Sharing a Product Idea: Is it Worth the Cost?

Minnette Bumpus, Bowie State University
Garthen Leslie, Independent IT Consultant
Dominique Turner, University of Maryland University College

This case was prepared by the authors and is intended to be used as a basis for class discussion. The views presented here are those of the authors and do not necessarily reflect the views of the Society for Case Research. The views are based on professional judgment. Copyright © 2017 by the Society for Case Research and the authors. No part of this work may be reproduced or used in any form by any means without the written permission of the Society for Case Research.

Introduction

On April 25, 2014, Garthen Leslie and Ben Kaufman, Quirky founder and CEO, appeared on the Bloomberg television show, In the Loop (Bloomberg Business, 2014), hosted by Betty Liu, to discuss how they had teamed up to move Garthen’s idea to an actual product. Garthen had invented a smartphone application that could control and monitor the operation of a window air conditioner. This invention evolved into the Aros smart air conditioner, a Quirky and GE cobranded product.

It had been a little over a year since that appearance; yet a few of Garthen’s close friends and family members still enjoyed kidding him about his “deer in the headlights” reaction to Betty’s question regarding whether or not his share of potential earnings from his invention was enough. As he relaxed at home on this muggy afternoon in July 2015, with one of the first manufactured Aros, programmed at a comfortable temperature, Garthen recalled the exact revenue sharing conversation that occurred halfway through that interview:

Betty Liu: How does this work with GE? Where is the revenue sharing here?

Ben: So, we actually give GE a bit of a royalty when this thing sells. So that’s how it works.

Betty: Okay, so they get a royalty, you get paid for it and what about Garthen?

Ben: Garthen gets cut into the revenue. Quirky across all of its products, every single product it sells, we share 10% of the revenue with the community, and Garthen will be a big part of that 10% on Aros.

Betty: Is 10% enough?
Garthen: Absolutely, I’m excited about that. We are all excited about the product and how well it is gonna do in the marketplace. In a couple of weeks, we’ll start having it in stores and it will do well (Bloomberg Business, 2014).

Garthen’s “deer in the headlights” expression, followed by his quick affirmative answer was in reaction to the timing of Betty’s question regarding his share of potential earnings from sales of the Aros. Having such a question asked when he was sitting on the right side of Betty and Ben was sitting on her left side, created an awkward moment. Taking into consideration the role that Quirky had played in helping him take his idea to the marketplace, Garthen knew that the set of the In the Loop (Bloomberg Business, n.d.) was definitely not the time and place to make any reference to hindsight being 20/20; which at that time was not the case.

Garthen had given considerable thought over the past 15 months to Betty’s question regarding his share of potential earnings from sales of the Aros (i.e., Is 10% enough?). As he reminisced about the Aros’ evolution, Garthen wondered if his answer to Betty’s question would be the same if it were asked today.

Quirky Background

Ben Kaufman, the CEO and founder of Quirky, started this New-York based company in 2009 at the age of 23, “with a three-word mission statement to ‘to make invention accessible’” (Bloomberg Business, 2014). This community led innovation platform made “invention accessible by bringing real people’s product ideas to life” (GE Appliances, 2014, para. 8).

Quirky’s in-house design team and engineers collaborated with an online international community to release new products weekly (Kellner, 2013). Ideas submitted over the years by inventors have fallen into a wide range of categories that included: electronics, health & fitness, home, kitchen, parenting, toys & baby – Mattel, travel, wild card, Apple accessories, connected home – Poppy, lighting – GE, audio – Harman, and beverages (Quirky, n.d.).

Garthen Leslie’s Idea Submission

Garthen’s smart air conditioning idea began fermenting in his head while he was an employee with the Department of Energy, where he was tasked with conserving resources; but at home his air conditioner was by no means energy efficient. Years of choosing between wasting energy in his Maryland home or suffering through the stuffy summer heat provided the impetus for thinking about how to create a smart air conditioner that could be controlled from his office. Garthen, a senior level IT policy advisor, with a doctorate in management, felt that, anyone with
basic general knowledge could come up with a product idea; however, it was essential to consider what innovations were necessary to make the product unique and marketable.

As fate would have it, in January, 2013, Garthen happened to catch an episode of the Tonight Show where Jay Leno was interviewing Ben Kaufman, founder and CEO of Quirky (The Tonight Show, 2013). Inspired by Quirky’s business model, and prepared with what he thought was a feasible idea, Garthen submitted his air conditioner proposal via the Quirky website a few days later.

Garthen’s air conditioner proposal was not his first submission to Quirky. In 2012, Garthen tested the waters with a dummy product to see how the Quirky process worked. He wanted to get solid feedback to see how thorough Quirky was in its evaluation of an idea. At the end of the process for the dummy product, Quirky told him what he already knew in terms of needed product development improvements, but he decided to table that idea since it was only a dummy product.

Submitting a dummy product was not the only reconnaissance work that Garthen did before submitting his air conditioner proposal. Garthen performed a search with the United States Patent and Trademark Office (USPTO) to make sure that his idea had not already been patented by the USPTO. Keenly aware of the importance of market research and to confirm the legitimacy of Quirky in comparison to other crowdsourcing sources, Garthen contacted people who had tried crowdsourcing outlets such as Kickstarter and Edison Nation to learn about their processes and their costs. Information about the idea submission fees and revenue models for Kickstarter and Edison Nation can be found on their respective websites (Edison Nation, n.d.; Kickstarter, n.d.). Additionally, after learning that the Pivot Power product, a flexible surge protector power strip, was one of Quirky’s highest selling products; he took it upon himself to contact the inventor of Pivot Power, Jake Zien, to acquire suggestions on how to have a successful invention.

The process that Garthen went through to submit his idea first involved registering on the Quirky website by creating a user account with a profile. With his profile completed, he was then asked to indicate how he wanted to participate in the Quirky community: inventions, contributions, or following others. After indicating the inventions option, Garthen was asked to select the category that best fit his invention and Garthen selected the “other” category. Next Garthen provided a response to the question: What prompted your idea (i.e., what was the problem that you wanted to solve)? Garthen provided a problem statement, which described how he had spent years choosing between wasting energy with a traditional window air conditioner in his Maryland home or suffering through the stuffy summer heat when he came home to a hot house. The next question that the Quirky application asked was: What is your solution? The answer that Garthen provided to this question outlined the features of his app controlled air conditioner. The third
question that Garthen answered was: What would be the value of your idea? Garthen responded to this question by explaining how the green function of the app controlled air conditioner would allow a consumer to save 6-7 hours a day on electrical use, while reducing his or her carbon footprint at home. The final step on the Quirky application required Garthen to create a graphic of his idea. Since Garthen’s graphic arts skills were limited, he drew a box to depict his idea. Finally, Garthen paid his $10 submission fee and hit the idea submission button in January 2013. A summary of the steps in the Quirky online application submission process is provided in Table 1.

**Table 1: Steps in the Quirky Online Idea Submission Process for Garthen Leslie**

| Step one: Register on the Quirky website | Garthen created a user account with a profile |
| Step two: Indicate how you want to participate in the Quirky community: inventions, contributions, or following others | Garthen chose the inventions option |
| Step three: Select the category that best fits your invention | Garthen selected the “other” category |
| Step four: What prompted your idea (i.e., what was the problem that you wanted to solve) | Garthen provided a problem statement, which described how he had spent years choosing between wasting energy with a traditional window air conditioner in his Maryland home or suffering through the stuffy summer heat when he came home to a hot house |
| Step five: What is your solution to the problem identified | Garthen outlined the features of his app controlled air conditioner |
| Step six: What would be the value of your idea | Garthen responded to this question by explaining how the green function of the app controlled air conditioner would allow a consumer to save 6-7 hours a day on electrical use, while reducing his or her carbon footprint at home |
| Step seven: Create a graphic of your idea | Since Garthen’s graphic arts skills were |
limited, he drew a box to depict his idea.

**Step eight:** Submit a $10 application fee with your submission.
Garthen paid his $10 submission fee online and hit the idea submission button in January 2013.

(Quirky, n.d.)

Garthen’s submitted idea was then routed to a review bucket where the Quirky community voted on whether or not the idea would proceed to the “under review” stage where it would be evaluated. The members of the community that voted included people familiar with electronics, airflow, design, marketing, and electrical engineering. Garthen understood that he had the opportunity to modify or recall his idea before it reached the “under review” stage, but these were not options that were of interest to him.

Every Thursday evening, Quirky staff members selected 3-7 ideas submitted online for that week and evaluated them. A Quirky spokesperson for the idea, assigned to represent the inventor to internal management, advocated for the inventor’s idea in his or her presentation to industry experts, Quirky staff members, and past inventors. Both the online and face-to-face Quirky audience discussed, then voted on the product. If the inventor received greater than 30% of the online votes and the majority of the votes of people in the audience, then a decision was made to transform the idea into a Quirky invention. In other words, the response at these Thursday night meetings determined if the inventor’s idea moved forward.

Unfortunately, Garthen was informed in April 2013, that his initial idea for a smart air conditioner was rejected in the review process. Garthen was disappointed but not discouraged when Quirky passed on his idea. Quirky also passed on a similar idea submitted by another inventor around the same time. One of the features that distinguished Garthen’s idea from the other inventor was that Garthen’s idea included the unique feature of a mobile fence or geofencing. This unique feature allowed the use of the GPS function on a cell phone to determine when the air conditioner came on based on your defined proximity to the Aros unit. For example, if you set it for five miles, then the Aros would turn on when you were five miles away.

Since Quirky passed on his initial idea for a smart air conditioner, Garthen was still the owner of his intellectual property and could have taken his idea to another crowdsourcing outlet or pursued an alternative avenue to get his idea to the marketplace, but he decided to use the feedback from Quirky to expand and resubmit his idea. Using past experience as his anchor,
Garthen knew that a route other than the Quirky process would have required more work on his part. In terms of a costs-benefits analysis, he could not afford a repeat of an earlier trial and error process that he had experienced with another company for one of his other ideas. This earlier trial and error process had cost him about $20,000.00 in 2007, and the idea was shut down by the other company. Another alternative would have been to try and take his idea to market by himself. This solitary journey was ruled out because he knew that he did not have the necessary knowledge, background, skills, finances, legal, marketing, service and customer acquisition capabilities that this option required. This option would have required him to form a product development team composed of people with different areas of expertise that Quirky had in-house. The solitary alternative was only workable when the inventor had the funds needed to finance these activities and to cover daily living expenses.

The feedback from community members included suggestions for added features, such as an application that tracked energy usage against a pre-set budget and another app that turned the air conditioner on and off based on the user’s location, as well as a request for an expanded write-up on the mobile fencing or geofencing. Garthen addressed all of the suggestions provided by the Quirky community, then resubmitted his expanded idea write-up in July 2013. This expanded idea now took precedence over the similar air conditioning proposals previously submitted by Garthen and the other inventor. Because of the volume of ideas submitted to Quirky, it often took a month or longer before any one idea was reviewed.

**GE and Quirky Partnership**

In April 2013, “Quirky and GE partnered to develop a line of co-branded connected devices” (Kellner, 2014). The agreement between Quirky and GE was viewed as a win for both companies. GE invested from 30 to 50 million dollars in Quirky and opened up its extensive library of Patents (IP) to the community; and the speed and nimbleness of Quirky brought products much faster than the bureaucratic product development process within GE. The partnership allowed GE to reinvent some of its consumer products, thus “opening up [its] brands to more ideas and new audiences” (Mann, 2014, para. 5), and Quirky was given access to GE’s marketing and manufacturing contacts.

GE’s executives were particularly interested in jointly developing an appliance product idea with Quirky. GE had years of experience in developing air conditioners but it had not given much thought to new technologies. During a meeting in the summer of 2013, between Quirky and GE to discuss how GE could reinvigorate its air-conditioning business, Ben Kaufman remembered Garthen’s resubmitted smart air conditioner idea.
Garthen’s idea happened to be the only appliance idea that was still active in the Quirky’s archive of submissions that had yet to make it to the review process. Since both Quirky and GE agreed that Garthen’s idea was perfect for the first Quirky and GE major product, Garthen “and his [resubmitted] idea were, hand-plucked from Quirky’s ever-growing archive of submissions, rather than going through the usual approval-and-review process” (McCorvey, 2014, para. 15) that Garthen had gone through with his initial smart air conditioner submission.

The Product: Aros Air Conditioner

Garthen’s idea for a smartphone application that could remotely control and monitor the operation of a window air conditioner evolved into the Aros, an app enabled window air conditioner. The app for this 45 pound, 8,000 BTU unit “collects personal information like your location, schedule, usage, and monthly budget, then learns over time to automatically maintain the right temperature for your home. It also suggests changes that could help save money” (Mlot, 2014, para. 4). The Aros has a white translucent exterior, with LED display controls on the front panel (Refer to Appendix A). The Aros pulls warm air into the front of the unit and directs the conditioned air upward and out through the top of the unit. Traditional air conditioning units pull warm air into the bottom front of the unit and direct the conditioned air back out of the middle front of the unit. This causes some of the just conditioned air to be pulled back into the unit instead of flowing out into the room. Blowing the conditioned air out through the top of the unit, as Aros does, reduces the amount of conditioned air pulled back into the Aros and creates a more efficient cooling process. Several of GE’s existing patents were utilized, such as a patent for the air conditioner’s chassis.

The Aros was “Quirky’s first major appliance and the fifth product developed out of the Quirky + GE partnership” (GE, 2014, para. 1). Ben Kaufman, founder and CEO of Quirky referred to the Aros as “the reinvention of the air conditioner” (Quirky, 2014). Along this same line, Kevin Nolan, Vice President of Technology at GE Appliance, stated that the Aros “redefines what the category of air-conditioning is, and how consumers think of it” (Quirky, 2014).

The partnership between GE and Quirky accelerated the speed for getting Garthen’s idea to market. He submitted, then resubmitted his idea for a smartphone app in January 2013, and July 2013, respectively. The prototype for his idea was revealed in March 2014; and the product, which carried Quirky and GE logos, was launched in May 2014, at a wholesale price of $300 per unit.

Quirky partnered with Uber to deliver the Aros to New York residents during the last weekend of May 2014 and the first two weekends of June 2014. Sales of the Aros air-conditioner had reached 1,762 units as of July, 2015 (Morris, 2015).
Intellectual Property

The intellectual property (IP) for any idea submitted to Quirky became the property of Quirky as soon as Quirky said that it would turn the inventor’s idea into a commercial product. The Terms of Use and Privacy Policy of Quirky outlined the terms and conditions for transferring Intellectual Property rights to Quirky for its commercial use (Quirky, 2016; Refer to Table 2). If for some reason Quirky changed its mind and decided not to make the product, then the IP reverted back to the inventor. Quirky, as well as GE owned the rights and patents necessary to produce Aros, this included the patent process between the app and the air conditioner. The logos of both companies were carried on every Aros packaging box. The GE logo was carried on every air conditioner. Although Garthen is no longer the owner of the IP for the Aros in its present form, he could, however, obtain a patent for an expansion of Aros if he chooses to do so in the future.

Table 2: Terms of Use and Privacy Policy of Quirky
Conditions for Transferring Intellectual Property Rights to Quirky for its Commercial Use

YOU HEREBY ASSIGN TO COMPANY all of your worldwide right, title and interest in such Intellectual Property, and/or User Content and/or Product Ideas, including without limitation all Intellectual Property Rights and any and all other exclusive rights to the same.

These rights to the Intellectual Property, and/or User Content and/or Product Ideas that are assigned herein include, but are not limited to: any and all rights to claim priority thereto; any and all rights to use, distribute, modify, commercialize, and legally protect the same; and any and all rights to design, develop, make, use, sell, offer for sale, export, and/or commercialize products and/or services incorporating the same. These rights assigned herein further include any and all exclusive rights to sue and recover for any and all infringements of such Intellectual Property Rights and any other exclusive rights to the Intellectual Property and/or User Content and/or Product Ideas, including any infringements which may have occurred prior to the date of this assignment, or which may occur on or thereafter.

(Quirky, 2016)

Royalties

The product was priced to accommodate the 10 percent for the inventor and the community and yield the desired profit for Quirky. In the Quirky system, 10% of the revenue was allocated for “the community” of contributors to the invention. If an individual weighed in on the color, size, specs, etc. of the invention, then he or she was part of the community. The largest portion of that
allocation was for the inventor. Royalty structures typically did not rise above 7%. Licensing executives did their best to hold you at 7% or below (Tharp, 2012).

The royalty structure relieved the inventor of the burden and cost of doing all of the expensive processes that are needed for a product to become marketable. Also, most companies that offered royalties had the necessary connections and business partners to perform these tasks without making major changes to their operations. This lowered the cost for the inventor considerably. There were two basic ways to structure the royalty agreements: 1) Have a royalty of a certain dollar amount for each unit sold, or 2) Base the royalty on a percentage of gross sales. Essentially these were the same, as the percentage can be converted into a dollar amount per unit sold (Invention Partner, n.d.).

The Terms of Use and Privacy Policy of Quirky outlined the User Royalty arrangement for members of the Quirky community who influenced a product idea that went to market (Quirky, 2016; Refer to Table 3).

Table 3: Terms of Use and Privacy Policy of Quirky: User Royalty

<table>
<thead>
<tr>
<th>User Royalty</th>
<th>is a royalty or fee paid to a User for contributing a Product Idea, or to a Product Idea, as provided for herein. The combined User Royalty (for all Influencers) for a Product Idea submitted on or after December 22, 2015, shall be: (a) up to 3% of product revenue from sales of products by Quirky (see, Three Percent Transaction below); or (b) up to 1.5% of revenue associated with licensing by Quirky to a third party of Intellectual Property Rights associated with a Product Idea (see One and One Half Percent Transaction below); or (c) up to 5% of revenue associated with sale by Quirky to a third party of Intellectual Property Rights associated with a Product Idea (see Five Percent Transaction below). It shall be entirely at the Company’s discretion to determine whether a particular Product Idea, or a given contribution to a Product Idea, qualifies a User for a User Royalty, and it shall be entirely at the Company’s discretion whether and how to allocate any User Royalties among multiple Users.</th>
</tr>
</thead>
</table>

(Quirky, 2016)

The royalty process with Quirky is listed below. There were no other profit sharing schemes. All community members operated under the same structure.

a) Once Quirky selected the idea for development, then multiple projects were opened to determine various components of the product. All of these projects were voted on by the Quirky community. Garthen, along with all the other community members had the opportunity to earn influence percentages based on their participation in various projects.
of the product development regarding: design, color, size, dimensions, name, marketing slogan and power (BTUs). Community members were awarded influence points for their suggestions. Each of these components carried a certain percentage (percentage of the total percentage allowed) to the winner of that phase. Each of the different areas where the community could have influence (earned a percentage of the total allowed percentage) was predefined and a percentage of the overall percentage was allocated to that part of the contribution. These percentages were determined before the product was made available to the community for input. For example: if the color was thought to be a big factor in a toy, then it would be given a larger percentage than maybe the name or marketing slogan.

b) Winners of each phase were chosen by popular vote.

c) For products sold on the web site, the community’s total royalty was 30% of gross sales in perpetuity. The remaining 70% of revenue for the Aros online sales was split between Quirky and GE. For sales through retailers (Home Depot, Amazon, Walmart, Target, etc.), the community received 10% of gross sales in perpetuity. The remaining 90% of revenue for the Aros retail sales was split between Quirky and GE.

d) The inventor was automatically allocated the larger percentage of the allowed royalty amount. The base percentage for the inventor was about 4%. For Example: with Aros, Garthen was automatically given 4.5% of the royalty amount. The royalty structure was set at the beginning of the agreement between Quirky and the inventor and did not fluctuate. The royalty did not change and cannot change in Garthen’s agreement as product sales fluctuate.

e) Because Garthen also received credit for the color and the marketing slogan, he was given an additional 2.5% for winning the color and marketing slogan for a total of 7.0%.

f) The reason for the difference in the royalty amounts was attributed to the fact that the cost of placing products with a retailer was much more expensive than simply shipping them from a fulfillment center. Also, products that did not ‘sell thru’ were often returned by the retailer or they incurred a storage fee imposed by the retailer until the next selling season. Naturally Garthen wanted most of the product to be sold via the internet.

g) Also, there were often store placement fees – fees that allowed your product to occupy the coveted row end spaces up front in the store.

h) All royalties were based on actual sales. Garthen did, however, receive some money upfront. This advance payment was similar to what an author would get (pre-sale) for publication of a book. The advancement was recaptured as sales were recorded. Therefore, there was no gratuity of any kind.

The Aros air conditioner was manufactured in China which significantly lowered the (landing) cost of the product. Landing referred to how a product arrived at an American port (i.e., landing in the U.S.). This was no different from any other company that manufactured offshore. As the
product sales increased and the orders sent to the manufacturer increased – the landing cost was lowered significantly which increased the profits for the company and the community.

Garthen was aware that “Quirky inventors [had] made some significant sums of money on the [Quirky] site, in some cases, hundreds of thousands of dollars” (Morris, 2015). Prior to Garthen’s product idea, the products produced by Quirky had been primarily small trinkets (e.g., molded rubber products, cookware, rubber bands with hooks). As of July 17, 2015, Aros was the highest revenue generating product of all Quirky products. Aros topped the list of Quirky’s top selling products, as judged by income paid out to the inventors (Refer to Table 4). Garthen’s total earnings from sales of 1,762 units of the Aros was $360,903. In second place was Stephen Stewart, with total earnings of $360,367 from the sales of 521,750 units of the Cordies.

**Table 4: Quirky's Top-Selling Products, as Judged by Income Paid Out to the Inventors (Inv.), as of July 17, 2015.**

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Inventor</th>
<th>Units sold</th>
<th>Units wholesale price</th>
<th>Inventor earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aros</td>
<td>A smart air conditioner—one that doesn’t run needlessly when you're not home. It can be controlled from your smartphone and learns your habits, knowing when you typically leave and return to your home.</td>
<td>Garthen Leslie</td>
<td>1,762</td>
<td>$300.00</td>
<td>$360,903</td>
</tr>
<tr>
<td>Cordies</td>
<td>A paperweight for cables that keeps them in a consistent location and helps to cut down on desktop clutter.</td>
<td>Stephen Stewart</td>
<td>521,750</td>
<td>$4.99</td>
<td>$360,367</td>
</tr>
<tr>
<td>Wrapster</td>
<td>A headphone cord organizer that prevents earbuds from becoming a tangled mess.</td>
<td>Matthew Fleming</td>
<td>537,064</td>
<td>$1.99</td>
<td>$175,085</td>
</tr>
<tr>
<td>Pivot Power</td>
<td>A flexible surge-protecting power strip. It has spawned nine sister products, each bending into circular, semicircular and zigzag shapes to fit around furniture and in tight spaces. All totaled, the Pivot Power family has sold over 8,500 units and earned Zien more than $137,000.</td>
<td>Jake Zien</td>
<td>2,874</td>
<td>$29.99</td>
<td>$30,185</td>
</tr>
<tr>
<td>Nimbus</td>
<td>A customizable smart dashboard that gives people a single place to view information streams that don’t normally go together, such as traffic, weather, email and social media networks. Nimbus works in conjunction with your smartphone to track the information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventor</td>
<td>Units sold</td>
<td>Unit wholesale price</td>
<td>Inventor earnings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>----------------------</td>
<td>-------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ryan Pendleton</td>
<td>1,794</td>
<td>$99.99</td>
<td>$48,991</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Michael Cavada</td>
<td>7,510</td>
<td>$99.00</td>
<td>$47,669</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jenny Drinkard</td>
<td>183,040</td>
<td>$19.99</td>
<td>$45,556</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tim Houle</td>
<td>157,829</td>
<td>$3.99</td>
<td>$45,195</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angelo Acachione</td>
<td>54,888</td>
<td>$19.99</td>
<td>$40,618</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jason Huber</td>
<td>4,911</td>
<td>$49.99</td>
<td>$40,180</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Wholesale prices at time of general availability

**Note: Earnings is based on a composite of the 30% and 10% royalties.

(Morris, 2015)

**Conclusion**

Taking into consideration the evolution of the Aros (Refer to Table 5), do you think that Garthen’s response to Betty’s question would be the same if it were asked a little over a year later? Is 10% of potential profits enough? Is 10% worth giving up a major portion of the profits for a predetermined royalty percentage? Is 10% worth giving up your Intellectual Property rights
and having your product idea branded by another entity? Do the benefits outweigh the costs for an inventor?

Table 5: Timeline for the Evolution of the Aros Smart Air Conditioner

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007:</td>
<td>Garthen Leslie was unsuccessful in his attempt to take one of his earlier ideas to market via another company.</td>
</tr>
<tr>
<td>2009:</td>
<td>Ben Kaufman started the New-York based company, Quirky.</td>
</tr>
<tr>
<td>2012:</td>
<td>Garthen Leslie submitted a dummy product via the Quirky based website to test the waters.</td>
</tr>
<tr>
<td>January, 2013:</td>
<td>Garthen caught Ben Kaufman’s appearance on the <em>Tonight Show</em> with Jan Leno.</td>
</tr>
<tr>
<td>January, 2013:</td>
<td>Garthen submitted his air conditioner proposal via the Quirky based website.</td>
</tr>
<tr>
<td>April, 2013:</td>
<td>Garthen received notification from Quirky that his initial idea for a smart air conditioner was rejected during the review process.</td>
</tr>
<tr>
<td>April, 2013:</td>
<td>Quirky and GE developed a partnership to develop a line of co-branded products.</td>
</tr>
<tr>
<td>July, 2013:</td>
<td>Garthen resubmitted his revised and expanded air conditioner proposal via the Quirky based website.</td>
</tr>
<tr>
<td>Summer, 2013:</td>
<td>Ben Kaufman and GE executives held a meeting to discuss jointly developing an appliance product idea. Quirky and GE agreed that Garthen’s resubmitted, revised, and expanded air conditioner proposal was a perfect for the first Quirky and GE product.</td>
</tr>
<tr>
<td>March, 2014:</td>
<td>The Aros air conditioner made its debut (i.e. prototype was revealed).</td>
</tr>
<tr>
<td>Time</td>
<td>Event</td>
</tr>
<tr>
<td>------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>May, 2014</td>
<td>The Aros air conditioner was launched for sale at a wholesale price of $300 per unit.</td>
</tr>
<tr>
<td>May &amp; June 2014</td>
<td>Quirky partnered with Uber to deliver the Aros to New York residents.</td>
</tr>
<tr>
<td>July, 2015</td>
<td>Sales of the Aros reached 1,762 units.</td>
</tr>
</tbody>
</table>
References


Quirky (2014, March 19). *Dr. Garthen Leslie sees his invention for the first time* [Video file]. Retrieved from https://www.youtube.com/watch?v=cvBGnkLb8Hg


The Tonight Show (2013, January 25). *Ben Kaufman and Quirky on Leno* [Video file]. Retrieved from https://www.youtube.com/watch?v=cOdEubG0BmU

Appendix A: Aros App Controlled Air Conditioner - Pictures