This project was completed as part of the curriculum of the University of Houston graduate Strategic Foresight program under the guidance of Dr. Andy Hines. The project spanned August through December 2016. The unsolicited client was Coleman with a project objective of exploring the future of outdoor recreation for the brand through 2031.

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BACKGROUND
Background on Coleman

The Coleman Company, Inc. is a manufacturer of camping equipment and outdoor recreational products. The well-known Coleman lamp was invented by 1909 and the lantern in 1914, and since that time more than 50 million of the lanterns have been sold throughout the world. Coleman is the market leader in lanterns and stoves for outdoor recreational use, a broad range of insulated food and beverage containers, sleeping bags, backpacks, tents, outdoor folding furniture, portable electric lights, and other recreational accessories. The shift from general purpose equipment to recreational equipment occurred in the 1960s in response to the post-war boom. Coleman was acquired by Newell Brands in 2016.

Outdoor Recreation Context

Formal physical education is stagnate, but general population awareness ada focus is increasing (particularly in relation to obesity and other diseases of affluence in children).

Social capital is linked to shared collections of experiences, marked by a rise in documented and posted outdoor activities, particularly for Millennials and Gen Z. Millennials thrive on participation.

There has been an incremental increase in functionality of outdoor gear with little fundamental shift in use.

Traditional camping is flat to declining slowly according to the USFS and DOI.

USFS projects overall flat land usage and outdoor recreation engagement, tied to historic demographics.
Explore the future of outdoor recreation in 2031

The market for outdoor recreation gear (tents, backpacks, sleeping bags, etc.) is deeply dependent on a variety of external market factors like cultural significance of remoteness, access to wild places, intrapersonal wellness, perception of nature, etc.

This program will consider how the outdoor recreation market may shift related to the following five areas – Personal wellness, Recreation in social fabric, Gear, Outdoor space, and Travel. These areas generalize into three clusters (outdoor recreation and people [purple], the places [red], and the gear [yellow]) all supported by a broader STEEP backdrop.

The span of scope includes all aspects of outdoor recreation with the primary purpose of being in the space of the outdoors – it excludes activities where the environment is secondary to other activities (e.g. tailgating, hunting/fishing, boating, etc.). While this framing only captures a subset of Coleman’s current use occasions, it may prevent unanticipated bias to present market.

This investigation’s primary purpose is to paint a picture of the context in which gear will operate in these futures – focusing on why and how consumers would engage in these outdoor recreation activities. Outside the scope of this program is the future dynamics around retail marketplace and the decision and purchase processes associated with future consumerism.
RESEARCH & SCANNING
Background & Purpose

The purpose of this study was to better understand current outdoor recreation behavior amongst a targeted audience, clarify their current view of the future of this activity, and capture a directional assessment of how the population relates emotionally to these activities.

The study was conducted in late September and early October 2016 as part of a project to explore the future of the Outdoor Recreation space for Coleman (as part of a research exercise for the University of Houston).

Methodology & Sample

The study was conducted online using an affiliative snowball sample of outdoor recreation participants in the US. The respondent pool was marginally representative of primary population centers in the upper Atlantic, Southeast, South Central, Midwest and West Coast regions. While no direct comparison between geographies will be captured here, the potential for response against a wide variety of outdoor recreation types existed as part of the sample pool.

The total sample size of 40 completes (no incompletes or partials) is too small to conclude findings with confidence, but could be used as a prototype of the test and analysis methodologies that would be required to run a similar study with higher degrees of validity. The survey opened closed on 8 October 2016 after 3 weeks of completions.

Respondents completed 26 questions (including basic demographics) with a completion time of less than 5 minutes.

Executive Summary

- As anticipated, the target population is engaged primarily in low barrier to entry activities with a relatively small number participating in a wide range with a high degree of frequency. In total, the population envisions these activities changing in tune with the balance of their life changes, and are generally optimistic about having opportunities to broaden their participation in outdoor recreation.

- This category of recreation is likely to remain highly social (affiliative in participation or perception) for the broader population.

- Future studies with a more robust sample should explore the variations by race and ethnicity (a recognized current incongruity with the general population. A more complete research program should also include a qualitative exploration and definition (and attributes) of the the current and future sets of activities in which the population is and anticipates participating.

- From a methodological perspective, deep reservations exist in a general population’s capacity to effectively imagine and communicate their own futures (much less respond appropriately to direct questioning to that end). It would be potentially quite helpful to define and apply alternative methods and projective techniques to probe more effectively.
The future is about the same…

For the purposes of this analysis, an additional sub-sample set of respondents was defined as those that had indicated having previously participated in 5 of these 9 activities at least once a year over the past 12 months. These are ‘active participants in this type of recreation’.

Comparing the degree of anticipated future participation against the two sub-samples there are very subtle differences may exist and would need to be clarified in a statistically significant study. The data suggested more active participants in the category are more likely to engage in more or much more future activity, and are more likely to expect the category to remain stable over a 10 year horizon. Caution should be used when interpreting this information though due to the potential for social bias (with recreation having positive health benefits). Respondents suggested that outdoor recreation as a whole would change about as fast as the balance of their lives over the coming 10 year period.

In the open ended question, most respondents indicated a desire to try something new. There was a far greater spread of desire to participate across the spectrum of activity involvement than the population is currently engaged.
Jungian Archetype Framework

This framework for understanding emotive need states is based on the 12 core classical emotional archetypes. In this case they’ve been broken down into 6 based on the dimensions of affiliation and extroversion.

Everyone experiences one of these archetypal need states when they participate in any definable activity, brand, category or state of mind.

Respondents were asked to rate their agreement on a 5pt likert scale to 12 projective statements on their future interaction with the outdoor recreation category. Each of these 6 archetypes was represented by 2 questions.

**ARES**
High Extroversion, Moderate Individuality
Bold, Dynamic, Independent

**APHRODITE**
High Extroversion, Moderate Affiliation
Fun Loving, Carefree, Spontaneous

**ZEUS**
Highly Individual
Self-Assured, Assertive, Forthright

**HERA**
Highly Affiliative
Approachable, Friendly, Open

**APOLLO**
High Introversion, Moderate Individuality
Focused, Competent, Controlled

**DEMETER**
High Introversion, Moderate Affiliation
Careful, Caring, Sensitive
Total Population Archetype

In the graph to the left, each dot represents an individual respondent’s average position on the archetype wheel (average location across all 12 questions). The distance from the center indicates how closely aligned that respondent is with a particular archetype. The unfilled circle represents the cumulative average of all 40 respondents — with sufficient sample, this could project to a targeted population.

- These data indicate a strongly affiliative perspective on the future of outdoor recreation — these are activities the respondents anticipate will either link with others or rely on others.
- Cumulatively respondents anticipate an approachable, practical, and highly accepted / acceptable activity with a high degree of group engagement or communication.
- It’s interesting to note here the strong Ares outlier — this would be an adventure seeking, individualist who anticipated outdoor recreation providing an outlet for bold action.

Q5_1-Q5_12 : Below are a set of phrases that could be used to describe outdoor recreation. As you read these phrases, imagine your participation in outdoor recreation over the next 10 years (2016-2026). How do you agree or disagree that the following statements describe how you will feel about participating in outdoor recreation in the future?
AR Gamified Rock Climbing - Digital projections, vision systems and simple game theory bring new dimensions to indoor rock climbing as participants challenge each other to arcade style games on the rock wall. Shifts across reality overlay mundane outdoor activities, or provide opportunities to place shift activity as a whole.

Whistler’s Watershed & Annex Projects - Two anticipated indoor adventure sports attractions focused on extreme sports and an ‘adventure water park’. Consumer expectations for adventure sport experiences shift away from the outdoors where they originated. Single location, multi-experience options become the norm.

Euromonitor 2030 - Amplified sustainability centered offerings in travel become more widely adopted across travel brands. Consumers look for broad socioeconomic benefits while they tread lightly on the environment. Bans and restrictions rooted in conservation dampen experience options.
SCENARIOS & IMPLICATIONS
Formal physical education stagnate, but focus increasing — CDC among others have indicated a stagnate level of physical activity in schools among high school students. 15% of high school students in December 2015 reported having not participated in any physical activity lasting 60 minutes or more in the last 7 days [link]. This finding is flat over the prior 15 years, and is likely to remain flat through 2030. The American Heart Association has indicated a strong correlation between physical activity and both cognitive function and mental health. That said little change is anticipated [link]. The Pokemon Go phenomenon in 2016 indicates a potential for AR and technology enable incentives to provide drive for outdoor physical activity [link]

Rise in documented and sharing of outdoor activities — Shipments for wearable cameras will increase from 7.4 million in 2015 to 24 million by 2021 [link]. While inclusive of both action cameras for outdoor recreation and body cameras for military and police, this market indicator suggests a rising desire for sharing content. Coupled with recent announcements by both Nikon [link] and GoPro [link], this sharing is coming with a rise in immediate and discrete connectivity.

Incremental increase in functionality of outdoor gear — subtle shifts in technical attributes of materials and textiles provide incremental forward advancement in outdoor wear, footwear and gear over the past 75 years [link]. This trend is likely to continue with improvements in durability, weather resistance, weight and user interface. Slow growth of digital and connected functionality, primary driven by wearable technology with links to broader lifestyles.

Traditional camping flat to declining slowly — Backcountry trekking, multiway hiking, and backpacking are expected to decline slowly through 2030 according to the National Center for Natural Resources Economic Research. The participating in any of the three activities of primitive camping, backpacking, or visiting wilderness areas is expected to decline by 2 percent over the next 15 years. [link] Overall the same study suggest ‘low impact / low involvement’ activities are likely to grow slightly. Conversely activities that require significant time investment, skill and involvement are flat to declining as much as 10% over the period. USFS projects overall land usage and outdoor recreation engagement [link]. Growth in outdoor recreation activity days is projected to be consistent across the US with faster than population growth in the pacific northwest for the majority of tracked recreation. The fastest growing actives by participation are in winter, water-based, and developed land activities — conversely ‘dispersed land’ activities (like hunting and fishing, and primitive camping) will see slow to negative growth relative to anticipated population growth.

Millenials thrive on participation — Where brand value in the past was pegged to functional and emotional benefits, millennial have shifted the equation somewhat and have included participatory benefits. The social value of engaging in an experience adds to total value of that experience [link]. Travel and adventure experiences will increasingly become part of the personal brand, where this type of tourism is more about the experience had on trip than the amenities of it.
Baseline Scenario Summary

The future of outdoor recreation is about creating unique sharable experiences free of the hassle of the unknown for an increasingly mixed user base. Outdoor recreation is increasingly perceived as a simple disconnection and retreat from urbanization, empowered by improved low cost transportation, always on (in the background) gear and a system of interconnected services that ensure relaxation without any of the skill or planning required. Most outdoor recreation activities for the mass are highly scripted to minimize risks.

Urbanization - The shift to a more urbanized society creates clear delineation between outdoor recreation types.

Experiential leisure - Travel as experience becomes an key driver of social status.

Service - Services become an increasingly important part of recreation time, be it in transportation to and from, curation of recreation options, the sharing of equipment and access time, or the guiding/navigating of unfamiliar activities.

Gear - Recreation equipment continues to improve functionally, but with little change in form and application.
Over the last few decades the breadth of outdoor recreation types and participants has expanded to better represent the diversity of the US population. As women and minority participation has increased (particularly over the past decade) their philosophical approach has more closely aligned with the broader Millennial mass cohort — a desire to personally create unique experiences that provide a series of highly sharable moments that set them apart socially, while simultaneously providing an underlying support of mental and physical health. While the adventure seekers exist, that group’s growth has stagnated but remains the icon of association for the masses in search of their own less intense experiences.

The consumer value proposition within the mass market for outdoor recreation gear and equipment has shifted focus to deliver improved functionality within the same core categories, but delivered less from a point of expertise and control and more from a point of convenience, simplicity and worry-free practicality. The inclusion of technology (both in terms of connectivity and advanced materials) plays a secondary nearly hidden role as ‘just in case’ and ‘only if I want to’. Gear is no longer just about technical superiority, but about experience guarantee with the perception of risk. Having direct connection with social networks enables realtime sharing of outdoor recreation lives.

With the exception of highly identifiable icons of social status (primarily outerwear) the gear shifts to play a highly supportive role for the experience. Service industries have surfaced that provide everything from location assurance, curated outdoor experiences, hyper local weather forecast based gear selection and adaptation, automated delivery of product to remote locations, and peer to peer sharing of land access and equipment. The relative cost of engagement in outdoor recreation has fallen (supported by fractional ownership and pay for access models for expensive gear). While the general categories of equipment have not changed — and their existence as outdoor replacements of common everyday needs (kitchen, shelter, etc.) remains consistent, they are replacing and keeping pace with a much more intelligent set of experiences from home. The range of ‘support’ provided by outdoor equipment has broadened the marketable range as well.

Primary entry points to outdoor recreation become increasingly popular focal points for the mass as the parks systems cater to new enthusiasts with little previous experience. Park areas are highlighted as icons of conservancy and environmental stewardship, the product of a two decades of increasing national attention and increasingly watchful eyes - these areas have more in common with cultivated gardens than fully wild untouched wilderness. For the safety of park guests and the ecosystems themselves, park policies have completely shifted to reflect practices long in place in African game parks (designated guides and strict wildlife encounter protocols). Adventure seekers are forced to more secluded pockets, becoming increasingly insular within an ever exclusive network of elites.
Breaks from the Baseline

Traditional outdoor recreation goes underground - The romanticism of traditional camping disappears and unorganized outdoor recreation takes a turn for the taboo as a wasteful high impact self-indulgent activity where the balance of society has made a subtle shift from individualism to communalism.

Shifting mental model associated with outdoor gear - traditional formats of gear (tent, sleeping bag, lantern, boots, outerwear) are completely rethought as advanced materials permit stronger lightweight redesigns. For instance, shelters more closely resembles modular rigid pods when erected, packs are no longer carried, lanterns are replaced by the aggregate of auto-luminescing equipment at site.

Slowing or reversal of urbanization - Due to shifts in economic and ecological viability combined with highly prevalent automated transportation, urbanization trends slow somewhat. Middle class populations begin to focus on adjacent geographic rings with less density and more consistent engagement with natural environments. Outdoor recreation shifts away from ‘adventure experiences’ and increasingly towards ‘everyday causal engagement.’

New regulations require licenses to participate in the use of government owned back-country spaces - Limitations on population density within conservation areas at any time and clear education or verification before granted permission. Cultural and socioeconomic implications on access, potentially driven by political or equality factors. Recreational trespassing becomes a challenge with population subsets who want the benefits without being government certified (either because of cost, or because of a desire to participate in adventure recreation that is prohibited).

Privatization and industrialization of conservation areas - New policy slowly reverses a drive for land conservancy in favor of privatization for the purpose of food production and raw material extraction. This shift indicates a change in direction for the long cycle of resource management practices in the US.

Massive global economic slowdown - Market implications for discretionary spending on new gear; reversal of travel demographic changes anticipated (strong Chinese participation abroad). Groups reconnect for support (if only emotional) bonding tighter family and close networks.

Millennials become ambivalent toward outdoor recreation as experience - As millennials move into middle age their drive for participation falls. Not aligning well with optimized exercise or curated travel, casual outdoor recreation falls out of favor with this group. The market peaks and begins a slow decline.

Issues

• How should distributed, pervasive, ambient technology (sense and respond) exist in otherwise natural areas? At what point does society reject it as a preserved space?
• What level of ecosystem preservation is appropriate as climate change impacts the viability of past systems? How will with value of precious arable land area be balanced between food production, CO2 sequestration, and wild habitat?
• How will urban centers manage the volume of visitors in neighboring wild places?
NEW REALITIES

Alternate Scenario - Summary

Three realities of engaging in outdoor activity present themselves — the traditional walk in the woods, curated 'better than nature' virtual experiences from anywhere, and hybrid mixed reality augmenting overlays within natural environments. Physical access to the most prestigious areas becomes divided along socioeconomic lines, as an unintended consequence of new entrance licensing bureaucracy designed to reserve public land access to citizens and registered guests.

Diverging Realities - Advances in mixed and virtual reality technologies open up new possibilities for experiencing environments that are widely available. Better than real curated virtual experiences provide every aspect of outdoor recreation without any of the unwanted side effects.

License to Hike - New regulations require licenses to participate in the use of government owned outdoor reserves. Access to outdoor spaces becomes increasingly polarized; those that have the means gain access.

Cleaved Media Consumption - New mixed media formats of entertainment are consumed or shunned along generational divides.

Technological advances - Technology moves to the forefront of the outdoor recreation experience and is seen as essential to achieve the 'full experience'.
NEW REALITIES

Education systems around the world have embraced virtual and mixed realities as part of their teaching toolset. Science classes for instance may virtually travel to the grand canyon to discuss erosion and geology in fully immersive 8k. Students exploring biology spend time in perfectly curated, beautifully filmed VR forests from around the world, comparing the uniquenesses of ecosystems.

Joining world famous treks, exploring perfect vistas, or scrubbing through seasons or dates from any given location are as simple as recalling them on widely available headsets fully immersive systems. The unintended consequence is a shift in expectation of physical world outdoor time and socioeconomic divide.

For those who can get access to wild places, day hikes and even walks in urban parks are routinely augmented, blended with multi-sensory mixed reality overlays. The sound of the stream and crunch of the leaves underfoot are amplified slightly; the sunset is perfected, the sky is darkened to highlight the streak of Milky Way.

The aging Xers and Millennials occasionally participate in fully analog engagement with nature, but from a place of nostalgia, escape and simplicity. As new grandparents, the Xers have mixed emotions over the intrusion of mixed reality alerts and enhancements as they explore the world with little ones again. Visually silencing the hydration level, air quality, and proximity alarms as they watch grandkids play in the park sparks uncomfortable conversations with their own kids.

This newly found (and newly tweaked) mixed reality explorations of the ‘natural’ world has an underlying socioeconomic shadow. The subtle barrier of needing to demonstrate citizenship or authorized guest status is enough to dissuade some classes from participating — the VR experience doesn’t require the trip and is after-all, perfectly curated anyway. The demographic divide in participation in outdoor activities from the earlier 21st century is only exacerbated.
**Alternate Scenario - Summary**

Outdoor recreation has become a highly regulated health and wellness focused activity in response to an overly stressed and restless society. The government has condensed activity to highly curated designated nature visitation zones to ensure the rejuvenating properties are maximized while also protecting increasingly fragile ecosystems. Illicit ‘off trail’ activity remains as a rebellious counter-culture desires to get back to nature undetected.

Ecosystem Shift - accelerating climate change effects degrade wilderness areas and government begins to overreact.

Never Alone - natural places become highly interconnected, highly monitored, secure areas — guarded as a national interests. Being in the wild is no longer synonymous with being alone.

‘Underground’ Land Poaching - Trespassing becomes a last resort for population subsets who want to experience wilderness as generations before them had.

Prescribed Time - “Forest Bathing” is prescribed by healthcare professionals for specific wellness regimes. Better-than-real curated virtual experiences provide augmented outdoor recreation. Eastern influences on western views of medicine and wellness drive increased awareness on the role of nature.

Momentary Escapes - The masses are searching for ways to find quick respite and small pleasures wherever they can.
Carrying capacity of existing arable land has dramatically declined in part as a result of climate change, and natural species migrations have not paced habitat shifts and the fragility of the ecosystems in most wilderness areas has been well documented. Invasiveness is the new norm and ecosystems are continuously in flux.

The federal government in partnership with international alliance bodies has reclassified federal owned wilderness areas into three zones — nature visitation zones, carbon sequestration and preservation zones, and strategic resource reserves. In 2026 lawmakers reduced the land available for public access by 80% of the 2016 levels as a necessary step to ensure long term ecosystem stability. Massive investment in the visitation zones ensured they were fully optimized and augmented for the health benefits of being in nature. Carbon sequestration and preservation zones are autonomously monitored, secure areas with extreme trespassing penalties. The large swaths of strategic resource reserve lands have been leased to the private sector for management and as a significant income stream as arable land values have increased dramatically.

In an overstressed hyper-connected world, the general population is being prescribed Nature Visitation Zone access passes for disconnected ‘natural’ time by government wellness coaches. No longer viewed as ‘parks’ these newly curated retreats prioritize the healing benefits of exposure to an idealized natural environment. Visitors spend up to 12 hours in these visitation zones, walking through manicured and highly curated spaces often with social groups as a shared relaxation experience (much like going to a hot spring, spa or golf outing). In order to protect the fragile biome, overnight visitation is prohibited, as are all forms of ‘off trail’ activity, outside food and beverage, or carcinogens of any kind. Access passes must be endorsed by a licensed healthcare provider, and visitors must affirm recent travel to limit cross contamination of soil or the introduction of invasive species.

Despite the tight restrictions and high degrees of wilderness monitoring, a counter-culture of illicit backcountry activity has grown — deemed ‘land poachers’ by most. Participation is steeped in moving through published activity waypoints, exploring while minimally impacting the wild, and getting out without detection. It has much in common with the urban extreme sports of the early 21st century. Outdoor gear is oriented toward being light weight, fast movement and remaining unseen. Technology integration and constant connectivity help them identify and move between monitoring sensors and evade detection. Advanced materials enable new survivalist type formats, and deep camouflage for previously big and bulky items like tents, tarp, and kayaks. Participants are much more likely to be sleeping in trees and traversing rapids in protective bodysuits than be setting up large campsites or portaging canoes or kayaks.
FUTURE ARTIFACTS

SHARED OUTDOOR EXPERIENCE LANTERN

- Wirelessly synced removable VR viewers stream curated content of outdoor spaces (e.g. Everest Summit attempts).
- Viewers can also capture 8k 360 degree personal content to replay and upload.
- The spatially aware system plots other simultaneous viewers within the VR space.
- Playback as a single trip in time, or explore as a stitched video mosaic of several distinct captures from different trips.

YELLOWSTONE NATIONAL VISITATION ZONE PACK

- Single use day pack provided as part of entrance fee (much like airline pillows or blankets).
- Modulates dermal absorption of airborne geothermal minerals.
- Monitors biometrics and guides patient to nearby attractions or amenities as needed.
Implications

New Mental Model of Gear - No need to market for negative influences on outdoor recreation like inclement weather, insect pests or harmful UV — these all become part of the expected set as a baseline to the experience benefits that will be the new brand core. Products, services and partner offerings may be targeted to specific geographic locations for a specific augmented experience (i.e. the automated transportation of site and moment specific provisions directly to remote areas).

Network Connectivity - Social connection of activities enabled by product & social network interoperability. These connections shift from passive and moderately past-tense to very active and now, ‘participate with me.’

Health and Wellness Focus - With an offering linked with litigious though lucrative health and wellness comes tremendous shift.
  • Products may be used ‘off script’ for illicit recreation activities.
  • Prescriptions have expectation of traceability and causal results.
  • Physical products may be designed for single use where the environment provides the majority of the value.

Indoor/Outdoor Recreation Occasions - MR/VR blur the boundaries of place as consumers experience nature and social recreation. At some future point the sensorial quality of manifest natural environments will meet or exceed biologic ones. This will massively disrupt the market and some of the underlying purposes for recreating in nature, especially when physical or social barriers to access exist.

Recommendations

• Partner with a consortium of non-compete medical device manufacturers, universities, and wellness experts to explore new business models the border on healthcare to define where these boundaries exist.

• Partner with connectivity leaders to co-develop remote networking and enabled products, potentially in partnership with USFS/DOI for location specific experiences.

• Articulate the operational norms and lead the experiential conversation with consumers about the degree and occasions of connectedness through ambient networks.

• Monitor VR/MR technology refinement and adoption, developing a brand philosophy and point of view for future activation of opportunities or proactive response to new threats.

• Engage in public/private conversation to ensure equal and open access to existing outdoor recreation resources. Availability enables opportunities for use and broadens the consumer base.