

Project Number: ZAZ-M102

# Improving Green Belt Project Performance for Staples, Inc.

A Major Qualifying Project Report

Submitted to the Faculty

Of the

WORCESTER POLYTECHNIC INSTITUTE



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## Abstract

Staples Inc. is concerned about the success of their in-house Green Belts training program because a total of 127 Green Belts were trained in the past but only 21 have completed the required two projects to achieve certification. The goal of this project is therefore to identify the problems and reasons for low Green Belt completion rate through extensive interviews. Suggestions for improving the certification program success such as the project selection and execution process to reduce cycle-time are presented.

## Acknowledgements

The success of this project was dependent upon many people. For this reason, we would like to thank everyone who helped and supported us throughout the project.

We would first like to thank the all of the staff at Staples that helped us out, giving us their time to answer all of our questions. In addition, our gratitude goes to Daniel Nephew for his supervision in our project.

Lastly, we would like to thank our Worcester Polytechnic Institute advisor Professor Amy Zeng for her guidance throughout our project.

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## Executive Summary

Our Major Qualifying Project was completed in association with Staples Incorporated Process Excellence Department. We were assigned to the task of improving Staples green belt program's project selection and execution process so that the median cycle-time time of 338 days would be reduced to 225 days. By reducing cycle time, it would in turn result in an average certification time of 15 months. In order for us to achieve this goal, we became familiar with the green belts that went through the program, both that have been certified and not certified, to better understand the issues and problems related in order to reduce cycle time. Interviewing and talking with these Staples' green belts provided us with some great insight on why things are or aren't happening during this certification process. We also had to become familiar with the data that Staples' provides for the green belt program, using the excel tools and charts to better understand where and why the problems are occurring.

The current cycle time for completion of projects varies. It may be dependent upon the complexity of the project, or may fall on the shoulders of the coach and sponsor. The time allowed for projects to be completed is not nearly enough. Also, there is no project selection methodology between green belts and sponsors. This proves to create a sense of uncertainty for green belt projects as a whole. Allowing belts to have an input in which projects they select may in turn create some drive for project completion, just because they are involved in their own project selection. Staples' gives projects to belts that are not in the same

jurisdiction or work shifts as them, which is very problematic as well. Another factor that causes issues relates to the project team. Teams are not selected in an even manner; meaning teams aren't matched up right. Developing a method in which would allow for teams to have all skills necessary in order to be successful completing projects is ideal and should be strived for. Creating a balance between each member, and being able to assign specific roles that could be played out to the optimal level possible by members would increase project completion % and value. Green belts need make sure the projects assigned to them can even be worth any RONA at all, because projects given now may not account for any benefits after completion.

## **Authorship Statement**

Over the course of the project, many ideas were presented and divided amongst both team members and were frequently edited together. As a result, both team members have contributed to each section of this report. The abstract and executive summary was completed by Kyle Nadeau. Acknowledgements and references were done by Jasmine Pitts. All of the work in Chapter One through Chapter Five were divided evenly between the two of us.



# 1. Introduction

## 1.1 Problem Statement

Almost all of the Green Belts have completed the first two elements of certification (Attending class and passing the exam), however, as of August 2010, only sixteen percent of those Green Belts have achieved certification. Since 2007, Staples has trained 127 Green Belts and only 21 have completed the required two projects to achieve certification.

Staples expects Green Belts to complete two projects within one year of training. The goal of this effort is to improve the project selection and execution process in order to reduce cycle-time of Green Belt projects from 338 days to 225 days which should in turn result in an average certification time of 15 months.

## 1.2 Company Profile

Staples, Inc. is edging at the number one office supply superstore operator in the US. The company sells office products, computers, furniture, and other supplies. Staples distributes through its chain of Staples and Staples Express stores. It has a presence in 27 countries mostly located in North America, South America, Europe, Asia, and Australia. Staples will sell office products over the Internet and through their catalog and direct sales operations, including the Quill Corporation. Quill is an Internet and catalog business. They target to servicing the needs of small and medium-sized businesses in the United States. Quill offers customer service, their brand products, and other special services. They also operate the Medical Arts Press, a specialty Internet and catalog business, offering products for

medical professionals. Staples, Inc. provides document management and services through its retail chain. Staples targets customers worldwide through its Corporate Express business. Their Sales have drastically increased over the past decade. In the year 2000 they surpassed \$10 Billion in Sales. Again in 2006, their 20<sup>th</sup> anniversary, their sales numbers jumped to \$18 Billion. The business calculated 2009 sales of \$24 billion and has over 91,000 associates worldwide. Staples operate in 26 countries throughout North and South America, Europe, Asia, and Australia. The company services to businesses of all sizes and consumers. Staples invented the office superstore concept in 1986 and today ranks second worldwide in e-commerce sales. In 2010, they are aiming to have sales of 60% from their business to business sales, and 40% from their retail sales. They also are striving to have support from 90,000 associates. The company is headquartered outside Boston.

## **1.3 Background**

### **1.3.1 Green Belt Certification at Staples, Inc.**

As a green belt, you must have full attendance at all of the green belt training classes. They must pass the final exam, achieving a grade of 80% or better. A minimum of \$65K return on net assets (RONA) in authorized project savings is a requirement. RONA can come from improvement or reallocations of projects. There are different types of projects as well (DMAIC, process designing, operational improvements, or rollout). Next, green belts must complete 2 DMAIC projects with some type of authorization. These projects are financially sponsored.

### 1.3.2 Staples, Inc. Green Belt Problem

A recently completed survey shows that the majority of green belt employees have not completed any projects. The problem with finishing their project faster is the availability of Resources and Time availability to do the project. They also feel that the pipeline in their own area is adequate. The training done by master Black belts is much more successful than the training done by black belt instructors. For example, 72% of Green Belts coached by Master Black Belts strongly agree that they're receiving high quality coaching in their groups. Only 33.3% of Green Belts coached by Black Belt coaches strongly agree that they are receiving high quality coaching. Shockingly, only 44% of green belts say that their leaders are embracing and communicating Process Excellence as a way to reach business objectives.

In the diagram below, it shows that almost 20% of green belts never meet with their deployment leaders. Communication between green belts and deployment leaders is essential to green belts' success on projects

**How frequently do you have meetings with your Deployment Leader?**

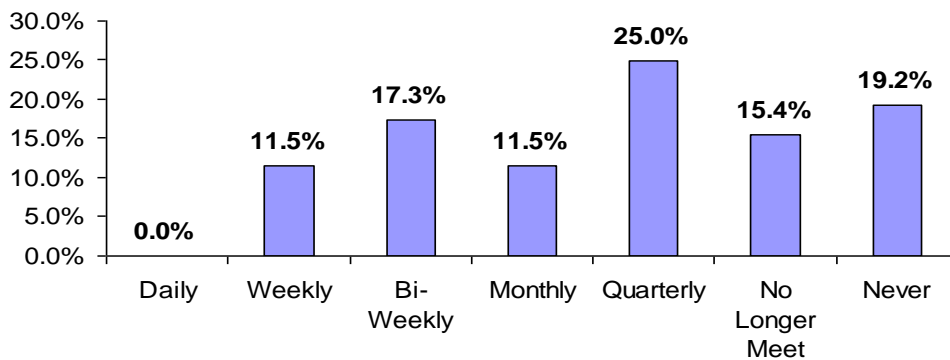


Figure 1: Meeting with Deployment Leader

Green Belts are spending the majority of their time developing their own charter. Out of all the projects, on 23% of the charters are primarily done by sponsors. In the chart below, data shows that more than 46% of green belts do not agree that the quality of charters given are not efficient enough to complete the define phase in the 2-3 week period.

**The quality of charters I am given provides me the opportunity to complete the Define phase in 2-3 weeks.**

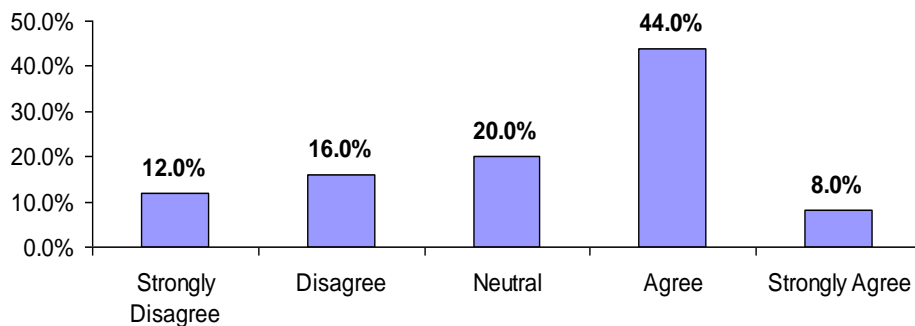


Figure 2: Quality of Charter

### 1.3.3 Staples Process Excellence

“As process excellence continues to mature, it will help us to stay ahead of our competition, work smarter, grow more profitably, and will be a key component in achieving our objectives.”-John Mahoney, Vice Chairman & CFO. Their goals are to process for excellence in Maximizing value to the customer, create growth opportunities, Reduce costs, Increase Productivity, and develop talent. Staples, Inc. has been one of the leaders in its industry in trying to educate and train employees on their Lean Six Sigma program. Eliminating waste and increase process speed is

a big key to success at Staples. The projects that green belts are required to do should be executed as data driven solutions, with the root causes being fact based. Projects are customer focused, with the customer defining each level of performance. The main execution process of the projects is for green belts to focus on improving and managing critical process inputs rather than just concentrating on sales, profits, etc. Black belt full time employees and green belt part time trainers do the green belt training. The green belt results have not been good over the last couple years, so they are trying to improve these results internally. Staples, Inc. is having trouble receiving data and resources to help them increase the total number of completed projects by the green belt employees.

## 2. Literature Review

### 2.1 Total Quality Management

Total Quality Management (TQM) is a management approach to long-term success through customer satisfaction. In a TQM effort, all members of an organization participate in improving processes, products, services, and the culture in which they work.

Some of the major management practices for companies to increase their quality and productivity are to first adapt a new philosophy. Also create a constant reason for improving products and services. Company has to adopt an institute leadership program. Training is a major component for each job description, this will drive out the fear employees have on change. The manufacturer must make certain that all departments are working together and not setting up barriers between them. Company should take out all the numeric quotas for workforce and management. Lastly all employees must work collectively to accomplish this new transformation.

The main difference between TQM and Six Sigma is the approach. TQM tries to improve quality by ensuring conformance to internal requirements, while Six Sigma focuses on improving quality by reducing the number of defects and impurities.

## 2.2 Six Sigma

Motorola invented Six Sigma in 1986; it is a set of techniques, based on statistical process control that can help companies make major improvements in product quality. To achieve Six Sigma, a process must not produce more than 3.4 defects per million opportunities. This set of techniques is also referred to as the DMAIC (Define, Measure, Analyze, Improve, Control) process; this is a guideline for solving business problems by effective execution. First one must define the problem and measure it, then analyze to find the root cause of the problem and improve the process with alternative solutions, this must then be controlled to ensure that the problem does not resurface. This technique is very successful because it is easy to implement and it focuses on fixing the process rather than the product. Despite the tremendous success of Six Sigma, there is still some criticism; some people argue that there is nothing special about it; they think it's just a reiteration of traditional techniques. It has been referred to as "Total Quality Management on steroids." Others may argue that Six Sigma solves problems as oppose to preventing them, but it was recently enhanced and now includes DFSS (Design For Six Sigma); which designs products to meet expectations when they are manufactured to prevent defects or errors.

Some companies that try to use the Six Sigma technique end up disappointed in their results and blame the idea for their failure. However, this is not the case; Six Sigma works within framework of an existing process, but it is not

designed to create alternative framework. It is not the answer to all business problems but it is a great technique and is very successful when applied properly. It may be useful for a particular set of problems and be completely useless in other situations. There is no single answer that can be applied to every problem, just as Six Sigma cannot be applied to every process. But when it is applied appropriately it has proven to be extremely successful. There are five different groups that are involved in the implementation and management of Six Sigma. Each of the roles are very important in making the process successful. These roles are black belts, champions and sponsors, green belts, master black belts, and process owners.

### **2.2.1 Black Belts**

Black Belts within Six Sigma are also referred to as change agents. A black belt upholds a leadership positions in any organization that utilizes the Six Sigma practice. Black Belts are often Six Sigma project team leaders who take the responsibility of implementing projects for process improvements within the organization. These individuals are extremely knowledgeable and proven experts in utilizing Six Sigma methods. They must also be experienced with change management and facilitation to be able to lead other experts in different areas and to increase business productivity and customer satisfaction.

### **2.2.2 Champions & Sponsors**

Project Champions and deployment champions are very important in Six Sigma projects. Project Champions help to ensure that organization systems are



implemented to underlie new Six Sigma initiatives. The role of these managers is to expose the program and endorse it as part of their initiative for management. Deployment champions support the strategy for deployment of the Six Sigma in a given customer segment, line of business, or central process team. Smaller organizations might only have one deployment champion, alternatively, larger organizations might have a senior deployment Champion to which several deployment Champions report to. The Sponsor owns the process that is being improved upon.

### **2.2.3 Green Belts**

Green Belts are small projects within their business unit, which supports the Process Excellence Culture. The training is one day for the successful teams and they only work on one project at a time. In order to get green belt certified you must attend 9 days of training, pass a final exam, complete 2 projects, and earn 65K in RONA project savings.

A recently completed survey shows that the majority of green belt employees have not completed any projects. These employees also feel that the Master Black Belt instructors have no priority or interest in the project. The problem with finishing their project faster is the availability of Resources and Time availability to do the project. Most of the green belts look to their coach for Technical support and more than half feel the project is not cross-functional. They also feel that the pipeline in their own area is adequate. The training done by

master Black belts is much more successful than the training done by black belt instructors.

The overall consensus of green belts is that they really want training but want it on their regular shift, not on a separate time slot. The lack of Resources is another problem stressed by green belt employees.

#### **2.2.4 Master Black Belts**

Master Black Belts are the people in Six Sigma organizations whom are responsible for actually deploying Six Sigma to the organization. They support and promote activities for improvement in all business aspects of the organization, in addition to customers and suppliers. They have several different responsibilities including: mentoring the Black Belts, Green Belts, other Six Sigma teams, helping deployment and development of dashboards and metrics for the organization. They are also responsible for creating, keeping up with, and making revisions to the Six Sigma curriculum.

#### **2.2.5 Process Owners**

Process owners are the individuals in the Six Sigma organization that have the authority to decide how a process will operate and to make sure that the processes continue to meet both business and customer needs in the present and future times. In order for a company to achieve world class status, it must not ignore this critical role in the Six Sigma process. The Process Owners are

commonly the unsung heroes of the Six Sigma process.

## 2.3 DMAIC Process

The Six Sigma DMAIC process methodology is a system that improves existing processes that are falling below specifications. The DMAIC methodology can be used when an existing product or process in an organization is not meeting customer specification or is not performing adequately.

**DMAIC** is an acronym for five interconnected phases:

**Define** the project goals and deliverables for both internal and external customers

**Measure** the process to determine current performance

**Analyze** and determine the root cause of the defects

**Improve** the process by eliminating defects

**Control** future process performance

### 2.3.1 Define

In the Define phase, the Six Sigma project team identifies a project for improvement based on business objectives and the needs and requirements of the customers. The problem needs to first be defined in solid, measurable terms. The team identifies critical-to-quality (CTQ) characteristics that have the most impact on quality. Once the CTQs are identified the team can then begin to map out the process to be improved with defined and measurable, deliverables, and goals.

### 2.3.2 Measure

In this phase, a baseline data is established. Critical measures that are

necessary in evaluating the success of the project are identified and determined. The process in which the problem is occurring or improvement is required would be mapped out in detail and would include time, people and material elements to ensure that the current state is clearly understood. During the Measure phase, valid and reliable metrics that will be used to monitor the progress of the project are established; input, process, and output indicators are identified. Once the project is clearly defined and has a clear measurable set of indicators, the process is studied to determine the Key Process Steps and an operational plan defined to measure the indicators.

### **2.3.3 Analyze**

In the Analyze phase, a thorough data analyses is carried out to narrow down the many reasons of a problem occurring to the critical few. Throughout the phase, the team can determine the causes of the problem that needs improvement and how to eliminate the gap between existing performance and the desired level of performance. This phase involves figuring out the source of the defects by finding the key variables that are most likely to create process variation. As the Six Sigma team progresses through this phase they will discover different process improvement scenarios and determine which has the best net benefit impact to the organization.

### **2.3.4 Improve**

The Improve phase is where the process transitions into solutions. Critical inputs have been verified and optimized toward narrowing down the root of the problem. Once the problem causes are determined in the Analyze phase, the team finds, evaluates through testing, and selects new improvement solutions. The team identifies and quantifies what will happen if the necessary improvements are not made or if they take too long, this develops a cost/benefit analysis. Also at the Improve stage, the team develops an implementation plan with a change management approach that will help the organization implement and adapt to the solutions and the changes that will occur as a result of them.

### 2.3.5 Control

In this phase, the improvements that were identified during the Improve phase would be documented, documenting the project is very important so that the new procedures and lessons learned are maintained and serve as examples for the organization. A roadmap of solving the problem would need to be established in this phase. Implementation plans and change management procedures are developed to make sure that the transition remains successful. The success of the Control phase depends on how well the team did in the previous four phases; the keys are a solid monitoring plan with proper change management methods. The lessons that were learned are now implemented and tools are put in place to make sure that the key variables remain within the acceptable ranges over time so that process improvement gains are maintained. In this phase the team develops a project hand off process, reaction plans, and training materials to ensure long-

term project results and savings. At the end of the Control phase, ownership and knowledge is transferred to the process owner and process team and the team identifies what the next steps are for future Six Sigma process improvement opportunities.

## 2.4 Return on Net Assets (RONA)

Return On Net Assets (RONA) is a measure of a company's financial performance. This value can be calculated by dividing net income by the sum of fixed assets and networking capital. The higher the return, the better the performance. The advantage of using RONA to measure the success of a company as oppose to other traditional methods is that it also considers the assets that a company uses to achieve its output. Although RONA does not overtly measure capital charges, it does remind managers that there is a cost to acquiring and holding assets.

## 2.5 Interviewing Skills

### 2.5.1 Preparation for Interview:

1. **Choose a setting with little distraction.** Avoid loud lights or noises and ensure the interviewee is comfortable. Often, they may feel more comfortable at their own places of work or homes.
2. **Explain the purpose of the interview.**
3. **Address terms of confidentiality.** Note any terms of confidentiality. Explain who will get access to their answers and how their answers will be analyzed. If their comments are to be used as quotes, get their written permission to do so.

4. **Explain the format of the interview.** Explain the type of interview you are conducting and its nature. If you want them to ask questions, specify if they're to do so as they have them or wait until the end of the interview.
5. **Indicate how long the interview usually takes.**
6. **Tell them how to get in touch with you later if they want to.**
7. **Ask them if they have any questions** before you both get started with the interview.

#### 2.5.2 Sequence of Questions:

1. **Get the interviewee involved in the interview as soon as possible.**
2. **Scatter fact-based questions throughout the interview,** to avoid long lists of fact-based questions, which tends to leave respondents disengaged.
3. **Ask questions about the present before questions about the past or future.** It's usually easier for them to talk about the present and then work into the past or future.
4. **The last questions might be to allow respondents to provide any other information they prefer to add and their impressions of the interview.**

#### 2.5.3 Wording of Questions:

1. **Wording should be open-ended.** Respondents should be able to choose their own terms when answering questions.
2. **Questions should be as neutral as possible.** Avoid wording that might influence answers, e.g., evocative, judgmental wording.
3. **Questions should be asked one at a time.**
4. **Questions should be worded clearly.** This includes knowing any terms particular to the program or the respondents' culture.
5. **Be careful asking "why" questions.** These questions may cause respondents to feel defensive which may hinder their responses to this and future questions.

#### 2.5.4 Conducting Interview

1. **Be careful about the appearance when note taking.** That is, if you jump to take a note, it may appear as if you're surprised or very pleased about an answer, which may influence answers to future questions.
2. **Provide transition between major topics,**
3. **Don't lose control of the interview.** This can occur when respondents stray to another topic, take so long to answer a question that time begins to run out, or even begin asking questions to the interviewer.

After the interview is complete, take down any additional notes and/or observations.



### 3. Methodology

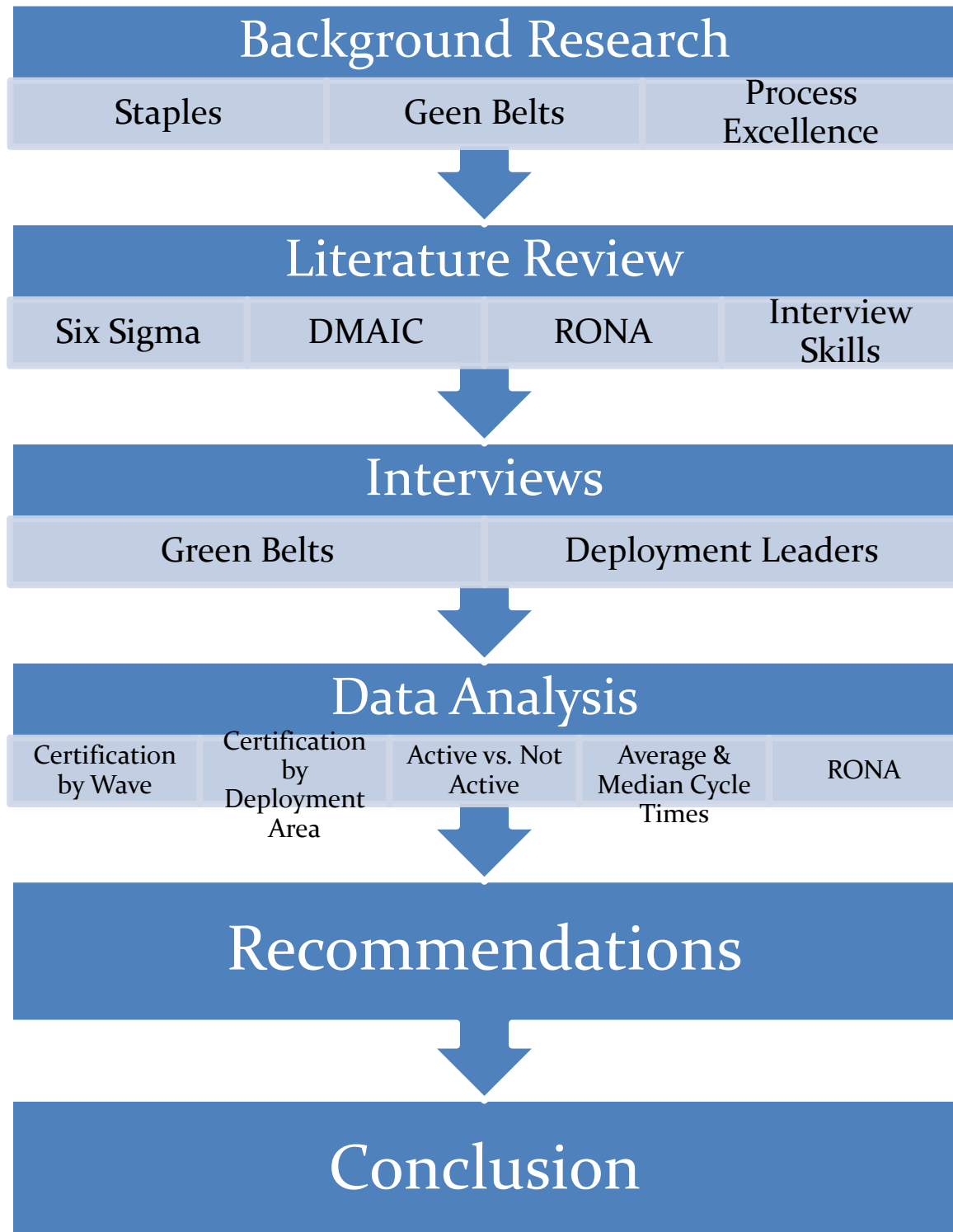


Figure 3 - Projects Process chart

**Background Research:** We researched many aspects of the Staples Corporation. Started with their company background, and ending with data on green belts from the Staples Process Excellence Department. We researched the previous studies and questionnaires done by Staples on green belts, both that have failed and become certified. We learned the issues already related to green belt training and project completion before talking to anyone from the company, which was beneficial to us.

**Literature Review:** Staples uses Six Sigma Lean Thinking and follows the DMAIC (Define, Measure, Analyze, Improve, Control) process, which we are familiar with and have learned before. Having a previous understanding of these two concepts helped us tremendously with understanding what Staples' expected out of this green belt program, success. As a green belt, projects are completed using the DMAIC process. They have tollgates set up after each phase of the process, and are pushed to meet those tollgates. Understanding the cycle time that it takes for belts to complete each phase of DMAIC is essential, and time constraint changes may need to occur.

RONA (return on net assets) is the financial part of the green belt program. RONA is the value calculated from the belts' projects. When the belt completes the project, there is a RONA value given. Each belt must total 65K in RONA in order to meet certification requirements. Staples' green belts have a good average in RONA, but that's only the case for certified belts. So either some belts are receiving

projects capable of being worth more value than others, or belts have time and can put solid effort into the projects when others can't.

Interviewing skills were a set of techniques that we studied before interviewing current Staple green belts and employees. These skills provided us with meaningful insight into how to correctly interview people, what to ask, and what to look for (trends, certain responses). We received a lot of our information through interviews, so learning how to conduct interviews properly was very important.

### **Interviews:**

Green Belts- Interviewing the green belts was very beneficial to us. Interviewing both certified and not certified belts provided us with insight on both sides of story. Receiving information directly from someone that has been through the process, and succeeded, is a great source. Interviews allow for us to become familiar with the trends that developed from answers given by the belts, such as time being a major issue, etc. Certified green belts gave us the information needed to understand how much cycle time, on average, it should take for each process, and how much work time compared to project time is necessary for projects to be completed in timely manner. Receiving information from the non-certified belts was very helpful too. Non-certified belts provided good insight on what not should be done in certain phases of the green belt process. Or what they did not receive, such as enough time away from day job to compete projects. We learned that some issues vary from belt to belt, but some issues are true for all green belts. Making

sure that all of the issues pertaining green belts are taken care of is extremely important toward belt completion rates.

Deployment Leaders- Interviewing deployment leaders gave us an over the top look at what the issues were for the green belt program. Leaders provided us with information on the good and bad things they thought they were doing with their green belts, and what they believed would create most success for belts. Making sure that leaders are engaged and devoted when teaching and sponsoring these belts is very important.

**Data Analysis:** After the interviews, we were able to collect all the previous data given to us and develop tables, graphs, and other relevant statistics to provide an analysis for green belt data. The five major relevant graphs that we broke down were % of certification by wave, certification by deployment area, active belts vs. not active, average and median cycle times, and RONA. These 5 pieces of information gave us solid evidence to where the improvements need to be made; and also shows where there is a good job being done in the green belt program.

The percentage of certification by waves provides insight into many different things, such as which wave is most successful, or which wave created the highest amount of RONA, etc. Being able to establish data gives exact percentages and shows exactly where problems are, because statistics don't lie. Areas that need improvements are discussed later in the report, along with some recommendations.

**Recommendations and Conclusion:** After the methodology process we went through during this project, we came up with recommendations and a conclusion help reduce issues and problems related to green belts, so that certification rates will improve. These recommendations and the conclusions of the project are discussed further, in detail, in upcoming chapters

## 4. Analysis and Results

### 4.1 Interview Results

These questions are targeted for Green Belts but we also asked the same questions to the Deployment Leaders, about their Green Belts. We interviewed 12 people who were either Green Belts or Deployment Leaders. All of the individual interview results are listed in the appendix, below is a summary of our results.

#### **Question 1: Are you certified ?**

⇒ Interviewed belts certified: **67%**

#### **Question 2: How often do/did you meet with your coach and sponsor?**

Most of the Greenbelts that we spoke to met with their coaches at least once a week. There are some however that met or spoke more often, sometimes bi-weekly or daily; these were people who's coaches were also conveniently their direct manager for their day to day job. In some cases these meetings changed and would happen less frequently after training was complete.

Meeting with Sponsors was less frequent overall, except for the cases in which the Greenbelt's sponsor happened to also be their manager. Some said that they would meet weekly and others would only meet at tollgates or as needed.

⇒ Meetings with sponsors:

- Once a week: **42%**
- Bi-weekly: **42%**
- Once a month: **17%**

⇒ Meetings with coaches:

- Once a week: 42%
- Bi-weekly: 50%
- Once a month: 8%

**Question 3: How involved is/was your coach and sponsor?**

For the most part the Greenbelts were very satisfied with the involvement of the coaches and sponsors. A lot of them said that they were “very involved” and extremely helpful; if there was a problem, they were always there to help or lead them to someone that could better assist them. There were some Greenbelts that said the involvement varied depending on the projects; if it was something that they was actually interesting or important to them, then they would be more involved but if they didn’t really care there was less contact and less involvement and in turn this projects would not be very successful.

⇒ Belts’ sponsors/coach that were engaged: 83%

**Question 4: What is encouraged most by your coach and sponsor?**

There were a lot of different answers to this question, it depended on what the coaches and sponsors felt was most important.

- Financial aspects, highest RONA
- Presentations, at the end of each tollgate
- Utilizing all of the tools
- Communicating with the team, even during inactivity
- Minimizing cycle time
- “Getting it done!”

**Question 5: Are/were dates for tollgates and status reports set? How often?**

There were some cases where their coach set tollgates, and they were very strict and could not be missed. In some cases the belts set their own dates, these

dates were not very strict and it was not a big deal if they were missed they could be put off without penalty because they had other priorities. There were also some Greenbelts who actually said that there were no dates set at all!

For the most part status reports were completed weekly. Some substituted status reports with their detail weekly team meeting follow-ups. There were also some people who did not think that status reports were necessary and didn't do them at all.

⇒ Belts completing status reports: **42%**

⇒ Belts met Tollgate dates: **17%**

#### **Question 6: Did you have prior project management experience?**

All of the Greenbelts that we spoke to had prior project management experience, some really extensive and others very minimal, who wish they had more. They told us that this experience was very helpful in their greenbelt experience and some even suggested that it be a requirement.

⇒ Formal prior project management experience: **58%**

#### **Question 7: Is/was certification a part of you and your manager's performance objectives?**

For some belts certification was a part of their performance objectives, mostly the belts who's coach or sponsor was conveniently their manager because that is who is in control of their objectives and it is just as important to them both. There are some people who said no, and these were people with higher positions



who had a lot of other important responsibilities or people who had managers that were not very cooperative.

As far as the manager's performance objectives, most of the Greenbelts couldn't really answer that question because they were unsure, some of them knew.

⇒ Certification is a part of belts' performance objectives: 42%

⇒ Certification is a part of managers' performance objectives: 33%

**Question 8: How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?**

For the most part the belts liked their projects, but would not consider the project their top priority. Anyone can be a Greenbelt, even the top management positions in the company, so they still have a daily job and other important responsibilities. As far as the interest of the boss in the project that depends on the project; if the project is in your field then your boss will be more interested than if it was in a completely different field.

**Question 9: Are/were your projects in your area of responsibility?**

The responses to this question were about half and half. For some belts, all of their projects were in their area of responsibility and their coach/sponsor were their manager. There were also people who had projects that had nothing to do with their area of responsibility; they could be during different shifts, different states, different countries, and different subjects.

⇒ Belts' projects that were outside of their area of responsibility: 67%

**Question 10: How much time did you spend on your projects?**

Greenbelts are supposed to spend 25% of their job on their project, that is what is proposed. However, there are some managers who are not very cooperative and do not reduce the greenbelt's workload in order to commit that 25% but instead they just add an additional 25% onto their daily job. This is a big issue and causes a lot of belts to spend less than 25% of their time on their projects.

For some belts this was not a problem because their coach or sponsor was their manager also, so the projects were sort of built into their daily job and these people tend to spend more than 25% of their time on the projects.

⇒ Boss allows 25% of time to be spent on green belt project: 25%

**Question 11: What helped you the most? What were your biggest obstacles/challenges?**

Help: good managers, good coaches, good sponsors, applying the tools, communicating with other Greenbelts and Blackbelts for help and advice

Obstacle: time management, other priorities

**Question 12: Have you attended Advanced Belt Training (ABT)?**

There were not a lot of Greenbelts who attended ABT, but the ones who do attend seem to be the more successful belts. Some think that attending should be a requirement for certification, while others feel that it might be too much of a time commitment and it would be tough to take that time from their daily job.

⇒ Belts attending ABT: 67%

**Question 13: How do you feel about presentations? Are you comfortable with PowerPoint?**

The responses to this question were about half and half. Some people were completely comfortable and for others it was a huge challenge. ABT does include training in these areas and some of the belts that attended said that it helped a lot.

## 4.2 Greenbelt Certification Data by Wave

Greenbelt waves are a select group of employees assigned to attend training classes and complete two projects that will create RONA benefits for the company. Waves begin every four months, and recorded in our data are waves one through six. The following data are the percentages of greenbelts that are: certified, not certified, active, not active, and not certified/not active, according to waves.

Table 1: Greenbelt Certification by Wave

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
Certified	50	40.90	34.78	13.64	3.85	0
Not Certified	50	59.09	65.22	86.36	96.15	100
Active	14.28	9.09	30.43	50	53.85	80
Not Active	85.71	90.91	69.56	50	46.15	20
NC/NA	42.86	81.81	39.13	45.45	38.46	20

Wave 1- 50 % of the belts in wave one have certified so far. This was the first wave of the green belt process ever at Staples, and was not a huge success. There are 42% of the belts not certified and also not active, which shows that 42% of the belts in wave one that aren't certified are not even working on their projects to become certified.

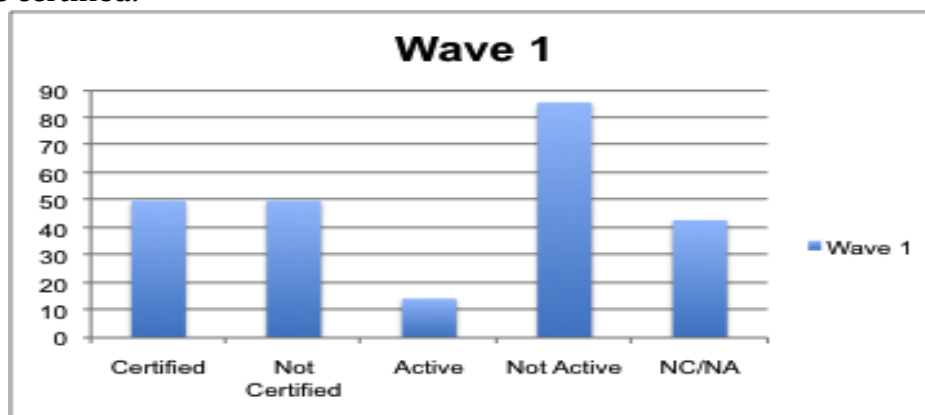


Figure 4: Wave 1(June 2007)

Wave 2- for wave 2 belts, the certification percentage dropped to 40%. There was a huge increase in the percentage for belts not certified and not active, which rose to 82% in this wave. This shows that for the first two waves, there is a combined 45 % certification rate for belts, with an increasing amount of belts becoming inactive.

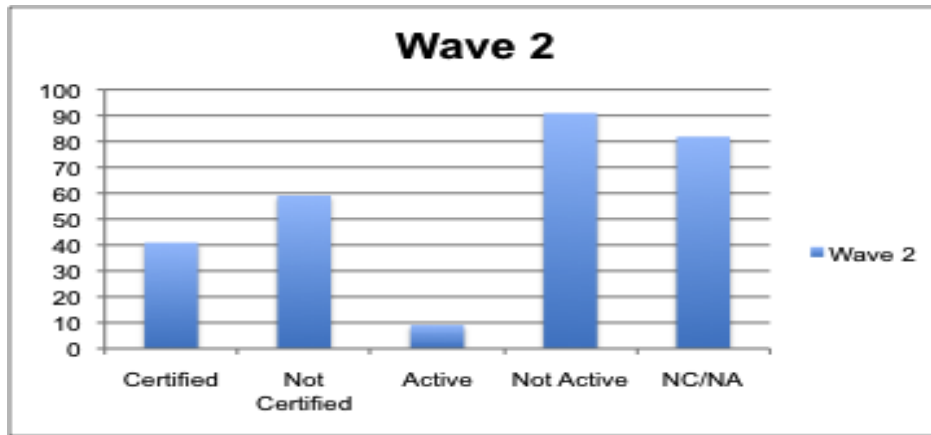


Figure 5: Wave 2(February 2008)

Wave 3- 35% of the belts have certified in wave 3. There has been a decrease from wave to wave in certification percentage for green belts. Many reasons account for this poor certification number, and changes may need to take place. Wave 3 has a not certified/not active percentage number of only 39%, so as a positive; belts in this wave are still working on completing projects.

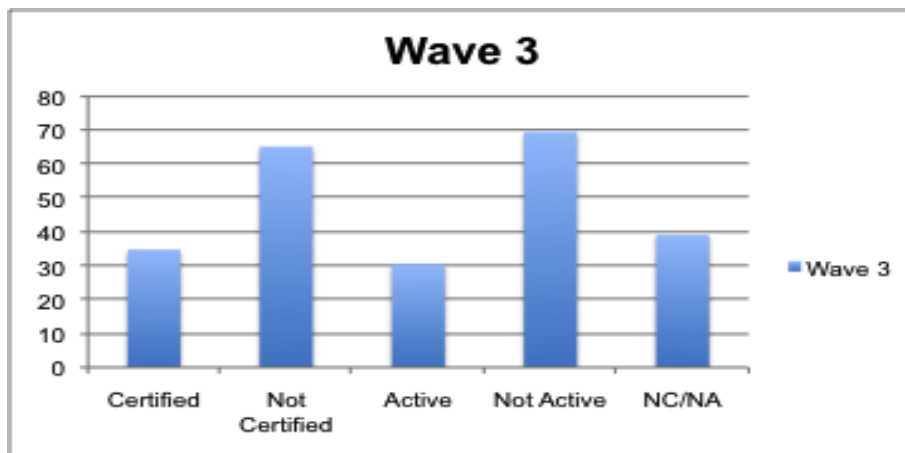


Figure 6: Wave 3(June 2008)

Wave 4 – In wave 4, there is a bigger drop in the certification percentage as it decreased to 13%. Some belts may still be working on projects. 50% of the belts in wave 4 are still active. A downward trend still exists with the certification percentage of green belts. Some time constraints should be taken into account though, because wave 4 belts have had less time to complete projects compared to previous waves.

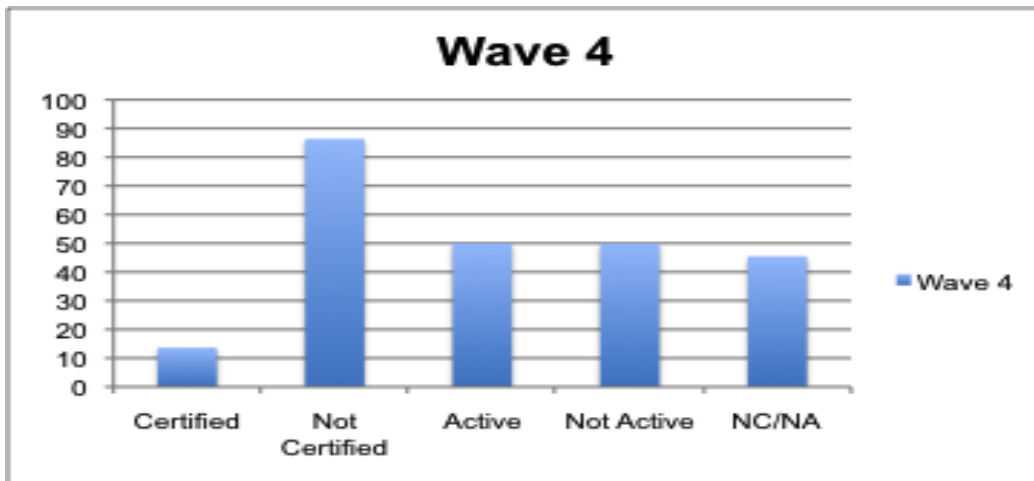


Figure 7: Wave 4(February 2009)

5 & 6- Wave 5 and 6 are waves that have just begun. Wave 5 has a 3% belt completion percentage and wave 6 has 0% certified. A high percentage of belts are still working on projects in these two waves, which is why the numbers revealed are so different compared to other waves.

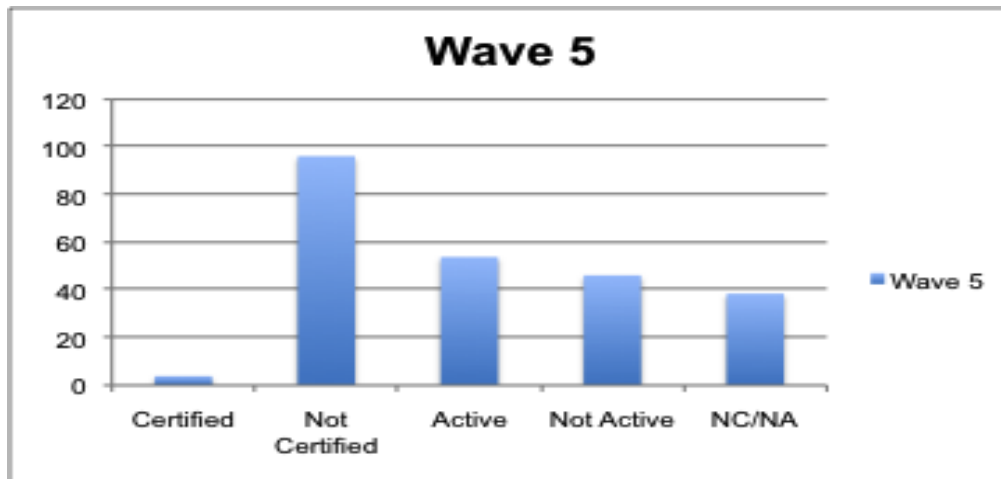


Figure 8: Wave 5(June 2009)

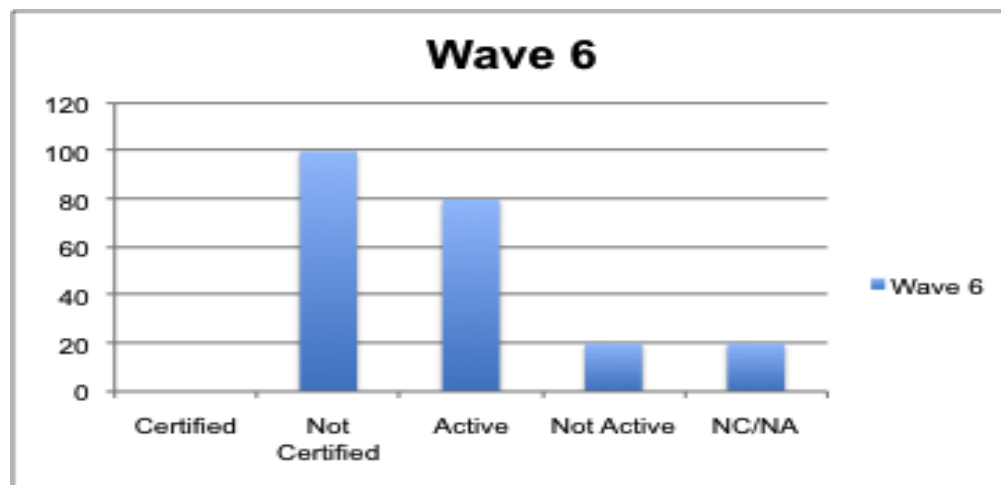


Figure 9: Wave 6(January 2010)

### 4.3 Greenbelt Certification Data by Deployment Area

The following data are the percentages of greenbelts that are: certified, not certified, active, not active, and not certified/not active, according to waves.

Table 2: Greenbelt Certification by Deployment Area

	Corp - IS/IT	Europe	NAD - Customer Service	NAD - Supply Chain
<b>Certified</b>	44.44	16.67	62.5	12.903
<b>Not Certified</b>	55.56	83.33	37.5	87.09
<b>Active</b>	11.11	25	18.75	50.54
<b>Not Active</b>	88.89	75	81.25	49.46
<b>NC/NA</b>	44.44	66.67	18.75	47.31

Corporate IS/IT- The Corporate IS/IT department in Staples has a 44% certification rate for belts in their department. Out of the four major departments that the green belts work in, the IS/IT department is the second most successful in certification completion. Only 11% of the green belts in this department are not active, which means that they are not going to certify many belts anytime soon. This is either because of belts dealing with bigger priority issues during their day job, or projects are put on hold because of different specific reasons.



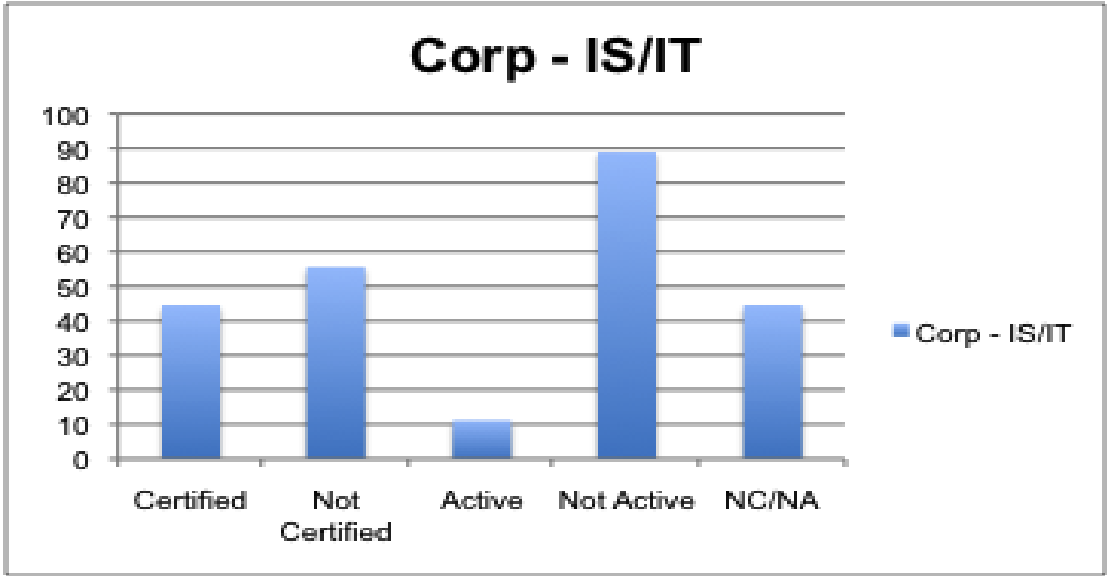


Figure 10: Corp - IS/IT

Europe- The Staples' Corporation has many units in Europe, which also has many green belt participants. European green belts have a fairly low certification rate of 17%. Low certification in Europe isn't much different than here in the United States, but failure to certify may be because of different reasons. For example, some departments in European countries are very short handed. Being short handed creates a demand for the belts to focus and prioritize differently, leaving themselves a little time if any to work on belt projects. Their day to day objectives may become a more important priority, which has something to do with the not certified/not active percentage of 67%. This entails that 67% of the belts that have not certified in Europe are not even active currently, so their projects are not even being worked on and not creating any value at all.

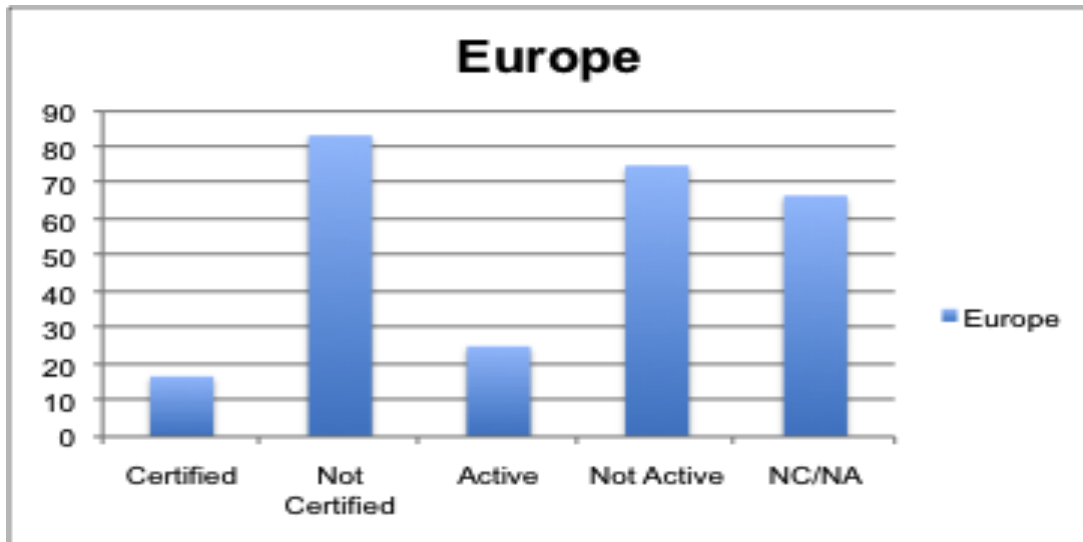


Figure 11: Europe

NAD-Supply Chain- The NAD (North American Delivery) Supply Chain is the least successful department when taking into account belts certifying based on departments. The Supply Chain department has a certification rate of 12%. The desire from the belts in this department seems to be there, but there are some issues with projects being given in this department, such as their value worth as a whole. Some projects are so hard to find in certain departments that are valuable enough for belts to complete. The 47% rate for this department in the not certified/not active area is not too high, but considering that fact that only 12% of the belts here didn't certify, it's a poor statistic.

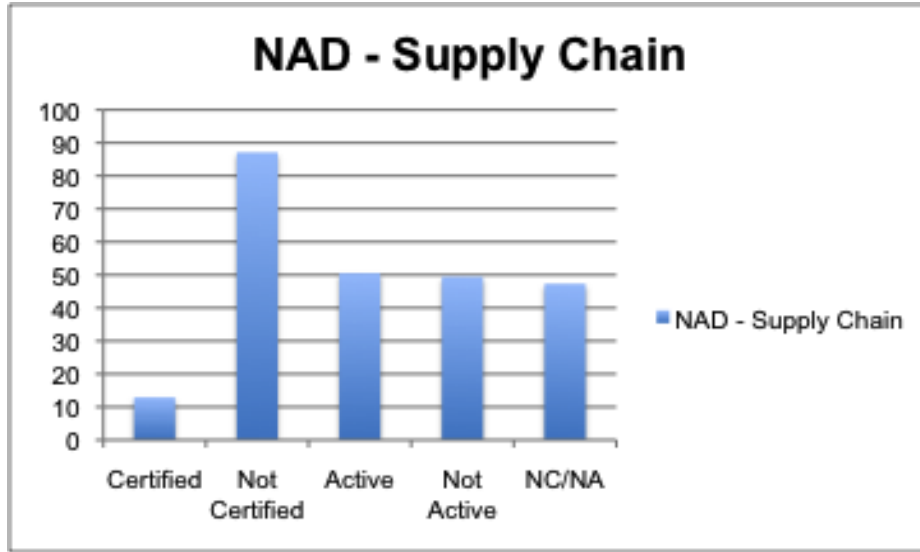


Figure 12: NAD - Supply Chain

NAD-Customer Service- The NAD (North American Delivery) Customer Service department has the highest success rate for certified belts, 62%, out of all the departments. Although 81% of the belts in this department are not active, only 19% of the non active belts aren't certified. From a positive standpoint, of the 19% active in the department, 80-85% of belts are not certified, which means they're currently working on projects and attempting to achieve certification.

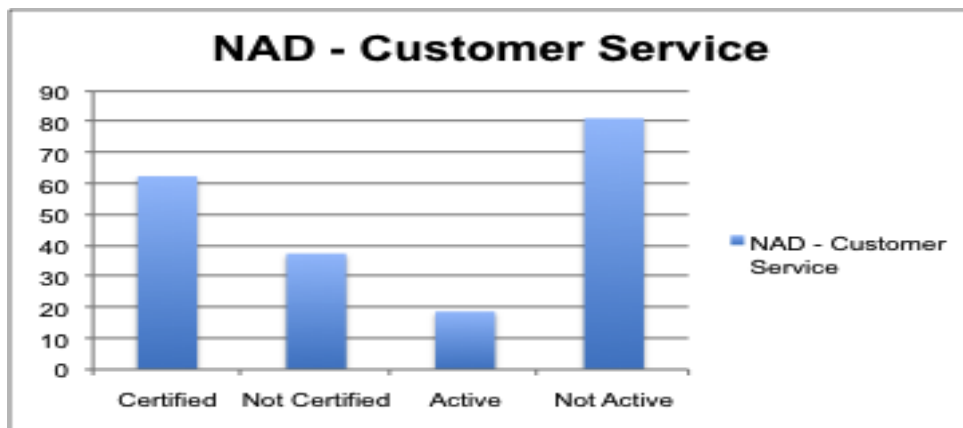


Figure 13 NAD- Customer Service

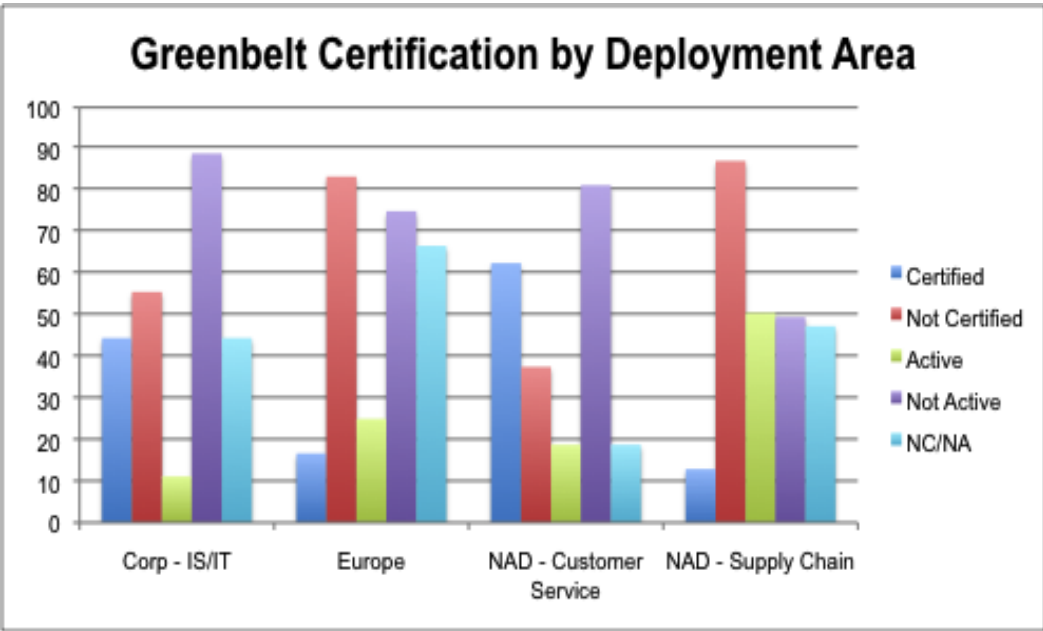


Figure 14: Deployment Areas

### 4.3 Cycle Times

The following chart reveals the cycle time it takes for belts to complete projects. The certified belts have a much higher cycle time, but that is because the non-certified belts have not completed all of their projects or none at all. The average cycle times for certified belts is higher than the objective, and decreasing some issues within the green belt certification process should shorten cycle time.

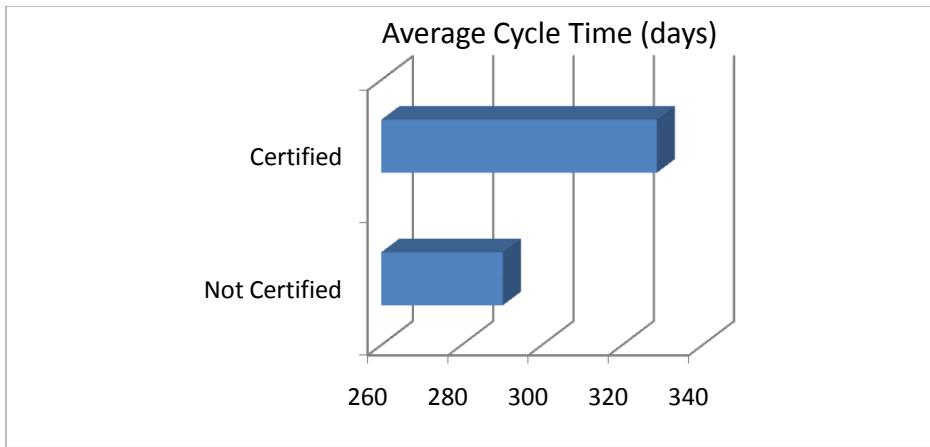


Figure 15: Average Cycle Time

Table 3: NA-NC Cycle Time

Not Certified/Not Active	
Average Cycle Time	328 days
Median Cycle Time	340 days

This table shows the average and median number of days it takes to complete a project, for green belts that are certified versus not certified.

Table 4: Project 1 vs. Project 2

	Project 1	Project 2
Average Cycle Time	392	222
Median Cycle Time	376	225

This table shows the average and median number of days it takes to complete the first project versus the second project.

## Average Green Belt Cycle Time by Wave (days)

	Define	Measure	Analyze	Improve	Control
Wave 1	104	33	93	72	53
Wave 2	38	89	87	52	33
Wave 3	58	46	61	121	14
Wave 4	58	77	50	130	25
Wave 5	24	65	54	73	19
Wave 6	35	47	57	47	18
AVG	52.76	59.54	66.97	82.32	26.91

Table 5: Cycle Times

The chart above provides the wave-by-wave cycle times for each particular phase. Waves 1 and 2 seem to have very high analyze phase cycle days, which is interesting. Both of these waves have the highest certification percentage out of the waves, and from this chart it seems like time constraints for cycle time as a whole is an issue. The time given for belts to complete each phase, or the time assigned to them to finish in, may be not enough. Looking into the data and information collected from the interviews, cycle time seems to be a big issue with the company and the green belts themselves. Implementing a better time management schedule for belts to complete projects in could improve the process and in turn create more positive results.



## 4.4 RONA

### Green Belt RONA (approved) by Wave

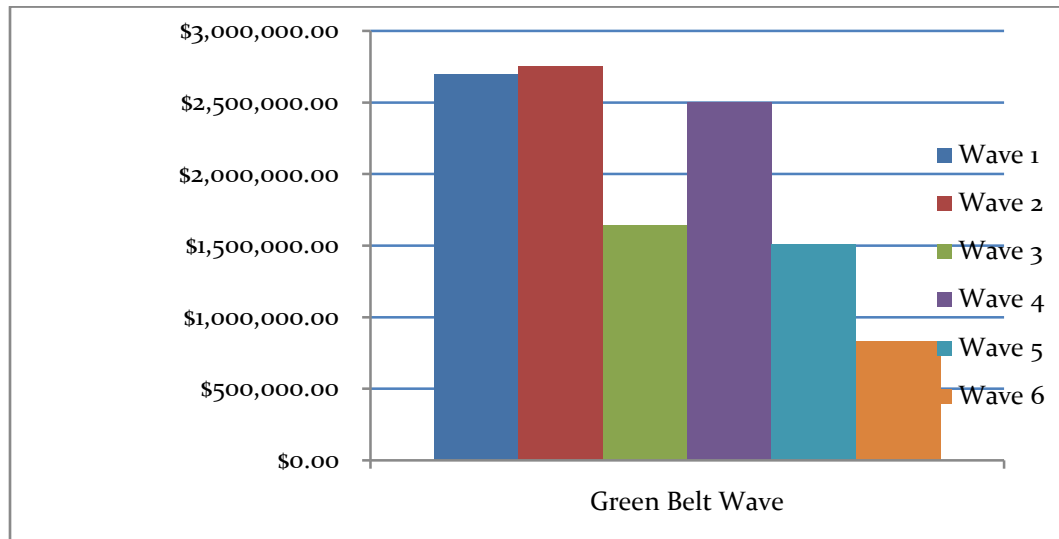


Figure 16: RONA by Wave

RONA averages for green belts in each wave are provided above. As revealed, the first two waves have generated the most RONA benefits, both peaking over the 2.5 million barrier. Wave 4 belts averaged RONA of exactly 2.5 million as well. The approved RONA for all belts are actually sufficient, the problem lies in the fact the not many of the green belts are included in this data because they have not become certified. This data is a positive chart, but it also shows that the belts that have been certified have all had projects that were worth a great amount of value. Other projects may not be worth any value at all, which is a problem and waste of time for belts left with this weak projects.

## 5. Recommendations and Concluding Remarks

Staples' problems with project completion have a lot to do with the Sponsor's and/or coach overall engagement in the project itself, time management and the pipeline of the project. Staples isn't doing as well as some other companies with green belt certification and there are several factors affecting their success. Some of the green belts are not fully committed to their projects because they have other priorities that will take place ahead of completing the project. Some sponsors do not push the belts as much because the project might not be important to them, so in turn the belts are not motivated to complete the project because they know that the sponsor doesn't care. Some projects may be way out of the belts jurisdiction, and also during different shifts. This causes additional problems for many green belts.

Through our research and interviews we have come up with the following recommendations:

### **Short Term:**

- Before becoming green belts, the candidates should be informed about how much of a privilege it is and the great opportunities and experience that can become of it so that they do not take it for granted.
- Opening up the program for self-nomination: at Staples, individuals are chosen by deployment leaders to be Green Belts. If people were allowed to nominate themselves for the program and enter upon evaluation, then you would know that

this is something that they really want to do and are enthusiastic about which will drive success.

- **Status Reports:** these should be a weekly requirement. Every Green Belt should submit some form of a status report at the end of each week; it is apparent that some people are not familiar with how to do status reports on Power Steering or they may not have the time, for that matter a supplementary write up from weekly meetings would be acceptable as long as there is some documentation every week. This will keep everyone up to date and prevent people from being left behind.
- **Process Excellence for Managers (PEM):** We recommend making PEM a requirement for all coaches, sponsors and deployment leaders. Without this, they don't really know all that it takes to coach and support a Green Belt and that is a recipe for failure because support is one of the key factors to a successful Green Belt.
- **Performance Objectives:** certification should always be a part of the green belts' performance objectives as well as their managers'. If this is not feasible, then they should not be involved in the program.
- **Short Term Constraints:** The issues Staples' may have could begin with time. Time could become an issue for such things as attending PEM for all coaches, sponsors, and deployment leaders; but we do believe PEM is necessary. Also time for belts to complete status reports. This should not be too much of a problem, but if belts have bigger priorities such as dealing with their day to day job then completing reports every single week at some points may be difficult.

## Long Term:

- **Candidate Selection:** there should be some guidelines for selection; a Deployment Leader should not be able to just choose whomever they please. Candidates should have at least minimal prior project management experience, and their skill set and performance should be evaluated according to the program to assess whether or not they are ready or suitable for the program.  
  
Three questions to keep in mind; Right person? Right time? Right project?
- **Project Selection:** There is no project selection methodology. We believe if this is changed, that projects may become more interesting to the green belts and they would be more willing and driven to complete the projects that they themselves select or have some say in. The projects should be in the Green Belts area of responsibility, have some relation to their daily job and also must be during their shift.
- **Team Selection:** A balanced project team should be constructed and using Belbin profiles is essential. Each member of the team must understand their roles and how to execute those roles.
- **ABT:** It is apparent that ABT is very helpful for Green Belts and Black Belts, but it may also be an inconvenience; some people are not able to take that time off from their job and some are not able to travel in order to attend. We would advise all Green Belts to try to attend at least some of ABT, in an area that they feel they need work in. Attending ABT is also a great networking opportunity; many Green Belts have met other Green Belts and even Black Belts at ABT that were very

helpful resources for them. We are well aware that ABT is nearly impossible for some people to attend and a hassle for others; this is why we recommend that **supplemental webinars** (online seminars) be implemented into the Green Belt Program. This way, anyone could attend. The belts and their coaches should vote upon the topics so that the webinars are of useful content and not a waste of time; so if a lot of belts seem to be struggling with presentations or a particular tool, those issues will be elaborated upon through the webinars.

- **Peer Mentor:** We recommend pairing all green belts with another green belt that is already certified, as a mentor. This is an additional support system for the belt and they can talk to someone who has already been through exactly what they are going through. They might be more comfortable talking about or asking certain questions to their mentor that they wouldn't want to ask their coach or sponsor.
- **Incentives:** We recommend implementing some type of award system. Good results should account for good benefits. This would also give belts motivation to do well on projects.
- **Long Term Constraints:** Assigning every single belt a peer mentor may be difficult to do considering not many belts have certified yet. Also, the certified belts may not have enough time to handle being a mentor considering they have to do their own job as well. A peer mentor is a positive idea we developed, but developing a schedule for green belts to be with mentors may be tough. Incentives, such as money rewards, could be a great incentive if the completion rate of belts increases. Staples will most likely not want to spend money on green belts if they feel the program is not working or not doing anything positive for the company.

We believe if the completion rate and interest in completing projects on time and becoming certified increases, then handing out incentives such as money rewards won't be much of an issue.

The goal of this effort was to improve the project selection and execution process in order to reduce cycle-time of Green Belt projects from 338 days to 225 days which should in turn result in an average certification time of 15 months. Our team did research, and conducted several interviews in order to make appropriate recommendations as to how Staples could reach their goal.

Throughout our interviews we came to the conclusion that time seemed to be the biggest challenge and a good support system was the biggest help. It is proposed that a green belt spend 75% of their time on their daily job and 25% of their time on their green belt projects. However, this is not always the case. We found that most of the belts were not even given that opportunity; their manager did not adjust their workload to accommodate that additional 25 %, instead it was just added on top of their daily job giving them 125%. This makes it extremely difficult for them to balance their responsibilities and make time for everything, often leaving the green belt projects as their last priority. This is why a good support system is essential! The belts' managers need to be more cooperative in adjusting workloads and become more involved with the projects, hence why we recommended that certification be a part of both the green belt and their managers' performance objectives.

A good support system is vital to successful green belts; if the belts' manager, coach and sponsor are not interested or enthused about the projects then neither will the belt. They are not being paid for this, so if no one else cares, why would they? They need the motivation and resources from their support system and we suggested that an additional member be added; the peer mentor who will be able to provide additional resources on a more personal level.

There were some cases where the green belts weren't meeting with their coaches and sponsors often enough and some people were getting lost and left behind in the process. For some belts all of the aforementioned issues were not a problem because their coach or sponsor was also their direct manager; so the projects were in their area of responsibility and sort of built into their daily job. These people did not have issues with time, they actually tend to spend more than 25% of their time on the projects and they have more frequent meetings with their coach and sponsor. This is why we suggested a project selection methodology so that the right project is given to the right person at the right time and this would allow a more stable support system.

Another issue that we touched upon throughout the interviews that fell under the category of time was deadlines. We came to the conclusion that it is not feasible to set standard deadlines for everyone. It all depends on the project, the complexity and the team. We cannot say that each phase should take a certain amount of days because that will vary from project to project.

Directions for future studies:

As our time and resources were limited in this effort, we have some suggestions for future teams who will continue in this direction. We would strongly advise taking a further look into some of the actual projects themselves, analyzing pipeline, subject matter, complexity, team dynamics, and progress over time. When looking into actual projects, try to understand and determine successful and unsuccessful trends that may be occurring in many projects. Also, when analyzing team dynamics, look into whether or not the teams are made up of individuals with certain skills that complement each other. Make sure that enough time is allowed for projects to be completed, especially if projects are of extreme complexity.



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## 7. Appendix

-This appendix is the individual answers to the questions we asked all twelve interviewers. The answers to the questions from each interview are listed below. We used each employees initials in order to protect each individuals identity.

### 7.1 S.P.

Fulltime Green Belt; Coach

11/10/2010

1. Are you certified?

- Wave one green belt- certified.

2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?

- She used every black belt as a coach; She met 2-3 times a week with someone. Talk to black belt coaches at least once a week. Her sponsor was not very engaged; only saw them at tollgates. She says sponsor dedication varies. She also states that green belts don't utilize their sponsor; the problem may be their boss, and the sponsor is the main issue. Also depends on what project it is. Priority relies upon how much the sponsor is engaged. (Maybe select sponsors with "hot item project")

3. How involved is your coach? Sponsor?

- Her sponsor wasn't very engaged. Says it varies from sponsor to sponsor. Also depends on the priority of the project.

4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

- They focus too much on presentations she says, in class. They also have too much stuff to do and not enough time or too much material to cover within the given time. But she says the black belt coaches and perception of doing steps in presentation is getting better.

- If project is a main priority to sponsor, then it becomes an easier project to do. Depends from project to project.

5. Would you rather do a project in your own department or in another department?

- If she had a choice, in her own department. She had on in different jurisdiction and time zone. It was difficult working and managing time with different time zones and shifts.

6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)

- Completion of the project, in the fastest time as possible while just getting the work done as best as possible.
7. Are dates being set for when Tollgates are to be completed?
- They have metrics they have to hit, but if she didn't make the timetable, then a meeting time would be rescheduled.
8. Are status reports being completed? How often?
- Didn't do status reports. She deleted them. But she provided follow-ups in meetings; didn't feel filling out status reports was important.
9. Do you have prior project management experience?
- Yes, but not enough
10. Are your projects in your area of responsibility?
- Completely out of your time zone. Way out of jurisdiction, in different shifts. She says they now do lean training, and this allows green belts to be comfortable in choosing to work in other departments.
11. Is certification a part of a Green Belts performance objectives?
- No, but it was one of her objectives. Her boss was huge into process excellence. Boss made sure she did the certification process.
12. Is certification part of the manager's performance objectives?
- Yes, boss wanted her to complete the belt process, and was encouraging about it.
13. How much time do you spend on your project? How much time would you like to spend on your project?
- More or less full-time. More work was added on. At least 50% of time of work spent. She wishes she spent more time on projects, but wasn't possible. " The boss needs to want to solve project if they want good work. Boss needs to be engaged and more sufficient work will be done. Can depend on project type as well.
14. Are you working on your first or second project? If second, compare.
- Done.
15. Have you struggled with any of the quizzes? Why?
- She struggled with quizzes. Horrible with tests. Says some belts haven't seen tests in over 15-20 years, so tests may be troublesome. Are coaches teaching? Should they be? Define function in virtual coach.
16. Have you attended Advanced Belt Training (ABT)?
- Yes, and believes ABT should be required for belts to attend at least once a year.

17. If you are certified, what helped you? If not, what were your biggest obstacles?
- What helped the most was talking and receiving input from all the other belts. She needed to find people who were going through the same struggle. She says more belts need to learn or just need to network more often and work together. Need to find people out there to help them if needed.
18. How do you feel about presentations? Are you comfortable with PowerPoint?
- They focus too much on presentations she says, in class. They also have too much stuff to do and not enough time or too much material to cover within the given time. She didn't have any major problems with PowerPoint or presentations.

### **Main Input; Problems; Suggestions/Questions**

1. Are the projects given worth enough value?
2. Needs to be stated and understood that being a green belt is a privilege, and provides great project experience along with learning how to use certain tools. It is a great resume builder.
3. Belts should attend ABT at least once a year.
4. 25% of the belts time needs to be taken out of their workday in order for them to be successful.

### **7.2 B.J.**

11/17/2010

1. Are you certified?
  - Yes. Wave 1.
2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?
  - They met every few weeks outside of tollgates. Had one external master black belt coach and one internal black belt coach. Met once a week with internal coach, external when needed.
3. How involved is your coach? Sponsor?
  - Sponsor was engaged and interested in getting the project done.
4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

- Had a good project team, and good projects that were main priorities to sponsors and belts.
5. Would you rather do a project in your own department or in another department?
    - Own.
  6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)
    - Keep the team engaged and able to talk and meet with sponsors and finish the projects, meeting all tollgates. RONA was also important to him and sponsor/coaches as well.
  7. Are dates being set for when Tollgates are to be completed?
    - Yes dates were set and met.
  8. Are status reports being completed? How often?
    - No status reports.
  9. Do you have prior project management experience?
    - Yes and it was helpful for him.
  10. Are your projects in your area of responsibility?
    - Yes one was, one wasn't.
  11. Is certification a part of a Green Belts performance objectives?
    - Certification was part of his, his sponsors, and his coach's objectives.
  12. Is certification part of the manager's performance objectives?
    - Yes.
  13. How much time do you spend on your project? How much time would you like to spend on your project?
    - Boss was supportive of the 75% to 25% of time to do project. Allowed him to take 25% of time out of everyday job to work on project.
  14. Are you working on your first or second project? If second, compare.
    - Done.
  15. Have you struggled with any of the quizzes? Why?
    - No
  16. Have you attended Advanced Belt Training (ABT)?
    - No ABT.

17. If you are certified, what helped you? If not, what were your biggest obstacles?
- Most Helpful- 1. Good class foundation 2. Coaches helping you learn the process 3. When to do what and when? 4. Sponsors have an encouraged team.
18. How do you feel about presentations? Are you comfortable with PowerPoint?
- Not a problem.

### **Main Ideas; Suggestions; Input**

1. Having good projects with which sponsors are engaged and have good priority for.
2. Templates were helpful. Look at the notes at the bottom.
3. Self-motivation; Certification was part of his objectives.
4. Boss was willing to free up 25% needed!
5. Sponsors need to have support of the people participating in their projects.
6. Pipeline of projects
7. Timeline

### **7.3 E.F.**

11/17/2010

1. Are you certified?
  - Wave 1 certified. His project staples didn't even own. His coach was a master black belt. He did a number of projects, with 3 coaches from external industry and 2 internally.
2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?
  - Four of the five coaches were excellent. The coaches and him interacted weekly during projects. He had to make the effort to talk to them. He goes to ABT's regularly and reaches out to black belts for help as needed. His sponsor didn't meet with him as much, but the projects he did were in his area, so meetings weren't needed so much. Says, "It's great" to have projects in your area. He really used the coaches to his advantage. He needed a lot of explanations.
3. How involved is your coach? Sponsor?
  - Sponsor was involved a lot. Projects were done in his area, so the sponsor was his manager and wanted the project completed.

4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?
  - Yes, but it wasn't the first priority. Projects are a priority, but not top priority.
5. Would you rather do a project in your own department or in another department?
  - Own department. He believes doing projects in different areas is very hard.
6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)
  - Trying to get continuous data. Coaches wanted him to meet with team members. Communicating with the project team helped him tremendously.
7. Are dates being set for when Tollgates are to be completed?
  - Yes tollgates were set. He missed them all the time, but rescheduled them. Green belt is not first priority. Timing (time management; budget week?) is extremely important because a belt doing their "real job" is first priority.
8. Are status reports being completed? How often?
  - Status reports were done but not a lot of recent updates were done because he communicated with his team so much, that status reports weren't really necessary.
9. Do you have prior project management experience?
  - Yes he had prior project experience. He was director of IT.
10. Are your projects in your area of responsibility?
  - Yes, wouldn't want it any other way.
11. Is certification a part of a Green Belts performance objectives?
  - Yes first year for certification performance objectives; not second year.
12. Is certification part of the manager's performance objectives?
  - It was definitely part of the coaches, but wasn't their main objective.
13. How much time do you spend on your project? How much time would you like to spend on your project?
  - 25%? No, about 20%.
14. Are you working on your first or second project? If second, compare.
  - Done
15. Have you struggled with any of the quizzes? Why?
  - Quizzes didn't bother him.

16. Have you attended Advanced Belt Training (ABT)?
  - ABT is beneficial to him. Day job is more important sometimes to people, which is why some do not attend.
17. If you are certified, what helped you? If not, what were your biggest obstacles?
  - Coaches share equal credit for his certification. They were persistent to say, "Keep going". They allowed him to see the "light at the end of the tunnel". Priority? Projects were important, but multiple priorities can change places.
18. How do you feel about presentations? Are you comfortable with PowerPoint?
  - Comfortable.

### **Main Ideas**

1. Projects- Do 3 (1st- no value, learn tools and how to do a project; 2nd- RONA calculated while taking belt out of everyday job roll; 3rd- place back in job roll and do project with calculated RONA to complete 65K)
2. Huge value in process improvement; He didn't care about the financials but just focused on getting the project completed while allowing the money to take care of itself.
3. Time overall is important.

### **7.4 G.P.**

Deployment Leader (Part time); IS Department

11/15/2010

1. Are you certified?
  - Yes
2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?
  - He met with the coach and sponsor every 2 weeks, or as needed. Completed weekly status reports.
  - As a coach, he doesn't put any stipulations on meeting times. No specific reason for this may be more of just his philosophy. Mainly just came down to results and working until the project is completed
3. How involved is your coach? Sponsor?
  - Sponsors and coaches were involved and engaged.



4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

Yes projects are a priority to him and sponsors, but not first priority. Day job is the first priority for belts.

5. Would you rather do a project in your own department or in another department?

- Own department is easier to him, depends on the belts. Sometimes belts don't have a say in whether or not they will be working in their own department.

6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)

- Completing the project is most encouraged. Meeting tollgates and getting things done on time.

7. Are dates being set for when Tollgates are to be completed?

- Yes, the belts set their own dates. He will push on them to complete everything by the dates. Some dates are required, some are not.

8. Are status reports being completed? How often?

- Yes weekly status reports are done for his green belts on a weekly basis.

9. Do you have prior project management experience?

- Yes he had prior experience. Some belts have project experience, which is beneficial to him.

10. Are your projects in your area of responsibility?

- Yes they are.

11. Is certification a part of a Green Belts performance objectives?

- To him as a coach, yes.

12. Is certification part of the manager's performance objectives?

- No, they were not.

13. How much time do you spend on your project? How much time would you like to spend on your project?

- Spent as much time as possible on projects. Realistically, about 15% of his work time was on projects. Other 85% was on daily job.

14. Are you working on your first or second project? If second, compare.

- Done projects.

15. Have you struggled with any of the quizzes? Why?

- Quizzes are not a problem for him.
16. Have you attended Advanced Belt Training (ABT)?
- No ABT attended. But said belts would benefit from going to certain classes on specific dates for ABT. Also, presentations from black belts would be beneficial to green belts to watch and learn.
17. If you are certified, what helped you? If not, what were your biggest obstacles?
- As a coach, he finds that selecting belt candidates is very challenging. Candidate selection- Need to choose the right people at the right time and make sure belts have enough time to dedicate themselves. (i.e. if their department is under-employed; if the belts just changed jobs into new department;etc.)
18. How do you feel about presentations? Are you comfortable with PowerPoint?
- In general, he's not comfortable with presentations. But anyone can learn how to be.
- **Main Reasons for Bad Certification Percentage**
    1. Project pipeline (right projects? Is sponsor passionate and engaged?)
    2. Combination of factors- timing (25% given); dedication by belt and sponsor.

## 7.5 E.M.

Ed went through 8 months of being GB, then turned BB. Now he is a GB coach, has 6 belts.

12/1/10

1. Are you certified? Wave 4 → black belt
2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?

Coach: weekly Sponsor: every 2-3 weeks

Weekly or as needed (1 every 2 weeks) with belts finished training

3. How involved is your coach? Sponsor?

Coach: incredibly involved

Sponsor not really

4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

Wasn't really a priority, ended up getting cancelled. Wasn't very important to sponsor.

5. Would you rather do a project in your own department or in another department?

Mostly in own department.

6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)

Just passing final, don't stress it. You need to know how/where to find the answers.

7. Are dates being set for when Tollgates are to be completed?

No dates for his belts, rough guidelines and advice. He has an informal grading system

8. Are status reports being completed? How often?

No specific status reports after training is complete

9. Do you have prior project management experience?

Yes, implementation systems

Definitely helps, could help if it was a requirement. Spending more time on basic project mgmt skills in training

10. Are your projects in your area of responsibility?

Yes, for the most part

11. Is certification a part of a Green Belts performance objectives?

Yes, when he was a belt

Yes, as a coach

12. Is certification part of the manager's performance objectives?

Yes, as a coach

13. How much time do you spend on your project? How much time would you like to spend on your project?

Less than 25% depends on belt.

Managers haven't carved out the time so they can't spend 25%

14. Are you working on your first or second project? If second, compare.

N/A

15. Have you struggled with any of the quizzes? Why?

N/A

16. Have you attended Advanced Belt Training (ABT)?

Yes as a green belt: he thinks that the ones who attend are the most successful. He pushes his belts to attend ABT. Good networking opportunities.

Yes as a black belt-required

17. If you are certified, what helped you? If not, what were your biggest obstacles?

Time management- obstacle

Utilizing and understanding the tools -helps

18. How do you feel about presentations? Are you comfortable with PowerPoint?

Depends on belts, he helps them out if they aren't comfortable

Additional insight:

Keys: projects, pair GB's w/ more experienced belts, learn what to do and what not to do from watching people.

More formal grading system after formal training- utilization, project movement

## 7.6 H.B.

12/6/10

1. Are you certified? No, wave 5 still active: working on both projects currently. 1st project started about a year ago, 2nd started about 5 months ago. Project one: Improve, project: Improve

2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?

Coach: haven't met in a month, previously every other week

Sponsor: project 1, not often because she got a new job and switched teams. Sponsor took a leave of absence, other difficult circumstances.

Project 2: meet often, sponsor is direct manager

\*Sponsor who nominated her for the greenbelt program did not have any process excellence management experience, so he didn't really know what it meant to sponsor and support a greenbelt. PEM should be mandatory

3. How involved is your coach? Sponsor?

Project 1: not very involved

Project 2: very involved

4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

Yes she was interested and it was worthwhile for the business. But it was not a priority

Projects were in own department

5. Would you rather do a project in your own department or in another department?

No, would be too difficult

6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)

Don't care about the tools; they want to see the benefits and the profit values. Growing the business or saving time.

Neither is putting a lot of pressure, not a huge priority there is more important stuff going on.

7. Are dates being set for when Tollgates are to be completed?

Originally, yes. Not really anymore, not hard dates no pressure to meet dates

8. Are status reports being completed? How often?

No

9. Do you have prior project management experience?

No

10. Are your projects in your area of responsibility?

Yes both were

11. Is certification a part of a Green Belts performance objectives?

Yes

12. Is certification part of the manager's performance objectives?

Probably not

13. How much time do you spend on your project? How much time would you like to spend on your project?

Sometimes 25%, sometimes less because there were more important thing in daily job

25% in addition to 100% workload was not decreased

14. Are you working on your first or second project? If second, compare.

1st: got moved in the middle of the project, sort of got put off and became more difficult with new coach

2nd: much better, coach/sponsor more involved

15. Have you struggled with any of the quizzes? Why?

No

16. Have you attended Advanced Belt Training (ABT)?

Yes, makes every effort to attend

17. If you are certified, what helped you? If not, what were your biggest obstacles?

Time management is biggest problem

Coaching and training and peers help the most.

18. How do you feel about presentations? Are you comfortable with PowerPoint?

Comfortable with it as long as she is comfortable with the content

Additional info:

Someone should be checking in with sponsors to follow up and make sure that they are keeping up as well.

## 7.7 M.N.

12/1/10

1. Are you certified? Yes

2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?

Coach- bi-weekly

Sponsor- (was manager) – so daily meetings and conversations

3. How involved is your coach? Sponsor?

Both very involved, sponsor was direct manager. Coach was a master bb,

4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

Great project selection, manager picked project and he had an input on selection.

Was very important to all

5. Would you rather do a project in your own department or in another department?

Own department: all 5 projects

6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)

Using all the tools, and once he came upon a problem that's when the coach and sponsor would help

7. Are dates being set for when Tollgates are to be completed?

Concrete milestones. Set dates, helped to focus and manage time. Some of peers didn't and he thinks that could have been a problem

8. Are status reports being completed? How often?

Yes, weekly

9. Do you have prior project management experience?

Minimal, 6months managing smaller projects

10. Are your projects in your area of responsibility?

Yes, all of them

11. Is certification a part of a Green Belts performance objectives?

Yes, built into Performance Appraisal and he knew it was a big deal

12. Is certification part of the manager's performance objectives?

Not sure

13. How much time do you spend on your project? How much time would you like to spend on your project?

25% - also built into normal job so maybe more

14. Are you working on your first or second project? If second, compare.

First 3 projects: milestones & coaches

Last 2: lest frequent meetings, it was kind of part of routing for daily job

15. Have you struggled with any of the quizzes? Why?

No, not really

16. Have you attended Advanced Belt Training (ABT)?

Yes, 2. But after certification

17. If you are certified, what helped you? If not, what were your biggest obstacles?

Helped most: concrete milestones, and coaches. No skipping meetings, project was very important.

Obstacle: the fact that the projects were in different locations where he didn't work, traveling time consuming.

18. How do you feel about presentations? Are you comfortable with PowerPoint?

Good, very comfortable.

## 7.8 P.A.

12/1/10

1. Are you certified?

Yes, wave 3

2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?

Coach- bi-weekly

Sponsor- as needed

3. How involved is your coach? Sponsor?

Very engaged

Sponsor was her manager

4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

1st- not too familiar

2nd- pretty familiar

Not top priority, her daily job came 1st

5. Would you rather do a project in your own department or in another department?

6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)

Get it done!

7. Are dates being set for when Tollgates are to be completed?

She set her own dates

8. Are status reports being completed? How often?

Bi-weekly

9. Do you have prior project management experience?



Yes, team member for a BB project.

10. Are your projects in your area of responsibility?

Yes

11. Is certification a part of a Green Belts performance objectives?

Yes

12. Is certification part of the manager's performance objectives?

Yes

13. How much time do you spend on your project? How much time would you like to spend on your project?

Percentage differed week to week to meet tollgates

Not 125%, stuff was taken off plate to allow time for projects

14. Are you working on your first or second project? If second, compare.

15. Have you struggled with any of the quizzes? Why?

Only math sections

16. Have you attended Advanced Belt Training (ABT)?

All but one

Should be a requirement for GB's until they are certified.

17. If you are certified, what helped you? If not, what were your biggest obstacles?

Helped: support

Obstacle: time management, other priorities.

18. How do you feel about presentations? Are you comfortable with PowerPoint?

Uncomfortable, ABT helps!

Additional insight:

Greenbelt mentor program- great

Engagement of sponsor

Allotted 25%

Lots of help from other belts, immediate feedback

## 7.9 T.W.

12/6/10

1. Are you certified? No, wave 5

2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?

Coach: during training a couple times a month, now twice a month with new coach

Sponsor: touch base once a week

3. How involved is your coach? Sponsor?

Sponsor: involved but other day-to-day things take precedent

Coach: same

4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

Yes interested in, wish had more time.

5. Would you rather do a project in your own department or in another department?

No

6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)

Get it done, keep the ball moving

7. Are dates being set for when Tollgates are to be completed?

Yes, not very strict

8. Are status reports being completed? How often?

No

9. Do you have prior project management experience?

Formally no, informally yes

10. Are your projects in your area of responsibility?

Yes

11. Is certification a part of a Green Belts performance objectives?

No, not on PA, but personally yes

12. Is certification part of the manager's performance objectives?

Definitely not

13. How much time do you spend on your project? How much time would you like to spend on your project?

Workload not adjusted, additional 10-12% on top of daily job

14. Are you working on your first or second project? If second, compare.

1st

15. Have you struggled with any of the quizzes? Why?

No,

16. Have you attended Advanced Belt Training (ABT)?

Yes, 2

17. If you are certified, what helped you? If not, what were your biggest obstacles?

Obstacles: business group, everyone is new he has to explain everything, poor charter. Availability.

Help: fellow greenbelts

18. How do you feel about presentations? Are you comfortable with PowerPoint?

Work in progress, greenbelt are lacking in this area could use more work.

Additional info:

After training, more practice work before starting project; partner with black belt to shadow them through first couple of stages of their project and then start their own project.

More communication with prior greenbelts, mentor for first project and then your on your own for second pro

## 7.10 D.H.

12-8-10

1. Are you certified? She is a black belt wave 1, coaches several GB's

2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?

Coach: intent, once a week-actual once a month

Sponsor: once every 1-2 weeks

3. How involved is your coach? Sponsor? Very engaged- coach/sponsor

4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

New areas-priority, own area- not a priority

5. Would you rather do a project in your own department or in another department?  
Own area

6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)

Benefit/ results

7. Are dates being set for when Tollgates are to be completed?

Yes, loose dates. Rough target. Sponsor should do tollgate schedules

8. Are status reports being completed? How often?

No

9. Do you have prior project management experience?

Most belts do not

10. Are your projects in your area of responsibility? n/a

11. Is certification a part of a Green Belts performance objectives?

Not sure

12. Is certification part of the manager's performance objectives?

Not sure, but more likely

13. How much time do you spend on your project? How much time would you like to spend on your project?

Workload adjusted, but not adjusted enough. They spend on average 5% of their time on a project.

Its not a priority and they don't have project management experience

14. Are you working on your first or second project? If second, compare. n/a

15. Have you struggled with any of the quizzes? Why?

4 out of 24 might fail, on average about 1-2

16. Have you attended Advanced Belt Training (ABT)?

Maybe 20% attend one

17. If you are certified, what helped you? If not, what were your biggest obstacles?

An educated. Engaged sponsor- help most

Obstacle- not having a good sponsor

18. How do you feel about presentations? Are you comfortable with PowerPoint?

Belts need help with this, some are good.

Additional info:

Project management experience, resource management, and schedule management, time management

GB selection and project selection

Before becoming a greenbelt they should be a part of a black belt project in order to become more familiar with the process.

Project selection: some p

## 7.11 D.B.

12/6/10

1. Are you certified?

2, not certified, 5-6 projects, currently active

2. How often do you meet with your sponsor? Coach? How often would you like to meet with them? Sponsor, talk to everyday. Coach, don't talk often they are in different locations

3. How involved is your coach? Sponsor?

Coach-not very involved, sponsor-very involved

4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?

Project is priority. Not really in his area, not great interest.

5. Would you rather do a project in your own department or in another department?

Doesn't really matter he is all over the place

6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)

Getting it done, according to plan.

7. Are dates being set for when Tollgates are to be completed?

Yes, but not always met

8. Are status reports being completed? How often?

On first project yes, on the rest not really

9. Do you have prior project management experience?

Yes

10. Are your projects in your area of responsibility?

Not really, they are all over the place

11. Is certification a part of a Green Belts performance objectives?

No

12. Is certification part of the manager's performance objectives?

No

13. How much time do you spend on your project? How much time would you like to spend on your project?

2 hours a week if he's lucky

Workload not adjusted, projects are additional

14. Are you working on your first or second project? If second, compare.

15. Have you struggled with any of the quizzes? Why?

No

16. Have you attended Advanced Belt Training (ABT)?

No

17. If you are certified, what helped you? If not, what were your biggest obstacles?

Time management is the biggest problem

Tools learned in greenbelt training, helped the most.

18. How do you feel about presentations? Are you comfortable with PowerPoint?

Comfortable, not a problem

## 7.12 G.I.

## Deployment Leader

11/08/2010

1. Are you certified?
  - Yes
2. How often do you meet with your sponsor? Coach? How often would you like to meet with them?
  - Tries to get belts to meet at least bi-weekly.
3. How involved is your coach? Sponsor?
  - His sponsor was good. Says sponsors need to be involved in order for projects to be a success.
4. How do you feel about your projects? Is it a priority? Are you interested? Is your boss interested?
  - First priority but not main one.
5. Would you rather do a project in your own department or in another department?
  - Yes in own department.
6. What is encouraged most? (Ex. max value, tests & quizzes, project completion)
  - Getting project completed in timely fashion, but make sure to get it done correctly.
7. Are dates being set for when Tollgates are to be completed?
  - Yes, but sometimes the dates aren't met, but rescheduled.
8. Are status reports being completed? How often?
  - Yes weekly.
9. Do you have prior project management experience?
  - Yes, and believes it is beneficial if belts have experience as well.
10. Are your projects in your area of responsibility?
  - They were.
11. Is certification a part of a Green Belts performance objectives?
  - Depends on belt and sponsor.
12. Is certification part of the manager's performance objectives?

- Sometimes it is, again depends on belts.
13. How much time do you spend on your project? How much time would you like to spend on your project?
- Belts need to get time off (25%) from their day job boss.
14. Are you working on your first or second project? If second, compare.
- Done
15. Have you struggled with any of the quizzes? Why?
- No
16. Have you attended Advanced Belt Training (ABT)?
- Yes believes it is beneficial for belts to attend once or twice a year if possible.
17. If you are certified, what helped you? If not, what were your biggest obstacles?
- Timing.
18. How do you feel about presentations? Are you comfortable with PowerPoint?
- Yes very comfortable.

#### Main Ideas

1. Right selection of belts at the right time (enough people working in their department so they can take time off, 25%, to complete projects)
2. Ask and get help whenever possible and needed.