MeritPatch
Family Collaborative Activities
by Jason Crouch
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Research Problem:
Modern lifestyles contribute to disconnected family values and have a negative impact on a family’s physical and emotional health.

Research Statement:
There is no doubt that the modern family is very busy and disrupted by outside influences. Social trends and expectations have caused many families to become disconnected. There is research that points to overuse of technology as one culprit. Other research suggests that lack of spiritualism has negatively affected families. Regardless of the cause, it can be argued that the more disconnect within a family, the more likely it is for family members to experience negative social, emotional and/or health related issues as well as broken relationships.

This study seeks to define family interactions and activities that support a healthy family lifestyle for all members and to create a system by which a family can feel a sense of accomplishment and pride through shared interactions. The study will use design thinking methodology to research through advice interviews and iteratively design based on feedback.
**Literature Review:**

Since this thesis is built on the idea of family interactions and rewards, there is a need to seek information based on a variety of ideas. Studies around family interaction, goal setting, reward systems (specifically, badge systems) and general interests of families appeared to have the most beneficial information. Six topics that spanned the breadth of the research include: goals, family types, family values, badging and gamification, creating a goal system and analysis of happiness.

**GOALS**

Families face a variety of challenges. Balancing work-life, home-life and social interests prove to be a constant struggle. It is clear that families who successfully make and achieve their goals have a better quality of life and conversely, families who fail to balance these tend to have more conflict. “A substantial body of research demonstrates that individuals with longer weekly working hours report more work-family conflict.” (Hoppman 191).

Families often have good intentions to make everyone else happy, but in doing so create an environment where it is impossible for themselves to be happy. “Parents may have the goal of wanting to read bedtime stories to their children and prioritize these activities at the expense of not being able to progress on an urgent—but not necessarily important—report.” (Hoppman 192). This example is rather watered down. Bedtime stories should be read to our children and it should not take so much out of the day that one can not attend to other responsibilities. But, there are many situations where parents spoil children to the point that the parents suffer as a result.

It is difficult to make everyone happy all the time. But, it is not as difficult to create a balance where everyone can experience positive results. “Success is often about privatization and focus. This requires discipline, but not in the way one often thinks of discipline. It is not about getting up at dawn seven days a week, or making every minute count, or constantly multi-tasking. It is rather about putting your energy into what matters.” (Bentley 193). Many people are over-focused on their job or their social life or making family members happy. Too much weight in one area tends to lead to conflict in other areas. But, it is not impossible to re-balance our priorities. If one first recognizes the misalignment they can take action. “A funny thing often happens when we set big, soaring, tough goals for ourselves – the seemingly impossible begins to become doable.” (Bentley 195).
FAMILY TYPES
The modern family is very different from past generations. There is no longer one definition of the construction of a family. In Bengtson’s Beyond the Nuclear Family: The Increasing Importance of Multi generational Bonds, he describes the modern family. “Families and their functions had changed from a social institution based on law and custom to a set of relationships based on emotional affect and companionship. But this did not mean loss of social importance. The modern family should be considered “a unity of interacting personalities” and that future research should focus on the interaction dynamics within families” (Bengtson 13). With that said, it is important to consider family dynamics throughout the process of this study. By interviewing only traditional nuclear families, there may be missed opportunities for a key stakeholder. However, spreading research across too many family types may skew findings.

There is comfort in finding that families, in general, seem to feel the same way about themselves regardless of their makeup. A good parent has similar goals if they are a single parent or a grandparent caring for their grandchild. “We did not find significant differences in care between mother, father, and grandparents. This indicates that children perceived that they received the same type of care from parents and grandparents, which is consistent with previous research” (Li 559).

There are also many difficulties that non-traditional families face. Families that go through significant hardships may be faced with additional responsibilities and expectations. In extreme situations, families undergoing serious conflict may be responsible for meeting expectations set by others. “Child welfare agencies have traditionally excluded families and children from service planning and decision-making, and most parents who are involved with Child Protective Services are involuntary clients” (Xu 37).

Regardless of the family situation, it appears that families all have similar feelings about what is good and right and how they want their family raised. “Almost all participants considered it imperative to define a good parent by focusing on discipline and educating good manners in children. At the same time, mothers considered it to be important to give love to and be warm toward their children.” (Lo 1595). This may implicate that families have similar goals for themselves. “Family represents a space in which the individual could be valued for him or herself where positive experiences can be created and family cohesion could be fostered” (Lietz 2).
FAMILY VALUES
There may be a disconnect with how families want to be and how they actually are. While families have a desire to be good and to raise their children in a positive manner, there are many difficulties they face. One concern is how different ages may respond to solutions. During certain teenage years, children are less apt to buy in to family oriented activities. "Adolescence is characterized by heightened reward sensitivity and risk-taking behaviors and often linked to high rates of drug use, reckless driving, and sexual promiscuity." (Galván 88). However this may be one of the most important aspects of this study. “The present “attitude” of the young modern men and women for consuming alcohol, drugs usage, partying at night, and dressing indecently is what’s disturb parents the most.” (Maragathavel. 2).

Families seem to express wanting to do more together, but today’s family tends to look for ways to do things without having to do it themselves. “We hand the majority of the child’s education & supervision over to machines (phones, TV, computer, game systems) & other Androids (teachers, coaches, child care services) that must teach per-programmed lessons.” (Maragathavel 4). This indicates that there are many opportunities to address family interaction.

Parents clearly need to take charge in how they interact with one another. Many are guilty of spending too much time watching TV, avoiding night time reading rituals and saying no to children asking to play. At the same time, there are those that insist on eating dinner together. That they talk about their days and take time to hear one another. “Our study suggests that eating dinner together as a family and having the television on during dinner are independent predictors of the quality of diet served to low-income preschool children.” (FitzPatrick 670). However, not everyone has the time and capability to do this. Other family situations may not be the same. Situations where parents are not able to be with one another on a daily basis may be an indication that conflict is more prevalent. “Both income and a partner are individually powerful resources for family well-being and their combined effect on subjective well-being is additive. Either resource without the other is linked to reduced levels of subjective well-being.” (Cummins 25).

All family members need to participate for this to work. Therefore, if there are non-participants, it may affect the study negatively. “Research indicates that parent involvement, especially in early childhood programs, can improve positive child outcomes.” (Knowles 393). As
children get older, it becomes increasingly more important for all to be actively involved. “Low levels of family activities negatively affect young adolescents' development and everyday functioning, which, in turn, can impact their future mental and physical health” (Lietz 3).

BADGING/GAMIFICATION THOUGHTS

Do badging systems have any value? The answer seems to be, yes. The whole point of this study is for participants to have a response. “The most commonly stated objective behind using a gamified approach is to encourage behavior change in end-users, whether that behavior change involves increased participation, improved performance, or greater compliance.” (Seaborn 28). Do families need to change or improve behaviors? In the very least the intention is to increase interactions. “Participants in the gamification group significantly increased their physical activity during the intervention period.” (Slomski 2419).

With this intention, there was a need to understand how gamification works and how to keep people motivated to continue using the system. All the digital games and social tools that people use on a regular basis point to similar systems having value. From time to time, there are activities that people enjoy simply because they are fun. “People often engage in problem solving for the value of participating in the process — independent of any value derived from the solution found.” (Raasch 36). Some may favor the games that get them the most reward. “A game-based intervention using social incentives to reward behaviors increased physical activity, according to a study published in JAMA Internal Medicine.” (Slomski 2419). Think of systems that give points or badges for achievements. “In general, the use of digital badges was reported as a positive way to encourage engagement in learning. In some cases, digital badges were the motivation for participating.” (Roy 2631).

Additionally, there is added value if you can actually do something with these achievements. Being on a leader-board in a game only means something if there are others also on that board. How would people react to a game that they can never move up on the leader-board? Having made achievements only means something real if they have a real implication to everyday life. “If you put that on your college resume, they [college admissions officers] can actually look at it and see how much work you've done.” Similarly, another student explained: “It's supposed to show up in your transcripts...And so when you're applying to colleges, colleges see like, you know like it wasn't just like an extracurricular, it was like actual work. This may give it a
lot more credibility.” (Davis 77). Credibility is something that may be a key goal for success. “Having something to show to others as recognition for all the hard work; being able to pick and choose learning events that suit their learning style, need or aspiration; being in control of their learning; and being able to choose events that are related to workplace activities and advancement empowers students’ to control their learning journey” (Roy 2632).

So people need to be able to reach their goals. They need to be able to display their achievements. They need to be able to compare their achievements with others. And, they need for it to have real implications for their lives. “Making micro-skills or credentials visible and portable in an online environment is an added asset of digital badges.” (Shields 1823)

**CREATING A GOAL SYSTEM**

That leads me to the “how to do it” resources. These sources gave me some further clarification of what needs to be included as part of my system. In general, a badging and gamification system seems to provide value and increases interest in participating. “Overall, we found evidence of improvements in interest and decrease in counter-productive motivational goal from a system using educational badges.” (Abramovich 229). However, all of the research found was related to educational models whose goals may not be the same in a home environment. “Programs that increase and improve physical education in schools have managed not only to improve the fitness of students, but also to motivate children and adolescents to continue performing physical exercise” (González 531).

This study should primarily exclude school and work life. The impression is that school and work is actually over-emphasized. The opportunity here is to balance these activities. Some of the opportunities may be for certain family members to get away from family from time to time for their own social needs. “A space for parents to socialize was an equally important component since parents with learning difficulties often experience feelings of social isolation.” (Knowles 394). But, the primary goal is for interaction together and to do so as a life-style change. “These activities are particularly effective when they occur over an extended period of time and are accompanied by social support, such as from mentors, friends or family members.” (Tanu 306).

Additionally, many of the resources found focused on gamification in a digital sense. And, while results appeared positive, it does not seem that it needs to be a digital solution. “Results from this study suggest that playing video games together with family members can bring family
members closer and enhance family satisfaction, especially for those with little communication opportunities.” (Wang 4088). But the challenge is to get families engaged and to keep them engaged. “If you are designing a gamified application, embedding game dynamics and mechanics that appeal to the target group and providing the type of rewards that are attractive to the motivation of the majority of them would significantly improve the appeal of the gamification.” (Kim 30).

ANALYSIS OF HAPPINESS
One of the more interesting topics discovered was how to gauge happiness. The assumption is that positive family interactions will have a positive affect on the family as a whole. While this may be true, there may not be a way to truly understand the implications on the overall happiness of a family. “Family, according to Psalm 128, is where a society is bred and nurtured. Moral values expected in a society should have their origin in family; therefore, the health of a society depends so much on how family is understood and lived.” (Obiorah 70). Understanding “family” may be the most difficult part of this study. Will they actually participate or will they just say they participated. If they understand the positive implications of this study, they may experience a great improvement in their interactions — whether or not their previous interactions were generally positive ones.

CONCLUSION
Family dynamics is a tough nut to crack. It lead down so many roads for exploration. There are too many roads to explore. Difficult decisions must be made on which ones are worth while and which ones are simply nice to have. Digging too deep may lead away from the problem. Keeping it simple and exploring familiar roads until there is a clear indication that another road is better will be difficult. The most valuable information will be information received directly from families. This is not just a study, it is a project with the intention of a product outcome. There needs to be clear understanding how families work, but also need understanding of how families will benefit from the solutions.
Knowledge Gap:
There are several key learnings to complete this project.

SYSTEM COMPONENTS
This is a question about what the “thing” is. There is a preconceived idea about what the thing could be, but that idea may or may not be something that families have an interest or need for. The assumption is that this tool will consist of selectable and customizable goals for family use. This system will propose that, because a family has an interest in achieving that goal, families will partake in activities that help them achieve that goal. A reward system will be in place to offer families a badge or patch of merit to recognize their accomplishment.

Components could include: a digital interface, a game board, goal cards, a tracking system and patches (physical or digital). The determination for what specific components will be involved will be a result of interviews and experiments with families.

DESIGN AND USABILITY
Once the components are decided upon, something needs to be created. While some of the ideas may come from family responses, much of the actual design process will be internal but guided by family feedback. Again, interviews and experiments will help determine the right path.

VALUE FOR FAMILIES
This may be the most important aspect of the project. Does the concept provide actual value for families and will families actually want to use it? There are many layers to this problem. Some of those layers include family composition, ages of participants, ability to participate in challenges, or even if families feel there is a problem worth solving.
Research Methods:

ADVICE INTERVIEWS
Interviewing real families before creating anything will help guide ideas from real knowledge rather than with assumptions. Before the interview, permission will be asked to write down answers. Interviews will begin with an introduction to the thesis topic followed by a number of questions. A question set will focus on who the family is and how they function as a family. There will be a few questions about types of reward systems they are familiar with and their thoughts about them as well as setting goals for the family. That will lead into questions about personality, likes vs. dislikes, and attempt to get families to tell stories that generate an emotional reaction (preferably happy memories). These emotional responses will be the most valuable insight into activities that families enjoy the most. This is the best method to gather information on family interactions because it will provide a sample of what families actually need. If assumptions are correct, there will be a process towards a solution that benefits families. If, during interviews, it is discovered that assumptions are incorrect, the project will be modified to appropriately address the new outcomes and the needs of families.

PROTOTYPING & EXPERIMENTS
These two research methods are grouped together because they are a single activity. Based on interview insights, a prototype system will be created that meets family’s needs. Experiments will then be conducted with those prototypes and again with families. Similar to initial interviews, the concept will be introduced, but this time the prototype will be presented and they will be asked for their impressions. Initial questions will ask them how they think the prototype works and how they would use it. If it is possible, a sample of the prototype will be left with some families so they may try it out on their own and report back their experience.

Prototyping is an essential part of this process, because it is something that can be tested with families. The intended concept should be something that will be used by others, so there will be a need to test its usability and functionality. That will lead to experimenting being the next step. Experiments are a natural progression to this process and are intended to prove out if the direction chosen, based on initial interviews, is the correct direction and what modifications should be made.
**EVALUATIVE RESEARCH**

Based on experiments, there will be an evaluation of family responses and determine changes that need to be made. This process will be repeated in order to come to a solution that meets the needs of families. Each phase should take roughly one week in the following order: Interview, Prototype, Experiment and Iterate. The process will cycle through experimentation and iteration until research proves there to be a significant desire for the solution or that there is no value in such a solution. The question-set for this section is not for families but will be introspective. Utilizing an affinity map to list out insights will help to organize them into themes and generate actionable insights. This will be done after the initial interviews as well as after experiments.

After the interviews, the goal of the affinity map will be to generate a number of questions that are called “opportunity areas”. In general, these opportunity areas should describe the problem that families want solved. Based on basic criteria, such as feasibility and my initial thesis statement, a specific opportunity will be chosen to move forward with.

After experiments, a similar method will be used to list out the things learned from the experiments, and again group them into themes with the intention of solving the problem and answering the questions below. This continued process should be able to prove out whether or not the solution solves a specific problem, what families see as the benefits to the solution and the usability of the solution.

The illustration below describes the method used to distill things learned from the interviews into insights and opportunity areas. As information is gathered, it was important to organize common themes and deduce possible insights from those themes.
**Interview Guide: Families**

The following interview guide was used during advice interviews. This guide served as talking points for an open conversation with the entire family.

**SET THE STAGE:**

Introduction to interviewees: Clearly state I am not there to sell or convince. I am looking for advice as family members.

“My name is Jason Crouch and I am working on a family centered project as part of my Graphic Design MFA thesis at Liberty University. I am here doing user research and I am only looking to understand your current experience. There are no right or wrong answers, I am here to learn from you and want to hear your expertise to better understand your experience. I will take your insights and expertise and use them to design a prototype to further test with. Thank you for taking the time today and sharing with me.”

**QUESTIONS:**

1. In a minute or two, can you tell me a little bit about yourself (each family member) and your role as a family member? (clarify role to be how the family functions and gets things done if needed)

2. Can you walk me through your day (today)? Or, Can you walk me through how your day went yesterday?
   a. Probe on problems that had to be addressed or areas of delight

3. What is your favorite part of your day? What is your least favorite part of your day?

4. What are you most proud of about your family?

5. What do you like to do for fun?

6. When was the last time that you worked on a project or set a goal as a family? Can you walk me through that process? What were some of the delightful parts of this? What were some of the difficult parts of this?

7. How do you share your family accomplishments with others (phone, email, text, social media)?

8. Have you tried to make any changes to help solve these headaches? If so, what are some of them? How have those worked?
9. Do you have any goals or things you would like to accomplish as a family? Can you describe any goals or achievements you have accomplished in the past?

10. Has anyone in the family ever received an award or recognition for something they did as an individual or as a group, within your family or outside of your family?
   a. Please describe your experience.
   b. Was there any physical or digital “trophy” that you received as part of that recognition? If yes, what was it and what did you do with that trophy?

11. How familiar are you with “merit badges” either as part of an employee system of recognition or as part of a social organization such as the boy/girl scouts? Please tell me about your experience?

12. If there were a service/social network/organization/other (thinking broadly) that allowed you to earn recognition for family achievements, what would that look like?
   a. What goals or achievements would you like to be recognized for?
   b. Are there different goals that are desired by the children than the goals desired by the adults and what are they?

13. Are there any other thoughts you have had about our conversation that you would like to share?

**CLOSING**

Thank you again for taking the time to meet with me. You really have allowed me to walk in your family’s shoes for a short time today and have provided me insights and feedback I can use in the development of my concept. I would like to follow-up with you in the future to show you concepts that result from this conversation, would that be alright with you?
Pilot Study

A brief pilot study was conducted for the intention of gauging interview questions and initial direction. The insights gained from this pilot indicate that families have a great deal of interest in spending time with one another. However, daily life for families is intricate and full of uncertainty.

It is apparent that parents and children do not have similar goals in life. Parents wish to make a better home for the entire family while children tend to be more aloof and are focused on the instant gratification for daily activities. Also, parents lead the charge on what daily activities will be aloud. More times than not, it is the parents goal to get chores done and work on home improvements during time between work hours. Family vacations are the singular time when families get away without the distractions of daily chores and home improvements.

This is not to say that families have no interest in spending time on collaborative activities. Parents often encourage children to participate in daily housekeeping and home improvement activities. They feel a sense of pride in completing a task together and they hold these memories dearly. However, they are not looking to get rewarded for these achievements. For parents, the reward is the memory. Children may enjoy the instant gratification of a reward, but that excitement quickly fades.

Another interesting aspect is that families are not looking for another tool to complicate their lives. They don’t want to change how they currently work together and express extreme distaste for anything that adds to their daily routine. Additionally, parents are very protective of their information. They do not want to share with people they do not know and they do not want to be in competition with their neighbors. Any development needs to be cognizant of these facts.
Advice Interviews

Advice interviews were conducted with three families. Each family was of similar social class and of a typical nuclear family structure. Families were given the names “Orange Family”, “Green Family” and “Yellow Family”. These names correspond with Post-it notes used during the evaluation of interview information. Family members will be named by their roles such as Father, Mother, Son and Daughter. The use of Son #1 and Son #2 are being used to represent brothers.

OVERVIEW

The Orange Family consists of a mother who is 38 years old and works for herself, a Father who is 40 and works for a local company, a son who is 10 years old and in 5th grade and a daughter who is 8 years old and in 3rd grade.

The Green Family consists of a mother and father who are both 45 years old. Mother works for a sports entertainment business and Father owns his own company in the health industry. They have two sons; 14 and 12 years old respectively. Son #1 is a freshman in high school and Son #2 is in 7th grade.

The Yellow Family consists of a mother who is 43 years old and is a stay-at-home mom, a father who is 44 years old and is a structural engineer, a twin son and daughter who are 11 years old and in the 5th grade and a younger son who is 9 years old and in the 4th grade.

All advice interviews began in the same fashion by introducing them to the purpose of the study and given consent and assent forms to review and sign.

COMMON THEMES

There were striking similarities between all families and how they operate. All families can be considered as having very busy lifestyles. Much of that activity is due to their children’s activities. School sports, music lessons, drama practice and time with friends dominate much of their after school lives. Parents spend their evenings and weekend bringing their children from activity to activity. They often need to coordinate the pick-up and drop-off arrangements with their spouses and they all express feeling stretched thin for time. In general, one parent appears more consumed by their work while the other parent spends more time organizing the family, paying bills, cooking and cleaning the house.

In speaking to families about the parts of the day they enjoy the most, parents express that dinner time and family
time together is often their most enjoyed times. However, parents also express great value in time spent alone or with their spouse after their children go to bed at night.

Children, on the other hand, did not express time with family as being significant. All children from all of the families expressed that they enjoy their activities most. Those activities include time with friends and after school activities. They did not speak about any time with their family as being something they even thought about. The child’s enjoyment for an activity-based lifestyle appeared at odds with the parents need to get stuff done, which often involved getting their children to their activities.

There were a number of times that families did speak about activities they enjoy together. The Orange Family and the Yellow Family both spoke highly of volunteer activities they do as a family. These activities were often done as part of a broader school or church activity. The Orange Daughter seemed excited at the mention of time the family spent helping at a local soup kitchen and said, “That was so much fun. I want to do that again.”

Family vacations are also common across all of the families and all family members express delight and fond memories of these activities. All three families go regularly to Disney World together. One interesting discovery is that all of the fathers have activities exclusively with their sons. The Yellow Family shared video from a recent beach vacation where Son #2 created “ball tracks” to roll a ball through the sand. This was a shared father-son activity that both Father and Son #2 seemed very proud about. The Green Family Father and Sons have visited 22 of 30 major league baseball stadiums together, and the Orange Family Father and Son participate in Cub Scouts together. The family mothers did not speak about having any exclusive activities with themselves and their children and the fathers did not speak about having any exclusive activities with their daughters.

Additionally, there are common “spur of the moment” activities each family regularly gets involved in such as weekend bike rides, cleaning up the house and shopping. There was no observation that any of these activities peaked any significant interest. Families expressed they try to fill down-time with enjoyable activities when they can but when speaking about their most enjoyable activities, these items did not appear to register as significant.
RECOGNITION

When families were asked about receiving recognition, there was some disagreement. The Orange Family Mother stated that she was very interested in sharing accomplishments with others. She stated that, “Doing good things as a family spawns others to do good things.” This notion was strikingly different from the other families who were fairly conservative about sharing their accomplishments and activities. The Yellow and Green Families preferred to send notifications of accomplishments directly to family and close friends rather than share openly on social media.

All families did state that they enjoy receiving recognition, but they differ in how they want to share this recognition or if they want to share it at all. The Green Family specifically stated they prefer to keep their accomplishments to themselves but also stated they feel encouraged to do more when they receive recognition.

This lead to a conversation about areas they currently receive recognition and how they feel encouraged. The Green Family discussed using exercise equipment that gave them badges for accomplishments such as distance, time or days in a row spent exercising. The Yellow Family spoke about a work health system that rewarded them monetarily for activities that were tied to the father’s smart watch. In both of these cases, families expressed feeling encouraged to do more and try new objectives. However, they do not share these badges with others and say they are used only for self motivation.

FORWARD LOOKING

All families express they do not feel they do enough together and are open to looking at ways they can improve this. They also expressed that a method of encouraging them, such as a rewards system, could possibly motivate them to do more together.

Family members stated that they would be interested in a number of activities which primarily involved new experiences such as traveling to new places or new found adventures. Parents stated they would also be interested in having daily tasks supported to help encourage the entire family to be involved in every day chores and responsibilities. Younger children of these families seemed less able to express their interest. There was also an interest in daily, weekly or monthly challenges. The Orange Family discussed wanting something that would tell them, “Here is your daily challenge.”
ADVICE INTERVIEW CONCLUSION

It is clear that while individual family members receive awards and recognition for individual accomplishments, there seems to be no system that families are aware of to encourage them to work collaboratively. Families are extremely busy and coming up with activities that excite or motivate the entire family appears difficult. For a solution to be successful, it is necessary that it be simple, easy to use and should not add to their busy lives.

Additionally, while some families feel encouraged through competition, other families prefer to keep their accomplishments to themselves. It is important that any solution include a way for families to opt or control how they want to share their information.

Finally, parents are very protective of how their children access outside information. Children do not appear to have any control or use of social media or other means to share information other than through direct contact. This means that parents have complete control over what tools are used by family members and how activities are pushed to family members. Since Facebook is the tool that parents appear to prefer most, it seems logical to create a solution within a tool that is already in use rather than attempting to add a new tool that could potentially make a solution more complicated.

The challenge at this point is to create a simple, user-friendly system by which a family can feel a sense of accomplishment and pride through shared interactions.
ADVICE INTERVIEW COMMENTS ORGANIZED BY THEMES

OPPORTUNITIES

FACEBOOK AS A TOOL
LISTS ARE GOOD
NO CURRENT AWARDS FOR FAMILIES
NEEDS TO BE SIMPLE TO AVOID BUSY LIFE
OPT OUT OPTION
DOING NEW THINGS
CURRENT ACTIVITIES ARE Routine
Prototype Design

The initial prototype began by looking at the Facebook app. Since parents all used Facebook as a means of sharing activities, to some extent, it seemed reasonable to consider if this solution could reside as a component of the Facebook app.

There are a number of similarities in this solution and with the Facebook app. First, they both rely heavily on users posting images. Second, they both have a memory component where posts are kept to reflect on past activity. Finally, Facebook also has some event components where users can notify friends of events they are planning. Utilizing Facebook as a main platform was eventually abandoned because it would essentially change how Facebook functions and approaching Facebook on such a radical changed seemed unlikely. Additionally, Facebook’s mission does not align with the goal of this study.

The new path was to create a separate, stand-alone app-based solution. This app would include a minimum amount of functional options to keep the solution simple. These options include events, locations and categories. Additionally, there would include some sub-functionality to allow for some basic user settings as well as add some dynamic options to hopefully excite families to take part in a variety of activities and in a variety of ways.

The Locations option is the most basic of options that allows users to see possible activities based on their location. It gives them the ability to see businesses, parks, museums, and other area based places without attaching a specific type of activity to that place. It gives no direction on what families should do at each location.

The Categories option lists MeritPatches that families can choose to do an activity around. This option gives families the ability to choose the types of activities they prefer, but does not give them any direction on where they should do this activity. Choosing a MeritPatch to achieve allows families to post photos and comments about their activity and save it to their memory board as well as share their activity with others.

Finally, the Events option combines both a location and a MeritPatch for a specific event. The assumption is that businesses may be interested in hosting events in order to entice families to come to the event. For instance, a sports team can invite families to a game at a discounted rate or offer free popcorn as an incentive. An additional
option is a MeritPatch challenge that allows families to compete against themselves or other families to earn the MeritPatch. An example of this would be to challenge families to ride every roller-coaster in an amusement park to earn a limited edition MeritPatch. All of these options allow families to post their experience, earn a digital MeritPatch and purchase physical MeritPatches if they choose. Businesses may also be interested in providing physical patches as a token from the event. Additional functionality includes options to change privacy settings, make random comments without earning a MeritPatch, RSVP to events, purchase tickets through the app, entering unique codes as proof of completing events, viewing MeritPatches earned and GPS locations and directions to locations and events.

Design considerations were put on the MeritPatch logo of a purple MeritPatch with a white star in the middle. Colors of red, purple and cyan were used to communicate the different options available. A color-coded toggle button utilizing the MeritPatch logo was included. And, some thought was put into the transitions from screen to screen to help create a user-friendly and energizing experience. 15 digital MeritPatches were also created to demonstrate a variety of categories and interests. Some categories include spiritual, physical fitness, outdoor recreation and cultural. These patches are visible on pages 1-19 of this study.

In order to test the prototype, a basic guide was created to help guide testers through the experience and to make sure they reached every page. Basic instructions asked testers to look at each screen, describe what they saw and what they thought the function was on each screen and to ask for their reaction to each screen and the concept in general.
Prototype Experiment

A second round of interviews was scheduled with each of the original families interviewed at the Advice Interview stage. Participants were reminded about the intent of the study as well as their confidentiality rights and how I would be proceeding with questions for the experiment.

Two Apple iPhones were brought to the experiment with the app prototype already installed. These phones were given to the children in each family. A link to the prototype was sent to each parent so they would be able to access the prototype individually.

USER EXPERIENCE

Testers expressed feeling that the interface was easy to use and posed no issues on how to navigate from one area to the next. All users stated they liked how the home-screen and the other option screens worked together. The only screen that appeared to cause confusion was the photo-picker. This is an area where a user attaches one of their own photos to the activity they completed. While testers understood what the screen was, they seemed confused and needed explanation on what choosing a photo meant. Testers were able to go through all other activities with ease.

On the home screen, there is a section to “Say Something”. Users expressed knowing what this was used for but shared little interest in what they would want to do in this area. This indicates that maybe users don’t really want to say anything. It is possible that there is enough interaction with the app within the three options of events, categories and locations to not need an arbitrary posting option unassociated with MeritPatches.

Testers had comments indicating they wanted more information that was currently displayed on earned patches and posts such as dates and locations of the activity. They expressed more information in this area is better for when they return to the memory.

There was a difference in opinion about purchasing MeritPatches. The Yellow Family had no interest in purchasing patches and was actually content with earning only the digital patches. The Orange and Green families were split between adults who cared little for physical patches and the children who were very much interested in physical patches. This may indicate that older children are less likely to want a physical memento from the activity. However, the Orange Mother said she would be very interested in purchasing books or calendars displaying their
yearly activities. She stated she would purchase these as Christmas gifts and it would be “one and done” indicating that having this option would make her usual activity of collecting photographs for Christmas gifts easy. This was an interesting notion since it brings in a new business model for the solution.

All families expressed interest in all of the options in the menu but they clearly gravitated to the Events option. The adults in each family noticed that each event had a perk that interested them such as getting something free with their purchase or free events for those who RSVP’d. All family members were particularly interested in the “Challenge Event”. This event listed the opportunity to earn a limited edition MeritPatch coin for families who rode every roller-coaster in an amusement park. There was some discussion over family members who liked and those who disliked roller-coasters. Family members who liked roller-coasters were attempting to persuade non-likers to engage in the activity. Families continued to express interest in engaging with other families on challenges to see who can win. This area was clearly the most enticing aspect of the entire app and generated much discussion between family members.
Defense of Work

Is this solution a simple, user-friendly system by which a family can feel a sense of accomplishment and pride through shared interactions? The answer is, yes!

All families expressed an interest in using this tool and asked if there are plans to make it available. Each family stated that this solution eliminates the, “what are we going to do this weekend” question. They all expressed that having a tool that encourages them to get out and try something new was exciting to them. Adults stated they would be more comfortable to have their children use this tool instead of other social media tools because it is more private and they like the idea that they can give their children some power to make choices for family activities rather than the adults making all the decisions.

This solution works because it takes out all the negative aspects of social media. Families complain that social media tools reveal information they don’t always like to share across extended friend groups. Parents worry that involving their kids in social media tools exposes their children to bullies, stalkers and general negativity. At the same time, families want to collaborate and share activities with one another. This solution works because it is focused on the family rather than focused on connecting with past, present or future relationships. It is focused on connecting families with one another and engaging in activities that families enjoy doing together.

This solution is not complete. It will likely take a number of years worth of time and involvement from a number of experienced developers, marketers, designers and business professionals to connect unanswered questions. There are also a number of changes to the functionality of the prototype to overcome questions families had. That being said, the concept is solidly supported at this stage.

Through the use of a clearly defined design-thinking method, I was able to learn a great number of details about how families run, the challenges they face and the needs they have. While this is a small sample of families, I believe a larger study would reveal many similarities among the majority of families across the United States.

There are still questions about partnerships that would need to be in place to make this solution work. It is assumed that businesses would engage in creating events for this solution. This is already being done with websites such as Groupon.com. It is also assumed that businesses have an interest in rewarding families who participate by purchasing
physical MeritPatches as give-aways for the event. There may be opportunities to partner with a business who is already involved in this type of coupon model. I believe it is worth it to research more in the months ahead, to iterate on the prototype and test with a wider audience. There is a clear connection to offering people incentive and people having a desire to do something. Families are very busy and need incentive to do this differently. This solution seeks to change behavior - “to encourage behavior change in end-users, whether that behavior change involves increased participation, improved performance, or greater compliance.” (Seaborn 28) Families involved in this study have indicated, at a minimum, an interest in trying something new.
Bibliography


Appendix

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