



## THE BETTER WORLD BETTER, BETTER BUSINESS CHALLENGE SUSTAINABILITY PROJECT

Better Business challenge concierges for Mid-Town Music

Global Sustainability, Fall 2011

Prof. Phoebe Crisman

Workshop Leader: Harriet Jameson

Team members: Mark Jacobs and Becky Fonichas

## TABLE OF CONTENTS

I. Abstract

II. Project Goals and Objectives

III. The Approach used to Engage Mid-Town's Sustainability Issues

IV. Project budget for lighting Substitution and adverstizing

i. LED cost benefit analysis

ii. Facebook advertising pricing analysis

V. Project Timeline and work breakdown Structure

VI. Documentation and Assessment Process

VII. Lessons Learned and Conclusion

## ABSTRACT

During September in 2011, our Global Sustainability team was introduced to the Better World Betty (BWB) Better Business Challenge. The challenge is a community based initiative geared to assist and promote sustainability among local Charlottesville businesses. Our role as students was to serve as concierges (consultants) to provide assistance to one of the participating business partners by helping with research and innovative solutions they could help steer their businesses towards their sustainability goals.

Our team selected to work with Mid-Town Music (MTM), a newly opened small business located at 300 West Main Street, Charlottesville, VA. MTM sells, repairs, and diagnoses both new and vintage instruments of all kinds. The sustainability issues the business faced revolved primarily around transportation, energy, and leadership. Categories within the Better Business Challenge criteria that if worked on granted the owner, Mr. Coleman, an opportunity to earn points via the challenge's scorecard. Our teams proposed solutions incorporated switching out Mr. Coleman's incandescent light bulbs in the store with more sustainable LED ones and rearranging his instrument display to benefit from natural light. MTM's transportation issue was tackled by advertising alternative parking near or the store and implementing a non-idling policy for deliveries. Lastly, we attempted to advocate leadership roles, by speaking to staff members about their levels of sustainability beginning at home.

The relationship with MTM's owner and the implementation of our proposed solutions began extremely well. We managed to make immediate progress in the leadership category. However, soon after we were introduced to the harsh realities of working with a newly opened sole proprietorship on a project of this nature. Mr. Coleman quickly became overwhelmed with other business issues which in turn made it almost impossible for us to coordinate and continue with our initial plans. Overall, the project was a valuable learning experience; one that we hope adds value to the BWB organization on its future projects.

## PROJECT GOALS AND OBJECTIVES FOR MID-TOWN MUSIC

Charlottesville, Virginia is in many ways a step back in time, and home to numerous historic landmarks and institutions. However, often overlooked in this quaint city is the detrimental environmental impact the community withstands. My partner and I, both students at The University of Virginia have recently been given the opportunity to take part in an initiative to assist local businesses become more sustainable. The initiative is spearheaded by a collaboration between The University of Virginia and a local non-profit organization called Better World Betty (BWB). BWB plans to raise sustainability awareness primarily through a friendly competition among local businesses called the Better World Betty Challenge.

The Better World Betty Challenge is geared towards accomplishing one mission at hand: this mission is to increase efficiency and sustainability while raising awareness in the Charlottesville region. Many businesses, particularly in the bustling Charlottesville area, are inadvertently subject to excess consumption and waste, and Carbon dioxide emissions. In an effort to alleviate environmental problems like these, BWB has come up with this challenge to facilitate a platform for businesses to participate, assess their unique environmental issues, and finally implement solutions that will eventually create a "greener" business for the Charlottesville area. Our team's role in the challenge is to serve as 'concierges' or sustainability consultants. Our primary function is to serve as liaisons between Better Business Challenge (BBC) coordinators and the participating business by provide assistance researching best practices. Ultimately, the challenge hopes to arrive at innovative solutions for the local businesses.

We chose to work with a local newly opened music store called Mid-Town Music (MTM). Midtown music is conveniently located at the heart of Charlottesville on 300 West Main Street. Mid-Town Music is still in its commerce infancy and is unique to this downtown region, because the company sells, repairs, and diagnoses both new and vintage instruments of all kinds. In addition, the business features musical instruction to Charlottesville artsy population.

## THE APPROACH UTILIZED TO TACKLE MID-TOWN'S SUSTAINIBILTY ISSUES AND GOALS

Prior to our first meeting with owner of Mid-Town Music our team met and began research on the business, its general processes, and other sustainability efforts performed by similar companies in the US. Our secondary research gave us an understanding of the businesses' day-to-day operations. Being a musical instrument retailer its highest cost of operation are cost of goods sold (COGS) and energy usage, which consisted of electrical plug-ins, display lighting for his equipment, and frequent purchases of musical equipment. Soon after we scheduled our first meeting with Mr. Coleman, the owner, and tried to identify what he wanted to gain from the BBC, and tried to indentify if there was any sustainability issues that he needed immediate assistance with. With the guidance of the BBC scorecard, the following areas were weeded out between us as areas of primary concern:

**The lighting situation (Energy):** The first thing we noticed upon the first meeting with the business owner was the lighting. After speaking extensively with Mr. Coleman, he revealed that these rows and rows of lights used to display the guitar collection were incandescent bulbs. He explained that he needed these lights on his instruments at all times to showcase the items and give them a certain ambience that will attract customers.

We discussed substituting his current incandescent light bulbs with LED's or CFL's. We understood here that some of his lighting choices gave particular instruments ambience, and therefore proposed two sub-category solutions. Firstly, we proposed that he switch out at least 50% of his fixture. Resulting in conservation, long-run financial savings, and points earned through the challenge. Secondly, he could move

many of his instruments to the window display, and use a rotation system. This will give them more street-traffic exposure and savings on electricity when ample day light is available. We also discussed the benefits of keeping, and monitoring electrical records. Mr. Coleman replied by expressing his willingness to switch out his lighting fixtures if he could get some statistics evidence of his potential savings. Thereafter, we promised Mr. Coleman to research and bring him the energy saving statistics, and work out the cost associated with the change specific to Mid-Town Music (energy savings for lighting shown in Figure 1 under the Budgeting and Funding section of the report). We also offered Mr. Coleman our assistance in analyzing his energy usage through Dominion Power's energy efficiency services. Our team understood and ensured Mr. Coleman that we understood that his time was scarce and ensured him that we would do any research and leg work that he needed in order to meet his goals.

**The parking problem (Transportation):** Mid-Town is located at 300 West Main Street, one of the busiest streets in Charlottesville with slim to none visible parking spots. This problem may seem harmless at the surface, but the minutes that customers spend circling town looking for parking are minutes of wasted gas, increasing exhaust pollution as well as Carbon dioxide emissions. Mr. Coleman also mentioned that his delivery vehicles are forced to stay idling on the curb closest to the store because of this same parking problem. We proposed to offset these issues by advertising alternative spots to park for customers in order to cut down the extra pollutants it require finding parking. In addition, we proposed incentivizing, and encouraging his employees to use alternative means of transportation to get to work. Our team proposed amending Mid-Town's answering machine service to state alternative parking areas (an idea that Mr. Coleman loved due to the zero-cost effect). Mr. Coleman explained that he already had a Facebook account for his business, and would appreciate knowing how much advertising would cost. We thereafter began reaching and formulating Facebook advertising cost plan for Mid-town Music displayed in Figure 2.

**The equipment purchasing problem (Purchasing):** Eames Coleman is faced with a tremendous amount of spending on amplifiers, synthesizers, drum sets, acoustic guitars, electric guitars, and many more electronic items that need electric outlets to use. Questions that arose were, Are there actually "greener" instruments of the same caliber that can be purchased? Alleviating this issue of blind equipment expenditures, will undeniably have a positive butterfly affect onto other issues including energy use for example.

He was quite interested finding out which of his suppliers were using sustainable manufacturing, and distribution methods. We spoke to him about the LEAP certified businesses, and offered to research which, if any, of his suppliers were actually certified. So far we have identified Wheatware a company that is spearheading the *Music Goes Green Initiative* as an avenue of search for Mr. Colman.

**The employee involvement issue (Leadership):** Mr. Coleman seemed to believe that his employees would be pretty open to assist him in any sustainability initiatives he was trying to implement. We discussed with him that there was variety of ways that their involvement as a Midtown team could benefit his bottom line, and give him the positive "green" exposure that could help give him the competitive advantage among his competitors. One way we proposed was to get involved in the Charlottesville Clean Commute Day and using alternative means of transportation whenever possible. Some possible ways to incentivize his employees is to allow them to leave half an hour earlier on his slow days. Promisingly, Mr. Coleman has already begun walking to work himself hoping that his effort will rub off on his staff as well.

## Weighted Impacts for Mid-towns sustainable efforts

Following the analyzing of Mid-Town's goals we have determined that the largest impacts revolve around his energy consumption scenario. The proposed change can be achieved with relatively low cost and done before the year is over. Solutions to Mr. Coleman's parking problem and leadership initiatives are probably equally weighted (according to him), and those are also easily obtainable within the semester timeframe.

### Proposed budgeting and funding for the lighting substitution project

The costs/investments associated with Mid-Town's sustainable effort are primarily divided into two categories; energy costs and savings, advertising pricing model, which are numerically displayed in the following figures

Figure 1: Midtown's Potential Lighting/energy savings

	Hours of Lighting usage/year	PRICE/HOUR of USAGE	Cost/year	Cost/month
<b>Incandescent</b>	2112	\$0.33	\$689.04	\$57.42
<b>CFL</b>	2112	\$0.25	\$528.00	\$44.00
<b>LED</b>	2112	\$0.05	\$101.32	\$8.44
<b>Savings</b>				
<b>Savings for CFL</b>		\$0.08	\$161.04	\$13.42
<b>Savings for LED</b>		\$0.28	\$587.72	\$48.98
<b>*Savings if only 50% of lighting changed</b>			\$293.86	\$24.49

- Assuming that opened 48 weeks per year
- Store opened 44 hours per week
- Cost of LED's (30 at \$ 24.95 = \$748.50 or 15 at \$ 24.95 = \$374.25)
- LED useful life 11.84 years.

Figure 2: Facebook Advertising Cost Structure

Audience	Price Per Click	Estimated reach in US
18 and older audience	\$0.72	140,052,820
21 and older audience	\$0.73	122,420,300

Facebook uses two systems to price advertising one being cost per 1000 impressions, the other being the price per click method (PPC); we have identified the PPC method to be best alternative for Mid-Town Music to draw in the "Green Music Crowd" while lowering its cost in the process. Facebook could serve as a platform for advertising his sustainability efforts and his parking availability. Mr. Coleman has now set up his FB page for the business and is moving towards effective advertising. Currently, Mid-Town Music advertises via print (flyers) and local radio stations. The Facebook approach will enable the business to reach a larger more targeted market segment for fragments of the cost. In addition, the business can transition into avoiding the flyer approach which in turn results in a decreased environmental footprint as well.

## PROJECT TIMELINE AND WORK BREAKDOWN STRUCTURE

Our team's tentative schedule revolves around our meetings with the business, our action plans, and project task deadlines.

**Week One: 10/3-10/7:** At this our teams had shared their class schedules, and were in the stage of brainstorming ideas and researching our business (Mid-Town Music). We attempted to meet with Mr. Coleman the owner within this week, but were only able to schedule a meeting the following week. We decided then to continue researching the business, coming up with innovative solutions, and committing to a finalized schedule and work breakdown structure.

**Week Two 10/10-10/14:** We met with the business, and discussed our roles and refined the problem. Our team had concluded that we both should be present during all the meetings, with Becky taking notes, and myself (Mark) asking questions, and would both attempt to provide feedback. We thereafter would meet to finalize the conceptual design assignment, a task that we split up evenly. The following day we are scheduled to meet, and work on our presentation slide and elevator pitch that was due Thursday the 13<sup>th</sup> of October 2011. Followed by Mark completing meeting Log in Google Doc's. Lastly, that week we would meet again, and reconvene with research and get into contact with our business to confirm the next meeting date (he was unable to commit to a date during the first meeting).

**Week Three 10/17-10/21:** Meet with business, to go over the specific activities from the score card that he could implement, and provide him with the research feedback that he requested. Becky and I will draft the mentor feedback action item.

**Week Four 10/24-10/28:** Follow up with Midtown Music on progress that business is making with agreed action items and steps to sustain business. Continue research on any unclear item or product required to fulfill sustainability task (Mark). Ensure business has completed or is in the process of completing action items, making sure to set finite deadlines on shorter termed items (Becky). Official Progress \Status and

Resources found for business due 3:00pm on 10/27. Final task for this week is to set up appointment to meet with Mr. Coleman for an early day the following week (At this stage the business owner was unable to meet or provide any correspondence due his busy schedule).

**Week Five 10/31- 11/4:** Solidify and complete all unfinished action items for the week. Both Becky and Mark will take on the task of assuring that all action items are completed to date. This will also be the week where both partners meet with the business owner as mentioned in week four overview.

**Week Six 11/7- 11/11:** Complete Mtg Log on Google Docs by 10:00am, 11/9 (Becky), ensuring all tasks is recorded to date. This task will also include reviewing over the business's needs, as they may have changed or altered since the challenge begun. The second step this week will be to confirm the themes of Midtown Music's needs. This task includes assigning actions like research, contacting experts, etc. (Mark) By 11/11, the action items that both the partners and the business owner has decided should be implemented.

**Week Seven 11/14-11/18:** Submit progress made on action item from previous week. This will be submitted to BBC mentor for feedback on 11/16 by 10:00am (both Becky and Mark). This progress should track all the steps taken to complete the action item, and feedback and input from Mr. Coleman regarding last week's action item as well.

**Week Eight 11/21-11/25:** Last and final research effort made by both Mark and Becky. Becky will concentrate on progress and projections from Midtown music thus far in correlation to research already presumed, while Mark will work on concluding the most recent action item at hand. This will include further research on the criteria in which the last action item falls under. Both partners will turn in their final research/work by 3:00pm on 11/21.

**Week Nine 11/28- 12/2:** This week will be geared towards general follow up with business. This will include projections of how the business has progressed and finalizing videos and records taken throughout the project duration. This week may or may not include a meeting with Mr. Eames Coleman to complete any unfinished action items. Both members will focus on video editing and visualizing our data.

**Week Ten 12/6- 12/9:** Both Becky and Mark will proceed to meet or contact Mr. Coleman as a follow up meeting. Inquiring how the experience was thus far, to the business owner, along with the staff members (Here again Mr. Coleman could not find time to meet).

## THE DOCUMENTATION AND ASSESMENT PROCESS

Documenting our findings, and research has been made easier by technological advances including graphs and tables outlining future tasks and cost projections the resources needed. My partner and I have also utilized these charts and graphs to illustrate when specific action items must be done. The scorecard has made this point-keeping task much easier, allowing us to physically see areas that Eames Coleman may be able to improve and accumulate more points. We want to make sure that he is well endowed in all of the sustainability fields (Energy, Leadership, Transportation), that apply to him. In addition, our team plans on accumulating video clips of Mr.Coleman efforts explaining why he has accepted The Better Business Challenge's invitation what he hopes to ultimately achieve from participating, and how he plans on spreading the word after our work with him comes to an end. We hope to incorporate 'before and after' pictures displaying the sustainable changes he has made.

Overall we will strive to maintain frequent communication with Mr. Coleman, along with brief feedback meetings with Mid-Town's employees to access their roles and views on the forecasted changes. Documenting these testimonials will be done on a scale of 1-10 in each area of focus. The documentation



process will be done using the Microsoft Project Manager Software package. We will be familiarizing Mr. Coleman with the software and its advantages in hopes that he will invest in the software for his own continued use in the future. Incorporating sustainable business practices should be an ongoing effort, and well documented processes and improvements are key to continued success.

## DISSIMINATION

One of the most exciting aspects of the project is getting the word out and publicizing our sustainable efforts. We plan to obtain video content from the perspective of Eames Coleman (business owner), and his employees regarding the impact that the challenge has had on his operations. Through these testimonials we will be able to spread the word of businesses "going green" via the Better World Betty website, and other social networking sites including Twitter, Facebook, and MySpace. Along with social networking and internet publicity we have an amazing idea to host a fundraiser in front of or near Midtown Music. This fundraiser will include accapella groups (one of the groups Becky is a part of), independent artists, guitar players, and much more. We were hoping to spread the word of sustainability through the universal language of music in efforts to raise at least some money, to hopefully alleviate even the small upfront costs of the LED bulbs that Eames will be using. Finally, this report will serve as an archive for future endeavors, and possibly contribute to the efforts BWB is undergoing to attaining additional funding to continue their work. We hope this will in turn create a trickle down effect and eventually create a bio dome of green businesses, unique to Charlottesville.

## LESSONS LEARNED DURING THE PROJECT

For the duration of the project there were numerous lessons learned. Lessons we believe would add value to the future success of the sustainability effort that Better World Better is attempting to have on the Charlottesville community.

- **Industry knowledge:** Upon undertaking the concierge role for Mid-Town Music (MTM), our team needed to know the general issues that similar businesses faced regarding sustainability. We researched comparable companies and identified from the outset that energy efficiency would be the primary area of focus, which resulted in being true for MTM as well.
- **Existing organizations that provide support:** Our team research and project mentors steered us into the direction of organizations and businesses like LEAD, Wheatware, and Dominion Power who offered information and services to assist small businesses in their sustainable efforts. In addition, our team learned numerous applicable ideas and practices during the energy Lunch 'n Learn seminar that was hosted by Better world Betty.
- **The advantages of teamwork and documentation:** We benefited from cohesive teamwork fostered through frequent team meeting, and staying true to the work breakdown structure. In addition, documenting all processes, and resources utilized helped in deciding the appropriate steps to take.
- **Little changes count:** Our team and business partner adjusted out fallacious past notions that only large and expensive changes can have a real impact. Throughout the project we continued to uncover how little changes, like using natural light and placing computers in sleep mode, can make substantial decreases in cost and wastage.
- **The reality of working with a small business:** Our concierge team had crash course in the daunting realities of working with a Sole proprietorship. Mid-Town still being in its infancy stage resulted in the owner being constantly busy with other plans and projects. In the beginning phases of the project he seemed enthusiastic and determined to implement changes. As the semester progressed we found it almost impossible to get in touch with him, let alone schedule times to

meet. At first we tried using his preferred means of communication (telephone) but after numerous non-responses to voicemails and emails we decided on using more creative methods. Becky paid the store numerous visits during operating times and each time found Mr. Coleman not present. Taking his busy schedule into account, we decided that proactive measures needed to be taken, so we went over possible points that we could add to Mid-Town's challenge scorecard, and offered filling out some recommendations for Mr. Coleman. However, his login details were never forwarded to us. In addition, we anticipated his presence at the Lunch n Learn event, but he did not attend. Given these occurrences we now understand that in practice often the business owner just does not have the time available during the scope and timeline parameters at hand. Looking forward, we understand his priorities and remain optimistic for Mid-Town, therefore one of our team members will be continuing to work with the business the following semester. As a takeaway, the challenge should potentially seek participants who are slightly more established to avoid occurrences like this in the future.

## SPECIAL ACKNOWLEDGEMENTS

We would like to extend a special thanks to the leaders of the Charlottesville Better Business Challenge, Teri Kent and Tom Cassidy. Their assistance proved valuable as a resource, and their mentorship made the project much less daunting than it seemed at times. We would also like to thank our workshop faculty member, Harriet Jameson for her continuous direction and feedback throughout the project. In addition, our gratitude to our business partner, Mr. Coleman whose participation made this project possible. Last but not least a special thanks to the entire global sustainability faculty who put us in touch with all the above mentioned project contributors.

## BIBLIOGRAPHY

<http://www.wheatware.com/shop/>

<http://www.energysavers.gov/>

<http://leap-va.org/>

<http://cvillebetterbiz.org/>

[http://www.facebook.com/advertising/?campaign\\_id=194417723019&placement=exact&creative=5811897392&keyword=facebook+advertising+cost&extra\\_1=4e61399b-cdc1-8469-2b7d-0000f86c6dc](http://www.facebook.com/advertising/?campaign_id=194417723019&placement=exact&creative=5811897392&keyword=facebook+advertising+cost&extra_1=4e61399b-cdc1-8469-2b7d-0000f86c6dc)

[http://eartheasy.com/live\\_energyeff\\_lighting.htm](http://eartheasy.com/live_energyeff_lighting.htm)