finds consumer emotions play a major role in consumer acts: feelings, senses, dreams, and fantasies that consumers seek to satisfy through consumption (Holbrook & Hirschman, 1982) often drive consumer preferences and behaviors. More specifically, while the function of a product/service matter to a consumer (i.e., how a product works, what benefits it provides, what problems the product/service solves), consumers want an "extraordinary experience" (McCole, 2004); one that is pleasing, creative, social (Schmitt, 1999), and absorbing (Holbrook, 2000). As Triantafyllidou and Siomkos (2014) put it, consumers want a "memorable experience that they can share later with their significant others" (p. 526).

Using nostalgia is one way in which marketers can try to influence consumer behavior. Nostalgia is defined as having preferences for things or experiences that were more common when one was younger (Holbrook & Schindler, 1991). Nostalgia is manifested through marketing stimuli that arise from people's internal memory and the feelings derived from cognitive responses (attitudes), followed by a particular behavioral reaction (a purchase).

One review of nostalgia in the literature argues that nostalgia has emerged as an effective strategy for reinforcing the positioning of *established* brands (Heinberg et al., 2019). A different strand of literature found early preferences from childhood and young adulthood play a significant role in determining subsequent preferences. For example, popular music preferences one has as a late teenager or early twenties is predictive of a lifelong attachment to that style of music (Holbrook & Schindler, 1989), or the type of car style one grew up with is predictive of the car aesthetic one likes later in life (Holbrook & Schindler, 2003). The movie stars and films of one's childhood impact lifelong film preferences (Holbrook & Schindler, 1994, 1996). Like imprinting (Lorenz, 1951) or early learning (Bornstein, 1989), nostalgia impacts consumer tastes.

In the management literature, there is an interesting strand of research that can tap into customer service as a way to activate a consumer's nostalgia. A strong customer experience orientation creates value for companies (Gentile et al., 2007), as experience-based consumer experiences affect consumers' memories (Pine & Gilmore, 1998), satisfaction (Mascarenhas et al., 2006) and future behavioral intentions (Lacher & Mizerski, 1994). This can ultimately develop a unique competitive advantage for a business (Tsaor et al., 2007).

Taken together, this body of work spans consumer characteristics, product characteristics, and perceptions of real versus artificial trees, alongside the emotional and experiential drivers reviewed above. Two gaps remain. First, much of this research is now dated, even as pressure on the industry from artificial trees has grown and the core demographics have shifted, and few studies have examined practical cost-return questions on the farm. Two notable exceptions to this are Vukina et al.'s (2001) work, modeling real-tree prices on a per-tree or per-foot basis against the opportunity cost of waiting another year to sell, and Pierskalla et al.'s (2023) study conducting a conjoint analysis comparing price, species, height, and product (real vs. artificial), helping inform growers and retailers about the trade-offs around those core attributes.

The second gap, and perhaps most relevant here, is a lack of a current, statewide behavioral and attitudinal profile of Michigan consumers.

The following section outlines the methodology we used to construct a profile of Michigan consumers, and attempt to fill these gaps, both theoretically and practically for growers.

2. Methodology

2.1 Focus groups

Best practices in survey research recommend using focus groups or other primary data collection sources to inform the creation of the survey instrument itself. Prior to receiving this grant from the MCTA, we conducted a series of informational interviews with growers throughout the state of Michigan. From these informational interviews, we developed a 60-minute focus group protocol, focused on three main areas: 1) an individual's history with Christmas trees; 2) how timing of advertisements and social media impacts Christmas tree purchases; and 3) the purchasing process of a Christmas tree. While we were particularly interested in drivers for live Christmas tree purchases, we did want to understand the drivers for artificial tree purchases, as well.

Eight focus groups were conducted in Southwest and Northern Michigan during the winter, spring, and summer of 2025. There were 32 participants, aged from 19 to 83 years old. Approximately 70% of participants were female, and 30% were male. The average and median ages of the participants were 57 and 62, respectively. The average length of each focus group was approximately 50 minutes.

Recordings of the eight focus groups were transcribed. Then, the transcripts were used to identify dominant or recurring themes of conversation, using Owen's (1984) criteria of repetition, recurrence, and forcefulness. In other words, we were looking for repeated patterns or phrases, similar stories, or "buckets" in which participant comments might fall. If a participant mentioned something with a louder tone of voice, used a particularly strong inflection, or another focus group participant agreed with a participant, this would be an example of forcefulness, and would be noted in our raw data, which informs our overall findings.

After coding these focus groups individually, researchers met to discuss similarities, differences, and settle on themes. Differences were discussed at length, and a mutually agreed upon theme was settled, only after significant discussion, returning to the data, recoding using agreed-upon themes, and additional discussion.

Our focus groups found consumers often spoke about four topics, when asked about their/their family's Christmas tree purchasing behavior: nostalgia, family tradition-building, the pain points of live trees, and a cost vs. experience value assessment. Each theme is described briefly below, with one or two quotations that do a good job representing a snippet of the overall qualitative information that went into each theme.

Nostalgia. Focus group participants often shared stories around a backward-looking nostalgia, rooted in childhood memories, that served as a powerful driver of their adult preferences for live trees. We define backwards nostalgia as the influence of previous experiences, typically from childhood (but possibly also experiences from midlife for an older person). Participants in all of the focus groups described how the emotions and memories of past Christmas tree purchasing

experiences shaped their current preferences. For example, participants said, "I think there's just a lot of nostalgia for us, traditions. It's been good feelings, and it's associated with the holiday." A different participant said, "I think probably what influenced me more was the house I grew up in didn't have a real tree, and I wanted one. Like I would think that's probably more, and that's, yeah, that's probably more what it is. And I would say [my husband] always had a real tree, and so he always wanted a real tree."

Tradition. A second theme was that of tradition. This is categorized as a response that highlighted the importance of family experience, creating family memories, passing down experiences to children, and the general importance of creating a memorable experience for children moving forward. This theme was extremely important to many participants, especially participants who also mentioned looking back on the memories they had created with children, and passing them on as a part of family history. Ultimately, this theme focused on the act of creating a tradition, family memories, or experience for children.

"I'm thinking of one year in particular where we were with the kids chopping down this tree, and it was snowing, and I said, this is like a hallmark. It was. So, I think that experience of picking out a tree, especially with a family, and listening to your stories, those are memories that you don't forget. The kids don't forget, you know. And I think that there's some kind of a sentimental activity that goes on and probably clouds your judgment."

Perceptions. A third, somewhat unexpected theme that emerged in the focus groups was the issue of the inconvenience and hassle of having a live Christmas tree. Many participants expressed their concern with the amount of time and effort required to purchase a live Christmas tree. Many discussed the length of time necessary to drive to a lot, find a suitable tree, cut down the tree, load and transport the tree, and unload and set up the tree at home. Many also described their pain points with the disposal of the Christmas tree. Of particular importance, more often than not, inconvenience themes were described jointly with the individual's age. This theme includes any quotes around extra time or effort spent to display a live Christmas tree above the time and effort required to display an artificial tree.

"The thing that will change that is your body. It happens, whether you like it or not, and that probably was one of the deciding factors. It's like, do we really want to go by ourselves and go and drag this tree around, and it's heavy? And, you know, I think the little one that we put up this year, he took it out of this bag thing and put it up, and it was all done. All we had to do was put a few ornaments on, and we were done, because the lights are already on it, and it was a matter of putting it on the table."

Cost vs. Experience. This final theme we found in our focus groups flagged mentions of the price of a live Christmas tree and the perceived benefits of having a live Christmas tree. Many participants brought up specific qualities that they preferred in a live Christmas tree, as well as the extra services and amenities that they believed added value to their purchase.

Most often, participants discussed the smell of a live Christmas tree, specific varieties and species, shape and color, extra services offered at the farm, and the price they were willing to pay for those attributes.

"I do love the smell. And you mentioned how firs are so much softer. Like, a fake tree is like, it's like tinsel, it's like plasticky. It's not great, but a real, a live tree is, it's a textural, like sensory experience"

2.2 Instrument development

The second core component of the project was to conduct a statewide survey in Michigan to better understand Christmas tree consumers. Prior work in the area has tended to focus on baseline consumer characteristics and desirability of certain tree characteristics (Florkowski et al., 1992; Florkowski & Lindstrom, 1995; Larson, 2004). The instrument itself was developed based on the themes identified from the focus groups and prior literature in the area of Christmas tree consumer.

The four themes identified by the focus groups and described above were treated as starting points to be tested, not as conclusions. Each represented something Michigan consumers told us mattered to them, and the survey we deployed state-wide was designed to measure each theme across a larger, more representative sample.

This distinction is very important: the survey results and analysis provide growers with more generalizable findings than the focus groups. This is because a sentiment that might be particularly vivid in a small set of conversations or a focus group setting does not always hold across a larger sample when asking participants about their habits and behaviors. In other words, while the focus groups can provide additional data or context for growers, we'd highly encourage any actions or changes growers might consider to be done based on the survey results.

The survey asked participants about the following topic areas (listed in order):

1. A baseline set of four questions about participants celebration of Christmas and tree habits
2. Three questions about if participants had an artificial tree most recently, including where they got it, how much they spent, and the barriers they have for incorporating a real tree
3. Nine questions about if participants had a real tree most recently, including where they got the real tree, how they discovered that purchasing location, travel time to the real tree, who they were with, how long they were there, how much they spent, what else they purchased, when they bought the live tree, and when they wanted to buy their live tree
4. One question on participant satisfaction with their most recent tree, and a set of seven questions on their attitudes about artificial vs. real trees
5. Six questions on their plans and what influences them including who drives the decision, what they grew up with, what they want to do next year, if this is the first real tree they have had, and if they have switched trees before
6. Eight questions on their consumer values around buying local, spending time outdoors, etc.
7. Two scales assessing nostalgia.

- a. First, Newman et al. (2020) built the Personal Inventory of Nostalgic Experiences (PINE) scale which comprises four items: “how nostalgic do you feel”, “to what extent do you feel sentimental for the past”, “how much do you feel a wistful affection for the past”, and “to what extent do you feel a longing to return to a former time in your life,” all rated on a scale of 1–10 and combined into an average score variable.
 - b. Second, Holak and Havlena (1998), built a nostalgia scale that we modified to the Christmas tree context where participants were asked to reflect on the last time they displayed a Christmas tree in their home and then rate their agreement with the following statements on a scale of 1–5, “I felt a longing for the past experience”, “the experience is highly nostalgic”, “the experience is a very gratifying one for me”, and “I have little desire to re-experience the past” (reverse coded).
8. The importance of a range of purchase issues including 1) nine questions on tree factors (shape, size, density, aroma, etc.), 2) 15 questions for on-site factors (services like loading help, shaking, bailing, knowledgeable staff, care information, activities, etc.), 3) eight questions on post-purchase factors (ease of care, disposal, setup, etc.), and 4) six questions on experience factors (building family traditions, ambiance, kids wanting it, etc.)
 9. 13 demographic questions like age, gender, income, religion, residence type, children, living situation (who and where), and location.

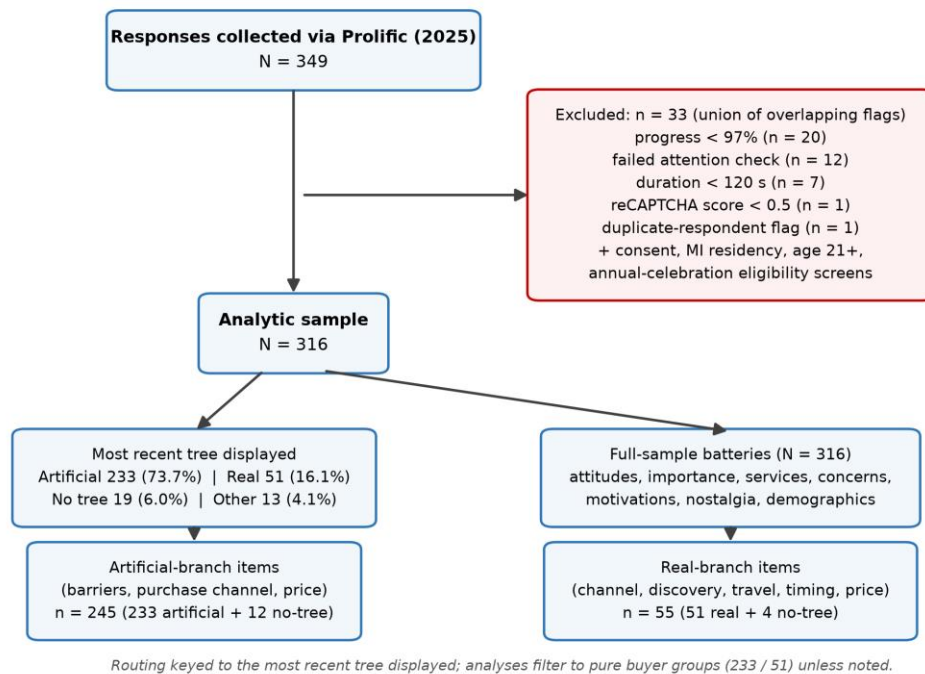


Figure 1. Sample derivation and instrument branching.

2.3 Sampling, data collection, and quality screening

Participants were recruited through Prolific, an online research panel that is commonly used in survey research. We partnered with the Frost Research Center at Hope College to use this

platform and recruit participants. The survey was disseminated to statewide consumers between November 18th and November 27th, 2025. As a majority of buyers start their purchase of real trees just after Thanksgiving, this timing was chosen to coincide with the start of the tree-buying season when consumers are likely to be solidifying their plans. Participants were recruited on Prolific based on meeting the following criteria: current Michigan resident, aged 21 or older, and celebrate Christmas annually. Informed consent was received from all participants. Participants were compensated through the Prolific platform and the study was approved by Hope College's Human Subjects Review Board (HSRB #25-015).

A total of 349 responses were collected during the time the survey was available. Five screening criteria were used to improve the quality of the sample and any one of the five would trigger removal from the sample. They included the following criteria followed by the number of responses that violated each (responses may fail multiple meaning that the total differs from the sum of failures): progress of less than 97% (20), an attention check where they needed to select "Wednesday" (12), Duration of less than 120 seconds (7), a Qualtrics reCAPTCHA score of less than 0.5 (1) and the Qualtrics duplicate-respondent flag (1). In total 33 responses were flagged and their removal results in a final sample size of 316.

2.4 Data analysis

All of the analyses for this project were conducted in Stata and include: variable construction and screening, descriptive statistics, cross-tabs and statistical comparisons between variables, modeling of the association of key variables (including a bootstrapped robustness check), mediation analysis, and an exploratory cluster analysis. Where possible, effort has been taken to acknowledge cell size limitations.

3. Results and Discussion

3.1 Sample profile

- **The sample celebrates Christmas, are Michigan residents, and the sample skews female and suburban (See Table 1).**
 - A plurality of participants were in their 30s and 40s with only 13% over the age of 60, underrepresenting the older population in Michigan where 20.5% of the population is over 65 (*U.S. Census Bureau*, n.d.). The sample also skews female (63.6% Michigander sample vs. 50.7% female Michiganders) and white (81.3% Michigander sample vs. 76.9% white Michiganders; (*U.S. Census Bureau*, n.d.).
 - The median combined household income band in our sample is \$60,000–\$79,999 (310 responses) and the median household income in Michigan is \$72,875.
 - The percent of participants in our sample who reported having a bachelor's degree or higher is 49.7% compared to 32.4% in Michigan (*U.S. Census Bureau*, n.d.). The analysis does not include any weighting of the sample based on demographics.

Table 1. Socio-demographics of the analytic sample (N = 316).

Characteristic	n	Percent
Age		
21–29	47	14.9
30–39	89	28.2
40–49	74	23.4
50–59	65	20.6
60–69	29	9.2
70–79	11	3.5
80+	1	0.3
Gender		
Female	201	63.6
Male	107	33.9
Non-binary / other	8	2.5
Race		
White	257	81.3
Black or African American	37	11.7
Other	22	6.9
Education		
High school or less	35	11.1
Some college	77	24.4
Associate degree	47	14.9
Bachelor's degree	116	36.7
Graduate degree	41	13.0
Residence type (self-reported; no missing)		
Suburb near a large city	147	46.5
Small city or town	78	24.7
Rural area	54	17.1
Large city	37	11.7

Characteristic	n	Percent
Household		
Married	162	51.3
Owns home	224	70.9
Rents	71	22.5
Children at home	152	48.1
Identifies with a Christian tradition	177	56.0

3.2 Market structure: tree types, plans, and loyalty

- The market in Michigan is dominated by artificial-tree households:** 73.7% of participants displayed an artificial tree the prior year, while only 16.1% displaying a real tree. Of those who displayed an artificial tree, 45.1% have been doing that for at least 15 years, while 36.9% and 18.0% have been doing that for 5–15 years or less than 5 years respectively. Of those who displayed a real tree 43.1%, 33.3%, and 23.5% have done so for greater than 15 years, 5-15 years, or less than 5 years respectively (these are not statistically different; $\chi^2(2) = 0.85$, $p = .654$). **Overall, this means that over 78% of participants have followed their same tree display behavior for at least 5 years.** This display behavior is also independent from age meaning that it doesn't change when we look at older participants compared to younger ones ($\chi^2(12) = 10.73$, $p = .552$).
- Intention to change is small and lopsided:** The prior year display choice predicts the plan for next year almost perfectly ($\chi^2(1) = 203.0$, $p < .001$; $N = 256$ with defined plans). Among those who displayed artificial trees 1.4% plan to switch to real while among those who displayed real trees, 11.1% plan to switch to artificial. While the number of participants who displayed a real tree and are planning to switch is a small sample ($n = 5$) this is still suggestive of a concern around consumer retention. While the number who say they are planning to switch to an artificial tree is small ($n = 5$), none of them are participants who have had a real tree for greater than 15 years. **Overall, only 2.5% of the participants plan to switch, highlighting that with this sample switching appears to be relatively rare.**
- Consumer Segments:** A categorical variable was constructed that looked at the different segments of participants based on their last years' decision and plan for next year. These were:
 - Loyal Artificial / Loyal Real: Members have the same tree last year, and plan
 - Considering Real: Artificial now, planning real next year
 - Considering Art: Real now, planning artificial next year
 - Flexible/Dual: Anyone planning both types next year, regardless of last year's type

- Undecided/No Tree: no defined plan, or a combination that doesn't fit into the other categories (e.g., no tree last year and no tree planned)
- **Real Christmas tree experience is widespread but adult purchasing experience is not.** A set of variables was constructed to understand prior experience with a real Christmas tree. The first of these variables look at whether someone answered questions that showed they have ever displayed a real tree. This is someone who either said they had a real tree last year, the last time they did display a tree it was real (for participants who didn't display a tree last year), they had a real tree as a kid, or they reported that they have switched between artificial and real at some point. This variable shows that 67.7% of the sample has had a real tree at some point. However, we also constructed a variable that works to show how many have had a real tree as an adult. This was done by looking at those who displayed a real tree last year, didn't display a tree last year but the previous time they did it was real, participants who say they switched but excluding those who had a real tree as a kid and had an artificial tree last year. This gives a conservative estimate for adult-only participants, and results in only 33.5% of the sample having a purchasing experience with a real tree as an adult.

For those who displayed an artificial tree last year 59.2% have had a real tree at some point and 14.6% have had a real tree as an adult (note that, by definition, those who displayed a real tree last year have both overall and adult experience with a real tree).

Additionally, for the loyal artificial consumer segment, only 13.9% have adult real-tree experience which is statistically distinct from the flexible/dual or undecided/no tree groups (50.0% and 52.6% with contrasts of .36, CI [.13, .59] and .39, CI [.21, .57] respectively). Participants who are currently committed to artificial trees are statistically less likely to have any adult real-tree experience than those who are flexible, undecided, or not doing a tree.

Table 2. Most recent tree displayed, next-season plan, and consumer segments (N = 316).

	n	Percent
Most recent tree displayed		
Artificial	233	73.7
Real	51	16.1
No tree	19	6.0
Other / non-traditional	13	4.1
Next-season plan		
Artificial only	221	69.9
Real only	44	13.9
Both real and artificial	22	7.0

	n	Percent
No tree / unsure	29	9.2
Consumer segment		
Loyal Artificial	208	65.8
Loyal Real	40	12.7
Undecided / No-Tree	38	12.0
Flexible / Dual	22	7.0
Considering Artificial	5	1.6
Considering Real	3	0.9

Note: The two "Considering" segments are below any inference threshold and are used descriptively only.

3.3 The openness–intention gap

- Open to a real Christmas tree vs. planning to get a real Christmas tree.** All survey participants were asked to rate their agreement with the statement “I am willing to purchase a real Christmas tree.” Figure 2 shows the breakdown of responses on this variable for the full sample as well as the artificial buyer sample only. A variable was created from those who responded “agree” or “strongly agree” to represent an openness to getting a real tree. 44.3% of the full sample are open to purchasing a real tree while 35.6% of the artificial sample is open to this. A key part of this is that while 35.6% of the artificial sample are open to a real tree, only 1.3% of them actually plan to get a real tree only next year. Among those open to a real tree, 16.9% plan to display some combination that includes a real tree next year (14 of 83); across all artificial buyers that is 6.0%. **This conversion gap is one of the core findings from this survey. While openness predicts planning ($\chi^2(1) = 20.16$, $p < .001$; Fisher's exact $p < .001$), openness represents an attitudinal openness but not a conversion prediction.** In other words, openness can represent a potential reachable market of 44.3%, and there is a potential market in 35.6% of current artificial tree displayers to target to convert to real Christmas trees.

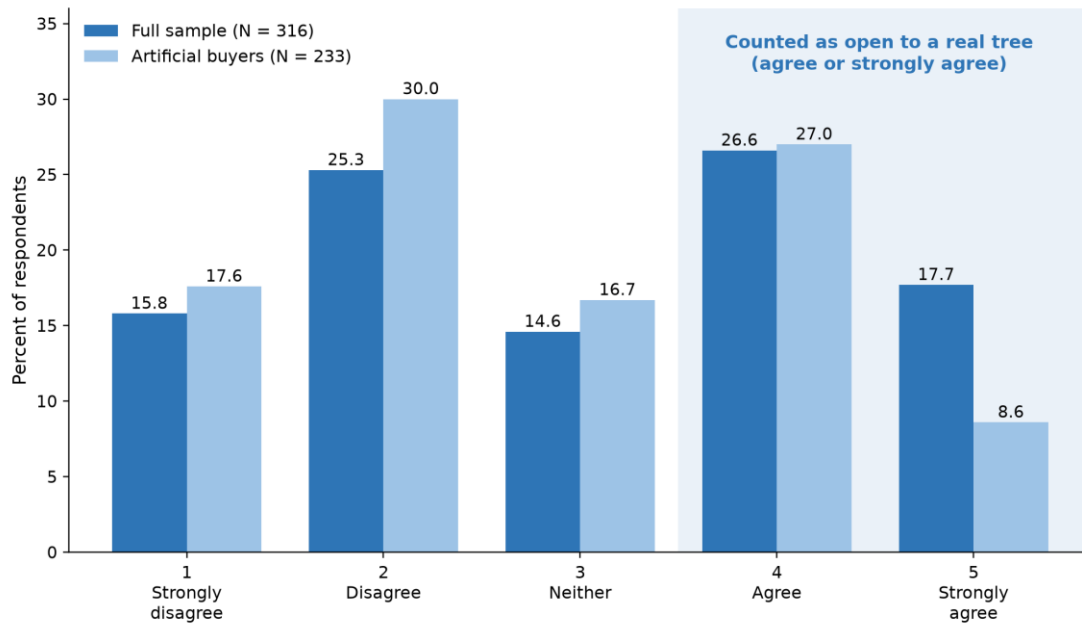


Figure 2. Distribution of the openness item, full sample and artificial buyers, with the ≥ 4 openness cut.

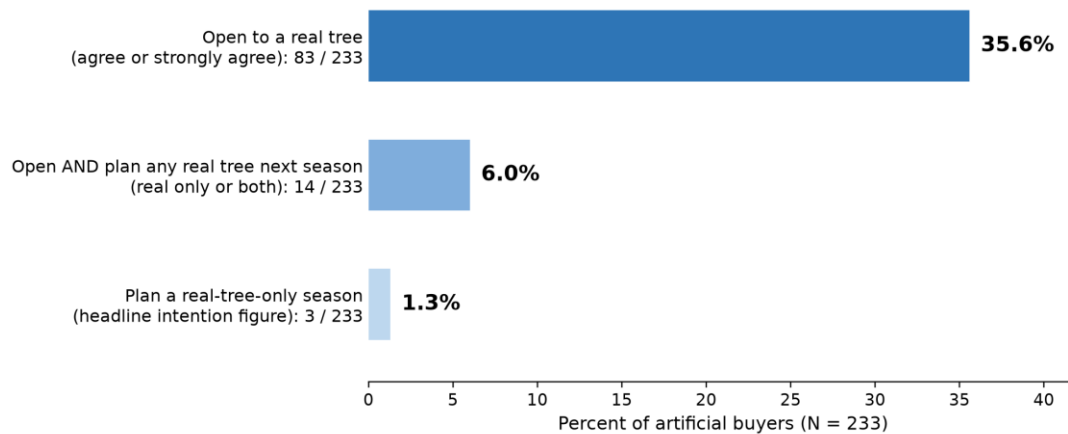


Figure 3. The openness–intention gap among artificial buyers.

- Openness variable behavior.** As a check on the openness variable every attitude question from the survey was correlated with the continuous question to see if it followed conceptual expectations. The table below highlights the expected sign, the correlation, and the p-value for each. All of the signs are as expected and the strength of the correlation is also in line with expectations. The strongest correlation is for the statement “real trees are better overall,” which would be expected to have a high correlation with someone’s willingness to purchase a real tree.

Table 3. Construct validity: correlations of the openness item with the attitude battery (artificial buyers).

Attitude item	Expected sign	r	p
Real trees are better overall	+	+0.43	<.001
Too much work to get a real tree	–	–0.41	<.001
Too much work to maintain a real tree	–	–0.41	<.001
Artificial is a good deal	–	–0.28	<.001
Artificial is easier overall	–	–0.26	<.001
Real trees cost too much	–	–0.15	.018

3.4 What separates the open from the rest

- **Modeling openness based on key variables.** A dichotomous openness variable was built from the responses to the level of agreement with the statement “I am willing to purchase a real Christmas tree.” Those who responded in the affirmative (4 or 5) were coded as 1 and those who were neutral or negative (1–3) were coded as 0. This was then used to model key drivers of openness in an effort to understand what consumer characteristics are associated with the potential “open to convert” market of the 35.6% of artificial buyers. This allows us to work towards a model that looks at the relationship between key variables in the survey and someone’s openness to a real tree.

This analysis worked through multiple stages in order to build confidence in the final variable selection. First, batteries of variables were tested against openness in simple bivariate comparisons. Within-battery comparisons were done to try and identify the key variables that were driving the relationship with openness.

Second, only variables that survived these comparisons were carried forward to inclusion in the multivariate logistic regression, where they are tested jointly, meaning they consider the other variables in the model. Finally, extended models were reviewed that included other key variables based on either statistical result or conceptual importance and robustness tests were run to stress test both variable selection as well as the model overall. More information on each of these pieces is in the next section of the report.

- **Five variables and their relationship to artificial user openness.** The primary model in this report is a binary logistic regression, looking at the openness of the 233 artificial buyers in the sample (robust standard errors; McFadden pseudo- $R^2 = .274$; AIC = 232.4, BIC = 253.1). Table 4 shows the results for the analysis and includes the average marginal effect (AME) that is calculated for each. These can be read as the estimated change in the probability of being open, in percentage points, associated with a one-unit increase in the predictor, while holding all other model variables constant.

The high-level findings from the binary logistic regression is that there are:

- Attitudinal/messaging levers (buy-local orientation, experiential nostalgia, and realness importance as beliefs that may be able to be activated);
- Structural levers (setup difficulty as a product or service opportunity); and
- One fixed audience constraint in the age 60+ cliff.

Each of these is discussed in more detail below.

Table 4. Primary logistic regression model of openness (artificial buyers, N = 233; robust SEs; pseudo- $R^2 = .274$).

Predictor	AME	z	p	95% CI
Buy-local orientation (per point, 1–5)	+13.5 pp	3.08	.002	[+4.9, +22.1]
Realness importance (per point, 1–5)	+12.4 pp	6.36	<.001	[+8.5, +16.2]
Experiential nostalgia (per point, 1–5)	+9.7 pp	2.67	.008	[+2.6, +16.8]
Age 60+ (0/1)	-45.4 pp	-4.35	<.001	[-65.9, -24.9]
Setup named as a barrier (0/1)	-21.6 pp	-4.72	<.001	[-30.6, -12.7]

Note: AME = average marginal effect on the probability of being open, in percentage points.

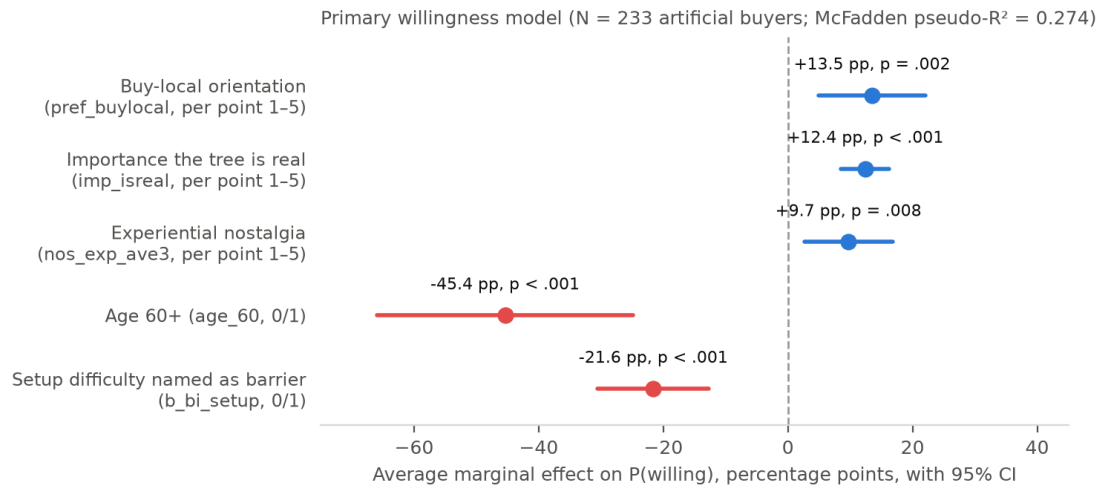


Figure 4. Primary openness model: average marginal effects with 95% CIs.

- **Buy-local orientation marks *general* openness to change, with a caveat.** An orientation towards buying local products isn't one that is restricted to the Christmas tree experience, and can be seen as a broader value held by a consumer. That being the case, the results suggest that this is relevant for openness to purchasing a real tree and, as such, can be a source of messaging for a marketing initiative.

Further analysis was done on this phenomenon to try and understand how a buy-local orientation related to switching proneness overall. A buy-local orientation is also the variable from this set of five that is most consistently linked to behavioral history of switching. This holds across ways of operationalizing history and different model specifications. A bivariate logistic regression shows buy-local orientation is related to ever having switched tree type in the full sample (N = 315; AME = +16.3 pp, 95% CI [8.6, 24.0], z = 4.15, p < .001), and an almost identical effect emerges with the broader measure of confirmed adult real-tree experience (N = 316; AME = +16.1 pp, 95% CI [8.5, 23.7], z = 4.17, p < .001).

The further analysis has important potential implications for marketing action. First, it may help identify a more persuadable audience as the results suggest that buy-local orientation is already associated with actual switching behavior in the past. This is a unique factor when compared with the other four variables in this model. The buy-local orientation is also something that provides potential targeting options outside of the Christmas tree context. For example, co-marketing with farmers markets or other 'local' businesses and campaigns could be a way to target potential real Christmas tree consumers. An important caveat with this is that the further analysis shows that this is direction neutral. In other words, it doesn't only relate to switching to a real tree, but also away from real trees to artificial trees. This suggests that buy-local orientation may be a good way to identify a target group but it is likely that more is needed when trying to get conversion from an artificial to real Christmas tree.

- **Authenticity as an attitudinal lever (and how that relates to aroma).** Participants rated the importance of a real Christmas tree, asked alongside a set of questions on preferences around their Christmas tree. This “realness” measure was tested alongside other attitudinal factors and was screened for inclusion in the model. Interestingly 47.9% of respondents who rate realness/authenticity highly are current artificial buyers.

Importantly, authenticity is distinct from openness in a few key ways. First, of artificial buyers who rate it highly, 47.8% are still not open to a real tree. Additionally, authenticity only correlates moderately with the openness measure at $r = .38$. It is one of the more stable variables in the model. Both of these pieces suggest that saying “realness of your tree matters” is not the same as a consumer being open to a real tree.

While targeting consumers who value authenticity likely isn’t a great variable for developing a targeting strategy, it is useful when thinking about the marketing messaging for growers and retail operations, and the potential to highlight the authenticity of a real Christmas tree. For example, a tagline like, “nothing compares to a real tree” could be an effective message.

The importance of aroma is well documented in prior research (Elder & Krishna, 2022; Krishna, 2012), which prompted a closer look at what aroma means for openness to a real Christmas tree when we are already looking at authenticity. Within the full sample, the importance of a Christmas tree being a real tree to consumers and the aroma of a real Christmas tree are correlated ($r = .515$, $p < .001$), but not at a level typically associated with construct overlap.

When running an identical multivariate logistic regression as the above section, but replacing “real importance” with “aroma,” we found that aroma is meaningful by itself (AME = +8.7 pp, $z = 4.25$, $p < .001$). However, this aroma-based model is outperformed by the original model, which achieves both a higher pseudo- R^2 (.274 vs. .224) and superior information criteria (AIC = 232.37 vs. 247.64; BIC = 253.07 vs. 268.34; $\Delta BIC \approx 15.3$: “very strong” evidence on the Kass–Raftery scale; Kass & Raftery, 1995). Furthermore, when running the logistic regression model with aroma *and* realness/authenticity, aroma loses its significance (AME = +2.7 pp, $z = 1.14$, $p = .256$) and the addition of the variable does not have a positive impact on the model when looking at comparisons (pseudo- R^2 gains only .004; BIC worsens from 253.07 to 257.37, $\Delta BIC \approx 4.3$: “positive” evidence favoring exclusion).

Additionally, two process based models were looked at (moderation and mediation models), to try and understand the way that aroma and realness/authenticity relate. A continuous interaction term showed no evidence of a moderation effect ($b = -0.13$, $SE = 0.11$, $z = -1.21$, $p = .225$). When looking at a potential path for aroma and the importance of real trees on openness to a real Christmas tree, a gsem path model (with the indirect effect estimated as the product of paths and tested by the delta method; Sobel, 1982) found no support for a

difference between the two when looking at a mediation process through nostalgia (aroma/real importance → nostalgia → openness). Neither of them work through this process, but we also see that aroma has a null direct effect on openness ($b = 0.199$, $z = 1.24$, $p = .214$) while real importance does have a direct effect on openness ($b = 0.688$, $z = 3.86$, $p < .001$). This is evidence that the realness/authenticity of a real Christmas tree construct is more robust than aroma alone.

The above tests all show similar results around the relationship between aroma and realness/authenticity: aroma performs worse than realness/authenticity importance when substituted into the primary model, adds nothing when included alongside it, and shows nothing in the moderation and mediation tests.

For growers and retailers, the practical implication is that if a marketing campaign leads with an emotional hook, it is likely stronger to use authenticity ("nothing compares to the real thing"), instead of a sensory appeal ("real trees smell amazing"). These two messages look similar, but this study suggests that realness/authenticity has the potential to shift those who are open to a real tree into the behavior of actually purchasing a real tree. This also suggests that it is best to not rely on the sensory component of aroma on its own, and would be better to fold messaging about the scent of real Christmas trees into a message leading with authenticity.

There are two important qualifications on this finding. First, while the tests show that realness/authenticity is more consistent than aroma, both the size and nature of the sample mean that some caution is warranted and future research should look to further tease out the components of what makes a tree "real" or "authentic" for a customer, especially concerning aroma.

Second, the survey measures if someone says aroma matters, but not what actually smelling a real tree on a lot does to that person's purchase intention. Research in sensory-marketing on scent suggests that there are links between scent and memory (Krishna, 2012), which creates an interesting question around the intersection of realness/authenticity and scent when looking at purchase decisions when a real tree is involved. This may also help explain some of the differences found here when participants are asked about scent without the aroma of a tree present.

- **Nostalgia is real, broadly distributed, and not limited to childhood.** With the prevalence of nostalgia in marketing research (Brown, 2018; Dam et al., 2024) and the themes from the focus-group work, two different measures of nostalgia were employed in the survey, both detailed in Section 2.2: the PINE scale (Newman et al., 2020) and a Christmas-tree-adapted version of the Holak and Havlena (1998) scale. The PINE items combined into a reliable average ($\alpha = .90$; item means ranged from 5.97 "longing" to 6.73 "sentimental"; averaged

variable mean = 6.39, SD = 2.25). On the Holak and Havlena scale, the fourth, reverse-coded item had poor psychometric fit (item-rest correlation = .14, compared to .60–.71 for the other three) and lowered the scale's reliability (4-item α = .71 vs. 3-item α = .86). The fourth item was dropped, and the measure used is the mean of the remaining three items (α = .86; item means ranged from 3.47 "longing" to 3.85 "gratifying"; averaged variable mean = 3.71, SD = 0.92).

The two nostalgia scales are correlated, but are distinct both statistically (r = .67 full sample; r = .63 among artificial buyers) and conceptually, and were not combined into one measure. When running our analysis, the experiential nostalgia scale was selected as the model's nostalgia variable over the general (PINE) scale. Theoretically, it is product-specific as it asks participants to think about their most recent display experience, while PINE measures a more general nostalgic disposition. Empirically, real-tree buyers score meaningfully higher on experiential nostalgia than artificial buyers (4.06 vs. 3.67, p = .004) while these two groups are statistically indistinguishable for the PINE scale (6.73 vs. 6.37, p = .282). This pattern also holds when looking at openness directly. Experiential nostalgia correlates more strongly with openness to a real tree (r = .275, p < .001) compared to PINE (r = .166, p = .011).

Nostalgia's reach is broad and not just confined to a specific subgroup. Respondents who grew up with a real tree don't statistically differ in this sample from those who grew up with an artificial tree on both PINE (real 6.41 vs. artificial 6.38, Bonferroni CI [-0.59, 0.64]) and experiential nostalgia (real 3.73 vs. artificial 3.69, CI [-0.22, 0.29]). Additionally, having experience with a real tree only during one's childhood has an indistinguishable impact on the respondent's reported nostalgia (experiential: real 3.64 vs. artificial 3.64, CI [-0.30, 0.30]; PINE: real 6.39 vs. artificial 6.18, CI [-0.54, 0.96]). Neither scale varies by the tenure (under 5 years, 5–15 years, and over 15 years in the current practice) of the current practice among artificial buyers PINE (6.38 / 6.48 / 6.27, all Bonferroni pairs ns), and experiential nostalgia (3.74 / 3.78 / 3.55, all pairs ns, largest contrast over-15-years vs. 5–15-years CI [-0.53, 0.08]). The direction of those who switch also sees no difference (to-artificial vs. to-real switchers do not differ: p = .715 PINE, p = .225 experiential). Age shows no relationship with Bonferroni comparisons all being null on both scales.

We also tested whether adult real-tree experience moderates the relationship between nostalgia and openness and found that this interaction was not significant (p = .266). This does not mean adult experience is unrelated to nostalgia. In fact, a separate test finds that respondents with experience with a real-tree as an adult score significantly higher on experiential nostalgia than those without (p = .008; not significant on PINE, p = .097), but this adult experience does not appear to change how strongly nostalgia predicts openness specifically.

This null result may reflect limited power due to the small number of artificial buyers with adult real tree experience (n = 34), and the fact that the experiential nostalgia items reference

the respondent's most recent tree display. For lapsed buyers now owning artificial trees, this reflects their current artificial-tree experience rather than their earlier real-tree history. The one area where there is a difference is in the consumer segments where on experiential nostalgia loyal real buyers score highest (4.14), significantly above loyal artificial (3.69, CI [0.01, 0.90]) and undecided/no tree (3.31, CI [0.26, 1.41]), while PINE shows no segment differences at all. Overall, experiential nostalgia is a construct that is linked to current behavior and is not simply a proxy for age, tenure, or childhood history.

Practically, nostalgia is more broadly applicable for marketing messaging, rather than limiting marketing efforts that employ nostalgia to a single demographic group.

- **Age 60 as a significant drop off.** One of the key issues that came out of the focus groups was the impact of age on real Christmas tree purchase intention. In earlier focus groups, participants voiced a range of issues that might limit their interest. These issues included not having kids at home to take part in selecting and displaying a real tree, to challenges associated with living arrangements (for example, apartments with restrictions on live trees), or even basic concerns around setting up a tree.

At the same time, this older generation discussed their experiences with growing up in homes displaying real Christmas trees, and highlighted some of the pieces that tied into nostalgia and their preferences for real over artificial trees. When analyzing this sample, our first test broke the sample into those under 60 and those age 60+ to compare mean responses on the continuous “openness to a real tree” question. The mean for those under 60 was 3.20 vs. 2.07 for those age 60+ ($t(314) = 5.11, p < .0001$). When looking at the dichotomous openness variable, 49.1% of those under 60 said they were open to a real tree while 12.2% said the same in the age 60+ group ($\chi^2(1) = 19.7, p < .001$). When restricting this to artificial users only results in an openness of 39.0% for those under 60 and 10.7% for those 60+ ($\chi^2(1) = 8.61, p = .003$). Furthermore, when doing pairwise comparisons between all of the age bands in the sample every pair among the four under-60 bands is null (Bonferroni corrected), meaning there is no statistical difference between them while every pair comparing the 60-69 band to an under-60 band is significant. Pairs involving 70–79 and 80+ are null as well but that is likely due to low power with an N of 11 and 1 respectively. Out of the 41 respondents aged 60+ none of them selected “strongly agree” for willingness to try a real tree.

Based on the comments from the focus groups, additional analysis was conducted to try and understand what is the age impact vs. barrier perceptions or nostalgia. First, the full barrier set was looked at comparing those under 60 with the age 60+ group for artificial tree users. On all of the barriers around real trees (getting it, transporting it, setting it up, maintaining it, disposing of it, going to a farm, and the cost of it) there is no difference between the groups. Getting a real tree a real tree (49.3% vs. 50.0%, $\chi^2(1) = 0.01, p = .942$), transporting it (70.2% vs. 64.3%, $\chi^2(1) = 0.41, p = .521$), setting it up (56.6% vs. 60.7%, $\chi^2(1) = 0.17, p = .679$),

maintaining it (76.1% vs. 85.7%, $\chi^2(1) = 1.30$, $p = .255$), disposing of it (65.9% vs. 71.4%, $\chi^2(1) = 0.34$, $p = .558$), going to a farm (53.2% vs. 60.7%, $\chi^2(1) = 0.56$, $p = .452$), and the cost of it (62.4% vs. 71.4%, $\chi^2(1) = 0.86$, $p = .354$) all show the same pattern with p-values across all seven ranging from .255 to .942, with no significance even before potential multiple test corrections. An aggregate variable of the count of barriers also confirms with the under-60 mean being 4.34 vs the 60+ mean being 4.64 ($t(231) = -0.73$, $p = .468$).

Second, neither of the nostalgia scales differ by age, with almost identical PINE scale averages between the groups (6.36 vs. 6.38; $t(231) = -0.02$, $p = .981$) and experiential nostalgia had a small but non-significant gap (3.68 under-60 vs. 3.55 60+; $t(231) = 0.78$, $p = .439$).

Based on prior thinking that this may be driven by having children at home, a direct test was run and we found no support for this. Adding “children at home” kept the age impact virtually the same (-43.8 pp, still $p < .001$), an interaction test of age 60+ and children at home is null ($\chi^2(1) = 0.05$, $p = .82$), and the information criteria do not support the larger model (BIC 253.1 → 255.5). Across the above tests, nothing distinguishes the 60+ group from the younger set. This suggests that this 60+ age cliff isn’t explained by logistical issues in the barriers, changing perceptions of nostalgia, or children at home, but that it may be some sort of habit or entrenched behavior that drives it. This area may be of value to look at in future work to try and better understand when current consumers of real trees “age out” and why.

- **Setup is the differentiating barrier; cost is not.** Barriers to purchasing a real tree were widely felt by the artificial tree users (mean 4.37 of 7; almost 20% of artificial tree respondents (18.9%) endorse all seven). However, it is important to note that there is a difference between the prevalence of these barriers and the ability to differentiate between groups based on these. When looking at those who are open to a real tree, only setup (66.0% of non-open vs. 41.0% of open buyers name it; $z = 3.70$, $p = .0002$) and maintenance (83.3% vs. 66.3%; $z = 2.98$, $p = .0029$) clear the Bonferroni bar, and only setup survives multivariate tests (decomposition AME -16.8 pp, $p = .010$; maintenance attenuates to null once realness importance is controlled; a joint model of all six remaining barriers alongside the primary specification yields zero survivors, with cost at $p = .990$). Setup is the main barrier that is consistent and holds through the various tests for inclusion in the model with it maintaining significance even while controlling for the other key variables (AME -21.6 pp, $z = -4.72$, $p < .001$). Maintenance appears meaningful on its own, but drops out when realness is added to the model. This suggest there could be a tie to the value someone places on the tree being real and how that impacts maintenance concerns/expectations. Furthermore, these findings suggest that focusing on setup ease is the better option. Growers and retailers might consider providing materials for customers with set-up directions, links to helpful video tutorials, asking around cleaning bottom branches and drilling at the baling station, and even add-on “set-up” options customers could purchase.

One of the other key variables to consider in the barrier battery is that of cost. This was tested for inclusion in the model but the key here is that cost is included at nearly identical rates by non-open participants (64.7%) and open participants (61.4%). While cost is a barrier, the majority feel cost is a barrier, and it does not differentiate who is open to conversion to a real Christmas tree. While this does not mean that cost is not an important issue for consumers, cost at a point-of-sale consideration for the consumer is not something that this survey is designed to test.

Table 5. Barriers to incorporating a real tree among artificial buyers (N = 233): endorsement and differentiation of the willing.

Barrier	Endorsed (%)	Differentiates openness? ¹	p (two-proportion)
Maintenance / watering	77.3	Yes (Bonferroni)	.0029
Transporting it home	69.5	Nominal only	.022
Disposal	66.5	No	.351
Cost	63.5	No	.625
Setup	57.1	Yes (Bonferroni; sole multivariate survivor)	.0002
Going to a farm	54.1	Nominal only	.015
Getting a real tree	49.4	Nominal only	.029

¹Bonferroni $\alpha = .0071$ (7 tests). "Nominal only" = $p < .05$ uncorrected but above the family threshold.

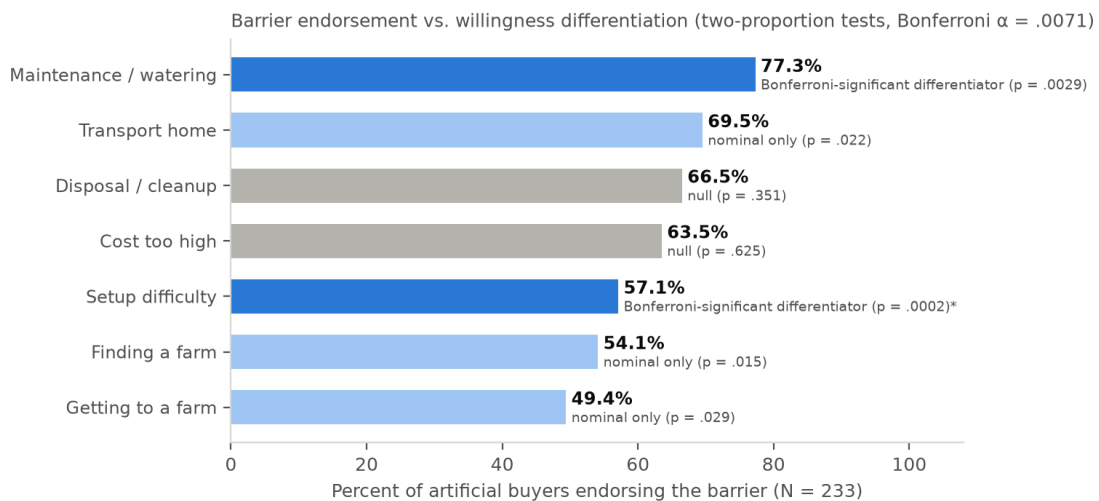


Figure 5. Barrier endorsement versus openness differentiation. Setup is the only barrier that survives the multivariate decomposition (AME -16.8 pp, $p = .010$).

- **Several alternatives were tested and ruled out.** How long someone has practiced their current tree display habit differs meaningfully between groups on its own (open average 13.4 years in current practice vs. 18.1 for non-open; $t(230) = 2.72$, $p = .007$), but this difference disappears when this is added to the full five variable model ($p = .175$). This means it was likely a stand in for authenticity values rather than mattering by itself. Openness does not appear to be related to whether the participant is rural, small city/town, suburban, or large city (Pearson $\chi^2(3) = 1.62$, $p = .654$). What a participant paid for their artificial tree shows no relationship with openness (Wilcoxon rank-sum test on the 7-category price band, $z = -0.995$, $p = .320$), challenging a sunk-cost explanation for who stays attached to their artificial tree. When considering who is making the decision there is no difference between those who display artificial trees and those who display real trees (Fisher $p = .233$) or the openness of artificial users (Pearson $\chi^2(3) = 3.320$, $p = .345$). However, the decision-making responses are highly gendered ($\chi^2(3) = 22.4$, $p < .001$, with 19.8% of men vs. 3.5% of women reporting the partner decides) but this is hard to disentangle from the skew in the sample and who takes a household survey so should be approached with caution. Renters are less likely to currently have a real tree (8.2% vs. homeowners at 21.6%, $p = .023$) but are equally open to one ($p = .317$) suggesting that this is likely to be driven by an access constraint and not a willingness to consider having a real tree. Finally, the importance a buyer places on the tree being environmentally friendly has a weak, non-significant result in the expected direction (open artificial buyers 3.81 vs. non-open 3.53 on the 1–5 importance scale; $t(231) = -1.88$, $p = .062$) and did not survive in the service-battery screen for conversion predictors. This environmental component also does not differ between real and artificial buyers (3.47 vs. 3.63, $p = .65$). Rather than acting as an independent lever, it sits inside the broader buy-local/nature orientation as it correlates with both the buy-local and nature preference.
- **Two key variables fell just short and would benefit from further follow up.** Having children at home is significantly related to openness to a real Christmas tree (52% vs. 37% receptive; raw $\chi^2(1) = 6.98$, $p = .008$), but drops to only marginally significant in the full logistic regression model at $p = .083$ (AME +9.1 pp). While it did not make it in the final model, the effect size is enough that it may still be valuable to include in targeting and messaging considerations.

Additionally, self-reported satisfaction with the participant's most recent tree shows potential with buyers who are more open being less satisfied with their current artificial tree (5.45 vs. 5.89 on a 1–7 scale; $t(231) = 2.67$, $p = .008$), but this also didn't make it in the final model (AME -2.9 pp, $p = .193$). This suggests that satisfaction is likely tied into the nostalgia and/or authenticity components that are more consistent in the modeling. Both of these variables were close and may be fruitful areas for further exploration in future research. The later section on life stages and family shows why this signal stays borderline despite families being more experience-driven. Parents are more open in general but are no more likely to value authenticity or to see fewer barriers.

3.5 Extended models, robustness, and bootstrapping

- **A systematic screen of every untested battery item.** The survey includes 37 other attitude, service, and concern items that were not included in the final model due to the strength of their bivariate relationships or lack of strong prior conceptual driver. In order to verify their non-inclusion each one was tested against every other item in its battery at the same time, using a multivariate logistic regression predicting openness. Entering a battery together means each item is judged while controlling for the others in its own family, so an item only stands out if it carries information the rest of the battery does not. The item with the strongest independent association was then carried forward as that battery's candidate.

For example, all 15 on-site experience items were entered together, and only the item that still held up once the other 14 were controlled for was considered further. This process resulted in four items that appeared to be potential candidates for inclusion: valuing a fast visit, overall setup concerns from the full sample (a distinct item from the other setup measure), the motivation that the ambiance of a real tree has, and allergy concerns. When all four of these were added to the final 5 predictor model, allergy concerns dropped in significance to $p = .243$. This suggests that "allergy concerns" only appeared meaningful when looked at in isolation. This resulted in a model that included the 5 final predictors plus these three remaining candidates. All predictors in this model have significance and the AIC and BIC values are better.

Additionally, a resampling technique (bootstrapping) was used to simulate running this search process 1,000 times for each battery but on slightly different versions of the sample to see if each of these variables would be selected again. Reassuringly, this bootstrapping process does not bring into question the five-predictor model, realness importance was significant in 100% of the re-tests, the setup barrier in 98%, age in 99%, buy-local orientation in 89%, and experiential nostalgia in 78%. This suggests the core model is fine and the questions were really around whether or not anything should be added to the model.

Table 6. Model comparison (all N = 233 artificial buyers).

	Primary (5 predictors)	All four candidates added	Trimmed model (+3)	Recommended extended model (+2)
Parameters (df)	6	10	9	8
Pseudo-R ²	.274	.354	.350	.328
AIC	232.37	215.99	215.24	219.97
BIC	253.07	250.50	246.30	247.58

Note: the trimmed model is the best-fitting one but contains the addition (setup-concern) with the weakest replication evidence on every check; the recommended extended model is preferred. This is a deliberate weighting of replication over single-sample fit.

Table 7. Recommended extended model (primary specification + speed orientation + ambiance motivation; N = 233; pseudo-R² = .328).

Predictor	AME	z	p
Buy-local orientation	+14.8 pp	3.42	.001
Age 60+	-41.9 pp	-4.17	<.001
Experiential nostalgia	+8.2 pp	2.45	.014
Realness importance	+11.8 pp	6.73	<.001
Setup barrier	-21.5 pp	-4.70	<.001
Speed orientation (values a fast visit)	-9.0 pp	-3.83	<.001
Ambiance motivation	+7.6 pp	2.48	.013

- **The primary model survives every re-coding of the outcome.** Openness to a real Christmas tree was generated from the willingness of someone to purchase a real tree, and was based on a response of 4 or 5 on the 1–5 scale. Multiple tests were done to ensure that the model holds up under different specifications of that openness variable. First, the cut point was lowered from 4 to 3 and all but buy-local holds with that specification. Second, an ordered logit was run on the raw 1-5 scale item and all hold with buying local dropping to marginal significance. Third, the threshold was raised to include only those who responded strongly agree (5). Age drops out of this model because no respondent aged 60+ selected 5, and nostalgia and buy-local lose significance while realness and setup hold.

These results are in line and support the theoretical framing for the core model. Realness and setup concerns are the main weight-bearing predictors, along with the structural result of

age. A "buy-local" orientation and nostalgia are softer, as they are conceptually more general. Additionally, the five-predictor model is built from a number of tests designed to help describe what is taking place conceptually and the pattern of these results suggest the inclusion of all five of these items is robust.

Table 8. Robustness of the primary model across outcome codings (artificial buyers).

Predictor	Binary ≥ 4 (primary)	Binary ≥ 3 (52.4% open)	Ordered logit, AME on $P(\geq 4)$	Binary = 5 (20 events; qualitative)
Age 60+	−45.4 pp	−35.5 pp	−35.0 pp	omitted (perfect separation: 0/41)
Realness importance	+12.4 pp	+13.7 pp	+12.1 pp	+5.5 pp*
Setup barrier	−21.6 pp	−23.0 pp	−18.4 pp	−12.5 pp*
Experiential nostalgia	+9.7 pp*	+9.6 pp*	+10.7 pp	ns ($p = .223$)
Buy-local orientation	+13.5 pp*	ns ($p = .164$)	marginal ($p = .086$)	ns ($p = .293$)

* $p < .01$; ns = not significant.

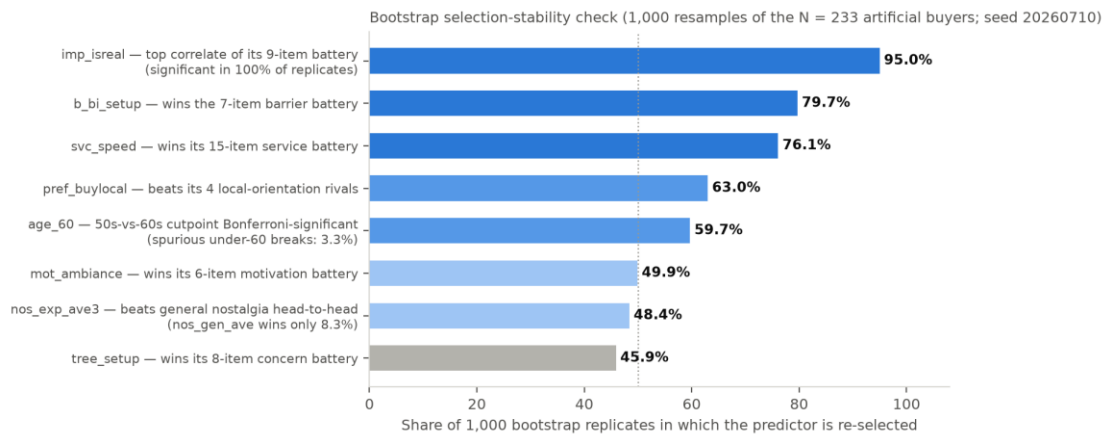


Figure 6. Bootstrap selection-stability results.

3.6 Life stage and family

- **A common expectation, tested.** It is common to assume that families with children are a key driver of real tree purchasing. To test this, the sample was split on whether children currently live at home with around 48.1% of the sample having kids at home. Due to the potential confound of kids at home being tied to age, every potentially age-sensitive test was re-tested

while controlling for age. Comparisons were run on the batteries of questions, Bonferroni corrected, and the findings are reported below. **Overall, the results show that families are a genuine, consistent segment on experience and attitude but that these findings are largely independent from the factors that actually predict openness.** Of note is that when looking at the family make-up of the personas derived from the cluster analysis later in the report, the family buyers are split across a “potentially convertible” group, and a group that is not. When considering your marketing efforts, families may not be a group to target in and of themselves, but that there are opportunities to serve them on experience, tradition, and add-ons when they do decide to purchase a real tree.

- **Where families are distinctive, the effects are large and survive correction.** Parents rate on-site children’s activities far higher than non-parents (2.74 vs. 1.93; $t(314) = -6.19$, $p < .001$, controlling for age $p < .001$), and score higher across both the family-motivation and nostalgia batteries. This is clearest when families’ motivations are from their children’s desire for a tree (3.84 vs. 2.59), and for family togetherness (4.08 vs. 3.48). The general (PINE) nostalgia is also elevated (6.83 vs. 5.99, all $p < .001$). All of these values survive Bonferroni correction. Experiential nostalgia ($p = .025$) sits right at its corrected threshold ($\alpha = .025$) and just clears it, while general-tradition motivation ($p = .009$) falls just short of its corrected threshold ($\alpha = .0083$) and is treated as suggestive only. Families are somewhat more open (52.0% vs. 37.2%, $p = .008$), and the real-buyer families purchase roughly twice the add-ons (1.36 vs. 0.74 items, $p = .029$, directional). Importantly the openness result shifts to marginal once the model’s attitudinal predictors are included (+9 pp, $p = .088$). Taken together, this doesn’t mean that these “family” components drive conversion or should be specifically targeted outside of the other findings in this report, but it does suggest there are opportunities for growers on-site, as families tend to purchase more and are looking for more of the family experience when they are there.
- **The openness factors are life-stage neutral.** None of the factors that separate the open to real trees from the non-open to real trees groups change with children at home. The single strongest predictor, authenticity, does not differ (2.70 vs. 2.89, $p = .19$). Additionally, neither does the setup barrier (54.4% vs. 59.7% of artificial buyers, $p = .42$) or the preference for a fast visit ($p = .78$). Importantly the type of tree that is displayed also doesn’t differ for those with kids at home, and is the same for parents and non-parents (16.8% vs. 19.1%, $p = .62$). These findings should not necessarily be interpreted as there is a proven zero difference as this may be due, at least in part, to the power of the tests given the sample size which would frame it more as if there is a difference it is likely of limited meaning.

Table 9. Children at home vs. none: key measures (full sample N = 316 unless noted).

Measure (scale)	No children (n = 164)	Children (n = 152)	Test
Distinctive (family-wise survivors)			
Children's-desire motivation (1–5)	2.59	3.84	$t(314) = -9.71, p < .001$
Family-togetherness motivation (1–5)	3.48	4.08	$t(314) = -5.24, p < .001$
Family-tradition motivation (1–5)	3.33	3.93	$t(314) = -5.05, p < .001$
Children's activities importance (1–5)	1.93	2.74	$t(314) = -6.19, p < .001$
Ancillary services importance (1–5)	2.29	2.87	$t(314) = -4.28, p < .001$
General (PINE) nostalgia (1–10)	5.99	6.83	$t(314) = -3.37, p < .001$
Childhood-memory motivation (1–5)	3.19	3.55	$t(314) = -2.68, p = .008$
Suggestive (nominal / soft / directional)			
Experiential nostalgia (1–5)	3.60	3.83	$t(314) = -2.26, p = .025$
General-tradition motivation (1–5)	3.29	3.64	$t(314) = -2.64, p = .009$
Openness ($\% \geq 4$)	37.2%	52.0%	$z = -2.64, p = .008$
Add-ons purchased (real buyers, N = 51)	0.74	1.36	$t(49) = -2.25, p = .029$
No life-stage difference (conversion machinery)			
Realness importance (1–5)	2.70	2.89	$t(314) = -1.32, p = .19$
Setup barrier (% of artificial buyers)	54.4%	59.7%	$z = -0.81, p = .42$
Values a fast visit (1–5)	3.08	3.11	$t(314) = -0.28, p = .78$
Currently owns real (vs. artificial)	16.8%	19.1%	$\chi^2(1) = 0.25, p = .62$

Note: The life-stage battery comparisons are an exploratory (post-hoc) screen; each is judged against its family-wise Bonferroni threshold, and only survivors are reported as findings. Null results are limited by power ($n \approx 150$ /group), not multiplicity. The nostalgia $\times$ life-stage interaction is uncorrected and offered as a lead.

3.7 How real and artificial buyers differ

- **Artificial buyers rate every real-tree hassle higher than the people actually living with real trees.** When comparing people with a real Christmas tree to those who display an artificial one on post-purchase concerns, seven show artificial buyers rating their concern higher (all seven clear the eight-item Bonferroni threshold, $\alpha = .00625$). There are two possible

explanations of this. It may be that those with active experience have a more accurate perception of the issues, or it may be that people with lower concerns are those who select real trees.

A follow up was done to assess if experience with a real tree changes these perceptions by looking at those with adult real tree experience. Among current artificial buyers, those who have never had a real tree as an adult did not differ from those who have, and no comparison cleared even an uncorrected $p = .05$ threshold. **This suggests that the driver for purchasing a real tree is not exposure, but people who genuinely have lower concerns about these factors.** There are a few possible practical implications for growers. First, this finding pushes back on the idea that if someone experiences how easy displaying a real tree is, they will convert to a long-term real tree consumer. Second, taking into consideration around openness to a real tree, this result suggests that concerns around real trees appear to act like a stable background trait, and not an experience lever that is easily actionable. Third, it suggests that care is needed around messaging around perceived hassles of purchasing or displaying a real tree. Care of or disposal information messaging (messages like “it’s easier than you think”) likely have little conversion impact on those who are high-concern. However, it may be possible to frame those messages for people who are already closer to acting (those who are most open) as a way to reduce friction around purchasing a real Christmas tree.

Table 10. Post-purchase concern ratings (1–5): artificial vs. real buyers (N = 284).

Concern	Artificial mean	Real mean	Gap	p
Disposal	4.10	3.20	0.90	<.001
Transport	4.26	3.59	0.67	<.001
Care	4.13	3.45	0.68	<.001
Watering	3.63	2.96	0.67	<.001
Setup	4.21	3.63	0.59	<.001
Needle loss	4.06	3.51	0.55	.001
Fire safety	4.44	3.92	0.52	.0003
Aesthetic	3.80	3.55	0.25	.133 (ns)

- **Real buyers are tradition- and experience-driven.** Real buyers score higher on four of the six motivations, led by a 0.73 gap for the importance of their own childhood memories, the importance of general tradition (0.65 gap), and the importance of family tradition (0.61 gap), and the ambiance a real tree brings (0.42 gap), each surviving Bonferroni correction within the six-item motivation battery ($p \leq .003$, $\alpha = .0083$). Family togetherness is nominally higher (0.34 gap, $p = .024$), but does not survive correction, and children’s desire does not differ (0.11 gap, $p = .58$). Additionally, real buyers also place more importance on aroma (3.84 vs. 3.10;

$t(282) = -3.86, p < .001$) and realness (4.31 vs. 2.46; $t = -10.40, p < .001$). Finally, out of the full 15 on-site service items in the survey the only one that survives Bonferroni correction is that artificial users rate loading assistance as more important than real buyers (3.67 vs. 3.00; $t(282) = 3.35, p < .001$).

It is important to keep in mind that when looking at both these tradition and experience items, the significance is about the difference between real and artificial buyers, not the overall value. **This means that real buyers may specifically connect the tree itself to authenticity, scent, memory, and atmosphere in a way that artificial users do not and that there is more importance placed on the actual loading of the tree. These same tradition, togetherness, and childhood-memory motivations are strongly concentrated in households with children (all surviving Bonferroni correction), whereas ambiance, the one motivation that survives in the openness model, does not vary by life stage.**

Table 11. Motivation ratings (1–5): artificial vs. real buyers (N = 284).

Motivation	Artificial mean	Real mean	Gap	P
Childhood memories	3.29	4.02	0.73	<.001
General tradition	3.39	4.04	0.65	<.001
Family tradition	3.58	4.20	0.61	<.001
Ambiance	3.96	4.37	0.42	.003
Family togetherness	3.79	4.14	0.34	.024
Children's desire	3.24	3.35	0.11	.582

Note: Raw two-sample t-test p (real vs. artificial). Bonferroni threshold for the six-item motivation battery $\alpha = .0083$; four items survive (childhood memories, general tradition, family tradition, ambiance).

3.8 Channels, discovery, spending, and timing

- **Choose-and-cut is the flagship channel, and discovery is word-of-mouth.** Within the Michigan sample for this survey almost four out of ten real Christmas tree buyers purchased their tree from a choose-and-cut farm. Additionally, discovery is dominated by word of mouth (47.1%) followed by search and physical visibility.

Interestingly Instagram, TikTok, newspaper, and radio were all offered as options in the survey, and selected by zero respondents. Based on discussions with growers and retailers, there is a continued interest in social media as a channel, but this suggests some qualifications for that. The data does not indicate that social media is not important, as this question was

specifically about how they became aware of the place they bought their tree not how they found open hours, varieties, or prices. The informational role that social media may present to prospective real Christmas tree purchasers should not be discounted. Anecdotally, we heard focus group participants mention turning to social media for information (e.g., pricing, seasonal hours, maps of parking, and even pictures of varieties of trees available that season) prior to driving out to a choose-and-cut operation. **However, the survey does suggest that particular attention should be given to how word-of-mouth may be used to reach the target market.**

Additionally, most real buyers shop close to home (70.6% traveled ≤ 30 minutes) and linger on site (49.0% spent 11–30 minutes; 41.2% spent more than 30). In this sample, respondents mainly shopped with partners (58.8%) and children (39.2%). Typical add-ons at the site of purchase are ornaments (43.1%), wreaths (33.3%), and garland (23.5%). These additional purchases are also a bigger deal for families as parents purchase roughly twice the add-ons of non-parents (1.36 vs. 0.74 items, $p = .029$).

Table 12. Real-tree purchase and discovery channels (real buyers, N = 51).

	n	Percent
Purchase channel		
Choose-and-cut farm	20	39.2
Corner lot (Scouts, church, roadside)	10	19.6
Nursery	8	15.7
Big-box store	7	13.7
Farmers market	5	9.8
Other	1	2.0
Discovery channel		
Word of mouth (family 35.3% + friends 11.8%)	24	47.1
Google search	6	11.8
Drove by	6	11.8
Billboard / ad	5	9.8
Facebook	4	7.8
Instagram / TikTok / newspaper / radio	0	0.0

- **When do people buy vs want to buy.** Of the 50 real buyers with valid timing data, 74% said they bought their tree when they preferred, but 18% said they wanted to buy earlier than they did (8% later). The modal preferred window is Thanksgiving weekend through the first week of December. It is important to keep in mind that the numbers are small here so this should be interpreted at a high level.

Table 13. Purchase timing: actual vs. preferred window (real buyers).

Timing window	Actual purchase (N=51)	Preferred timing (N=50)
Weekend before Thanksgiving	2 (3.9%)	1 (2.0%)
Weekend after Thanksgiving	17 (33.3%)	21 (41.2%) — modal (tied)
First week of December	21 (41.2%) — modal	21 (41.2%) — modal (tied)
2nd week of December	10 (19.6%)	5 (9.8%)
3rd week of December	1 (2.0%)	2 (3.9%)

- **Real tree and artificial tree costs.** Real tree buyers' spending was asked about in 9 bands of prices from less than \$5 to more than \$175. Using midpoint estimates the average is \$76.49 and falls in the \$76-\$100 band and the median price is \$88. Bands from \$51-\$125 cover almost 65% of the real buyer sample. For artificial users the midpoint-based average is \$145.28 falling in the \$101-\$200 band with the median being \$150. 66.9% of artificial users said they paid between \$1 and \$200.

Table 14. Price distributions and break-even arithmetic.

	Real buyers (N = 51)	Artificial buyers (N = 233)
Mean price	\$76.49 / year	\$145.28 (one-time)
Median price	\$88	\$150
Notes	78% pay $\leq$ \$100	9.9% paid \$0 (gift/hand-me-down); 4.7% $>$ \$400
Break-even (mean prices from midpoints)	—	1.9 years
Artificial per-year cost at 5 / 10 / 15-year life	—	\$29.10 / \$14.50 / \$9.70

- **The artificial channel.** 67.4% of those who have an artificial tree bought it at a generic retail store, 16.3% online, 7.3% got it as a hand-me-down, 3.9% gift, 3.4% thrifted it.

3.9 Switching behavior and the lapsed-buyer market

- **Switching is common, convenience-driven, and the direction (real to artificial vs. artificial to real) is only driven by authenticity.** In the full sample, 43.8% of respondents have switched tree type at least once. Among all switchers, in either direction, convenience is the most common stated reason (46.4%), well ahead of curiosity (10.9%) and price (10.1%). Environmental concerns were only cited by 3.6% of the switchers in the sample, and was ranked behind convenience, and on par with allergies. Of those who have switched, 96 moved toward artificial, and 31 moved toward real.

Testing a modified version of the core five-predictor model against switch direction (1 = switched to artificial, 0 = switched to real; dropping the setup-barrier variable, since it's only asked of current artificial owners) finds that realness importance alone predicts which way someone switched (AME = -15.2 pp, $z = -4.99$, $p < .001$, 95% CI [-21.2, -9.2]). This suggests that people who value authenticity switch toward real trees, not away from real trees to artificial.

Age, nostalgia, and buy-local orientation do not predict direction of switching (all $p > .35$). This nuances the earlier findings: generic traits don't explain who switches which way, but the specific belief that realness matters does explain who switches to real Christmas trees. This reinforces that authenticity isn't just associated with stated openness, it shows up in actual switching history as well. We also checked whether current presence of children associates with switching or its direction and found no relationship (ever-switched 43% vs. 45%, $p = .75$; toward-real among switchers 26% vs. 23%, Fisher's $p = .68$).

- **The lapsed-buyer market is not what one might think.** Lapsed real-tree buyers, or those who have had a real tree as an adult but now have artificial, are not a promising market based on our analysis. Among the 233 artificial-tree households, respondents who had bought a real tree before were no more likely to actually plan a real-tree purchase next year than those who never had (8.8% vs. 6.5%, Fisher's $p = .711$). Respondents who had bought a real tree before were only slightly more likely to express general openness to purchasing a real tree again (44% vs. 34%, $p = .333$). Both of these are not significant and show no difference between those artificial users who have never had a real tree as an adult and those who have. Not only does this difference not exist for actual purchase intention next year, but also within the openness frame. This suggests that growers should treat the 35.6% "willing" figure as a measure of latent market potential to nurture over time, not evidence of an identifiable lapsed-buyer segment ready to convert.

3.10 Four attitude-based buyer personas

- **Cluster analysis process.** In order to build out possible personas, nine standardized attitude/preference measures (general nostalgia, experiential nostalgia, buy-local orientation, a nature-preference index built from a preference for nature and a preference

for the outdoors, realness, and four composite scores built as means of each of the following: tree-selection factors (realness removed), on-site services, post-purchase concerns, and motivations- Cronbach's α ranged from .649 for tree selection factors to .872 for motivations) were entered into a k-means cluster analysis. Belief in realness was kept as a standalone input rather than folded into the broader tree-selection factors composite since it was already established as the single strongest individual predictor of openness.

Cluster analysis is a statistical process that groups respondents by their full combination of attitudes rather than one attitude at a time, discovering natural groupings based on the inputs rather than assuming them in advance. The number of groups ($k=4$) was selected via hierarchical dendrogram inspection using Ward's linkage (Ward, 1963) and the Caliński-Harabasz pseudo-F stopping-rule criterion (Caliński & Harabasz, 1974; pseudo-F = 47.45 at $k=4$, versus 51.37 at $k=3$ and 43.58 at $k=5$). Both diagnostics indicate four groups as an acceptable option.

- **External validation.** The clusters from the analysis were then compared against relevant survey variables that were not used as inputs to the cluster analysis itself. This addresses convergent validity, or whether the clusters meaningfully relate to real behavioral and typological outcomes. Cluster assignment was cross-tabbed with: consumer segment ($\chi^2(15)=108.0$, $p<.001$), current tree type ($\chi^2(9)=73.5$, $p<.001$), openness ($\chi^2(3)=62.0$, $p<.001$), presence of children at home ($\chi^2(3)=19.7$, $p<.001$), and self-reported residence type ($\chi^2(9)=17.1$, $p=.047$). The residence-type association is notably weaker than the other three and is driven mainly by two of the four personas with the Authenticity-driven persona skewing rural (37.0% of rural respondents, vs. 24.1% overall), while the Nostalgic-but-committed-to-artificial persona skews large-city (46.0% vs. 29.1% overall).

Additional cross-tabs tested income, age, or the objective, zip-code-derived geography classification and no significant relationship was found (metro/CBSA area; all $p>.06$), confirming the clusters are not just a relabeling of demographic segments. Reported barrier count was also not significantly associated with cluster assignment.

- **Robustness testing.** It is possible that the result of a single cluster analysis is specific to the way it was set up, which would mean the outcome is an artifact of that particular analysis and not a stable, real pattern. To check for this, the entire process was run twice more, each time with one specific modification, to see how the results compared to the original. This allows a comparison of whether the same people fall into the same cluster or not, helping to establish confidence in the outcome. This is reported as a correspondence rate, the percentage of people from an original persona who end up back in the same group. A higher rate means that persona is more stable and trustworthy.

The first modification re-ran the clustering on only artificial-tree buyers, adding in each respondent's reported barrier count (an artificial-buyer-specific measure of practical obstacles like setup, storage, and transport) as a tenth factor, extending beyond the beliefs and preferences captured in the original nine. This check did more than produce a stability score as it showed that the Authenticity-driven persona isn't really one group. About 40% of its members landed in a low-barrier group (barrier count averaging 2.22) who hold the persona's core beliefs with little practical obstacle in the way, while about 54% landed in a high-barrier group (barrier count averaging 5.35) who hold the same beliefs but face substantially more friction. The same underlying attitude, in other words, describes two different groups--a convertible subgroup and a barrier-constrained subgroup--once real-world obstacles are factored in.

The second modification subtracted each person's own average rating across all their answers before re-clustering, to investigate the impact of people who may simply rate everything high or everything low, regardless of the specific question. This is a way to separate a person's genuine pattern of relative emphasis from their general rating tendency.

Neither of these invalidates the four-cluster solution as a whole overall validation (against segment, tree type, openness, kids) still holds for the full 4-group structure. The attitudinal narrative attached to the two individual labels didn't hold up under these checks (see below), but we did find meaningful groups do exist.

Table 15. Psychographic personas with robustness grades (full sample, N = 316).

Persona	n (%)	Profile	Robustness
Authenticity-driven / convertible	76 (24%)	High realness importance, nostalgia, and experiential motivation; low hassle concern. 68.6% of all real-tree buyers; highest receptive share	Robust (77.6% correspondence under rating-level correction); splits into two practically distinct sub-groups (below)
Nostalgic but committed to artificial	92 (29%)	Highest general nostalgia and post-purchase concern; lowest realness importance; more likely to have children at home	Robust (75.0% correspondence)
Practical, settled artificial households	81 (26%)	Moderate profile, low realness importance, elevated buy-local preference; disproportionately childless	Weak (50.6% correspondence; scatters under barrier-inclusive re-clustering) — report tentatively
Low engagement	67 (21%)	Low on every attitude measured; least receptive	Caveated (rating level –0.80 SD below grand mean; only 32.8% correspondence once level is removed) — substantially a response-style pattern, not a confirmed attitudinal type

- **Cluster implications.** The authenticity persona splits into two subgroups. Both subgroups share similar underlying attitudes, but differ in their consideration of practical hassles. When breaking each cluster up by their openness to a real Christmas tree, we see the four barrier-informed clusters ranging from 55.9% to 18.9% ($\chi^2(3)=19.75$, $p<.001$), confirming barriers do independent work.

This is reinforced by a five-cluster alternative that breaks out a cleaner version of the authenticity-driven persona. Here we see the lowest average barrier count of any cluster in either solution (3.62), and the highest within-cluster openness found anywhere in the analysis (81.4% full sample; 61.5% restricted to artificial buyers). Two independent ways of looking more closely (adding a fifth, finer-grained cluster to the full sample, and adding barrier count explicitly to the clustering of artificial buyers), highlights there is a genuinely low-friction, highly receptive core that exists within the broader authenticity-driven persona. This point also highlights that the authenticity-driven audience would benefit from a two-track messaging approach: one for the lower barrier set and a second, friction reducing messaging strategy for the higher barrier set.

Practically, the cluster analysis suggests that both authenticity sub-groups are the primary target, while the nostalgic but artificial group is unlikely to be converted. Additionally, the remaining two personas are not solid enough to anchor marketing strategies to, and would likely have limited returns from marketing messages and efforts. Looking at children in the home, the data shows that children are present in 60% of the authenticity-driven persona and 58% of the nostalgic-but-committed-to-artificial persona, versus only 30% of the practical-settled-artificial persona — so the family signal spans both a potentially convertible and a non-convertible group.

4. Limitations

There are four limitations worth highlighting, that further contextualize and nuance our findings. They are as follows:

1. As with all surveys of this type, it is a cross-sectional design. This means causal claims cannot be made. Every coefficient in the model is a conditional association. Future work in this area could look at potential interventions, and how those change purchase intention or activate other purchase intention levers.
2. Openness to a real Christmas tree, as it is framed in this work, is not an action. While these people may have more potential for conversion, openness itself is not the end goal. Only a follow-up after an actual purchase season can measure real conversion. Similarly, a self-reported importance of a specific attribute in the survey is not the same as a final behavioral pull.

For example, the survey investigates if someone says that aroma matters to them but it isn't able to see what a person would do if they are at a retail lot or choose-and-cut farm and encounter the scent of a real tree. This could be further investigated through on-site work or encounters testing intentions with a smell intervention.

3. This sample is Michigan residents, 21+ who celebrate Christmas and was recruited from a Prolific online. The sample skews female (63.6%), suburban (46.5%), and White (81.3%), under-represents the 60+ population, and is not reweighted. Estimates describe this population only, and there may be generalizability issues as a result of this and the relatively small sample size for some of the effects that are being looked at. While caution was taken to try and limit interpretation from small cell sizes, they are a reality in this sample. Now that there are baseline effect sizes available for the questions in this survey future work could use them to calculate out sample sizes with the necessary power to further test relationships of interest.
4. Respondents to the survey may not be the household decision-maker. The survey captures one respondent per household, but the tree decision is often shared or made by a partner

and the sample skews female (63.6%) with a strongly gendered decision structure (19.8% of men vs. 3.5% of women report a partner decides).

This matters for the attitudinal estimates because concern ratings themselves vary by decision role. For example, among artificial buyers, partner-decides households differ significantly on fire-safety and ongoing-care concerns (both $p < .003$, Bonferroni-surviving) and nominally on setup, disposal, watering, and aesthetics. Because the respondent is not always the person weighing these trade-offs for the household, the concern and preference estimates should be read as the responding member's view, which may not map onto the household's actual decision-maker. This warrants future study to better understand the dynamics of who is with the decision maker, who takes care of the perceived "hassles," and how those types of relational pieces impact purchase decisions.

5. Implications

The implications below seek to incorporate focus group insights to further contextualize survey findings, and provide action items for growers and retailers. **The most useful lens for this section is to treat conversion as activation rather than persuasion.** For example, about a third of artificial buyers are already open to a real tree (35.6%), yet few plan to act on it, so the marketing task is less about changing minds rather than about giving an already-open consumer a concrete, easy reason to act.

1. **Authenticity is core.** One of the major findings in our analysis is the relationship between realness, or authenticity, and openness (+12.4 pp; significant in 100% of bootstrap resamples). Authenticity is also the single largest gap between the real and artificial subgroups (4.31 vs. 2.46). Highlighting authenticity in marketing messages that also reference aroma, tradition, and the atmosphere a real tree creates in your home are all genuine motivators for Michigan consumers.

Yet our analysis suggests each one is an expression of the same underlying authenticity orientation rather than an independent lever. Experiential nostalgia fits in the same way. It is a real driver of openness to a real Christmas tree across demographic groups and personas,, which makes it usable in general messaging. It works best as the emotional frame around an authenticity message. Think of authenticity/realness as the message, and nostalgia is the tone it should be delivered in. The focus group participants returned repeatedly to the smell of a fresh-cut tree, to a preferred species (Fraser fir came up often), and to visible freshness ("plump and well taken care of"). These are tangible ways to express the authenticity/realness of a real Christmas tree. Tagging trees with a harvest date and, for retail lots, where the tree comes from may help reduce the friction for certain groups.

Can split the authenticity audience in two. Based on our analysis, an authenticity-driven persona is the primary target for Christmas tree growers to market to, but this group can be

further split into two distinct subgroups that share similar beliefs but differ in how they see potential frictions: a low-barrier, highly receptive core and a barrier-constrained group. The lower barrier group is already close, at least on the idea of a real tree, so they need a reason to act. Consider giving a concrete occasion and offer like “come get your tree Thanksgiving weekend.” A first-time discount or a scheduled time slot may also help this group make a plan and convert to a real Christmas tree consumer.

The second group is also close to being persuaded to purchase a real Christmas tree, but feel more constrained. Think of the task less as persuasion, but more to reduce perceptions of the burden around the logistics and friction involved in purchasing, setting up, and maintaining a real tree. This isn’t just messaging that “real trees are great,” but is about tangible things that make it easier for consumers to make the switch to a real Christmas tree, and remove their perceived frictions like setup concerns.

2. **Setup is the barrier to beat.** Among the barriers to a real tree, setup is the only one that separates the “open to a real Christmas tree” group from the rest of the sample, and the variable that is in the primary model (AME = -21.6 pp, $z = -4.72$, $p < .001$, 95% CI [-30.6, -12.7]).

Cost, by contrast, is widely felt but does not differentiate the open to a real Christmas tree from the non-open to a real Christmas tree group, and what an artificial buyer paid for their tree is unrelated to openness. While cost is a real concern overall it is not one that separates who will convert.

Because setup is the differentiator, the most direct response is to remove it rather than argue with it. The focus groups show a few options for dealing with this. For example, one couple over 60 years old paid a premium to have a live tree delivered in a stand to their front door, and hauled away after Christmas. A delivery-setup-and-removal service or simpler options such as simple stands, stand-fit help, fresh-cut or pre-drilled trunks, and “we’ll set it up” options speak directly to the one differentiating barrier, which also has the benefit of making it easier for those who might age out on the physical barrier side. From this perspective, something like a tree stand is not an afterthought but rather a key complement in the consumer purchasing process.

3. **Normalize the “hassles.”** When comparing artificial users with real tree users, artificial users rate real-tree hassles (disposal, transport, ongoing care, watering, setup, needle loss, and fire safety) above what real buyers report. Disposal is the largest difference between these two groups (artificial 4.10 vs. real 3.20; gap 0.90; $t(282) = 5.79$, $p < .001$) and fire safety is the smallest (4.44 vs. 3.92; gap 0.52; $t(282) = 3.64$, $p = .0003$). The highest concern for both is fire safety. Importantly, when testing if this is something that changes with real tree experience there is not a difference suggesting that this is a stable background feeling (all $p > .05$).

This study finds messaging like “it’s easier than you think” is unlikely to move higher concern buyers to try a real Christmas tree, but that language may help buyers who are already closer to going with a real tree because of their openness to a real Christmas tree.

4. **How to think about lapsed buyers.** It may seem appealing to target the lapsed real tree buyer who now has an artificial tree, given these are consumers who have purchased a real Christmas tree before. Yet, this does not bear out in our analysis; lapsed buyers were no more likely to plan a real Christmas tree purchase next year than those who never had a real tree (8.8% vs. 6.5%, Fisher’s $p = .711$), and they are only slightly more likely to express general openness to a real Christmas tree (44% vs. 34%, Fisher’s $p = .333$). The evidence on this presents a group, the lapsed buyers, that is not fruitful for a marketing return and at most suggests more long-term strategies in line with the full openness group.
5. **Age matters for two separate reasons: targeting, and customer retention as existing buyers age out.** Age 60+ is the largest constraint that holds in the analysis (–45.4 pp; not one respondent aged 60+ strongly agreed they were willing) and is not explained by barriers or nostalgia. The size of this gap suggests the 60+ group is not a productive primary target for growers. Additionally, it is important to note that not only is age something that should be considered in terms of who a grower/retailer should target, but also in terms of the current consumer mix that a grower/retailer has. If the consumer mix a grower/retailer currently has visiting their operation skews closer to that age 60 cut point, it should be of concern as it may signal that over the next few seasons there may be a reduction in current customers that will need to be replaced with new, hopefully, younger consumers.
6. **Buy local can help target.** A “buy local” orientation is the variable most consistently tied to actual switching history (+16 pp across specifications) which can present opportunities for targeting possible consumers outside of the Christmas tree context. However, the caveat here is that it is related to switching overall and not just people who are switching to a real tree. This means that identifying consumers with a “buy local” orientation (think folks who try to shop at local food co-ops, farmers markets, local small businesses, etc.) could help a grower/retailer identify opportunities to partner with these local businesses. Marketing campaigns or tactics should still be paired with the authenticity/realness messaging, and setup messages discussed above.
7. **Use the most effective channels.** Word of mouth is the most common method of identifying where someone would get their real tree, followed by an online search, and driving by a choose-and-cut farm or retail lot. Importantly, no respondent named Instagram, TikTok, newspaper, or radio as the way they found where to buy. This does not mean that social media or websites are not still important for information. The fact that 47% of people identified word of mouth as how they found where to purchase their real Christmas tree suggests that word of mouth is a channel that should be tapped when looking at marketing initiatives. Practically this means that growers and retailers should prioritize referral mechanics, a strong Google presence (including a Google Business profile), and signage to

reduce friction on-site. Branded hoodies/coats/beanies, clear check-out processes, clear tree selection processes, and clear parking are all additional things growers might consider to improve the consumer experience. The bottom line? A happy customer who had a good experience will talk about that experience to their friends, neighbors, and relatives. Seeking to create a positive on-site customer experience, especially for first-time visitors, will improve your word-of-mouth referrals. Referral mechanics can help drive this a bit more quickly.

8. **Consider what the visit looks like.** Our sample reported their real Christmas tree purchasing trips are unhurried and family-centered: 90% spend 11+ minutes on site, most shop with a spouse/partner (59%) and children (39%), and 43% / 33% / 23% add ornaments / wreaths / garland (about a third buy nothing extra). That supports on-site merchandising and family-oriented experiences will grow the average basket size, and repeat visits among people who *already* buy real.

Consumers who value a fast visit on site report lower openness to a real tree (−9 pp), and place a higher importance on ambiance (+7.6 pp), but more work and a larger sample are needed to validate this. Present the visit as an experience, but consider keeping a fast lane on-site to help certain consumers get their tree more quickly.

The focus groups add one caveat to the on-site experience in an interesting way: participants valued a natural, farm-like feel, and some said an overly manicured setup would detract (“groomed walkways would distract from my experience... I like things to just feel more natural”). This also ties into the work of Pierskalla et al. (2023, 2024) around the potential restorative impact of something that is more nature based. Consider keeping the visit authentic to what your target customer group is looking for. Whether your target customer wants a rustic, out-of-the-city feel, or a more upscale one, the point is to match the experience to that audience. This means it is important you know your consumer base and who you’re seeking to target with your operation.

9. **Families present opportunities to add value, but seeking to convert consumers with family messaging may not work.** Families with children at home are a real, distinctive segment of the market that is more tradition- and togetherness-motivated, more nostalgic, more interested in the on-site experience, and inclined to buy more add-ons (1.36 vs. 0.74 items, $p = .029$). They are also more open to a real tree in raw terms (52% vs. 37% receptive, $p = .008$) but that openness is carried by their higher nostalgia and tradition motivation rather than by anything family-specific. Families are no more likely than non-parents to value authenticity ($p = .19$), to perceive fewer barriers (setup $p = .42$), or to actually own a real tree ($p = .62$). In other words, once the main drivers are in the model, children-at-home is only a borderline independent predictor (+9 pp, $p = .083$). Targeting families with your marketing efforts alone is low-precision; of roughly 152 parents in our sample, about as many fall into the committed-artificial persona (53) as into the convertible authenticity persona (46), so “target parents” reaches at least as many “never-switchers” as “switchers.”

The practical implication is twofold. First, a conversion campaign should lead with the actual levers (authenticity, a setup-solved offer, buy local, under-60) and treat "has children" as at most another layer, rather than a target market screener. Second, families should still be served well when they do buy. Offerings like on-site children's activities, marketing the family-tradition, using the frame of family togetherness in your marketing messaging, and add-on merchandise all appeal to a consumer with a family. Beyond conversion, families point to a separate, longer-term opportunity: family formation is a potential moment when households first enter the live tree market, so a forward-looking "start your family's Christmas tradition" message aimed at engraining a real tree tradition in a new generation might be effective at bringing in new consumers.

6. Future Directions: Consumer Life-Cycle Analysis

For us, we believe the Christmas tree customer's journey and consumer loyalty are essential to the understanding of Christmas tree purchasers and the attainment of new customers. Purchase cycles are often very repetitive, but can vary from buyer to buyer (Howard & Sheth, 1969). The consumer lifespan also factors into this, as the individuals grow, change and develop as do their needs.

Prior marketing research and marketing practitioners define the consumer life cycle as **what** needs to be known about a consumer, but also **when** information needs to be known by a consumer, and **why** it needs to be known (Stampfl, 1978). For example, for the real Christmas tree industry, it is important to identify key points of entry and points of exit in the consumer's customer journey as they begin to think about, search for, purchase, and perhaps exit in favor of an artificial tree. A survey conducted in 1989 by Reniee Hildebrandt (1991) found that most households who purchased a real tree were a middle-aged couple with children. This indicates that a key point of entry for new consumers is when they start a family. For growers, there should be a particular attention to this audience as capturing these consumers early could lead to lifelong loyalty.

As families transition from one life stage to the next, resources are reallocated due to changing needs and demands (Wilkes, 1995). These transitions often have key patterns and similarities that can be utilized to market to specific consumers (Wilkes, 1995). As children age and grow out of the house, families are less likely to purchase a real Christmas tree because key motivators such as nostalgia and Christmas traditions are not relevant. Thus, the marketing towards a retired couple should look different than the marketing towards a family with two young children. Moreover, as we found there is a bit of a cliff when a consumer turns 60, we might ask if it's even worth the time, effort, or energy to market to a consumer over the age of 60.

This is in line and ties back into things we heard in the focus groups. One couple over the age of 60 loved to have a live tree, and was willing to pay a much higher price for that tree in order to have it delivered, in a stand, directly to their front door, and then to have it removed after Christmas. While this is time intensive for growers, it speaks to a different need than for a young

mother, trying to create a “core family memory” for her young children, and her needs when purchasing a live tree.

In other words, we believe future research and work could be done to define the consumer life cycle for live Christmas tree purchasers, and to define and understand when changes in purchasing behavior related to the life cycle occurs. We feel strongly that this could provide additional clarity on what messaging, and when, effectively converts consumers into purchasers, and when growers should cease marketing efforts.

References

- Behe, B. K., Walden, R. M., Duck, M. W., Cregg, B. M., Kelley, K. M., & Lineberger, R. D. (2005). Consumer preferences for tabletop Christmas trees. *HortScience*, 40(2), 409–412.
- Bornstein, M. H. (1989). Sensitive periods in development: Structural characteristics and causal interpretations. *Psychological Bulletin*, 105(2), 179–197. <https://doi.org/10.1037/0033-2909.105.2.179>
- Brown, S. (2018). Retro Galore! Is there no end to nostalgia? *Journal of Customer Behaviour*, 17(1), 9–29. <https://doi.org/10.1362/147539218X15208755279216>
- Caliński, T., & Harabasz, J. (1974). A dendrite method for cluster analysis. *Communications in Statistics*, 3(1), 1–27.
- Dam, C., Hartmann, B. J., & Brunk, K. H. (2024). Marketing the past: A literature review and future directions for researching retro, heritage, nostalgia, and vintage. *Journal of Marketing Management*, 40(9–10), 795–819. <https://doi.org/10.1080/0267257X.2024.2339454>
- Davis, G. C., & Wohlgenant, M. K. (1993). Demand elasticities from a discrete choice model: The natural Christmas tree market. *American Journal of Agricultural Economics*, 75(3), 730–738. <https://doi.org/10.2307/1243580>
- Elder, R. S., & Krishna, A. (2022). A Review of Sensory Imagery for Consumer Psychology. *Journal of Consumer Psychology*, 32(2), 293–315. <https://doi.org/10.1002/jcpy.1242>
- Florkowski, W. J., & Lindstrom, O. M. (1995). Consumer characteristics associated with perceptions of live Christmas trees. *Journal of Environmental Horticulture*, 13(1), 15–18.
- Florkowski, W. J., Lindstrom, O. M., & Florkowska, M. A. (1992). Importance of five natural Christmas tree characteristics as related to socioeconomic variables and opinions of choose-and-cut farms' customers. *Journal of Environmental Horticulture*, 10(4), 199–202.

- Gentile, C., Spiller, N., & Noci, G. (2007). How to sustain the customer experience: An overview of experience components that co-create value with the customer. *European Management Journal*, 25(5), 395–410. <https://doi.org/10.1016/j.emj.2007.08.005>
- Hamlett, C. A., Herrmann, R. O., Warland, R. H., & Zhao, F. (1989). Christmas tree consumption behavior: Natural vs. artificial. *Northeastern Journal of Agricultural and Resource Economics*, 18(2), 135–139.
- Heinberg, M., Katsikeas, C. S., Ozkaya, H. E., & Taube, M. (2019). How nostalgic brand positioning shapes brand equity: Differences between emerging and developed markets. *Journal of the Academy of Marketing Science*, 47, 631–651. <https://doi.org/10.1007/s11747-019-00637-x>
- Hildebrandt, R. (1991). Marketing Christmas trees: Implications from a Kansas study. *Journal of Forestry*, 89(11), 31–34.
- Hinson, R. A., Marx, B. D., & Main, A. C. (1992). A case study of a partnership promotion program for Christmas trees. *Journal of Agribusiness*, 10(1), 1–14. <https://doi.org/10.22004/AG.ECON.62314>
- Holak, S. L., & Havlena, W. J. (1998). Feelings, fantasies, and memories: An examination of the emotional components of nostalgia. *Journal of Business Research*, 42, 217–226.
- Holbrook, M. B. (2000). The millennial consumer in the texts of our times: Experience and entertainment. *Journal of Macromarketing*, 20(2), 178–192. <https://doi.org/10.1177/0276146700202008>
- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132–140. <https://doi.org/10.1086/208906>
- Holbrook, M. B., & Schindler, R. M. (1989). Some exploratory findings on the development of musical tastes. *Journal of Consumer Research*, 16(1), 119–124. <https://doi.org/10.1086/209200>
- Holbrook, M. B., & Schindler, R. M. (1991). *Echoes of the dear departed past: Some work in progress on nostalgia*. In R. H. Holman & M. R. Solomon (Eds.), *Advances in Consumer Research* (Vol. 18, pp. 330–333). Association for Consumer Research.
- Holbrook, M. B., & Schindler, R. M. (1994). Age, sex, and attitude toward the past as predictors of consumers' aesthetic tastes for cultural products. *Journal of Marketing Research*, 31(3), 412–422. <https://doi.org/10.1177/002224379403100309>
- Holbrook, M. B., & Schindler, R. M. (1996). Market segmentation based on age and attitude toward the past: Concepts, methods, and findings concerning nostalgic influences on customer tastes. *Journal of Business Research*, 37(1), 27–39. [https://doi.org/10.1016/0148-2963\(96\)00023-9](https://doi.org/10.1016/0148-2963(96)00023-9)

- Holbrook, M. B., & Schindler, R. M. (2003). Nostalgic bonding: Exploring the role of nostalgia in the consumption experience. *Journal of Consumer Behaviour*, 3(2), 107–127.
<https://doi.org/10.1002/cb.127>
- Howard, J. A., & Sheth, J. N. (1969). *The theory of buyer behavior*. Wiley.
- Kass, R. E., & Raftery, A. E. (1995). Bayes factors. *Journal of the American Statistical Association*, 90(430), 773–795.
- Krishna, A. (2012). An integrative review of sensory marketing: Engaging the senses to affect perception, judgment and behavior. *Journal of Consumer Psychology*, 22(3), 332–351.
<https://doi.org/10.1016/j.jcps.2011.08.003>
- Lacher, K. T., & Mizerski, R. (1994). An exploratory study of the responses and relationships involved in the evaluation of, and in the intention to purchase new rock music. *Journal of Consumer Research*, 21(2), 366–380. <https://doi.org/10.1086/209404>
- Larson, R. B. (2004). Christmas tree marketing: Product, price, promotion, and place tactics. *Journal of Forestry*, 102(4), 40–45.
- Lorenz, K. Z. (1951). The role of gestalt perception in animal and human behavior. In L. L. Whyte (Ed.), *Aspects of form* (pp. 157–178). Indiana University Press.
- Mascarenhas, O. A., Kesavan, R., & Bernacchi, M. (2006). Lasting customer loyalty: A total customer experience approach. *Journal of Consumer Marketing*, 23(7), 397–405.
<https://doi.org/10.1108/07363760610712939>
- McCole, P. (2004). Refocusing marketing to reflect practice: The changing role of marketing for business. *Marketing Intelligence & Planning*, 22(5), 531–539.
<https://doi.org/10.1108/02634500410551914>
- Newman, D. B., Sachs, M. E., Stone, A. A., & Schwarz, N. (2020). Nostalgia and well-being in daily life: An ecological validity perspective. *Journal of Personality and Social Psychology*, 118(2), 325–347.
- Owen, W. F. (1984). Interpretive themes in relational communication. *Quarterly Journal of Speech*, 70(3), 274–287. <https://doi.org/10.1080/00335638409383697>
- Pierskalla, C. D., Deng, J., McGill, D. W., & Jiang, S. (2023). *Christmas tree shopping environments, mental fatigue recovery, and shopping preferences: A nationwide marketing study*. Final report prepared for the Real Christmas Tree Board. West Virginia University.
- Pierskalla, C. D., Deng, J., McGill, D. W., & Jiang, S. (2024). Effect of biophilic shopping environments featuring Christmas trees on perceived attentional and mental fatigue: A national study. *Urban Forestry & Urban Greening*, 95, 128309.

- Pine, B. J., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 97–105.
- Schmitt, B. (1999). Experiential marketing. *Journal of Marketing Management*, 15(1–3), 53–67. <https://doi.org/10.1362/026725799784870496>
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13, 290–312.
- Stampfl, R. W. (1978). *The consumer life cycle. The Journal of Consumer Affairs*, 12(2), 209–219.
- Triantafillidou, A., & Siomkos, G. (2014). Consumption experience outcomes: Satisfaction, nostalgia intensity, word-of-mouth communication and behavioural intentions. *Journal of Consumer Marketing*, 31(6/7), 526–540. <https://doi.org/10.1108/JCM-05-2014-0982>
- Tsaur, S. H., Chiu, Y. T., & Wang, C. H. (2007). The visitors' behavioral consequences of experiential marketing: An empirical study on Taipei Zoo. *Journal of Travel & Tourism Marketing*, 21(1), 47–64. https://doi.org/10.1300/J073v21n01_04
- U.S. Census Bureau. (n.d.). QuickFacts: Michigan. Retrieved July 14, 2026, from <https://www.census.gov/quickfacts/fact/table/MI/PST045225>
- Vukina, T., Hilmer, C. E., & Lueck, D. (2001). A Hotelling-Faustmann explanation of the structure of Christmas tree prices. *American Journal of Agricultural Economics*, 83(3), 513–525. <https://doi.org/10.1111/0002-9092.00174>
- Ward, J. H. (1963). Hierarchical grouping to optimize an objective function. *Journal of the American Statistical Association*, 58(301), 236–244.
- Wilkes, R. E. (1995). *Household life-cycle stages, transitions, and product expenditures. Journal of Consumer Research*, 22(1), 27–42.

Appendix A. Focus-Group Thematic Detail

This appendix preserves the fuller set of focus-group quotations and thematic detail that informed the survey. The themes themselves, together with a small number of representative quotations, are summarized in Section 2.1; the material below is retained as a complete qualitative record and can be shortened or removed in a later revision.

The Role of Nostalgia

"Yeah, yeah, it's definitely a little bit of nostalgia. You know, all the ones that we used to go to when I was a kid, kind of, we would always go at nine, working parents and it was always kind of like that, you know. Like I said, I don't really remember where we would go, but all I really remember, you know, being surrounded by trees and the Christmas lights overhead, you know"

"I don't know that's actually how we always purchased and this was what I grew up with. And so it just kind of seems really fun. And then, so that was in Georgia, we did that, and then we lived in Florida, we did that, and we moved here, except for those couple of years of going to a farm, what our kids were growing in, we always found a tree lot, and we had a couple of really good ones with really great trees"

"I think there's just a lot of nostalgia for us, traditions. It's been good feelings, and it's associated with the holiday."

"It goes back even farther in my mind. My father worked as a young man for the CCC, if you know of that civil Conservation Corps. And when he was involved in that, it was in the Upper Peninsula, replanting for us in Michigan, because we've been they've been cleared for lumber, and so it was rebuilding the tree industry. So in my mind, we've always had this tree industry in our family, but I think just the fun of getting a tree for us has always been a fun thing."

"I think probably what influenced me more was the house I grew up in didn't have a real tree, and I wanted one. Like I would think that's probably more, and that's, yeah, that's probably more what it is. And I would say [my husband] always had a real tree, and so he always wanted a real tree."

What these quotes exemplify and what this theme reveals is that nostalgia operates as a powerful driver of consumer behavior in the Christmas tree market. Participants did not describe making rational comparisons between real and artificial trees; they described feelings that had been formed in childhood and carried forward. This is consistent with the imprinting model found in prior marketing research (Holbrook & Schindler, 1991; Lorenz, 1951; Bornstein, 1989), and it suggests that the Christmas tree industry's most valuable communication asset may be experiences it helped create decades ago.

The challenge, then, is reaching consumers whose childhood experiences did not include live trees, or whose nostalgic associations are with artificial ones, and considering how to frame marketing communication efforts appropriately to capture this sense of childhood nostalgia.

However, we did find limitations to the role of nostalgia. For example, despite a deep love and clear preference for live Christmas trees, some consumers shared they felt they were too old to handle purchasing, transporting, setting up, caring for, taking down, and disposing of a live Christmas tree each year.

The Role of (Creating) Family Traditions

"Similar for us, when we were young and married, we would buy a tree from a tree lot, usually not too big because of price. You know, when we had children, it was really a fun adventure to go on a snowy day and cut down a tree and have them be involved and watched them wrap it and, you know, be a part of the decorate the tree process like right from the beginning. So that was fun."

"We have 11 kids, so having tradition and fun stuff is really important to them, and so we've been getting a live tree ever since, I think we had a fake tree the first two years, and it just seemed too boring to just get out a pre-lit tree for the kids. And so we thought we might do that thing where

we take them to a lot and we go find it. So we do the whole walking around thing every year. There's a lot of us, so it takes us a long time, besides really funny, and we love that part of it. We also had a daughter with medical special needs. She had a trach and a whole bunch of equipment that needed to go along. So finding a lot that was friendly and would let us go out before bad weather came, because she couldn't, we couldn't go out with her, and we wanted to make her part of it, so finding a lot that would let us go pick our tree in September and put a thing on it."

"I think of like tradition, because, like I said, we've mostly gone to the same farm for a number of years now, so we kind of have that tradition of walking up and down the aisles trying to find the right one, and then definitely some. Thing I look for, or something I appreciate, is the bailing, right, the shaking, where they shake all the dead needles out, and then they wrap it. Because we've, we've gone to other farms where they didn't wrap it, and then you're like, dragging it through the door, and needles are going everywhere before you even get it set up. So like having it wrapped, it comes in and you can get it in the stand and get it straight. That's a big deal, but definitely the tradition and the sense of place. I think we have memories, because we've gone to the same farm for a lot of years. So having those memories, the boys have those memories, and we have the picture of us picking it out and cutting it down every year you'd see the boys bigger than me."

"Well, it was more fun because the grandkids have a little more extra experience."

"I think, well, the first few years you were married, we lived in a tiny apartment and did not have a tree. Went home to mom and dad to see their tree. And then we started getting a tree. And I think at one point when the kids were little, we had an artificial tree the first few years. And then we realized what a great adventure it is to go and cut our own tree, and we made a big deal of it, you know, with the hot chocolate and the whole thing, and, yeah, and it just became a tradition. And now that we're this old, we've had fun taking a grandchild one at a time, because they can better lie down on the ground and cut the tree, whereas we're a little old to be doing that, but we kept it up even this past year, getting a real tree and loving it. And we'd love to continue that"

"When our two younger kids were quite small and went kind of treat my husband got down. I mean, this is the family, this is your family lore, story stuff. And when he was cutting it, and I can't remember what happened, oh, he was going to take it out of there, he fell backwards. And he there was a smoke there that you did see was a lot of snow. Fell backwards. The tree fell on top of him. The kids thought he did it on purpose. They were hysterical. They laughed. They jumped down the tree. They thought it was so funny. Every year he had to do that. Well, we went to cut a tree because they thought that was part of all my trees fall back. Have a tree fall on the kids fall on top of him. It was like, okay, that wouldn't have happened in a tree lot, no."

"For us, when we were young and married, we would buy a tree from a tree lot, usually

not too big because of price. You know, when we had children, it was really a fun adventure to go on a snowy day and cut down a tree and have them be involved and watched them wrap it and, you know, be a part of the decorate the tree process like right from the beginning. So that was fun."

"...because now I have kids in college, and when they come home at Thanksgiving, I want it to feel festive. Not necessarily Christmas, like, but, it's festive."

"What I've started doing since, um, I've been living with my husband is um, we, ha, it's like the first weekend after Thanksgiving. Well, I guess that next weekend, or whatever, we get back home, we like start putting the tree up, order, like, Chinese food, and then watch a Muppet's Christmas Carol, and it's just so much fun."

"We [decorate our tree] Christmas Eve. We always watch It's a Wonderful Life. And when the kids were really little, um, Rudolph would come before It's a Wonderful Life, and we have pajamas [for them,] which morphed into socks. Yeah, and then morphed into shirts from It's a Wonderful Life."

The Inconveniences and Difficulties of Purchasing and Maintaining Live Christmas Trees as One Ages

"I think I mentioned a few things, the mess and the watering, which can make a mess. Absolutely, for sure that you know the whole cleanup, the ease of a fake tree."

"You don't have grandkids that are willing to go with us anymore. Get on their hands and knees and saw them off. Help us load them on the top of the car and take them off at the other end, there's a possibility we might have to just give up on this tradition."

"See, I think as we get older, you know, convenience becomes an issue."

"I think that really was part of the decision to do an artificial was that once you get your live tree, and they're really nice for about two weeks, and then you got to be careful that you're still giving them some water to suck that up, so all sudden they're just going taking it out of the house. It's always a mess."

"I might feel differently if I went out there now, but it felt like we were looking forever and ever and ever and ever and walking miles. And I never particularly enjoyed that part of the tree routine. It was, yeah, muddy, loud with the like, bailing machines and whatnot. Not my favorite scene."

As an example of this, one of our focus group participants purchased live Christmas trees every year, but shared her family's practice had changed as she'd aged. The conversation went, as follows:

Participant: "We have [our Christmas tree] delivered, and it comes, usually Thanksgiving weekend, if we're home. . . and then we keep it 'til after Christmas."

Dr. Hearit: "Did you say you have it delivered? Could you tell me a little bit more about that?"

Participant: "I'll support local folks. So, the farmers market moves into the [term] market for Christmas, and there's a grower there, and he's been to Holland['s farmer's market' forever, and we learned, I don't know, five years back—I think it was actually during COVID—that he would deliver them. So, we go up to his little tree stand, and he does other evergreen types and so forth. We just order from him. It's kind of old fashioned. He has a piece of paper, you write your address,

you pay him with a check. It's really funny. And, then, they delivered it. Whatever in the world we want, okay.

Student Researcher: "Do your friends do that, too? Or do you know other people that get it delivered, or not really?"

Participant: "You know, everyone's surprised when we tell them that we do this, yeah, well, I guess don't know it. Yeah, you'd have to go to Mr. [name]'s stand and realize that he delivered. We used to go out and put one on top of the car. We put it in the car. We do all this stuff. One year, [we realized] it'd be awfully easy to just have them bring it to the porch."

Dr. Hearit: "Are there tradeoffs for you? Like, do you worry about not getting to pick out, like, the specific tree?"

Participant: "What a good question. I did at first, and the trees are beautiful, they're very freshly cut. I mean, like, he will go, I know he and the guys go to the field and cut it just before they bring it to my house."

Dr. Hearit: "So, you have, like, a high degree of confidence you're getting a fresh tree."

Participant: "Yes."

A few participants continued in their early 60s to purchase live trees, but did acknowledge age would impact their purchasing behavior in the future. For example, one female participant in her early 50s said: "...we like the adventure of going and getting [the Christmas tree]. And it's funny in our house we're always like, what about that one? And we're like, no, there's gotta be a better one than that. And we always end up back at that one. And every time [my husband] is like, 'can we just get this one?' And I'm like, 'well, there's that one over there!' and then we go look at it all the way around and you know, it's it every time. But this year actually, it was really funny, [my husband] said, 'how long do you think we're gonna keep doing this? Like, we don't have kids at home, we're doing this ourselves. Like, when are we gonna think this is not a great idea?' But so far, we're still doing it."

Experience in Decision-Making

"I have learned over the last few years about the benefits of having a live tree, like the environmental impact of having a live tree, and so that has helped my decision to get one in the future, even though I don't have one right now."

"They have fir trees like that's our preferred tree. Is the fur, because it's not as picky. We like the softer needles. And it's, uh, it's definitely, it's very reasonably priced, but they don't necessarily trim the trees, great. So it's, it tends to be, we're walking, we're walking, we're searching, we're searching. And when it's just about like we have to go somewhere else, they're not going to have one, then we find one the tree. And oftentimes, because they don't trim them, we're just taking the top part of the tree because the bottom part is not suitable. But we can, we can find seven feet of tree at the top. So oftentimes, that's, that's what we end up taking with us."

"But I think that would be a selling point to be able to say, like, Okay, well, I know this is fresh, and I know it didn't drive in from Duluth."

"if it was, even if it was, you know, let's say there's Tom and Sons farm that does choose and cut, and then they also had a retail lot, you know, in town, or something that so you could, the signage or the messaging was such that, you know, this is from a local farm. We just cut these down, blah, blah, blah that would, that would probably influence me to at least consider going there."

"But we were very much partial to the Fraser Fir variety. So that was a big one for us, yeah, you know, wanting that particular type of tree, yeah?"

"I expect it to be, you know, real fresh. I expect it to be plump and well taken care of. You know that no, no holes in it or anything like that. And I expect it to be the kind of tree that I want. I'm gonna spend that kind of money, I'm going to go and find the prettiest tree that I can."

"Groomed walkways would distract from my experience, because, again, I like things to just feel more farm authentic than touristy or anything like that. I don't mind if there's a little warming barn, again, with some drinks or donuts that you can buy or something, but just nothing that's real high production or flash that makes me feel like I'm contributing to that instead of the growing of the trees."

"Yeah, we would tend to shop a little bit comparison shop, if we had our hearts set on one, which will probably end up having being at some point. We probably end up shopping around too if we couldn't find it or we wanted something bigger."

"I think value is what you're saying is really important for what you're getting. I would say, though we always had a, maybe around a \$70 cutoff point at that point, you know, so and sometimes you could find, you know, one for \$60 and one for \$70. And there really wasn't much height difference, you know, it was just a matter of, maybe that leader, how tall that one was, or something. So you could, you could figure that out. And then something, like I mentioned before, was Cub Scouts or something. Then there's just maybe not quite the value you hope for, but you're helping, you know, an organization."

"So we found a place. Now that's a little, like, it's about the same price as another one, but their trees are way better shaped. It's way easier to find a great tree. So we go there, even though they don't have any of the extras, instead of the place. Based on tree shape and good selection."

"If I was gonna buy from a place like that [a corner lot or big box retailer], I would want to see a sign saying where they were cut, and when they were cut. I don't think I'd buy them unless it said when they were cut."

"I guess I would say, like, whether or not the trees were nice. But also, you know, when the people aren't who are, like, wrapping the tree, or if they're like, the employees are nice, and it's a good price for the tree. And I don't know, we just like being able to, like, walk around and pick the tree."

"They were offering probably \$5 off, yeah, what it was? And we like, oh, okay, let's go there. But the prices have escalated so much that the coupon is kind of negligible now, because we paid almost \$100 last year for the tree, because they go by the, you know, the height, yeah? But yeah, I think once you find a place that you like, atmosphere, people, trees, you tend to go back. Plus, you know where it is, it can be really hard to find some of these places."

Appendix B. Practitioner Report

Evergreen Growth: Crafting a Marketing Blueprint for Michigan's Christmas Tree Farms

Practitioner Report

Final Report Prepared For:



Michigan Christmas Tree Association (MCTA)

Prepared By:



Hope College

Kevin Chastagner, Ph.D.

Lauren Berkshire Hearit, Ph.D.

Human Subjects Approval

Hope College Human Subjects Review Board, HSRB #25-015.

Publication Date

August 2026

Website:

evergreengrowthmi.org



Table of Contents

Introduction	3
Survey Creation and Constructs.....	3
Sample.....	4
Action Checklist.....	4
Findings for Growers and Retailers.....	5
1. Lead with authenticity	5
2. Setup: the barrier and the fix.....	7
3. Normalize the ‘hassles’	7
4. Lapsed buyers are not the target.....	8
5. Age: who to target and who to retain	8
6. Buy-local as a targeting signal.....	9
7. Word-of-mouth is the top channel	10
8. What the on-site visit looks like.....	10
9. Families: serve them, be careful targeting them	11
Contact Us.....	11

Introduction

Christmas tree growers and retailers face challenges in understanding their current consumers, potential consumers, and the marketing work involved. Due to the short selling cycle and the seasonal nature of the industry, there are limited opportunities to connect with consumers which can reduce the information that a grower or retailer has access to about their consumers. Additionally, the seasonal nature means that the development cycle of marketing initiatives is functionally limited to one chance a year to see a return. The combination of these two pieces increases the value of more systematic data on consumers to try and help better target marketing in hopes of increasing the likelihood of success.

Early consumer research in this space focused on baseline consumer and tree characteristics (Florkowski, Lindstrom, & Florkowska, 1992; Florkowski & Lindstrom, 1995; Larson, 2004), leaving room for a more current picture of a market that has changed considerably amid growing tension between real and artificial trees (Hamlett, Herrmann, Warland, & Zhao, 1989). Recent work has re-opened the space from new angles, for example, the restorative-environment findings of Pierskalla, Deng, McGill, and Jiang (2024) on Christmas tree shopping environments, but a statewide behavioral and attitudinal profile of Michigan consumers does not exist.

This project was funded by a grant from the Michigan Christmas Tree Association with three practical objectives: (1) describe who Michigan's real- and artificial-tree consumers are and how they buy; (2) identify what distinguishes artificial-tree buyers who are open to trying a real tree, so growers can size and prioritize the conversion opportunity; and (3) generate the evidence base for a grower-facing marketing toolbox (messaging themes, channel guidance, and service recommendations).

For those interested in the full details of the analysis there is a full report that is available from the MCTA or the authors. There is also a slide deck from the 2026 MCTA Summer Meeting and a website with more tools and practical advice that is linked to the findings from the survey at: evergreengrowthmi.org.

Survey Creation and Constructs

Focus groups conducted with Michigan consumers in 2025 supplied the constructs the survey was built to quantify, nostalgia, family tradition-building, barriers to getting a real tree and the experience of getting a real tree. In brief, the survey measured how people currently buy (channels, price, timing, and who they shop with), their attitudes toward real versus artificial trees, the barriers they see to a real tree, two established nostalgia scales, the importance they place on the tree itself and on the on-site, post-purchase, and experience sides of buying, and standard demographics.

Sample

Participants were recruited through Prolific, an online research panel that is commonly used in survey research, and completed the survey on Qualtrics between November 18th and November 27th, 2025. As a majority of buyers start their purchase of real trees just after Thanksgiving, this timing was chosen to coincide with the start of the tree-buying season when consumers are likely to be solidifying their plans.

Participants were recruited on Prolific based on informed consent, current Michigan residency, being 21 or older, and that they celebrate Christmas annually. Participants were compensated through the Prolific platform and the study was approved by Hope College's Human Subjects Review Board (HSRB #25-015).

A total of 349 responses were collected during the time the survey was available. Five screening criteria were used to improve the quality of the sample and any one of the five would trigger removal from the sample resulting in a final sample of 316 usable responses. The final sample skews toward female participants (about two-thirds) and is slightly whiter than the Michigan population.

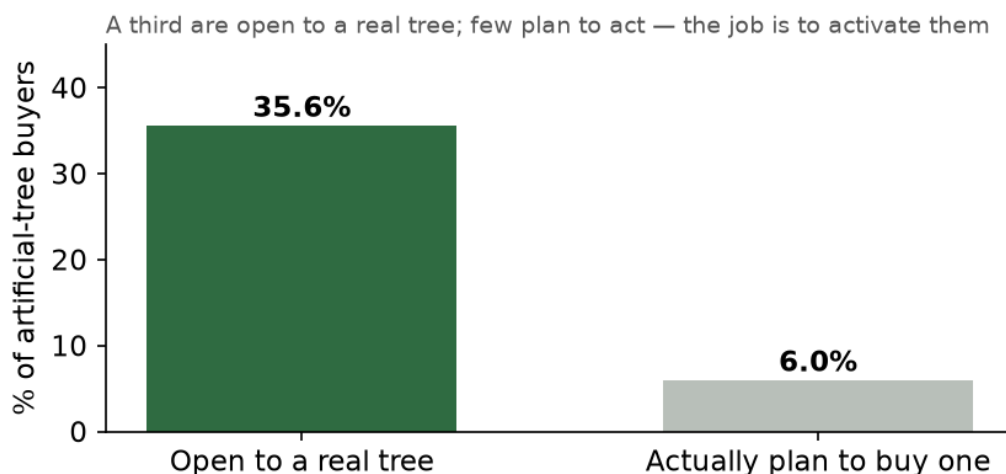
Action Checklist

1. **Lead with authenticity.** Make the realness of the tree the headline of your messaging; use aroma, tradition, and atmosphere as support; make it visible with harvest-date tags and "grown here" signage. Give a "ready-to-buy" core a reason to act (an occasion plus a first-time offer), and make it easy for what we call the "barrier-constrained" group.
2. **Setup.** Setup is one of the highest barriers for prospective real Christmas tree consumers. Consider offering delivery, set-up, and removal, or simpler options like pre-fitted stands, stand-fit help, pre-drilled trunks, and "we'll set it up."
3. **Normalize the hassles.** Shake, bale, and wrap trees; make disposal easy; use "easier than you think" language with already-open prospective first-time real Christmas tree consumers.
4. **Lapsed buyers.** Do not build a campaign around them; spend that effort on the levers above.
5. **Age.** Do not make 60+ a primary target; watch your own customer-age mix; consider using full-service delivery to retain aging real-tree buyers.
6. **Buy-local messaging.** Lead with "local," and use "grown and cut here" signage; meet these buyers at farmers markets and shop-local events; turn a first local sale into loyalty.
7. **Word-of-mouth.** Fuel referrals (bring-a-friend offers, ask for reviews) and be findable (a full Google Business Profile and clear signage).
8. **The on-site visit.** Stock ornaments and wreaths at the point of sale; make the visit an unhurried family experience; keep it feeling like an authentic farm.
9. **Families.** Serve them well (activities, add-ons, family framing) but do not screen on "has children" when deciding who to target with your marketing efforts; instead, consider language like, "start your family's tradition" for new families.

Findings for Growers and Retailers

Our analysis found, amongst other things, a set of practical implications for growers and retailers to consider when marketing real Christmas trees within the State of Michigan. A third of Michigan artificial buyers are already open to the idea of a real tree (35.6%), but few plan to act on that. While considering what it takes to convert consumers to real Christmas tree purchases, growers and retailers should consider building marketing initiatives that target consumers who are open, and provide them with a way to make a concrete plan to actually purchase a real Christmas tree.

Openness is not intention

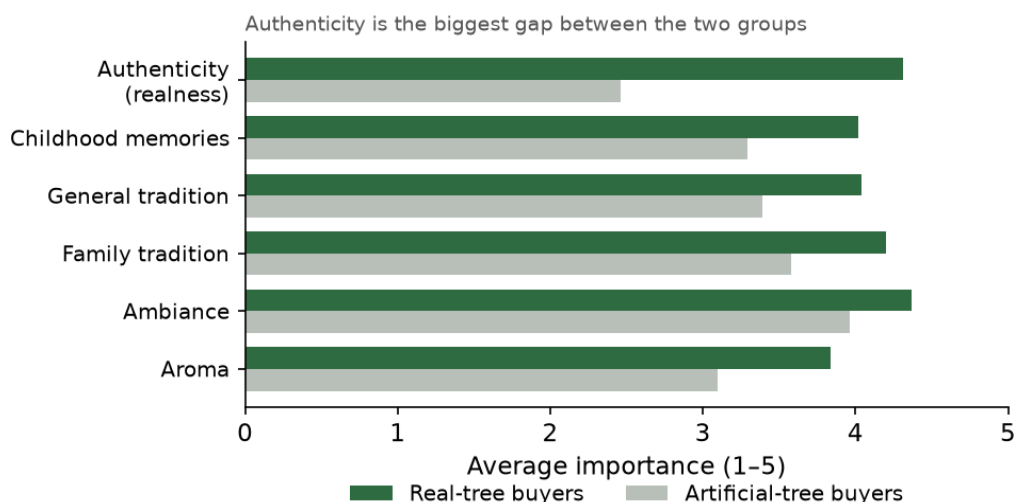


Openness to a real tree vs. plans to buy one, among artificial-tree buyers.

Each finding below states what we found and, under “What to do,” the concrete steps a grower or retailer can take. A one-page action checklist is on the previous page.

1. Lead with authenticity

What sets real-tree buyers apart



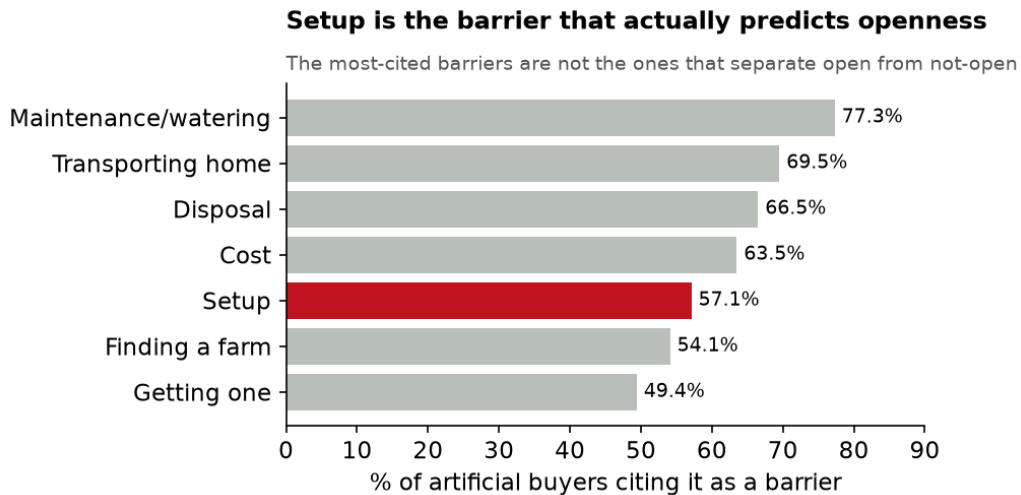
There is a strong relationship between realness, or authenticity, and openness to purchasing a real Christmas tree. In our sample, valuing authenticity is the single largest gap between real and artificial consumers: people who buy real trees rate authenticity higher than people who own an artificial tree. Aroma, tradition, and the atmosphere a real tree creates in the home are all genuine motivators, but our analysis suggests they are expressions of that same underlying authenticity rather than separate levers. Experiential nostalgia fits the same way. It is a real driver of openness, it is broadly distributed rather than confined to one demographic group, and it works best as the emotional frame around an authenticity message rather than as a campaign of its own. Our focus groups reinforced this, with one participant calling a real tree “a textural, like sensory experience” compared with an artificial tree that felt “like tinsel, it’s, like, plasticky.”

What to do:

- Lead your messaging with the realness of the tree. Simple versions include “nothing compares to a real tree” or “a real, fresh-cut Michigan tree.”
- Use aroma, tradition, and atmosphere as support for that realness message, not as separate campaigns.
- Make authenticity visible on the tree and the lot with harvest-date tags, named varieties (participants volunteered “Fraser Fir” and “softer needles”), and “grown here” signage. This matters most at retail lots and big-box settings, where the grower is not visibly present.
- For the low-barrier, highly receptive core (open, with few frictions), give a reason to act now, such as “come get your tree Thanksgiving weekend” along with a first-time discount or a scheduled time slot.
- For the barrier-constrained group (open, but seeing more friction), the task is not persuasion but reducing the logistics of getting a real tree for the first time (see the setup finding).

Valuing authenticity is not the same as being ready to switch. Many artificial buyers who say realness matters are still not planning a real tree, so use authenticity as the message you lead with, not as a way to pick who to target.

2. Setup: the barrier and the fix



Barriers to a real tree, ranked; setup is the one that separates the open from the rest.

Within the artificial-buyer sample, setup is the only barrier that differs between consumers who are open to a real tree and consumers who are not. It is not the most commonly cited barrier, but it is the one that separates the open from the rest.

What to do:

- Offer a delivery, set-up, and removal service. In our focus groups, one couple over 60 years old paid a premium for exactly this.
- Stock and promote simpler options too, such as easy or pre-fitted stands, stand-fit help, fresh-cut or pre-drilled trunks, and “we’ll set it up” options.
- Treat the tree stand as part of the sale and the experience, not an afterthought.

Cost is not the lever here. Cost is widely felt, but does not differ between the open and the not-open, and what a buyer paid for their artificial tree is unrelated to openness, so the idea that people stay with artificial because they already paid for it does not hold up.

3. Normalize the ‘hassles’

When comparing artificial owners with real-tree owners, artificial owners rate the hassles of a real tree (disposal, transport, ongoing care, watering, setup, needle loss, and fire safety) higher than real owners do. Concerns around disposal shows the largest gap between real and artificial Christmas tree consumers, and fire safety the smallest. However, our analysis found these concerns act more like a stable background feeling, so marketing messaging is unlikely to move higher-concern buyers. But for buyers who are already more open to real Christmas trees, it can help the switch from artificial to real feel easier.

What to do:

- Reduce the mess on the grower side: shake out dead needles and bale or wrap the tree before it leaves the lot. One participant credited this with being able to “get it in the stand and get it straight.”
- Make disposal easy with clear recycling or drop-off information, or a haul-away option. You could potentially provide details about tree recycling for the county or city in which you operate when consumers purchase a tree from your choose-and-cut or retail location. Disposal is the concern with the single largest gap between artificial and real buyers.
- Use “easier than you think” messaging around the maintenance of real Christmas trees for buyers who are already open to a real tree. This is not an effective way to convince high-concern buyers to try a real Christmas tree for the first time.

These moves help buyers who are already close to switching more than they change the minds of high-concern buyers.

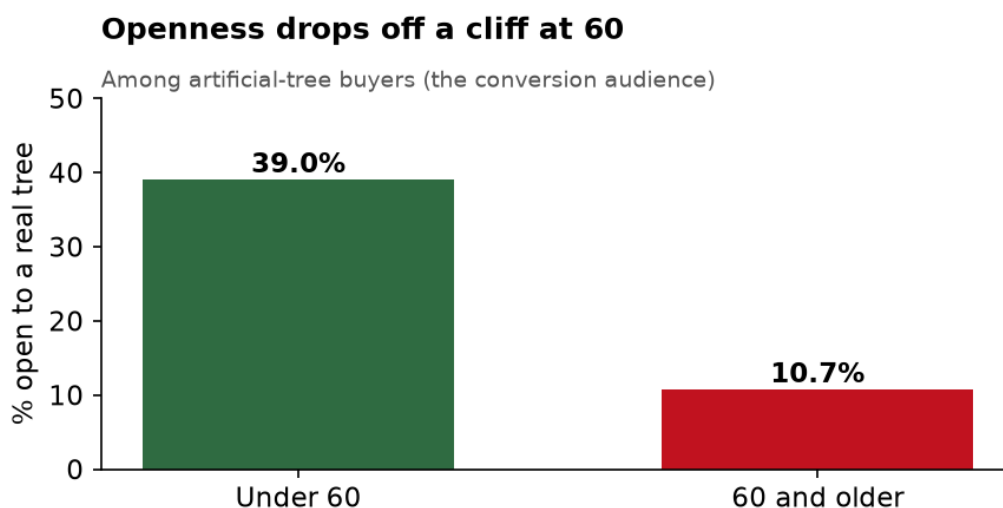
4. Lapsed buyers are not the target

It can seem appealing to target lapsed real-tree buyers who now own an artificial tree, since they have prior experience and maybe some nostalgia. In our analysis this does not bear out. Lapsed buyers were no more likely to actually plan a real-tree purchase next year than those who never had a real tree (8.8% versus 6.5%), and only slightly more likely to express general openness (44% versus 34%), a difference too small to rely on.

What to do:

- Do not build a marketing initiative around lapsed buyers. The likely return is weaker than the other options in this report.
- Put that effort into the levers that do separate the open from the rest: authenticity, an easy-set-up offer, buy-local messaging, and a younger audience.

5. Age: who to target and who to retain



Share of artificial-tree buyers open to a real tree, by age.

Age 60 and older is the largest constraint in the analysis. Not one respondent aged 60+ strongly agreed they were willing to purchase a real tree this coming season, and this is not explained by barriers or nostalgia. Among artificial buyers, 39% under 60 years old are open to a real tree, versus about 11% at 60 years and older.

What to do:

- Do not make the 60+ group a primary target for conversion messaging.
- Watch your own customer-age mix over time. If your current customers skew toward the 60+ cut point, treat it as a signal that you will need to replace those customers with younger ones over the next few seasons.
- Use full-service delivery and setup to retain older real-tree buyers who love the tree but are aging out of the physical work. In our focus groups, that arrangement let one aging couple keep buying real trees longer than they otherwise would have.

This is a hard-to-convert age group, so treat delivery for older customers as retention, not conversion.

6. Buy-local as a targeting signal

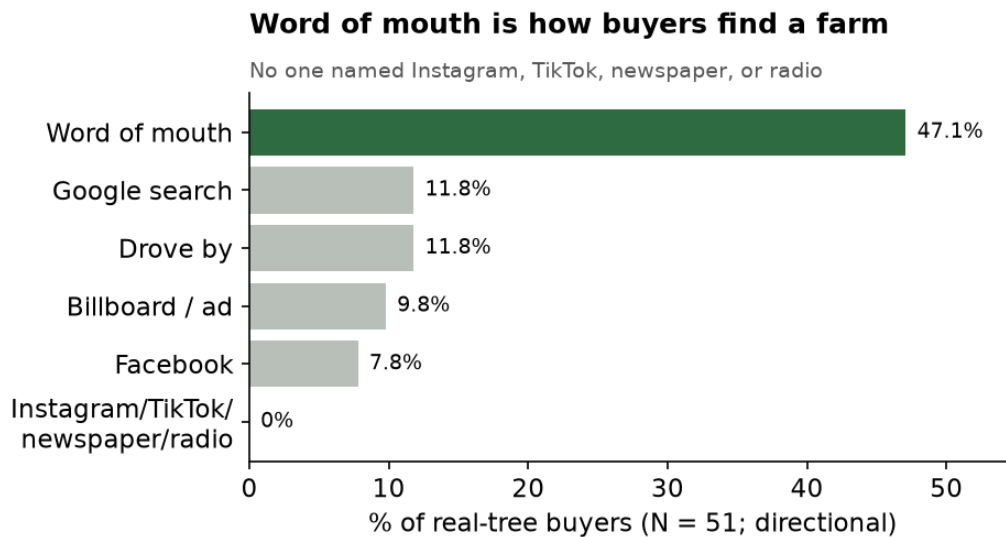
A “buy-local” orientation both predicts openness to a real tree, and tracks who has actually switched tree types before. Lead with local in your message and meet these buyers in the local channels they already use.

What to do:

- Lead with “local” and make it visible. “Locally grown,” “cut this week on our farm,” or “support a Michigan family farm” taps a value that predicts openness and doubles as proof of authenticity. Particularly important for most retail lots and big-box settings, clear “grown and cut here” signage on site matters to consumers.
- Meet local-minded buyers in the channels they already use: farmers markets, “shop local” events, Michigan-grown and agritourism networks, and marketing materials in neighboring local businesses. One participant said, “[if a sign said] this is from a local farm, we just cut these down... that would probably influence me to at least consider going there.”
- Use the first local sale to build loyalty. Buyers described sticking with a preferred local grower once they find one. One focus group participant said, “once you find a place that you like, atmosphere, people, trees, you tend to go back.” Many participants agreed with that sentiment.

Buy-local flags people who are values-driven and switch-prone in either direction, not people guaranteed to move toward real. It widens the audience you can reach; authenticity and a setup-solved offer are what actually convert them.

7. *Word-of-mouth is the top channel*



How real-tree buyers found where to buy (N = 51; directional).

Word of mouth is how real-tree buyers most often find where to buy (47%), ahead of online search and driving by. No respondent named Instagram, TikTok, newspaper, or radio as the way they found where to buy. This does not mean social media or a website are unimportant for information, but discovery runs on word of mouth and on being easy to find.

What to do:

- Fuel referrals on purpose: a “bring a friend” or refer-a-neighbor discount, a photo-worthy moment on the lot, and an active ask for online reviews, which are word of mouth at scale.
- Be findable when someone searches or drives by. Claim and fully fill out a Google Business Profile (hours, varieties, price range, photos, directions) and use clear road signage. Participants noted it “can be really hard to find some of these places.”
- Use social media and your website to inform people who already know you, such as hours and what is in stock, rather than as the main way to get found. Consider ensuring your website is updated with that season’s hours, pricing, and contains language that will put your website at the top of a search engine when a consumer searches, “local Christmas tree farm,” “Christmas tree lot,” “real Christmas tree farm” or other permutations of a non-expert searching for a real Christmas tree.

8. *What the on-site visit looks like*

Real-tree purchase trips are unhurried and family-centered. 90% of buyers spend 11 or more minutes on site, most shop with a spouse or partner (59%) and children (39%), and 43% add ornaments, 33% wreaths, and 23% garland while on site (about a third buy nothing extra).

What to do:

- Stock ornaments, wreaths, and garland at the point of sale. Because roughly four in ten buyers add ornaments and about a third add wreaths. This is a low-effort way to raise the average sale.
- Build the visit as an unhurried family experience: walking the rows to find the right tree, hot chocolate, and treating the outing as an adventure, which focus-group participants described directly.
- Keep it feeling like an authentic farm rather than polished or touristy. Several participants preferred that genuine feel, so on-site additions should read as real rather than produced.

This finding is based on descriptive data, so treat it as a picture of who already buys real rather than a tested conversion lever.

9. Families: serve them, be careful targeting them

Families with children at home are a distinctive segment: more tradition- and togetherness-motivated, more nostalgic, more interested in the on-site experience, and more likely to buy add-ons. But family identification is not a conversion lever. Parents are no more likely than non-parents to value authenticity, to see fewer barriers to purchasing a real tree, or to actually own a real tree. Children-at-home is only a borderline predictor of openness. Ultimately, the family audience splits across a group that is convertible to purchasing a real tree, and a non-convertible group.

What to do:

- Do not use “has children” as a target market screener for conversion. Lead with the actual levers instead: authenticity, a setup-solved offer, buy-local, and a younger audience.
- Serve families well when they do buy: on-site children’s activities, family-tradition and togetherness framing, and add-on merchandising.
- As a longer-term bet, consider a “start your family’s tradition” message aimed at new families forming their own rituals. The survey cannot confirm this, but the focus groups and the life-cycle view point to family formation as a natural entry point.

The family audience mixes people who will convert with people who will not, so treat family stage as a way to serve customers well, not as a way to find converts.

Contact Us

If you have any questions or have found this helpful, reach out and let us know:

Kevin Chastagner, Ph.D.
Associate Professor of Management
Hope College
chastagner@hope.edu

Lauren Berkshire Hearit, Ph.D.
Associate Professor of Management
Hope College
hearit@hope.edu

Appendix C. MCTA Summer Meeting Presentation



Evergreen Growth

Crafting a Marketing Blueprint for Michigan's Christmas Tree Farms

Dr. Kevin Chastagner & Dr. Lauren Berkshire Hearit | Hope College

Funded by the Michigan Christmas Tree Association

Why We Did This

The problem you already know

- Six weeks to sell. Fifty-two weeks of decisions.
- One shot per year to find out whether a marketing dollar worked
- Hard to keep customer data when the season is that compressed
- Most marketing advice assumes you sell year-round. You don't.

What we set out to fix

- Give growers real data on Michigan consumers — who they are, what moves them, and where the marketing effort actually pays.

What the Grant Set Out to Do

1

Talk to Michigan consumers directly

Eight focus groups · 32 participants

DONE

2

Field a statewide survey built from what they said

316 Michigan consumers

DONE

3

Turn it into a marketing blueprint growers can use

Full grant report + Practitioner report + Presentation + Website

DONE

Objective 1: What We Heard in the Room

Eight focus groups · 32 Michigan consumers · Southwest & Northern Michigan

Ages 19 to 83 · Real-tree buyers and non-buyers in the same room

NOSTALGIA

Looking back

Childhood memory drives today's preference — often without realizing it

TRADITION

Looking forward

Parents deliberately building a memory for kids and grandkids

PAIN POINTS

As one ages

The physical work of a real tree pushes some families to artificial

EXPERIENCE

What makes it worth it

Species, freshness, atmosphere, and the trip itself — price is only one part

What They Actually Said

NOSTALGIA

"I don't really remember where we would go, but all I really remember is being surrounded by trees and the Christmas lights overhead."

TRADITION

"He was cutting the tree ... and he fell backwards. The tree fell on top of him. The kids thought he did it on purpose. They were hysterical ... That wouldn't have happened in a tree lot."

PAIN POINTS

"You don't have grandkids that are willing to go with us anymore ... there's a possibility we might have to just give up on this tradition."

EXPERIENCE

"I would want to see a sign saying where they were cut and when they were cut. I don't think I'd buy them unless it said when they were cut."

Objective 2: The Statewide Survey

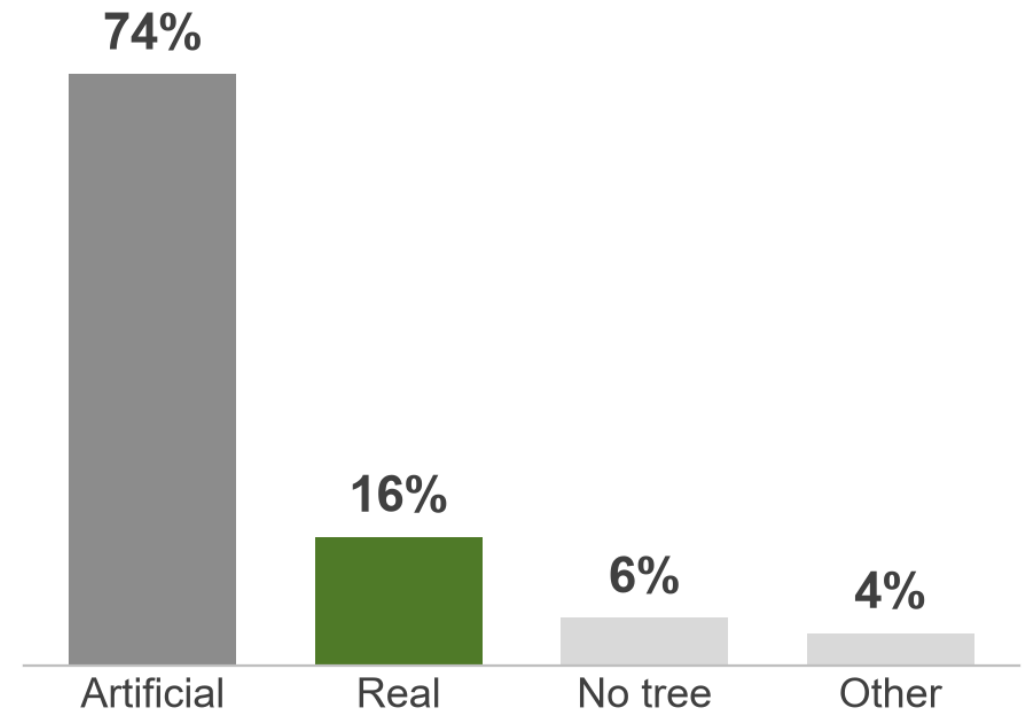
How we did it

- 316 Michigan adults who celebrate Christmas (349 collected; 33 removed for quality)
- Fielded the week of Thanksgiving, when people are actually deciding

Who answered

- Skews female (64%), suburban (46%), white (81%), college-educated (50%)
- **Only 13% are over 60 y.o., we under-represent older Michigan**
- About half have children at home

Three out of four Michigan households put up an artificial tree



This Market Barely Moves

Habit runs deep

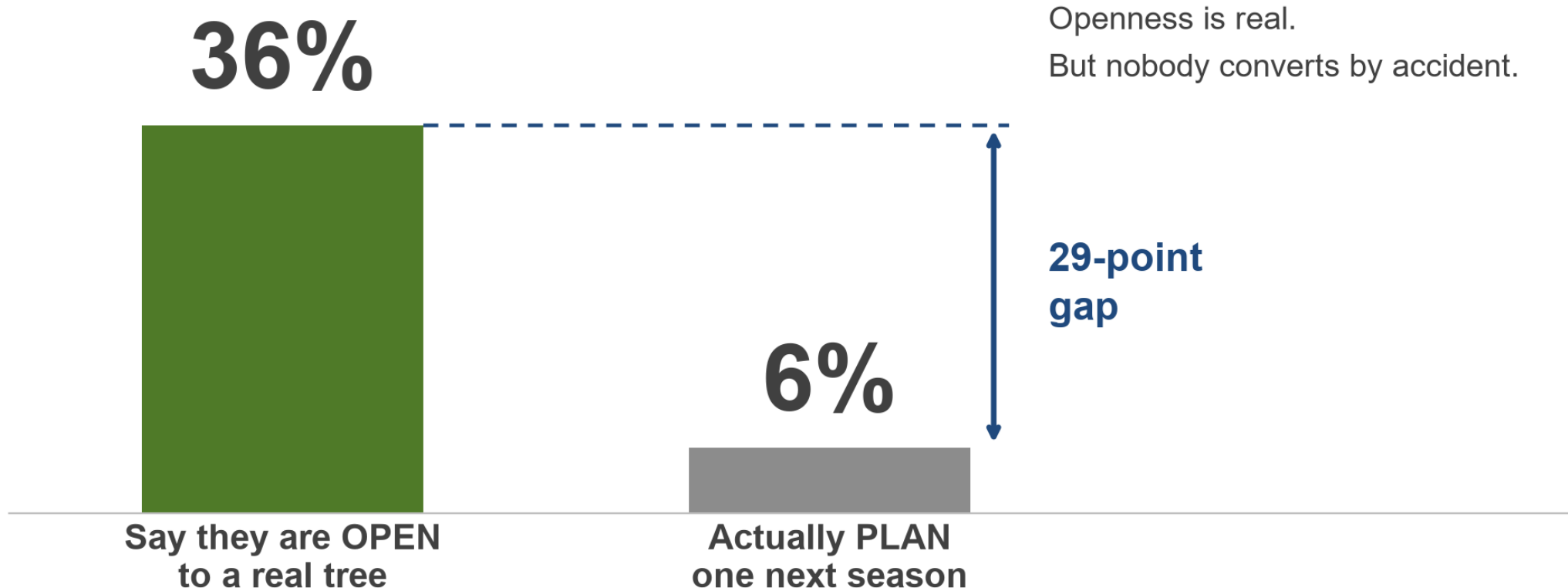
- 78% have displayed the same type of tree for five years or more
- Last year's choice predicts next year's almost perfectly
- **Only 2.5% of our sample plans to switch, in either direction**

Two-way switching

- Of everyone who has ever switched in our sample: 96 went to artificial, but 31 went to real
- Top reason for switching, in both directions: convenience (46%)

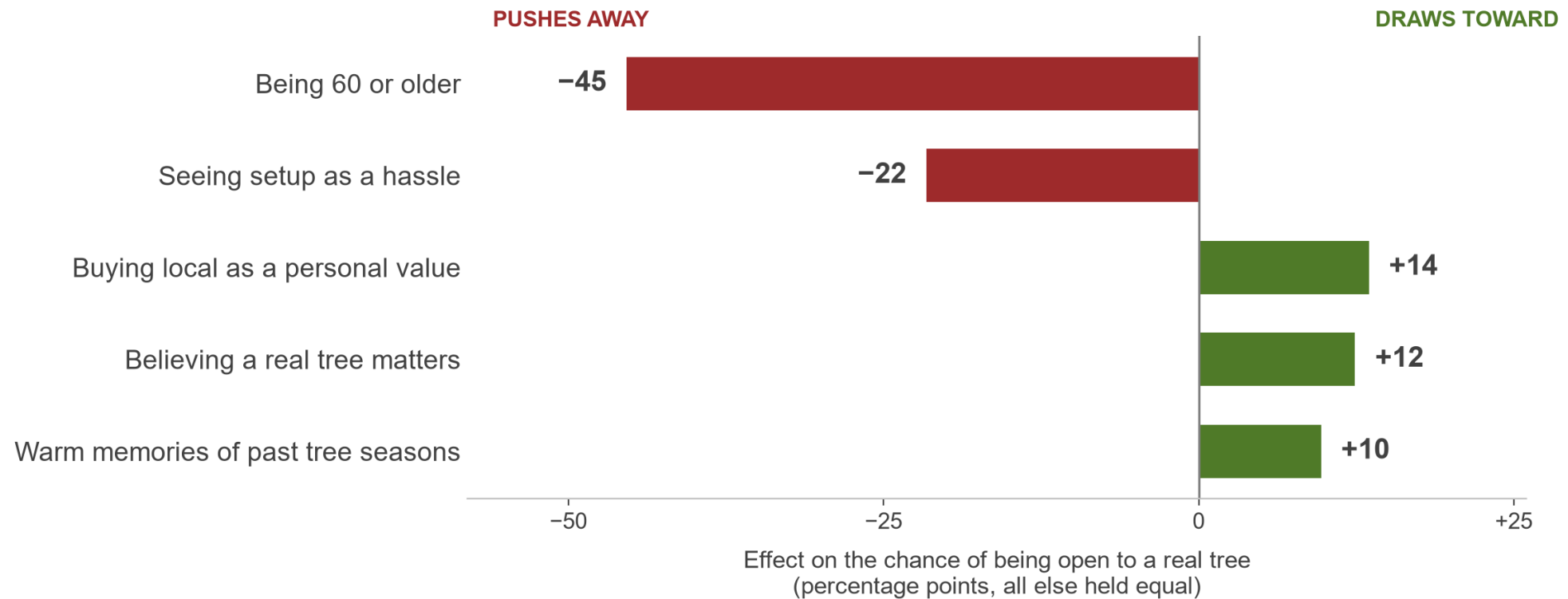
There is a 29 point gap between those who say they are open to a real tree, and those who actually *plan* to purchase a real tree next season

Among current artificial-tree households



Five Things Separate the "Open to a Real Tree" Group

Among current artificial-tree households — what moves someone toward, or away from, being open to a real tree



Cost is not on this list. Neither is income, where they live, or what they paid for their artificial tree.

Lead With Authenticity — Not Aroma

Authenticity: Placing a high importance on it being ‘real’

- Biggest gap between real (mean = 4.3) and artificial buyers (mean = 2.5) of anything we measured (5-point scale)
- Strongest predictor of openness among artificial buyers. Held up in survey, and in focus groups

The surprise: aroma doesn't stand on its own.

Scent looks powerful on its own — but once you account for “it’s a real tree,” aroma stops adding anything.

“Nothing compares to the real thing.”

Fold scent, tradition, and atmosphere inside that message, rather than using scent, tradition, or atmosphere as the basis of your marketing campaigns.

Setup Is the Barrier Worth Attacking

Barriers are everywhere

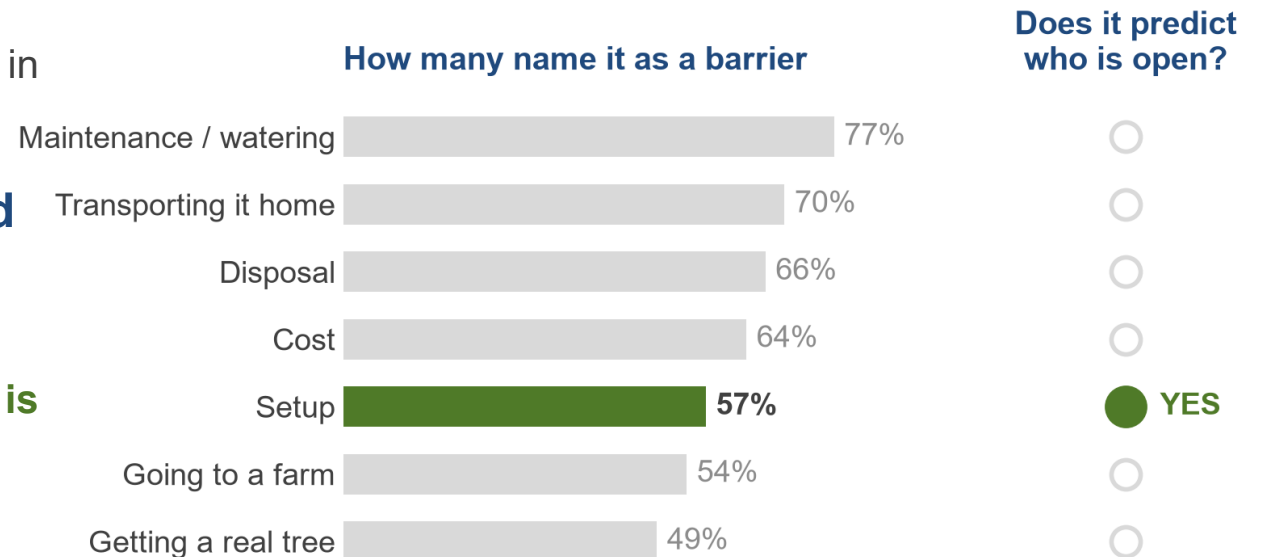
- The average artificial buyer named 4 of 7 barriers. One in five named all seven.

Only one separates the open from the closed

- Not open to a real tree: 66% call setup a barrier
- Open to a real tree: 41%
- **The only barrier that holds up once everything else is accounted for**

What that means

- › Consider delivery-and-setup service
- › Pre-fitted stands/stand-fit help
- › Fresh-cut and pre-drilled trunks
- › “We’ll set it up” as a paid add-on



Cost is named by nearly two-thirds — and tells you nothing about who might convert.

The 60+ Age Cliff

- Under 60 y.o.: about 4 in 10 are open to a real tree.
- 60+ y.o.: drops to about 1 in 10 respondents are open to a real tree. **Not one respondent over 60 strongly agreed.**

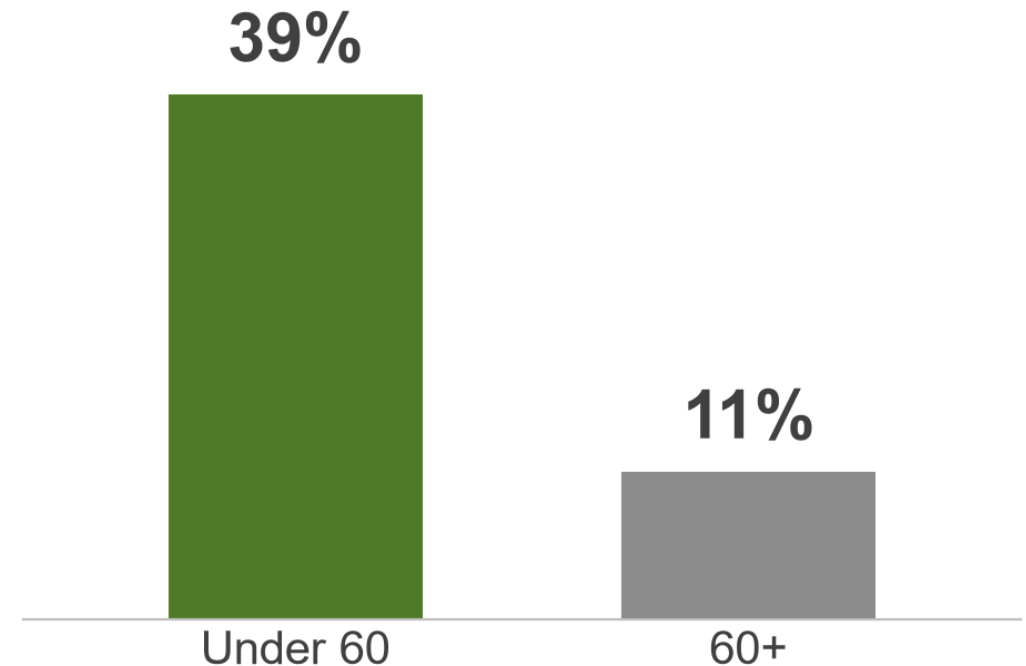
We tested every explanation we could

- Not barriers (older buyers report the same ones)
- Not nostalgia (the two age groups score the same)

Three takeaways:

1. 60+ is not where new customers come from.
2. A 60+ heavy base signals you need to replace demand.
3. Delivery + setup could retain the older buyers you have.

Share of artificial-tree buyers open to a real tree



Buy-Local Is a Targeting Tool, Not a Message

People who value "buying local" are the most likely to have ever switched tree types.

This holds across every way we measured it.

The catch: it predicts switching in BOTH directions.

Buy-local people move toward real trees — and away from them.

So use it to find your audience, not to convince them

- Co-market with farmers markets and local business campaigns
- “Shop local” weekends and cross-promotions
- **Then bring the authenticity and setup messages once you have their attention**

Four Things Worth Reconsidering

Each sounds sensible — and each came back empty in the data.

Lapsed buyers

People who once bought real and now buy artificial are **no more likely** to plan a real tree than people who never bought one.

“It’s easier than you think”

Artificial buyers rate every real-tree hassle **higher** than actual real-tree owners do — but **prior experience doesn’t shift it**. The message would need more.

Families as a screener

Families are **more** tradition-driven and buy more add-ons — but **no more likely to value authenticity or to own a real tree**.

Social media for discovery

No respondent found their tree source through Instagram, TikTok, newspaper, or radio. (Doesn’t mean drop social, though...)

Where They Buy and How They Find You

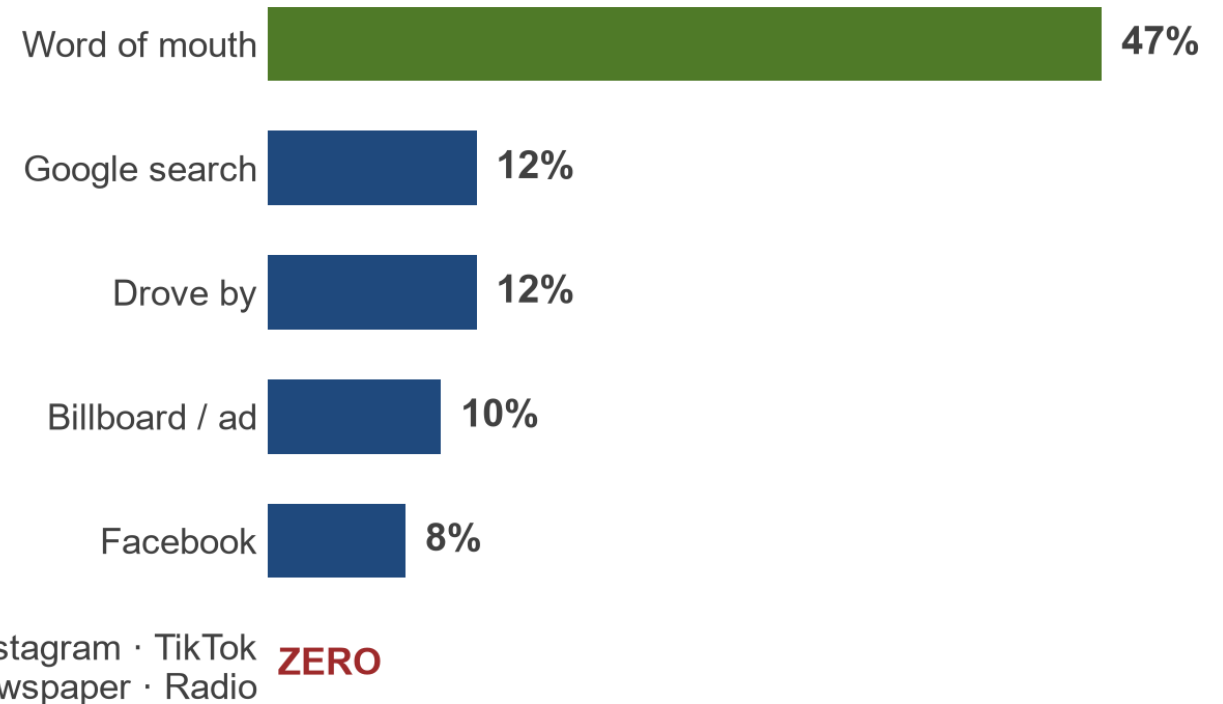
Where real-tree buyers bought

- **Choose-and-cut farm 39%**
- Corner lot (Scouts, church, roadside) 20%
- Nursery 16%
- Big-box store 14%
- Farmers market 10%

51 real-tree buyers — treat these as directional

The read: referrals, Google presence, signage
In that order.

How real-tree buyers found the place they bought from



What the Visit Looks Like

71%

travel 30 minutes
or less

90%

spend 11+ minutes
on site

59%

shop with a
partner

39%

shop with
children

- Add-ons: ornaments 43% · wreaths 33% · garland 24% — about a third buy nothing extra
- Families buy roughly twice the add-ons (1.4 vs 0.7 items)

There may be some potential in unmet early-season demand

18% wanted to buy EARLIER than they did. Only 8% wanted later.

Peak preferred window: Thanksgiving weekend through the first week of December.

What They Pay

Real trees

- Average \$76 · median \$88 · 78% pay \$100 or less

Artificial trees

- Average \$145 · median \$150 · one-time purchase

Break-even is under two years.

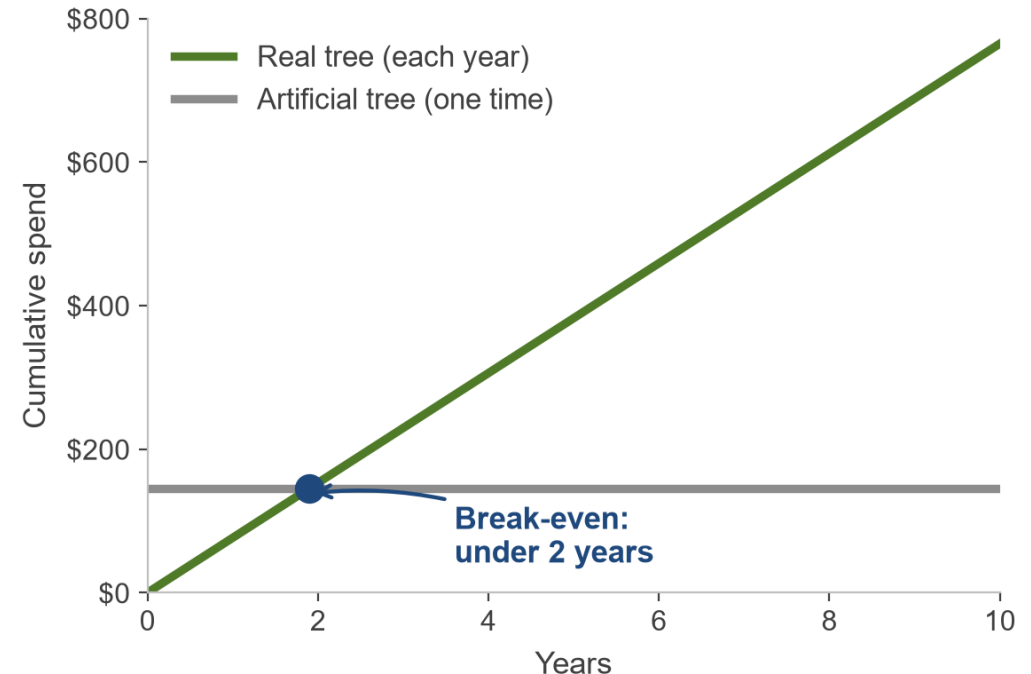
An artificial tree kept 10 years costs about \$15 a year.

The honest read

You will not win a pure cost argument past year two.

Which is fine — cost doesn't predict who's open anyway.
Compete on the thing artificial can't replicate.

You will not win a pure cost argument past year two



Four Kinds of Michigan Consumer

Grouped by their whole pattern of attitudes, not one answer at a time

Authenticity-Driven	Nostalgic, Committed to Artificial	Practical, Settled Artificial	Low Engagement
about 1 in 4 Believe in real trees. Low hassle concern. Two-thirds of all current real-tree buyers. YOUR PRIMARY TARGET.	about 3 in 10 Sentimental, but don't value realness and worry about hassle. Unlikely to convert. Don't spend here.	about 1 in 4 Moderate on everything. <i>Use with caution</i>	about 1 in 5 Low on every attitude we measured. Least receptive. <i>Use with caution</i>

The Target, Split in Two

The authenticity audience isn't one group — it's two, sharing the same beliefs but facing different obstacles.

THE LOW-FRICTION CORE

Already convinced. Openness as high as 8 in 10.

They don't need persuading.

They need an occasion and an offer.

- › “Come get your tree Thanksgiving weekend”
- › First-time buyer discount
- › Reserved time slot

THE BARRIER-CONSTRAINED

Same beliefs — more obstacles in the way.

They don't need persuading either.

They need the friction removed.

- › Delivery
- › Setup service · pre-fitted stands
- › “We'll handle it”

Neither group needs to be convinced real trees are good. Both need it to be easy to act.

What To Do This Season

1. **Lead with authenticity.** “Nothing compares to the real thing.” Fold scent and tradition inside it.
2. **Attack setup and mess.** Delivery + setup service, pre-fitted stands, shake-and-wrap, haul-away disposal.
3. **Build referral mechanics.** Word of mouth is 47% of discovery and almost nobody engineers it.
4. Fix your **Google presence** and your **signage**. That’s the next 24% after referrals.
5. **Post harvest-date tags and “grown here” signage.** Cheap, and it signals authenticity and local at once.
6. **How old is your customer base?** If it skews toward 60+, plan for building towards replacing it over the next few seasons.

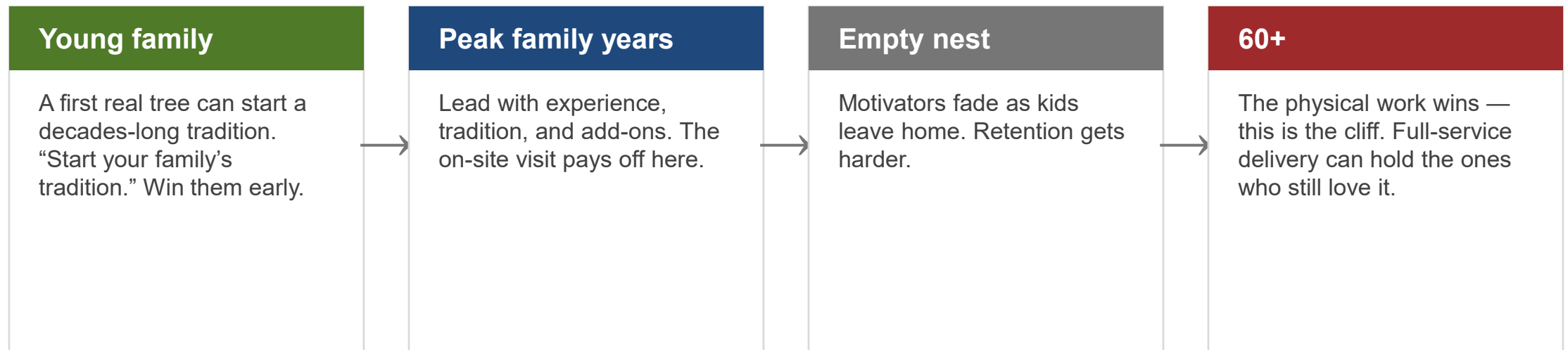
-Full detailed report available through MCTA or us
-Practitioner report available on the website along with this slide deck

Website here:



Think in Life Stages, Not Just Seasons

The same customer needs different things at different points in life. Marketing to the stage — not just the season — is how you win them early and keep them longer.



Match the message to the stage — and watch which way your own customer base is drifting.

Thank You

Kevin Chastagner, PhD
Associate Professor of Management
Hope College
chastagner@hope.edu

Lauren Berkshire Hearit, PhD
Associate Professor of Management
Hope College
hearit@hope.edu

Website:
evergreengrowthmi.org