

Live Well Collaborative Sustainability Studio: A Case Study of an Interdisciplinary Approach to Better Understanding 50+ Product Perception and Interaction

Peter Chamberlain
College of DAAP, School of Design, University of Cincinnati
Cincinnati, Ohio 45221, U.S.A.
and
Dr. Chris Allen
Lindner College of Business, University of Cincinnati
Cincinnati, Ohio 45221, U.S.A.

ABSTRACT

In a recently conducted studio course at the University of Cincinnati, three teams comprised of graduate and undergraduate students of various majors from the College of Business and the College of Design, Architecture, Art, and Planning (DAAP) came together to focus on the complex issue of understanding the behavior and motivations of 50+ aged consumers in regard to sustainability. This unique interdisciplinary design studio took place at the Live Well Collaborative (LWC), a University of Cincinnati design-driven research hub for innovative product and service concept development for the 50+ age group. Guiding the student teams were two faculty members from the respective colleges, and supporting the efforts of the studio was a panel of sustainability experts from regional businesses and multinational corporations.

By the end of the quarter, the students and faculty had expanded their versatility through the experience of working with those outside their discipline, and came to better understand the unique qualities and merits of their own contributions to the efforts of an interdisciplinary team.

The successes, missteps, and future impact of this studio will be discussed in this paper in the hope that they might inform and prepare others who are planning such an endeavor.

KEYWORDS

sustainability, consumer behavior, green, packaging, point of purchase, social responsibility, baby boomer

INTRODUCTION

The fields of Design and Marketing are tied inextricably to our complicated and ever-changing world. As the roles of these two fields grow ever closer to one another, they will have to call on far more resources and employ more varied expertise and perspective than ever before, as they work toward the common goal of satisfying the triple bottom line of people, planet, and profit. Within this complex construct, appealing to the 50+ consumer represents one challenging facet of this task, and is on the radar of any major corporation targeting future success. It is clearly worth appealing to this group, as they have tremendous buying power and influential effect on younger consumers. This paper is an account of an interdisciplinary studio exploration of the 50+ market that is intended to yield crosscutting results that will in turn affect both marketing and design strategy for approaching this group of consumers. Throughout the 10-week studio entitled, "50+ Sustainability Studio", students sought to understand the emotional and rational motivations within the product - consumer experience of the Baby Boomer generation. It was suspected that if the personality, perceptions, attitudes, and needs of the 50+ consumer can be properly interpreted in regard to sustainability, then these consumers can be better provided for in a manner that is environmentally responsible, satisfies their expectations, and is profitable. Additionally, it is the hope of the authors that the implications and lessons learned section of this paper will be particularly helpful to those educators and professionals who are venturing into the complicated territory of interdisciplinary studio management, understanding the 50+ consumer, and the complex issue of sustainability.

COURSE STRUCTURE

Players

The students of the 50+ Sustainability Studio were comprised of both undergraduate and graduate students from the colleges of Design, Architecture, Art, and Planning (DAAP) and the College of Business at the University of Cincinnati. Within these divisions there were marketing, finance, industrial design, graphic design, and fashion design majors. Each of these students had been steeped in the culture of their respective college and particular program, and brought with them their respective way of working, and of defining goals and outcomes. The students were expected to demonstrate flexibility and adaptability in the manner in which they related to one another's unique perspective, and concentrated on maintaining a productive direction in the studio.

The two faculty members working with the 50+ Sustainability Studio represented the colleges of Business and DAAP. The role of the faculty in the studio was one of support and coaching rather than traditional knowledge dissemination. As the students entered each new phase of the studio, the faculty presented methodologies and tools, and then stepped out of the way to let the students experience their application, as they gained confidence in working in interdisciplinary teams.

An expert advisory panel comprised of key members of industry worked with the student teams. Members of this panel included sustainability and materials experts from Proctor & Gamble, General Mills, Haney Packaging Resource Center, and local recyclers Rumpke Waste Management. The experts not only advised students, but they also shared specific research findings and data, creating yet another layer of collaboration and communication across disciplines. The students, faculty, and expert panel members worked together as a community of practice, openly sharing their information and experiences[1]. Interaction with the expert panel brought students to the conclusion that corporations in general are only beginning to understand the lifestyle and behavior of the 50+. It is clear that businesses hoping to serve this growing segment need to better understand their unique needs and buying motives [2].

Studio Timeline

Covering such a large topic in just 10 weeks required that every single class session be utilized with maximum efficiency. Since the studio met only three times a week for two hours, the members of the studio had to immerse themselves in the topic every

day in order to build a foundational knowledge base. As students interviewed family members, engaged 50+ consumers in the grocery store, or took notice of television shows related to the 50+ lifestyle, class was in session for 10 weeks around the clock.

Studio Process

To best understand the needs of the 50+ consumer, a user-centered design process was employed. Through the phases of: Understanding, Synthesis, Validation, Refinement, and Finalization, business and design students were able to conduct research, communicate the highlights of their efforts, and distill findings. Their insights formed the basis of design requirements which were ultimately satisfied by final design concepts. This process (Figure 1), which often involves a repeated cyclical repetition of its middle three phases is common to the field of industrial Design [3].

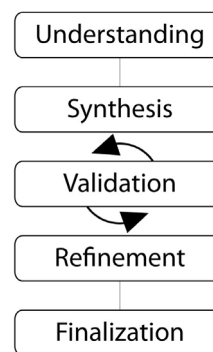


Figure 1. Fundamental Studio Process

Team Formation and Chartering

The creation of charters to direct the work of small teams is a tool that is regularly employed in the College of Business marketing courses at UC. This simple and straightforward document greatly assisted the progress of the teams in the 50+ Sustainability Studio by directing and governing their efforts toward a specific outcome. The charter was comprised of a restatement of the general problem statement, goals for the project, scope and boundaries, an action plan, critical milestones, and a detailed account of projected outcomes.

This outline of work, or "charter" was a critical development in the 50+ Sustainability Studio. With a topic as vast and elaborate as sustainability, much time and effort could potentially have been wasted in an under or misdirected expenditure of energies. The charter greatly assisted with communication between students of the respective interdisciplinary teams,

and made work to be done less daunting for those students working outside their comfort zones.

In the understanding phase the students shared experiences as a broader group, this assured that there was a “fabric of common understanding” that all members of the studio would own. Throughout the term, the students used an online “wiki” as a virtual bulletin board to share thoughts about their experiences, and to engage in discussions about the work of other groups. The LWC Wiki helped the students weave together their common understanding, experiences, and insights.

Experiential Components

In the initial understanding phase of the project, the student teams got out of the classroom and engaged in research at various locations around the Cincinnati area.

The students visited a variety of local consumer goods stores including grocery, bulk, and natural products specialty stores to investigate current sustainable packaging and products on the market. A bag usage study was undertaken which assessed the variety of sustainable or eco-friendly products that are currently offered, how sustainability is communicated through vehicles such as product form or styling cues, graphic messaging, and whether or not it is effectively being communicated. Key insights included the establishment of a “natural product palette” of colors, imagery, and form language, and the notion that some 50+ consumers are leery of or mistrust products that they feel are “green washed”. Faculty and students visited Cincinnati packaging prototype professionals, Haney Packaging Resource Center. There, the students gained valuable insights into the world of mass-production, distribution, and shelf dynamics in the point of purchase environment for consumable products.

Student teams travelled to a local waste management facility operated by the Rumpke Waste Management Corporation. The students engaged waste management professionals in conversation about the trends in package design that relate to recycling, the habits of the 50+ consumer as perceived by Rumpke, and likely future trends in packaging and their suspected ramifications. In addition, the students were able to directly observe the specific components of the recycling system that is currently operating at the Rumpke facility. A key insight from this trip was the fact that an impressive 93% of material received at the facility is able to be recycled. Additionally, students learned that there is some consultation between design firms and corporate design departments aimed at recycling optimization when new package concepts are being developed,

but that this is the exception rather than the rule.

The students also conducted in-home interviews with members of the 50+ age group. The sustainability measure of the lifestyles of the 50+ was assessed in terms of their behavioral patterns, beliefs, and their relationship with products that they consume. This research yielded many insights, particularly in the areas of labeling, money and finances, brand loyalty, and the barriers that prohibit sustainable behavior.

STUDENT OUTCOMES

The three teams of the 50+ Sustainability Studio arrived upon a number of final product concepts as the output of the studio. Their concepts were rooted firmly in both their research insights and interaction with the expert panel members. A brief description of the respective teams’ final concepts follows below.

Team XGL+ (Extreme Green 50+) defined the “Seven Barriers to Sustainable Behavior for the 50+”. The students of this team realized that if they sought to meaningfully reveal aspects of the behavior of a portion of the populous as large as the 50+, that they would have to employ a vehicle such as personae to make these traits more real and relative. As a result of the team’s research they were able to identify the core seven sustainability barriers of: responsibility, health, family, brand loyalty, cost, misinformation, and convenience. These barriers underpinned the behavioral characteristics of this group and the team suggested that a combination of the personae created around the extremes of these themes could be used to better understand the psychographic makeup of consumers and consumer groups. Each Sustainability barrier persona was comprised of a story that illustrated a day in the life of that example consumer, as well as their practices, and the ways to reach them. The respective personae were validated through discussion with a group of 50+ consumers. An example of the seven personae is depicted in the image below (Figure 2).



Figure 2. Not My Problem Norm

Not my Problem Norm's persona was created to represent the psychographic portion of those 50+ consumers who feel that they are such a small part of the larger sustainability issue that their individual behavior is inconsequential. He doesn't feel that he should be held accountable, and rather it's the companies making consumer products that must provide better and easier options for him to be green. Some examples of Not my Problem Norm's Practices are buying the 2X Tide laundry detergent because it's the only thing readily available, purchasing products primarily on brand, quality, and expense rather than sustainable attributes, and engaging in some sustainable activities such as saving bottles for re-use, but mainly out of convenience. Some ways to potentially reach Not my Problem Norm are to offer him "green" products in his brand that work well and are inexpensive, and to communicate the active (and relatively simple) role that the end consumer can play in increasing sustainable success.

There are six additional personae which were developed, and which represent other key traits of the 50+ in regard to sustainability.

A survey component was designed to enable companies to tailor sustainable business and design solutions to the particular combination of the seven consumer behavior types represented by the above-mentioned personae. This useful tool for future sustainable product and experience facilitation could be applied to a wide variety of sustainability-related design projects for this group of consumers. Team ReThink created "The Pangea Collective".

This team came to the conclusion that the average 50+ consumer spends very little time thinking about the products that they buy in terms of sustainability. In fact, they found that the term, "Sustainability" is generally not a term that is used by this age group at all. More so than scrutinizing every product that they use in terms of its impact on the environment, those 50+ wishing to exercise sustainability-related behaviors were likely to seek membership in something that was seen as contributing to the greater good, and which clearly was part of the solution rather than the problem. They were not necessarily interested in all of the details, but wanted simply to belong to and associate their respective lifestyles to the betterment of the human-environment relationship. In this team's search for ways to enable the 50+ to feel like part of the solution, they developed an over arching campaign to promote ideas of sustainability, "The Pangea Collective". The Pangea Collective would be a parent entity to which existing brands belonged as co-conspirators affecting positive and healthy change that would be fueled by the brand loyalty already commanded by companies who would participate in the endeavor. Purchasing and using the products of

the member companies would allow consumers the sense of connection to a sustainability movement. Each and every time a Pangea Collective product was used, the 50+ consumer could feel that they were doing their part; no reading through ingredient labels or researching, just straight-forward, believable, and convenient sustainability (Figure 3). This team also created designs for Pangea branded gear to further promote the movement.



Figure 3. Pangea products

Team Kegmama developed "The P&G Refill Village". This team's final concept revolved around a refilling system for household use product containers. By using this system consumers would be more likely to feel that they are leading a sustainable lifestyle. They could place the burden of responsibility on the producers of the products, and reduce the amount of non-biodegradable plastic used in product packaging. With this concept, both the consumer and producer could save money while continuing to build brand loyalty. Consumers would buy a starter kit that contains an at-home container and a refill pouch. When the at-home container begins to get low, the consumer would take the pouch to the refill center in the store, fill it, and replenish the product container at home. This closed loop cycle would ensure that transportation efficiencies and consumer convenience are maximized while the potential for the creation of waste is minimized. The team conceived this particular type of system with the 50+ consumer in mind because research revealed that while the 50+ consumer generally wants to lead a more sustainable life, they often aren't sure how. By offering a brand – sponsored "Refill Village"(Figure 4), consumers would be empowered to make more eco - friendly choices while continuing to depend on the products that they trust. The consumer would experience heightened levels of convenience while saving money and actively participating in sustainable practices.

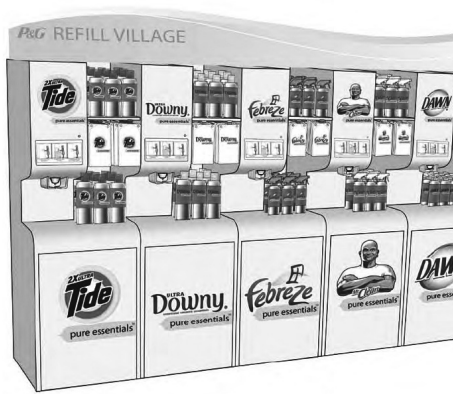


Figure 4. Refill Village Station

IMPLICATIONS AND LESSONS LEARNED

To be sure, there are challenges that will need to be met in fielding any interdisciplinary, sustainability studio. However, proactive management by the faculty coaches will go a long way in addressing these challenges. Based on the studio experience described here (and numerous other interdisciplinary studios supported by the Live Well Collaborative), we can offer these suggestions for increasing the odds of a successful outcome.

Fuzzy Front End

Most studios will launch with ambiguity regarding the desired outcome. However, given the wide range of issues that could come into play in a sustainability studio, the potential ambiguity associated with these can be daunting. But this is how it should be if one wants to maximize the potential for creative work products from interdisciplinary teams. To get through this fuzzy front end and start students on a path of creation will require instructor interventions. In particular, the project chartering process described above can be a critical tool for managing the fuzzy front end. The key principle in chartering is to get teams to take control of their own destiny. Capture goals and objectives on paper with each team to make it crystal clear what will be expected of them at the end. Typically, students will submit a first draft of the charter that is too ambitious and the instructor's role is to reign them in and help them create a timeline that budgets their time effectively. The chartering process should be empowering for the teams by letting them have a voice in developing their own work plan.

Managing Teams

It is common for today's college students to participate in numerous team projects. And many times they flounder in these assignments, because working in teams is simply not an innate skill. Hence, team-based classes often start off with lots of skeptics, because teams haven't worked well in the past for many students. Again, this problem is exacerbated in an interdisciplinary studio where students are, often for the first time, being asked to work with majors from other colleges, and where one can also have a mix of graduate and undergraduate students. Without proactive team managements on the part of the faculty coaches, this can be a recipe for more skepticism and mediocrity.

Building diversity into every team is essential for creative outcomes, but the result is it will take diverse teams more time to build trust. Additionally, diversity in cognitive and work styles guarantees that there will be conflict and abrasion among the individuals in such teams. Instructors can ease (but never eliminate) the conflict issue by helping teams appreciate and celebrate that such conflict is normal. Giving students the tools to understand their unique cognitive styles will help them better manage through the conflict. Numerous inventories and instruments exist for assessing cognitive styles. It is not so much a matter of finding the one best instrument; it is the process of self assessment and deep understanding that yes, we are all different, that helps students develop trust for their new teammates[4].

Another opportunity for instructors to assist teams function at a higher level comes with the common activity of brainstorming, which should entail the two step process of divergence and then convergence. It's all too common to find these two steps being intermingled. That is, students will start critiquing one another's ideas when they are supposed to be in a phase of pure idea generation. One way to develop discipline is to show the brainstorming events on the schedule and sit in with the teams on those days to discourage critiquing. Having several small events building up to a full day of brainstorming works especially well. That full day we label as the day for a 1000 new ideas. By the time the studio arrives at this date in the middle of the term, good brainstorming skills are in place and we capture 1000 new ideas.

Creative Sparks

Managed proactively, interdisciplinary teams have great potential to generate creative solutions. But where possible, faculty coaches can also stage events or provide resources to fuel the creative process. Experiential activities typically will serve this

purpose - as in the trip to the recycling facility that was a feature of this sustainability studio. When one sees the huge mounds of waste that are generated by a large city on a daily basis, it is impossible to not be motivated to open oneself up to creative solutions. Having our three teams experience this revelation as a team, document it through journaling and photography, and then post the verbal and visual record of the experience on the LWC wiki provided a continuing source of inspiration throughout the studio experience.

Another reliable source for creative insights is direct contact with a focal consumer. This particular experience is essential at the LWC because we ask student teams to create solutions for a 50+ age segment of consumers. When students begin such a studio, they bring many assumptions and stereotypes about older consumers that must be challenged before they can create anything that is relevant. The in-home interview is the perfect tool for exposing hidden assumptions and stereotypes. Once exposed it is typical that a host of new ideas are generated as one sees the consumer in a new light.

Additionally, outside experts can provoke students to stretch their thinking and entertain more alternatives. In our case we were able to engage with experts from Procter & Gamble and General Mills who had first-hand knowledge of their companies' efforts to promote efficiencies and reduce waste in packaging. To ensure that your experts don't converge when you are trying to diverge, it is important to share with them the overall timeline for the studio to allow their comments to be in sync with the needs of the teams.

Motivation and Sense of Urgency

Any instructor of any class knows that students are faced with multiple demands. In an interdisciplinary studio, the demands across students from different programs will be highly variable throughout. This provides a robust scenario for stalemate. Put another way, teams will procrastinate if not prodded and slight schedule conflicts as the culprit. On a weekly basis it is essential that the faculty coaches are addressing the issue of what progress looks like. Many different types of activities can be scheduled to keep teams moving forward. Staging debriefs with an outside client or experts are an obvious way to mark progress. Having students file documentation on a wiki or just present to one another is a good device for showing what they learned or observed since last week. Calling for 1000 new ideas is a staged event the students find motivational. Of course, the process of preparing for and conducting in-home interviews always imposes discipline on the teams' activities. One great element of a sustainability studio is that

students often resonate to this cause. But to maintain a consistent level of effort in those interdisciplinary teams still calls for a proactive effort on the part of faculty coaches to manage their sense of urgency.

Trusting Your Process

In our ten-week quarter system we need to make productive use of every week to realize meaningful deliverables by the end of the experience. There needs to be a process underlying this use of time that keeps things moving forward. It's probably best if you can capture your process on a single sheet of paper or in one schematic so that it is readily explainable to all participants. And it has to be a process that all can trust. There are days in any studio experience where it seems like the whole thing is about to collapse. The best thing to do at the end of a day like that is to remind yourself that creation in teams is a messy process full of conflicts, but a process after all.

References

- [1] J. Lave and E. Wenger, **Situated Learning: Legitimate Peripheral Participation**. Cambridge, MA: Cambridge University Press, 1991.
- [2] George P. Moschis, et al., **The Maturing Marketplace: Buying Habits of Baby Boomers and Their Parents**. Westport, CT: Quorum Books, 2000.
- [3] J. Cagan and C. Vogel, **Creating Breakthrough Products**, Upper Saddle River, NJ: Prentice Hall PTR., 2002.
- [4] D. Leonard and A. Swap, **When Sparks Fly: Igniting Creativity in Groups**. Boston, MA: Harvard Business School Press, 1999.