

LEAN SIX SIGMA GREEN BELT MINI-PROJECT

NET IMPACT



Cal Poly, Undergrad

IMPROVING NET IMPACT'S FAIR TRADE CAMPAIGN EFFICIENCY

Prepared by Jenny Hoekstra

May 31, 2018

Cal Poly State University

EXECUTIVE SUMMARY

NET IMPACT is an international nonprofit organization for students and professionals interested in using business skills in support of social and environmental causes. California Polytechnic State University—San Luis Obispo has a chapter for undergraduate college students who want to develop their understanding of sustainable business. I serve as the Director of External Relations for the club and oversee some of the projects that are taken on.



Net Impact, Cal Poly Undergrad is currently taking on a Fair Trade Campaign, in which the goal is to be recognized as a Fair Trade University. Fair Trade is a social and business movement of which the goal is to help producers in developing countries become empowered workers with living wages. According to fairtrade.org, “there are over 1.65 million farmers and workers spread across more than 74 countries participating in Fairtrade”. This project is multifaceted and consists of the following major tasks: forming a team, implementing Fair Trade items into campus dining outlets, hosting educational events and meetings, sourcing Fair Trade items at events or meetings, and passing a Fair Trade resolution signed by the university president.

This project has a few aspects that could benefit from a Lean Six Sigma analysis. First, there is no clear way to keep track of which project members consistently come to meetings. In addition, tracking the amount of students that show up to various events and meetings would be key in understanding which events are the most popular among students would be a key indicator of which parts of the project are the most successful. Also, it is difficult to form a consistent stream of communication between and the members of the project and campus dining as well as the administration. Improving these aspects of the project will help us restructure the project so that its efficiency improves significantly.

RECOMMENDATIONS

By applying the DMAIC process to Net Impact's Fair Trade Project, I have come up with 3 recommendations for improving the efficiency of the project as a system.

1. **Implement a system** using a running document on Google Sheets to keep track of members who come to meetings. Having a system in place that encourages project members to come to these planning meetings will make the meetings more efficient and effective. A way to do this is delegate the task to a member—the task being to mark which members are absent. There will be a rule implemented in which any member may only miss 2 meetings per quarter and then will get reconsidered as a part of the project.
2. **Observe** which meetings and events are most popular among students using a running document on Google Sheets. This can be done through a sign-in sheet passed around at every meeting. We will use this data to discuss what we did well, whether that means we marketed the event well or if it's a popular speaker. We will have a question in the sign in sheet that inquires how the student heard about the meeting and use the responses to figure out which marketing tactics are working best.
3. **Invest more time and resources** into connecting and meeting with President Armstrong; we will use the methods of email, networking, and social media posts to gain his attention. This can be measured by ensuring that at least 3 emails are sent to him and/or his office assistant and that each project members networks with at least 3 peers to find a personal connection with Armstrong. Through various tools in the DMAIC process, it has become apparent that meeting with our university's president is the single most effective way to carry out this project. Although this is not our easiest task, it will provide the most benefits.

DEFINE

TOOL #1 – PROJECT CHARTER

WHY TOOL SELECTED:

The Project Charter was an essential tool to begin this project. I was able to lay out the project's goals and guidelines in an easy to understand way. Mainly, the charter helped to narrow down a many different possible angles that the project could've been approached from into a single concise path.

PROJECT CHARTER

Project Name: (1) Enter Project Name Net Impact Project Efficiency Improvement	Business/Location: (2) Net Impact Cal Poly Undergrad Club // Cal Poly San Luis Obispo Campus
Team Leader: (3) Enter your name Jenny Hoekstra	Champion: (4) Madison Weatherford // +18057177627 Anthony Rotolo // +13104024710
Project Description/Mission: (5) Assess the overall efficiency of Net Impact's current project - a Fair Trade Campaign.	
Problem Statement: (6) Net Impact's project aimed towards supplying more Fair Trade options for Cal Poly students to choose from and educating students about Fair Trade is not as efficient as it could be.	
Business Case: (7) The Fair Trade project is a project that Net Impact is taking on as a club. I chose it because I am involved in the club and the project and would like to help expedite the process and meetings.	
Deliverables: (8) 1. build a team 2. reach out to campus dining 3. source fair trade 4. education 5. legislation	Goals/Metrics: (9) Complete all deliverables and be recognized by the university
Process & Owner: (10) The process affected is campus dining, Greg Yeo, the director of campus dining owns that process	
Project Scope Is: (11) We might not have the ability to get in touch with President Armstrong especially with the current campus climate Project Scope Is Not:	
Key Customers: (12) All Cal Poly students (especially those interested in choosing fair trade products)	Expectations: (13) a decent choice of fair trade options on campus, also to learn about Fair Trade through education

Milestones: (14)		Completion Dates: (15)	
Project Start:			
begin to complete all 5 deliverables by utilizing the team. Creating sub-groups to be more efficient		to be finished by the end of the quarter	
Project Completion:		Project will be complete when all 5 deliverables are completed	

Expected Business Benefits: (16)		Quantify		Explanation
		1-Time	Annual	
<input type="checkbox"/>	Hard Cost		more FT options***	***2 Fair Trade products available at each nonfranchised dining outlet
<input type="checkbox"/>	Soft Cost			***The most important benefit that is hard to quantify is the increased benefits gained by the Fair Trade workers throughout the whole supply chain. These workers will be paid better, under better conditions, etc. These qualifications are audited by a third party FT certification
<input type="checkbox"/>	Revenue			
<input checked="" type="checkbox"/>	Speed			
<input checked="" type="checkbox"/>	Compliance			
<input checked="" type="checkbox"/>	Intangible			

Team Members: (17)
Gabi, Madison, Josh, Elise, Grace, Anthony, Natalie, Danielle,

Expected Resource Needs (Internal/External): (18)
The main resources we will utilize is connections and networking; which is free of cost. We will also need money for sourcing FT products at events, marketing material, etc.

Risk Assessment: (19)
Not many material risks associated with this project. Mainly the risk of loss of time if the project doesn't work out.

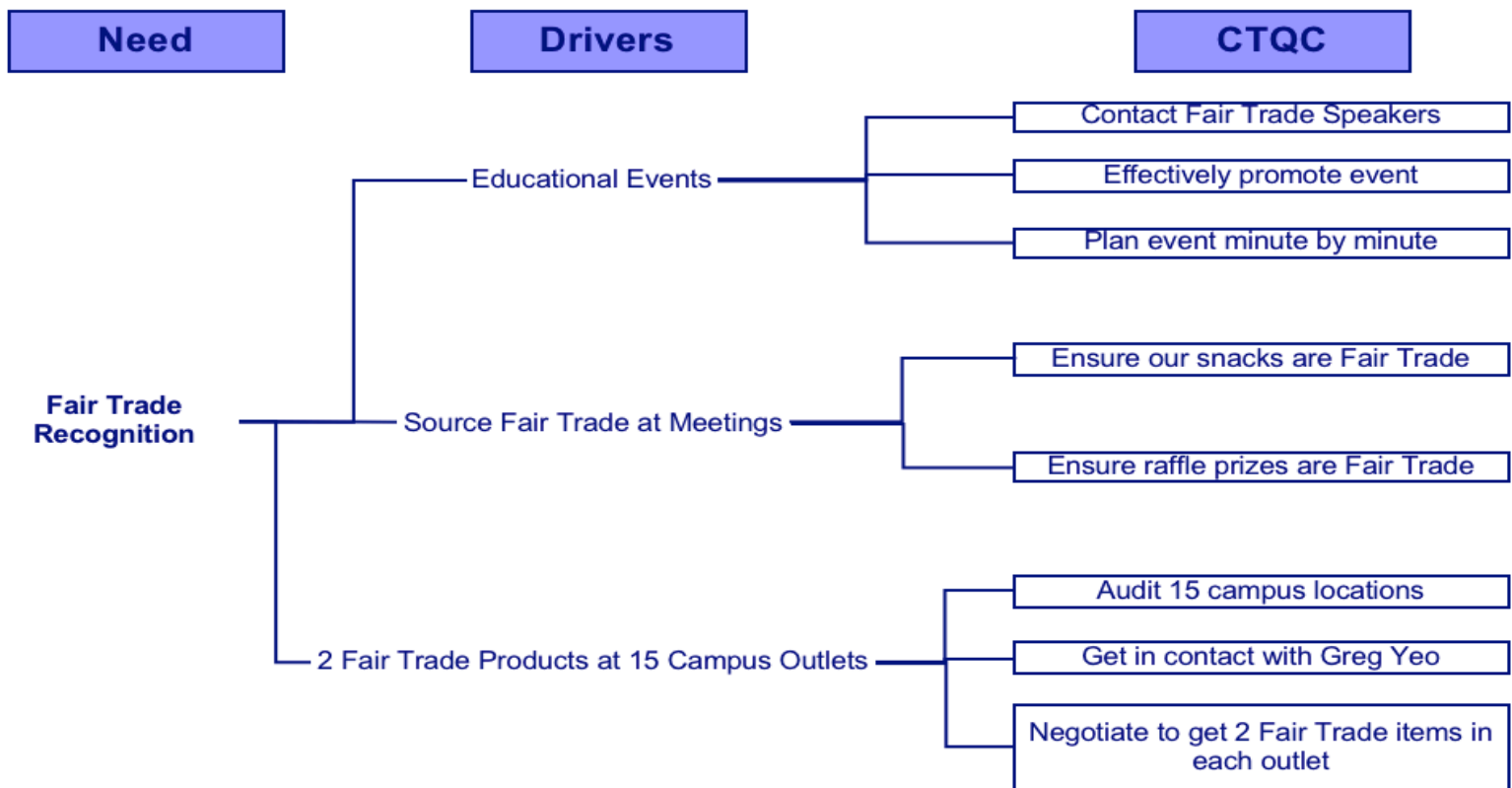
Prepared By: (20)	Date (Last Revision): (21)
Jenny Hoekstra	Thursday, May 31st

INTERPRETATION: The project charter helps us to define the problem that the DMAIC process will help to solve. The main problem that has been identified through the project charter is that Net Impact's Fair Trade campaign is not run as significantly as it could be. More specifically, the attendance at meetings and events is scattered and not consistent. In addition, the process of getting two Fair Trade products implemented in all 15 non-franchised campus dining locations is a tough task to tackle, and the process could be improved.

TOOL #2 – CRITICAL TO QUALITY DIAGRAM (CTQC)

WHY TOOL SELECTED:

This tool is useful because it lays out the project's priorities in a measurable way. Knowing what the key performance factors are is critical to any project, so it will be helpful now knowing which characteristics are critical to the success of the project and how we can measure them in order to improve the process.



INTERPRETATION:

What we can get from this diagram is that the most critical to quality aspects of the project come from the 3 main drivers—educational events, sourcing fair trade at meetings, and implementing fair trade projects at campus dining outlets. Some of the more specific outcomes of this chart include the importance of ensuring the success of the events through marketing tactics, correctly sourcing fair trade items, and negotiating correctly in order to get Fair Trade items in campus dining locations. By identifying the methods that are critical to the success of each driver, the project will become as efficient as possible.

MEASURE

TOOL #3 – DATA COLLECTION PLAN

WHY TOOL SELECTED: This tool is useful in finding the variability in data. By reviewing this data, we can get closer to identifying root causes. It is also useful because identifying how the data is measured and who owns the information allows for some accountability to be present in the project. This tool creates a meaningful and easy-to-view layout of essential data for the project's efficiency improvement.

Data Collection Plan		Project: Net Impact's Fair Trade Project Efficiency					
Question(s) to be answered: Which members consistently attend meetings? What Fair Trade Events and Speakers have we had in the past and will we have in the future? Where is the variability?							
Potential Analysis Technique(s): Assign a board member to be in charge of each Metric							
Data		Operational Definition					
Metric	Data Type	How Measured	Who Owns Information	Sampling Notes	What Organization	How Recorded	When/Frequency
Board Meeting Attendance	Numerical	Marking Attendance of board members at bi-weekly Board Meetings	Net Impact - Director of Operations	No board member shall miss more than 2 meetings a quarter	Net Impact - Cal Poly Undergrad	Excel Dashboard	Bi-Weekly Thursday Board meetings
Club Meeting Attendance	Numerical	Passing around a sign-in sheet during announcements	Net Impact - Director of Operations	To analyze trends in meeting attendance by regular club members	Net Impact - Cal Poly Undergrad	Google Forms	Bi-Weekly Thursday Club meetings
Past and Future Speakers	Short Answer	Excel sheet of names, company, and contact information of past and future speakers	Net Impact - Director of External Relations	To keep track of speakers	Net Impact - Cal Poly Undergrad	Google Docs	Bi-Weekly Thursday Club meetings
Past and Future Events Held	Long Answer	Google Docs file complete with a name and description of each Fair Trade Event held	Net Impact - Director of External Relations	To keep track of events	Net Impact - Cal Poly Undergrad	Google Docs	Whenever event is held

INTERPRETATION: This data collection plan leads to some main conclusions regarding the key metrics of the project. Before the project, the key metrics were apparent but not yet measurable. Now, we can see that effectively measuring meeting attendances, speaker information, and information on events will help the project progress. It is also helpful noting what the data type is because then we can see, for example, that since past and future events held is in 'long answer' format, it would be most helpful to display this information in a document form.

TOOL #4 – OPERATIONAL DEFINITIONS

WHY TOOL SELECTED: This was an important tool to select for this project since there a lot of aspects to this project that might not be apparent to the average reader. Assigning measurable quantities to these operational definitions is key in defining the project’s scope.

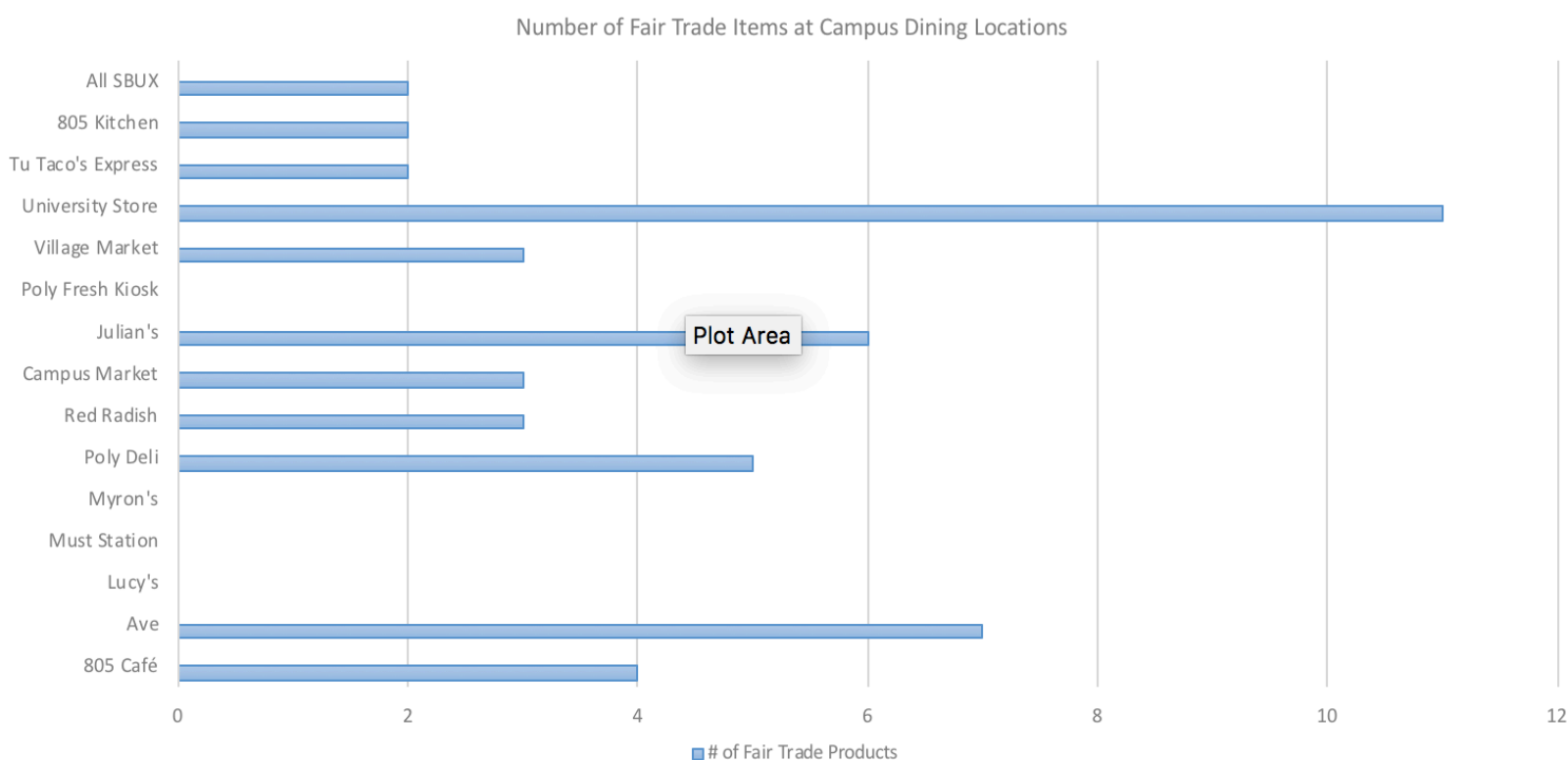
Measure	Operational Definition
Attendance	A member showing up to the discussed location for a meeting within 10 minutes of meeting start time
Promote Event	Director of Marketing creates and posts at least 2 social media posts before the time of the event
Fair Trade product	A product sold that has been certified by a third party auditor as Fair Trade
Passing Campus Location	Cal Poly Campus Dining location that sells at least 2 Fair Trade Certified Products
Audit	Project member assesses campus location and records how many, if any, Fair Trade products are sold there
Speaker	A professional in the Fair Trade Industry who speaks at a club meeting about Fair Trade
Board member	A Net Impact member who has gone through a recruitment process to gain a position on the club's board
Club member	A Net Impact member who attends meetings whether it be frequently or only once

INTERPRETATION: For the operational definitions tool, I identified some key terms such as “Fair Trade”, a method of ethical business supply chain that is not actively understood by all potential readers. In addition, I also gave quantifiable definitions to many of the terms used throughout the project such as attendance, promotion of an event, audit, etc. For example, this will help us know exactly what it means to promote an event effectively: creation and posting of at least 2 social media posts by the time of event. This type of specification is crucial for this project and for the events and meetings that we host because every project member has different definitions of terms like “promotion”.

ANALYZE

TOOL #5 – DATA CHART

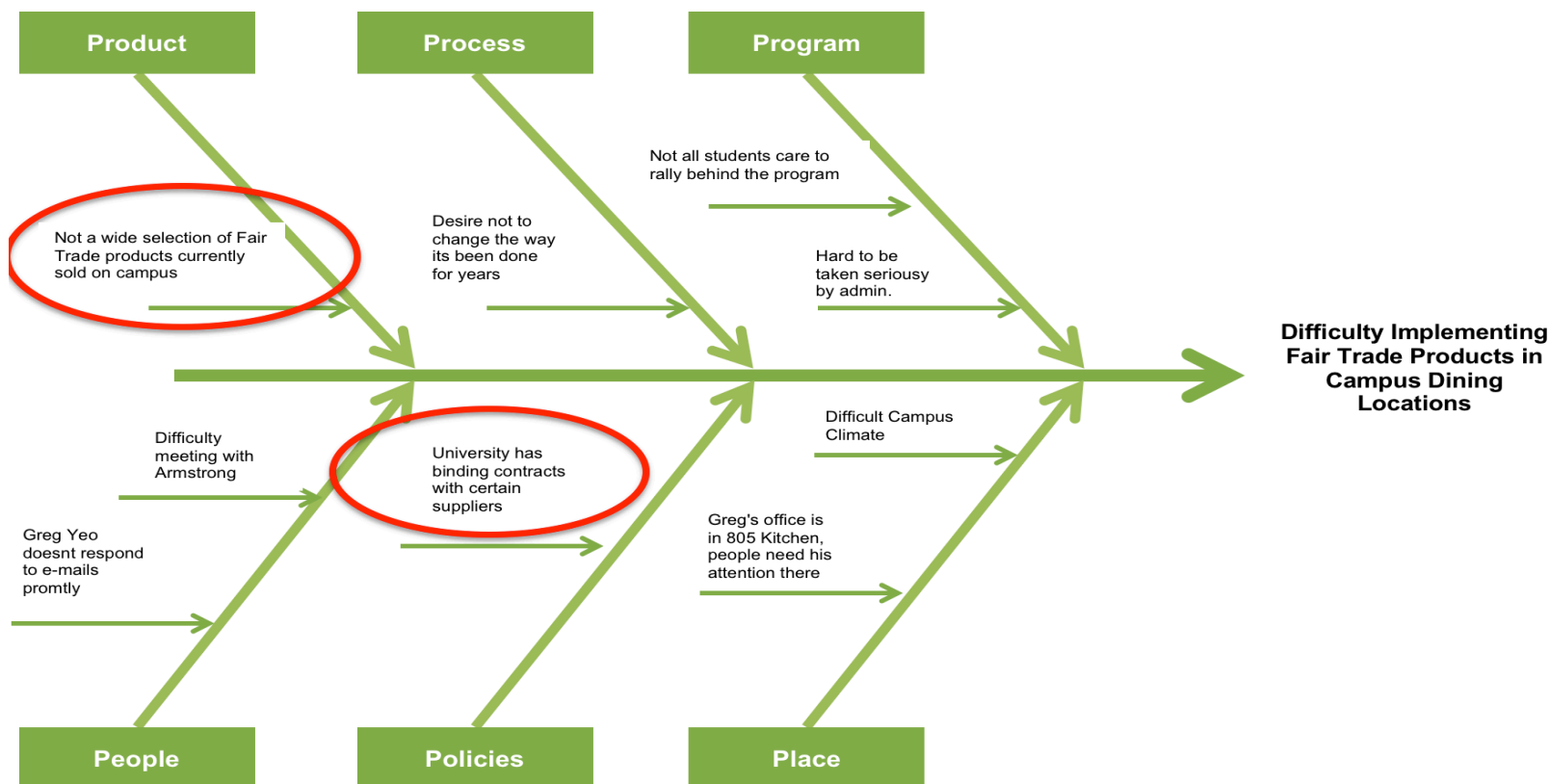
WHY TOOL SELECTED: I wanted to add a data chart to this project to effectively show the progress of the auditing portion of the project. With this chart, we can see the amount of Fair Trade items that have been implemented so far into each campus dining location.



INTERPRETATION: This is progress from the beginning of the project, but you can see we still have four locations with zero Fair Trade items offered. With this data, we can see where we need to improve and which locations we need to put the most time and resources into. The project has come a long way in the time it has been in effect, but with the new tools and recommendations uncovered from this Lean Six Sigma examination the process will go a lot smoother. We can conclude that the Poly Fresh Kiosk, Myron's, Mustang Station, and Lucy's are the campus dining locations that have not yet implemented Fair Trade products.

TOOL #6 – FISHBONE DIAGRAM

WHY TOOL SELECTED: I selected the fishbone chart because the project needed a brainstorming tool analyzing why there is difficulty implementing Fair Trade Products in Campus Dining Locations. The tool was helpful because it helped to uncover some potential reasons for the difficulty that might not have been thought of before.



INTERPRETATION: It was helpful to break down the brainstorming into categories where the problems could be arising from. The area that I gained the most insight from was the Place category because it is not a subject I had thought about before. I was able to understand how the difficulty in our campus climate regarding diversity might impact the project. The administration has a lot on their plate right now and this project may not be the number one priority. I was able to narrow down the main root causes as follows: 'the university has binding contracts with certain suppliers' and 'there is not a wide selection of Fair Trade products currently sold on campus'. These are the tangible issues that we need to work around.

IMPROVE

TOOL #7 – IMPACT EFFORT

WHY TOOL SELECTED: This project is multifaceted and has many important tasks at hand. The reason this tool was selected was because it is necessary to analyze which tasks have the most impact on the project so we know where to invest the most time and resources. The Impact Effort tool was effective in identifying which tasks have a high impact and their level of difficulty.

Impact Effort Matrix

Objective: To get 2 Fair Trade Items implemented in each non-franchised Campus Dining
Sponsor: Net Impact Fair Trade Project
Stakeholder: Cal Poly Campus Dining

	Hard	Easy
High Impact	<p><i>Meet with President Armstrong and have him sign Fair Trade legislation for Cal Poly Corporation</i></p>	<p>CONTACTING FAIR TRADE SPEAKERS TO TALK AT NET IMPACT MEETINGS</p>
Low Impact	<p><i>Continue emailing Greg Yeo, head of campus dining, when responses are rare and unhelpful</i></p>	<p><i>Give out Fair Trade Raffle items at each Net Impact Meeting</i></p>

INTERPRETATION: First, I took note of which tasks are hard to accomplish and have a low impact. These tasks can immediately be taken out of the process or put to the side for the time being. Both tasks that fall into the easy category such as giving out Fair Trade items at events and meetings and contacting Fair Trade speakers to talk at club meetings should be continued. Meeting with President Armstrong, which falls into the high impact and difficult to accomplish category, should be focused on for the remainder of the project.

TOOL #8 – FRONT PORCH DINNER EVENT PDCA (PLAN-DO-CHECK-ACT)

WHY TOOL SELECTED: For Net Impact's Front Porch Dinner and Discussion night, being well planned out is essential. By coming up with a plan-do-check-act list, Net Impact was able to effectively execute the event without forgetting some important aspects. In addition, it was helpful to reflect about what worked well and what could be done better next time.

PLAN

- Event Leader: Jenny Hoekstra
- Event Description: Free dinner and discussion about Fair Trade and how it affects our earth and the people on it. There will be trivia, a home-cooked meal featuring Fair Trade ingredients, a raffle (for Guayaki Yerba Mate), and great people. We will also be talking about our Fair Trade Project and how students can get involved.
- This event will be held at Front Porch Coffee house right next to the Cal Poly Health Center.

Do

BEFORE THE EVENT

- Market the event
- Buy all necessary food
- Store food before the event
- Assign shifts to cook and prep
- Decide on documentary trailer to play

DAY OF THE EVENT

- Cook the dinner (begin meal prep at 10am)
- Set up
 - Arrange seats, plates, coffee station, assembly line, etc.
- Trivia
- Serve dinner
- Discuss fair trade via thought-provoking questions

CHECK

- We will assess the success of this process and change and improve for our next event.

ACT

- Net Impact's event team will update the Google Doc of our event procedures based on what worked well at this event. We will discuss the effectiveness of the event at the following board meeting and decide upon the most efficient process.

INTERPRETATION: For this event, I had the task of ensuring it ran smoothly. This event is categorized under the "Host meetings and events discussing Fair Trade", so it was one of our main tasks in completing the Fair Trade campaign. It was imperative to have a plan of action and a check-list of items to complete. I split the "Do" tasks into tasks to complete before the event and tasks to complete the day of the event. We met as a team a week after the event and assessed the success of the event and how the list helped us. We discussed that next time, we should be more specific regarding trivia and discussion and write the specific questions on the PDCA tool sheet rather than coming up with the questions the day before the event. Overall, the event ran more smoothly due to the PDCA tool that was implemented.

CONTROL

Tool #9 – MONITORING AND RESPONSE PLAN

WHY TOOL SELECTED: This tool basically lays out the five main tasks of the campaign, how they will be measured, and what the response should be if the task is not being completed as expected. This is a useful tool for everyone involved in the project to be familiar with, especially those with the responsibility of responding.

Monitoring Plan						Response Plan		
Name of the Measure	Input, Process or Output?	What is the Target?	Method of Data Capture	Checking Frequency	Person Responsible	Upper/Lower Trigger Point	Who Will Respond?	Reaction Plan
Build a Team	Input	At least 5 members	Each member fills out a google forms including name, contact, and time willing to commit	Quarterly	Campaign President	Less than 5 members	Campaign President	Try to recruit members by posting on social media, posting flyers around campus, and making announcements in classes
Reach Out to Campus Dining Outlets	Output	2 Fair Trade Products sold at each non-franchised Campus Dining Location	Keep a running Excel Dashboard Audit	Quarterly	Campaign President	Less than 2 Fair Trade products sold at outlets	Campus Dining Team	Continue to pursue contact with Greg Yeo, head of Campus Dining
Source Fair Trade at Events & Meetings	Output	Serve or raffle off a Fair Trade Item at at least 5 events or meetings	Keep track of items sourced via google docs	Quarterly	Campaign President	Less than 5 meetings featuring Fair Trade items	Events Team	Raffle Fair Trade products as prizes, seek out local Fair Trade businesses that might donate
Commit to Fair Trade Education	Input	Hold at least 6 educational meetings or events	Keep track of events held via google docs	Quarterly	Campaign President	Less than 6 educational meetings or events	Events Team	Plan more meetings / events, contact potential speakers
Pass Fair Trade Resolution	Output	Have the University President sign a Fair Trade Resolution	Yes/No	Quarterly	Campaign President	President Armstrong does not sign the Fair Trade Resolution	Resolution Team	Get a meeting with our ASI president and draft up a campus petition

INTERPRETATION: Once again, a main reason this tool is needed for this project is because it is helpful to hold a team member reliable for certain tasks. In this case, the five main tasks of the campaign are given targets that are specific and measurable. An example of where this is effective is for 'Reaching Out to Campus Dining Locations', if 2 Fair Trade products are not implemented at each location, the campus dining team is responsible for completing the reaction plan.

TOOL #10 – PROJECT CLOSEOUT

WHY TOOL SELECTED: I chose the project closeout because it is the most effective way to closeout a Lean Six Sigma project. It is important to clearly communicate the results of the project in a clear way and this tool is an excellent way to do so. The Fair Trade Project will benefit greatly from the main recommendations suggested in the project closeout below.

PROJECT CLOSE-OUT				
Instructions:				
1) Fill out the required information in the gold cells				
2) For Requirements, "Value" is the current measured level for that requirement, "Date" is the date measured				
3) Obtain signatures as necessary				
4) Modify this document to suit your needs				
PROJECT INFORMATION				
Date	6/8/18			
Project Name	Net Impact's Fair Trade Campaign Efficiency			
Project Description	Assessing and improving the efficiency of Net Impact's Fair Trade Campaign. Defining the main problem areas and identifying measurable solutions.			
Project Manager	Jenny Hoekstra	Phone	9492285900	
Project Sponsor	Madison Lan Weatherford			
CUSTOMER INFORMATION				
Customer Contact	Net Impact, Cal Poly Undergrad		Phone	8057177627
This document confirms that the requirements for the identified project, as enumerated in the section below, have been met to the satisfaction of the signers.				
Requirement	Description of How the Requirement is Measured	Target	Value	Date
Implement a system to keep track of which project members consistently come to planning meetings	Measured through a running document on Google Sheets that keeps track of who misses which meetings and who comes. If a member misses more than 2 planning meetings per quarter, their involvement in the project will be reassessed.	10 members per planning meeting	TBD	6/8/18
Observe which meetings and events have the most student attendance	Measured through a running document on Google Sheets that keeps track of who was at each meeting and/or event and what the attendance number was. In the following planning meeting, discuss on what was done for that event and how the attendance reflect that.	at least 30 attendees per club meeting or event	TBD	6/8/18
Invest more resources into connecting and meeting with Predident Armstrong	This can be measured by ensuring that at least 3 emails are sent to him and/or his office assistant. In addition, project members are encouraged to reach out to 3 peers to network and find connections to Armstrong.	3 emails sent/ 3 peer connections	TBD	6/8/18
SIGNATURE BLOCK				
Jenny Hoekstra, Project Manager		Date: 6/8/18		
Net Impact, Cal Poly Undergrad, Customer Representative		Date: 6/8/18		

INTERPRETATION: The project closeout states the necessary actions that should be carried out to successfully improve the campaign to the desired extent. The tasks should be completed in accordance to the specifications listed in the chart above. To make this as streamline as possible, measurable target values and a means to measure those values have also been listed. It will be up to the President of Net Impact and the Fair Trade Campaign manager to uphold these tasks to completion. When these guidelines are specifically followed, the Fair Trade Campaign will run much more efficiently and effectively.

Works Cited

"Farmers and Workers." *Fairtrade Foundation*, 5 June 2018,
www.fairtrade.org.uk/Farmers-and-Workers.