Project MetaGuest

Office: Predict 475 Project Management

Senior Project Overseer: Dan Roth

Division: Section 55

Time: Winter Quarter

School of Continuing Studies

Northwestern University

.....

Project Manager: Daniel Prusinski

Business Intelligence Data Analyst

Target Corporation

Minneapolis, MN

In Compliance with Master of Science Predictive Analytics

Executive Summary

In 2013, over 185 million unique quests shopped at Target in the US and Canada. Of the 185 million guests, Target was able to personally identify 122 million individuals. Understanding guest behavior is a top goal for 2014, but as of now there is no report to monitor basic guest behavior metrics through time. As Target continues to advance along the analytical model, trending guest behavior over time is the next hurdle to successfully garner maturation and business aptitude in the changing retail marketplace.

The following major goals were successfully completed in 2013 that now makes it possible to analyze guest behavior in a time context:

- Establishment of Stable Guest Logic on all Guest Data
- Migration to Teradata Warehouse that Optimizes Query Metrics
- Greater than 50% Identification Rate for Overall Target Guests

As a result of the above accomplishments, project MetaGuest will allow Merchants to see a more complete story of core guest behavior at Target in a report including:

- Spend Per Trip Based on Personal Identification Segments through
- Trips Per Month/Week/Annual Based on Demographic Profile through Time
- Item Purchases Based on Specific Customer Segments through Time

In the past, Target could only see static snapshots of guest behavior, but project MetaGuest will allow the business to see the guest in color (behaviors, buying patterns, loyalty) for the first time.

Project MetaGuest falls within the 2014 roadmap for success and lies within the matrix run innovation project guidelines. In order to reap as much benefit as possible, this project is time constrained. All resources and infrastructure are supplied within the Target organizational structure.

As a result of the events that unfolded over the holiday season, Target has an urgent need to understand how and where guest behavior has changed. Project MetaGuest will answer these questions front and center. Now is the time to better equip merchants with tools to navigate the ambiguous business situation. Thank you for taking the time to review the project plan for MetaGuest.

Table of Contents

Executive Summary	2
Project Scope Statement	4-5
Priority Matrix	6
Work Breakdown Structure	7
Cost and Time Estimate	8-10
Activity Order	11
Gantt Chart Baseline	12
Activity On Node	13
Project Baseline Budget	14
Cumulative Baseline Budget	15
Communication Objectives	16-18
Communication Plan	17
Register	18
Risk Assessment Matrix	19
Risk Response Matrix	19
Project Organization	20
Feasibility	21
Integration	22
Appendix 1: Project Proposal	9-11
Preliminary Budget and Resources	24
Responsibility Matrix	25
Appendix 2: Risk Breakdown Structure	26-29
Risk Severity Matrix	27
Change Control Process	28
Change Request Form	29
Appendix 3: Human Resources Management Plan	30-34
Staff Management Plan	31
Schedule Management Plan	32-34
Appendix 4: Leadership and Project Management Experiences	34-36
Appendix 5: Earned Value Analysis (EVA) Schedule	36-38
Status Report.	38

Project MetaGuest Scope Statement

1. Project Objective:

Develop an automated, self-emailing, report that focuses specifically on the current state of the Target guest through trending key meta metrics about guest data. The project is to be fully completed, iterated, and user functional by December 2014 and resources are all to be derived internally at Target at no outside additional cost.

2. Deliverables:

MetaGuest is a technical project that is better suited for a process breakdown structure (PBS) broken in to key phases. The deliverables will follow each major phase and are outlined below-

- > Analysis Establish key metrics to be trended overtime, and the time interval for which the analysis will be based. The metrics are not to exceed fifteen an shall have no less than ten in the report.
- > Design Have three different dashboard designs and feedback from key stakeholders and intended users.
- > Construct Final version of code vetted, documented, and synthesized with reoccurring reporting team.
- > Test Run report over four weeks, with at least three participating team member and no more than seven, to assess overall effectiveness as well as make iterations.
- > Rollout Schedule, present, and collect feedback on three different presentations for key stakeholders as well as intended users.

3. Milestones:

In developing important milestones for MetaGuest, natural benchmarks within Target process flow are documented below-

- March 21 Project Charter Acceptance, Manager
- ➤ March 31 Multi-Department Project Acceptance
- ➤ May 14 Key Metrics Established
- June 14 Dashboard Design Approved
- July 30 Final Documentation of Standardized Code
- > August 18 Final Iterations Complete
- > September 15 Presentations
- October 15 End User Feedback
- ➤ November 15 Hand in Completed Project Documentation

4. Technical Requirements:

Target is in the midst of migrating from an IBM database to Teradata, and will require duplicative coding efforts and specifications in order to meet the project objective within the timeframe

- > Establish how stable quest logic will be applied to MetaGuest
- Define where MetaGuest will reside post-project
- > Create coding that minimizes creating irrelevant tables
- > Define whether excel, SAS, or Tableau is the best dashboard tool
- Reporting requirements must meet specified bandwidth
- > Table pulls must follow changing requirements
- Code needs to be written in an EDW and ADW format.
- Delivery method must be a push rather than a pull for end users

5. Limits and Exclusions:

In an effort to focus on the expectations of MetaGuest, the limits and exclusions are detailed below:

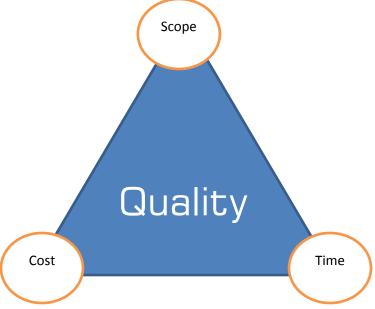
- MetaGuest will contain only Guest data, and no POS data
- The report is objective across all divisions without customization
- > End users are responsible for ad-hoc additional metrics
- Creating a storage repository is not included in MetaGuest
- > Intended end users are Guest Insights and Division Insights
- Healthcare data will not be included
- > Target Canada data will not be included
- Email notification and centralize posting is the means of delivery

6. Review with Management: James Nelson

Before moving forward, communication and iterations to the project scope statement must be resolved in an effort to be of one accord. Deadline for Review with Management resolve is 4/23/2014.

MetaGuest Priority Matrix

Project efficacy is helpfully demonstrated from the graphic below:



The priority matrix below details how the three attributes are prioritized.

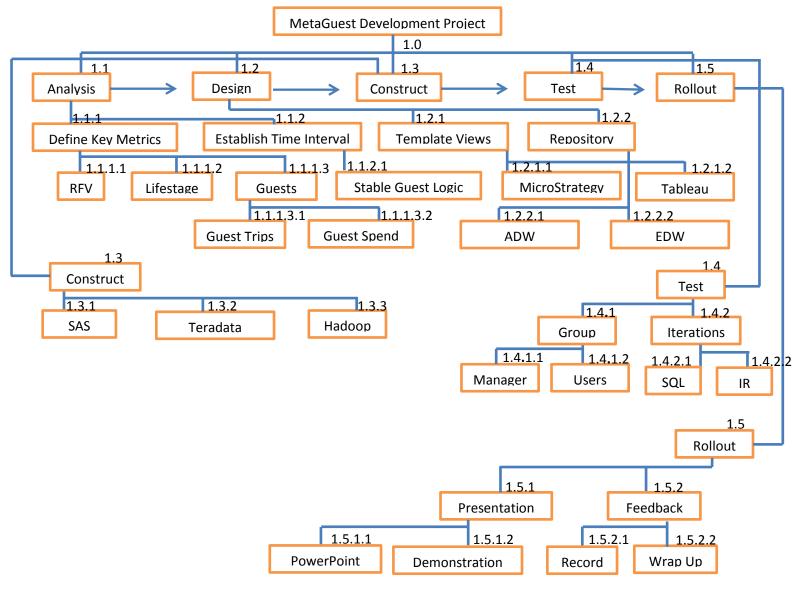
	Time	Performance	Cost
Constrain	X		
Enhance		X	
Accept			X

Accept: Tolerable *not* to meet the original parameters.

Enhance: During the project, enhancements can be made to this parameter.

Constrain: This parameter must be met.

Process Breakdown Structure for project MetaGuest



Outputs:

Analysis Phase Deliverables: **Analysis Document** RFV Breakdown Lifestage Analysis **Guest Trip Segmentation Guest Spend Segmentation** Stable Guest Logic Interval

Design Phase Deliverables: MicroStrategy View **Tableau View ADW Data Repository EDW Data Repository**

Construct Phase Deliverables: SAS Code Written Teradata Code Written **Hadoop Code Written**

Test Phase Deliverables: **Test Document** Manager Testing Feedback User Feedback Coding Iterations SQL Coding Iterations IR

Rollout Phase Deliverables: Physical/Electronic PowerPoint Pre-Code Embedded in PP Document Feedback from Users Iterate in SQL

	Time-Cost Labor Estimates											
WBS ID	Task Description	Estimate (hrs)	Estimating Approach	Estimated Duration (hrs)	Estimated Interruptions (hrs)	Total Duration (hrs)	Labor Rate \$/hr	Labor Cost Total \$				
1.0	MetaGuest Project	200	Bottom Up (BU)	264.0	64.0	328.0	50, 65, 75, 150	\$ 24,200				
1.1	Analysis	6	BU Template	6.0	2.0	8.0	\$65	\$ 520				
1.1.1	Define Metrics (Calculate)	4	BU Template	4.0	4.0	8.0	\$65	\$ 520				
1.1.1.1	RFV (Compile)	5	BU Template	5.0	1.0	6.0	\$50	\$ 300				
1.1.1.2	Lifestage (Build)	5	BU Template	5.0	1.0	6.0	\$50	\$ 300				
1.1.1.3	Guests (Assemble)	10	BU Template	10.0	2.0	12.0	\$75	\$ 900				
1.1.1.3.1	Guest Trips (Calculate)	6	BU Template	6.0	2.0	8.0	\$75	\$ 600				
1.1.1.3.2	Guest Spend (Compile)	4	BU Template	4.0	-	4.0	\$75	\$ 300 \$				
1.1.2	Establish Time (Compile)	2	BU Template	2.0	-	2.0	\$65	\$ 130				
1.1.2.1	Guest Logic (Calculate)	8	BU Template	8.0	2.0	10.0	\$75	\$ 750 \$				
1.2	Design (Compile)	6	BU Template	6.0	2.0	8.0	\$65	- \$ 520				
1.2.1	Template Views (Build)	2	BU Template	2.0	-	2.0	\$65	\$ 130				
1.2.1.1	Microstrategy (Build)	4	BU Template	4.0	-	4.0	\$50	\$ 200				
1.2.1.2	Tableau (Build)	6	BU Template	6.0	1.0	7.0	\$75	\$ 525				
	. ,		BU Template			-	-	\$ -				

1.2.2	Repository (Document)		BU Template			-		\$ -
1.2.2.1	ADW (Build)	8	BU Template	8.0	2.0	10.0	\$75	\$ 750
1.2.2.2	EDW (Build)	8	BU Template	8.0	2.0	10.0	\$75	\$ 750
						-		\$ -
1.3	Construct (Document)	6	BU Template	6.0	1.0	7.0	\$65	\$ 455
1.3.1	SAS (Coding)	4	BU Template	4.0	-	4.0	\$75	\$ 300
1.3.2	Teradata (Coding)	6	BU Template	6.0	1.0	7.0	\$75	\$ 525
1.3.3	Hadoop (Coding)	8	BU Template	8.0	2.0	10.0	\$75	\$ 750
						_		\$
1.4	Test (Document)	4	BU Template	4.0	-	4.0	\$65	\$ 260
1.4.1	Group (Compile)	2	BU Template	2.0	-	2.0	\$65	\$ 130
1.4.1.1	Manager (Trial)	8	BU Template	16.0	4.0	20.0	\$150	\$ 3,000
1.4.1.2	Users (Trial)	8	BU Template	24.0	8.0	32.0	\$65	\$ 2,080
	Cocro (Trial)		Bo Template	21.0	0.0		703	\$
1.4.2	Iterations (Document)	10	BU Template	20.0	8.0	28.0	\$65	\$ 1,820
1.4.2.1	SQL (Coding)	12	BU Template	24.0	6.0	30.0	\$75	\$ 2,250
1.4.2.2	IR (Coding)	12	BU Template	24.0	6.0	30.0	\$75	\$ 2,250
	(5545)		20 Template	2 1.0	0.0	-	7,3	\$
1.5	Rollout (Document)	4	BU Template	6.0	1.0	7.0	\$65	\$ 455
1.5.1	Presentation (Build)	8	BU Template	8.0	2.0	10.0	\$65	\$ 650
1.5.1.1	PowerPoint (Compile)	4	BU Template	4.0	-	4.0	\$65	\$ 260
1.5.1.2	Demonstration (In Person)	6	BU Template	8.0	2.0	10.0	\$65	\$ 650
1.J.1.2	1 613011)		BO Telliplate	0.0	2.0	10.0	دەد	\$

1.5.2	Feedback (Document)	4	BU Template	4.0	_	4.0	\$65	\$ 260
1.5.2.1	Record (Compile)	6	BU Template	8.0	2.0	10.0	\$65	\$ 650
1.5.2.2	Iterate (In Person)	4	BU Template	4.0	-	4.0	\$65	\$ 260
						-		\$ -
						-		\$
		<u> </u>	Top Dow	n Estimatior	<u> </u>			
1.3	Construct (Document)	2	Consensus	2.0	-	2.0	\$65	\$ 130
1.3.1	SAS (Coding)	4	Consensus	4.0	-	4.0	\$75	\$ 300
1.3.2	Teradata (Coding)	4	Consensus	4.0	-	4.0	\$75	\$ 300
1.3.3	Hadoop (Coding)	4	Consensus	6.0	1.0	7.0	\$75	\$ 525
	Total	14		16	1	17		\$ 1,255

Target's Business Intelligence has been building reports for over five years. MetaGuest has similar components to past projects based on the overall objective of creating a report. The analysis, coding, design, testing, and rollout aspects of the project have prior templates. The difference in this report is that the metrics being reported on are newly developed in addition to the Hadoop software interface. From researching in Project Management (Larson & Gray), the Template Method of Bottom-Up Approaches is the best suited method for estimation with MetaGuest. Given that many of the processes in the project have past information and templates, it is logical and efficient to use this estimation method.

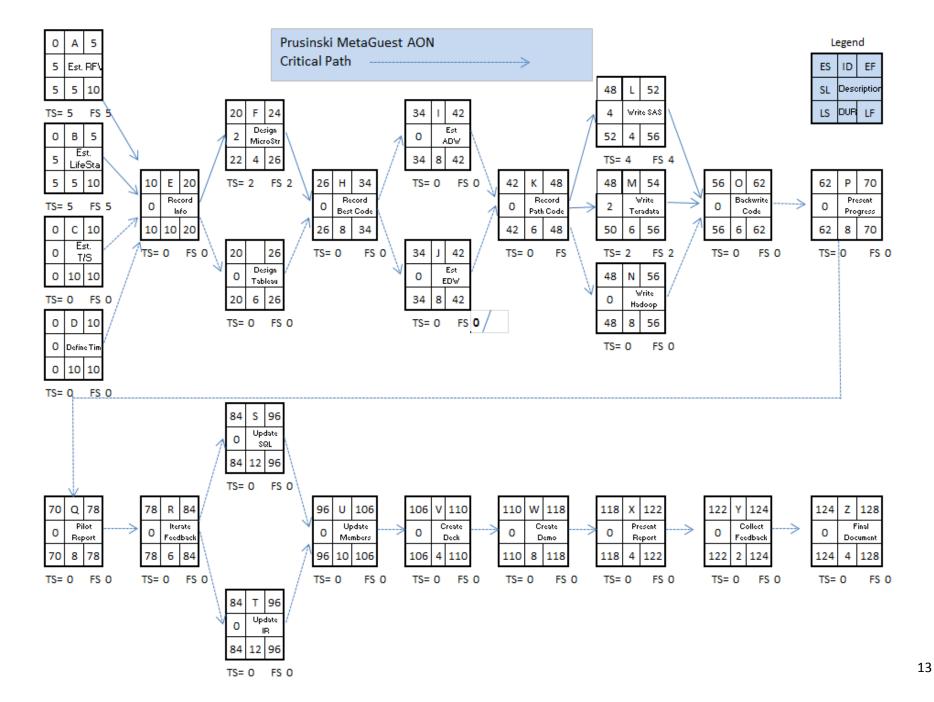
In an effort to explore an additional estimation method, I used the Top-Down approach and the Consensus method. This project is small enough that the Delphi Method is not necessary. In my opinion, management shortchanged the project package. The issue is most evident in the Teradata and Hadoop coding aspects. Management is applying the same number of hours for all three coding languages. The issue is that Teradata and Hadoop are brand new languages to Target and the systems do not run as smoothly as SAS. The shortcoming is that management is not aware of this nuance and shortchanged this process.

	MetaGuest Activity Order										
Activity	WBS Code	Hours	Description	Preceding							
А	1.1.1.1	5	Establish Guest RFV Breakdown from Demo Table Data	None							
В	1.1.1.2	5	Establish Lifestage Breakdown from Guest Table	None							
С	1.1.1.3	10	Guest Trips and Spend from Transaction Table (Very Similar Table)	None							
D	1.1.2 1.1.2.1	10	Trend Stable Guest Logic for Weekly Interval	None							
E	1.1 1.1.1	10	Document Key Metrics for MetaGuest as Best Practice (Milestone)	A,B,C,D							
F	1.2.1.1	4	Design MicroStrategy Dashboard using Key Metrics	E							
G	1.2.1.2	6	Design Tableau Dashboard using Key Metrics	E							
Н	1.2 1.2.1	8	Document Dashboard Code in Best Practice Format	F,G							
I	1.2.2.1	8	Establish connection/network for Analytical Data Warehouse	Н							
J	1.2.2.2	8	Establish connection/network for Enterprise Data Warehouse	Н							
K	1.2.2	6	Document Data Warehousing Code in Best Practice Format	I,J							
L	1.3.1	4	Write SAS code for Dashboard/Key Metrics	K							
М	1.3.2	6	Write Teradata code for Dashboard/Key Metrics	K							
N	1.3.3	8	Write Hadoop code for Dashboard/Key Metrics	K							
0	1.3	6	Back Interpret All Aspects of SAS, Teradata, Hadoop	L,M,N							
Р	1.4.1.1	8	Demonstrate/Explain Initial Report for Management	0							
Q	1.4.1.2	8	Pilot Initial Report with Specific Users	Р							
R	1.4 1.4.1	6	Document Findings from Management and Users	Q							
S	1.4.2.1	12	Make Iterations to Overall Project Utilizing SQL Language	R							
Т	1.4.2.2	12	Make Iterations to Overall Project Utilizing IR Language	R							
U	1.4.2	10	Make Iterations Known to Management and Users	S,T							
V	1.5.1.1	4	Create PowerPoint for Official Rollout Presentation	Ü							
W	1.5.1	8	Create Demonstration and Integrate into PowerPoint	V							
Х	1.5.1.2	4	Run Presentation with Management and Users	W							
Υ	1.5.1.2	2	Collect Feedback from Management and Users	Х							
Z	1.5	4	Wrap-up All Aspect of Project into Electronic and Physical Copies	Y							

Gantt Chart Baseline

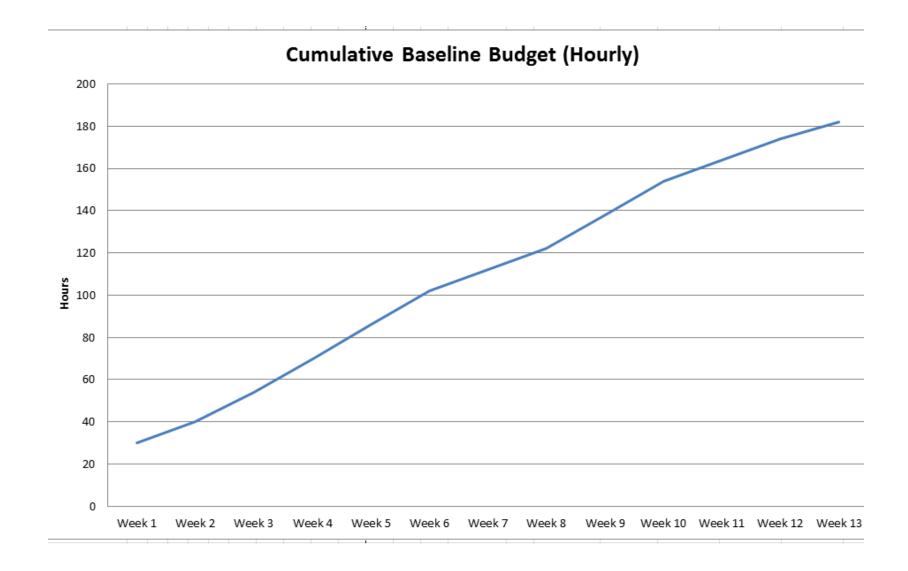
	Duration		Budget												_	
ID		Task	(Hours)						Wee	ks						
				1	2	3	4	5	6	7	8	9	10	11	12	13
Α	5	Establish Guest RFV	5													
В	5	Establish Lifestage	5													
С	10	Guest Trips and Spend	10													
D	10	Trend Stable Guest Logic	10													
E	10	Document Key Metrics	10			l										
F	4	Design MicroStrategy	4													
G	6	Design Tableau	6													
Н	8	Document Dashboard	8													
1	8	Establish ADW	8													
J	8	Establish EDW	8													
K	6	Document Data	6													
L	4	Write SAS code	4													
M	6	Write Teradata code	6													
N	8	Write Hadoop code	8													
0	6	Back Interpret	6													
Р	8	Report for Management	8													
Q	8	Pilot	8													
R	6	Document Findings	6													
S	12	Make SQL Iterations	12													
Т	12	Make IR Iterations	12													
U	10	Showcase Changes	10													
V	4	Create PowerPoint	4													
W	8	Create Demonstration	8													
X	4	Run Presentation	4													
Υ	2	Collect Feedback	2													
Z	4	Wrap-up	4													
Total	182	Week Total (Ho	ours)	30	10	14	16	16	16	10	10	16	16	10	10	8
		Running Total (F	Hours)	30	40	54	70	86	102	112	122	138	154	164	174	182





<u>Project Baseline Budget</u>

	Duration		Budget													
ID		Task	(Hours)						Wee	ks						
				1	2	3	4	5	6	7	8	9	10	11	12	13
Α	5	Establish Guest RFV	5	5												
В	5	Establish Lifestage	5	5												
С	10	Guest Trips and Spend	10	10												
D	10	Trend Stable Guest Logic	10	10												
E	10	Document Key Metrics	10		10											
F	4	Design MicroStrategy	4			4										
G	6	Design Tableau	6			6										
Н	8	Document Dashboard	8			4	4									
1	8	Establish ADW	8				6	2								
J	8	Establish EDW	8				6	2								
K	6	Document Data	6					6								
L	4	Write SAS code	4					2	2							
M	6	Write Teradata code	6					2	4							
N	8	Write Hadoop code	8					2	6							
0	6	Back Interpret	6						4	2						
Р	8	Report for Management	8							8						
Q	8	Pilot	8								8					
R	6	Document Findings	6								2	4				
S	12	Make SQL Iterations	12									6	6			
T	12	Make IR Iterations	12									6	6			
U	10	Showcase Changes	10										4	6		
V	4	Create PowerPoint	4											4		
W	8	Create Demonstration	8												8	
X	4	Run Presentation	4												2	2
Υ	2	Collect Feedback	2													2
Z	4	Wrap-up	4													4
Total	182	Week Total (He	ours)	30	10	14	16	16	16	10	10	16	16	10	10	8
		Running Total (F	Hours)	30	40	54	70	86	102	112	122	138	154	164	174	182



MetaGuest Communication Objectives

The project scope statement is the first communication piece that needs to be agreed upon by management. Additional information needed for the success of MetaGuest is detailed below:

Reporting Requirements- Desired metrics, calculations for metrics, and interval requirements need to be gathered in the analysis phase. The project manager will refine the requirements with the key manager and finally communicated to a few of the end users. The information will be stored on the project managers folder on Target's public hard drive space. Unless noted, the information is public, but does not need to be broadcasted. The final reporting requirements will be communicated with the end users at the end of the analysis phase in the monthly status meeting.

Design Information Communication - The Reporting Team will need to know the established reporting requirements prior designing the report for MetaGuest. A PowerPoint will be assembled by the Project Manager to communicate the reporting requirements, which will be stored in an Excel Table. There are no privacy concerns for the reporting team. The information will be communicated in a presentation with hard copied available and soft copies sent out after the meeting.

Construction Information Communication - Writing the code for MetaGuest will require a few analysts. SAS will be the primary tool for writing the code and communication will be done in person and through email. At this point authors of the code will include James Nelson, Jacob Yunker, Daniel Prusinski, and Senthilkumar Subramanian. It is vital that the code be well documented by each programmer so that collaboration ensues. Weekly iterations will be highlighted in an email with documentation communicating why the changes were necessary.

Testing Information Communication – As the report is tested, users will record comments and suggestive iterations on a provided form electronically. The goal is to have a seamless turnaround time, and not become bogged down with expansive changes. Potential changes will be vetted with management before making final iterations in a meeting with the project manager. The presentation will entail a PowerPoint presentation and soft copy in the form of word document tracking proposed changes.

Rollout Communication – The rollout will take place in a monthly team meeting, and management will introduce MetaReport to the whole team. This will be done in a PowerPoint presentation, and the end users present will get a copy of the actual report during the meeting. At the end of the meeting, the end users will have a physically provided form to fill out seeking feedback and general comments. These comments will be synthesized by the project management into a Word document and shared with the manager in an in person meeting.

Communication Plan

What	Target	When	Method	Tool for
Information	Audience			Communication
Scope	Project	Once, first	Email with	Word
Statement	manager, key	week	hardcopy	
	stakeholders			
Project Plan	Key	Once, mid	Email,	Word
	stakeholders,	March	hardcopy	
	management			
Key Metric	End Users	Weekly during	Email, and	Word,
Findings		analysis	presentation	PowerPoint
		phase		
Milestone	Project	Biweekly	Email	Office
Update	manager, key			
	stakeholders			
Project	Manager	Weekly	In person	Word
Update				
Cross-	Reporting,	Monthly	In person	PowerPoint
functional	Guest &		meeting	with Word
team update	Division			сору
	Insights			
Design	Manager, End	Weekly,	Working	PowerPoint
Template	Users	during Design	meeting, and	and
		Phase	email	Word/Tableau
Developed	Data Analysts	When needed	Email, text	SAS
Code		during	editor	
		construct		
		and test		
		phases		0.40
Beta	Manager,	Weekly during	Email, in	SAS, and email
MetaReport	Testing Team	testing phase	person	dashboard
Issues and	Manager, key	When needed	Email and	Word, Office
Delays	stakeholders	\^/	meeting	///a.a.d. Off:
Accepted	Project	When needed	Email or	Word, Office
Changes	Manager	\\/\.	meeting	CAC
Final Product	End Users,	Weekly, in	Email or	SAS, or
	and	rollout phase	centralized	Tableau
	Management		location	

MetaGuest Register

		STAKEHO	LDER REGISTER for N	letaGuest	
	Name	Designation/Title	Dept	Role	Interests
	Colleen				
1	Theisen	Sr. Manager	MMBI	Manager	Team Head
2	James Nelson	Manager	MBI	Direct Manager	Key Benefactor
1	Mark	Wanager	IVIDI	Key	Rey Belleractor
3	VonOven	Director	BI&A	Stakeholder	Next Level of Analytics
				Oversees	,
4	Dan Ryks	Reporting Manager	MMBI	Reporting	Reporting Aspect
5	Jarrett Reed	Division Insights	MBI	End User	End User
		Type/Frequency of			
	Name	Communication	Contact	Influence	Power
	Colleen	5 11/00 111			
1	Theisen James	Email / Monthly	E-mail	Management	Resouce and Authority
2	Nelson	In Person / Weekly	E-mail	Resources	Direct Team Authority
	Mark				Manages all Aspects of
3	VonOven	Written out/ Quarterly	Email	Little	Project
4	Dan Ryks	Template / Weekly	E-mail	None	Will run future reports
5	Jarrett Reed	Presentation / Daily	E-mail	Design	Little
	Nome	Evacatations	Internal/Externa		
	Name Colleen	Expectations	I	1	
1	Theisen	Keep Updated	Internal		
	James			1	
2	Nelson	Key Point of Contact	Internal		
	Mark				
3	VonOven	Only Key Updates	Internal	4	
4	Dan Ryks	Build Template	Internal		
5	Jarrett Reed	Testing and Roll Out	Internal		

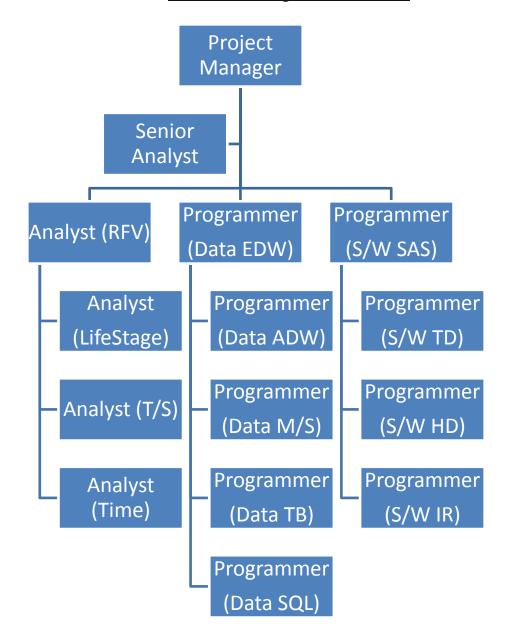
Risk Assessment Matrix

			Detection	
Risk Event	Likelihood	Impact	Difficulty	When
Server Space	4	3	2	Start-Up, Rollout
MicroStrat Crash	4	2	5	Design
Programmer	3	3	3	Construct, Test,
Quitting				Rollout
IR Failure	1	5	5	Testing
(Hardware)				
User Backlash	3	4	2	Rollout

Risk Response Matrix

		Contingency	Trigger	
Risk Event	Response	Plan		Responsible
				Party
Server Space	Change data dump	Upload initial	Exceed initial	James Nelson with
	locations, contact	design to Target	capacity	the Support of
	TTS immediately	Cloud Space		Daniel Prusinski
MicroStrat Crash	Submit tick to TTS	Run code through	Too many reports	Ryan Ruffcorn
		SAS environment	running on system	Dan Ryks
Programmer	Alert director	Have two	Lack of	Daniel Prusinski
Quitting		contractors	communication	Colleen Theisen
		briefed.	and unknown	
IR Failure	Transfer code to	Back up all code	Hardware fails	Mark VonOven
(Hardware)	new hardware	on externally		

MetaGuest Organization Chart

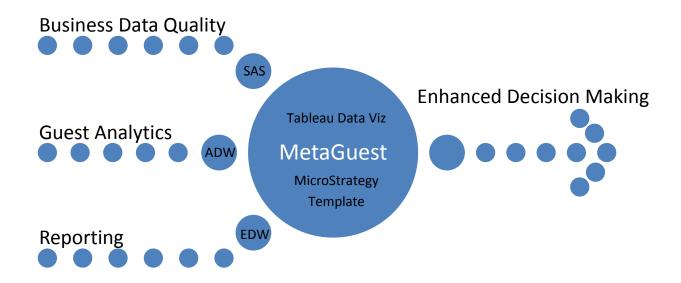


Feasibility

The integration of reporting at Target Corporation has been a refined process for over five years. As greater insights are extrapolated from ad hoc analytical requests, specific analyses are beneficial for the entire organization and have the need to be updated through time. Given that the reporting structure already exists within Target, and business stakeholders are accustomed to reporting requirements and metrics, project MetaGuest will acquiesce well within Target's culture. The metrics being standardized over time are Trips and Spend utilizing stable guest logic. All three of these metrics exist independent of each other, but have not been incorporated into a relational report shown linearly. Given that these metrics are not knew to Target, the programming and analytical component is very feasible along with the data warehousing requirements. The data required for project MetaGuest is strictly internal to Target and relies on the Guestld as the primary key, which does not put personal information at risk. Departments consisting of Reporting, Business Data Quality, and Guest Analytics are all involved with project MetaGuest and these department have worked together on recent projects.

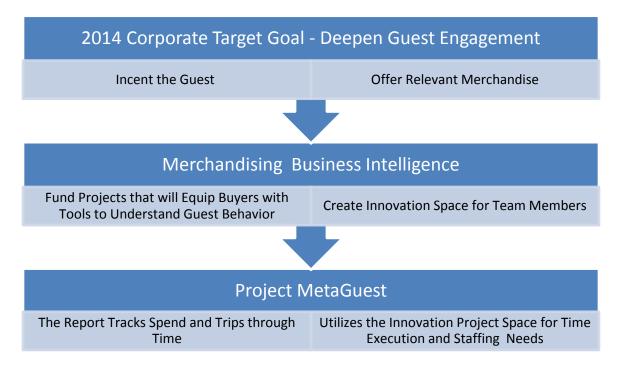
Time is the most stringent factor for project MetaGuest. As seen in the AON, simultaneous coding is utilized along with best practice documentation immediately following each coding cluster to efficiently monitor and check the most integral and time consuming aspects of project MetaGuest. The time interval for individual contribution is based at 25 percent of the analysts and programmers daily schedule, which fits within Target's matrix organization as well as allows for more time to be added if extenuating circumstances become present.

Project MetaGuest is well suited for success within Target's reporting requirements based on the established reporting infrastructure, existing hard/software, and matrix project integration culture. The diagram below shows the smooth nature of project MetaGuest.



Integration

The feasibility diagram also parlays well with the physical integration project MetaGuest will have within Target's organization. Within the corporate roadmap for 2014, the integration is best shown in the additional diagram below.



Project MetaGuest fits well within the current road map for success in that it delivers a tool that merchants can use to better understand guest engagement. The tool will be used to understand behavior patterns around incentives as well as merchandise purchasing patterns. As the tool roles out for use, presentations will be made to key merchants that have asked to pilot this report. The overall integration for project MetaGuest follows the 2014 roadmap for success and utilizes existing channels of infrastructure, behavior patterns, and relationship to ensure optimal reporting penetration.

Appendix 1: Project Proposal

Target Corporation is a billion dollar retail company. With over 1,200 stores nationwide, millions of guests shop Target daily. One strategic initiative senior leadership has road-mapped for 2014 is deepening quest engagement. Management within my department, Merchandising and Marketing Business Intelligence (MMBI), has asked me to create a project plan for better defining and monitoring overall guest behavior data at target in the form of a report that shows key metrics about our guests over time.

I will name this project MetaGuest based on the overall desired outcome for information about guest data to be fed to team members in a concise report. As of January 8, 2013 my manager, James Nelson, is the official project sponsor. The current stakeholder groups include the following:

Guest Insights (GI) – Target's MMBI team that represents guest data.

Division Insights - Similar to GI, but works with merchandising divisional leadership on guest data requests.

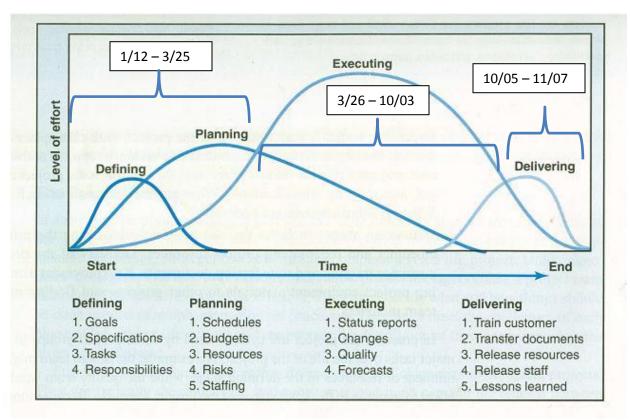
Reporting – Coordinates and executes reporting for MBI.

Business Data Quality (BDQ) – Represents Target's importation and cleaning of data.

Division Insight Leaders (DILs) - Communicate the desired outcomes for guest data.

As Target aims to meet growing consumer demands, understanding changing behaviors aptly translates to thriving and surviving in the retail environment. Currently, Target has built many tools for extracting guest information and classification categories for different types of guests. The next step for Target reaching its goal of deepening guest engagement through data-driven analytics is understanding changes in guest behavior and predicting future outcomes. The overall value project MetaGuest brings is the next step in analytical capability for Target through quantifying guest behavior through time.

The key project constraints at this point include cost, schedule, budget, and resources. Each constraint will require further iterations given that the project is being preliminarily scoped. The costs to Target at this point include no outside purchases of software, consulting, or products, but rather cost internal time, and resources. I would expect two hours a week for 2014 in regard to my personal schedule, as well as 2 hours a week of other team members through the process. Total time cost is estimated at 200 hours. Given that the new reporting to be established will take place within pre-existing innovation space via data tables and software, the costs are considered sunk costs and do not entail an extra cost. Over the next ten weeks further planning of project MetaGuest will take place and implementation will begin four weeks after the project plan is accepted. Preliminarily, March 25th is the planned date to begin implementing the project. Final feedback on the project is expected the first week of October. Please refer to the diagram below for a more detailed schedule.



http://filebox.vt.edu/users/alanma/bit3434/pm2chart.JPG

The preliminary budget and resources can be seen below:

Item	Cost	Rationale
Microsoft Project	License Fee	Primary Tool for
		Communication
Meeting Rooms	NA	Team Meetings
Tables, Views, and	Internal Team Time	End Product
Reports		Development
Team Member Hours	200 Team Hours	Primary Work of Project

Overall expectations include: the project will include iterations, reporting development will require collaboration between the five stakeholders, and as the project develops additional resources will be allocated to fulfill needs. Assumptions include mutual buy-in from the stakeholders, flexibility in the reporting requirements, and mutual benefit to MMBI as the report becomes available. Given the data breach during the holiday season, impact reporting will be purposely excluded.

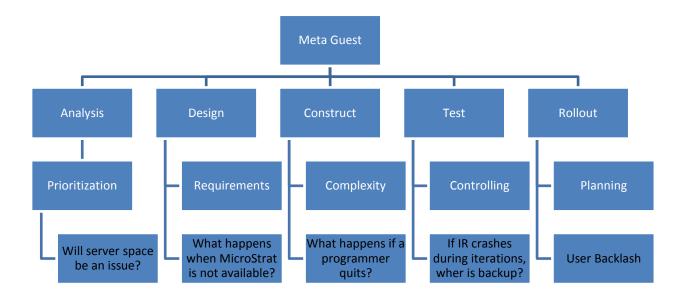
Project organization includes: Dan Prusinski – project manager, James Nelson – project funder, Jacob Yunker – guest data coordinator, Alex Miller – implementation coordinator, Ryan Ruffcorn – reporting coordinator, Carl Cooley – division insights coordinator, Jarrett Reed – DIL coordinator. The responsibility matrix can be seen below:

Task	James	Dan	Alex	Jacob	Carl	Ryan	Jarrett
Identify Target Guest Metrics for	R	S		S	S		S
Reporting							
Develop Report Template		S				R	
Pilot Report		R				S	
Create re-occurring reporting		S				R	
schedule							
Present Reporting Tool		R	S				
Create Predictive Models based	S	R		S	S		
on Report							
Present Key Findings to	R	S					S
Management							
Provide Documentation for	S	R	S				
Iterations							
Responsible = R		•		•	•		
Support = S							

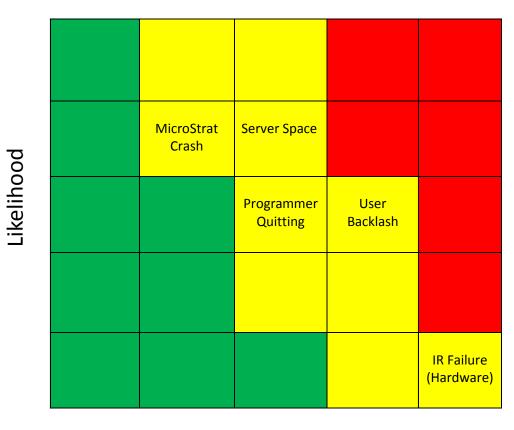
Support = S

At this point in project MetaGuest, management is working closely with the project manager to develop and scope the overall plan. Iterations are expected to sharply shape the project planning in the next two weeks.

Risk Breakdown Structure



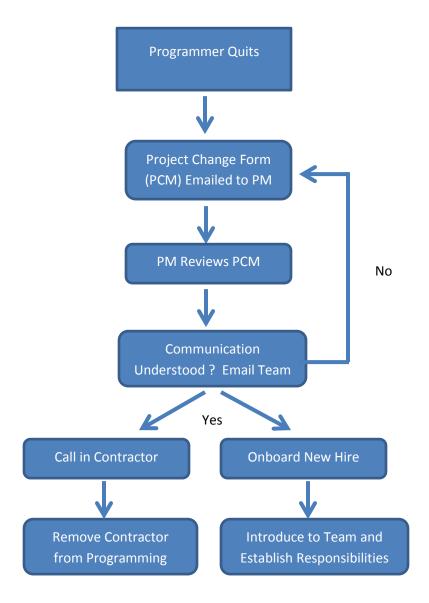
RISK SEVERITY MATRIX





- Red zone (major risk)
- Yellow zone (moderate risk)
- Green zone (minor risk)

Change Control Process



MetaGuest Change Form									
Requestor Name: Kyle Kruegger Date: 2/6/2014 Request #: 1									
Type of Request: Please put in Subject line of email along with Change Form: Urgent <u>Moderate</u> Low Impact									
Change Requested by/Date: 2/18/2014									
Description of Requested Change: Robert has decided to pursue opportunities elsewhere, I will begin the hiring process on Monday.									
Reason for Change: Better commuting for his family.									
Area of impact on project for proposed change (Please circle one or more) Analysis Design Construct <u>Test</u> Rollout Other:									
DispositionApproveX_Approve as AmendedDisapproved Comments:									
Lets' talk on Monday about who we want to hire.									
Funding SourceCustomer _X_SponsorOther:									
Sign-off Project Manager: <u>DSP</u>									
Project Customer:									

Human Resources Management Plan

Roles and Responsibilities:

Project MetaGuest is a completely internal project that will follow suit within Target's matrix structure organization. The following staffing requirements are necessary for completing MetaGuest within the stringent timeline:

Project Manager (1 Position) – The project manager is ultimately responsible for all aspects of managing the project, overall administration duties, and communication of results and iterations. Authority is linked through submittal of a performance review for all project team members and will have direct correlation with annual raises, terminations, or performance improvement plans. The ideal candidate will have prior 1 year prior project management experience, knowledge of data housing and manipulation software, and familiarity with data reporting structure at Target.

Data Analyst (4 Positions) – The data analyst is responsible for establishing key metrics for the new reporting techniques. The four different positions will require specific subject matter expertise in: RFV delineation, Lifestage calculation, Trip Spend definition, Stable Time Logic acquisition. This is an individual contributor role without any authority beyond project contribution. Upon completion of the project, the project manager will evaluate your contribution and it will be reviewed as the annual innovation project in the annual review. The ideal candidate will have active knowledge of specific subject matter, demonstrated time management skills as well as deadline delivery success, and permission from manager.

Senior Analyst (1 Position) – The senior analyst will interpret and document all coding aspects of project MetaGuest. This position works in close tandem with the project manager and is preceding experience for project management roles. All analysts and programmers report to the senior analyst. Incentive is being offered based on ratings from direct reports. The ideal candidate will have excellent communication skills both written and verbal. Coding languages including: SAS, SQL, Teradata, Tableau, Hadoop, and IR are necessary for this role. This is an entry level leadership role with the ideal candidate being endorsed as a leader from their manager.

Programmer (9 Positions) - A programmer from the following languages is needed: MicroStrat, Tableau, ADW, EDW, SAS, TeraData, Hadoop, SQL, and IR. The programmer will write basic reporting code that complies with Target's best practices with subtext for basic documentation. As an individual contributor you will be responsible for your work and the joining acquisition found in the AON. Direction is supported through the senior analyst. MetaGuest is within the Innovation project strategy and will be documented in the programmers annual review. The ideal candidate will be comfortable working on a collaborative meeting for a short time, proven coding track record, and excellent communication skills.

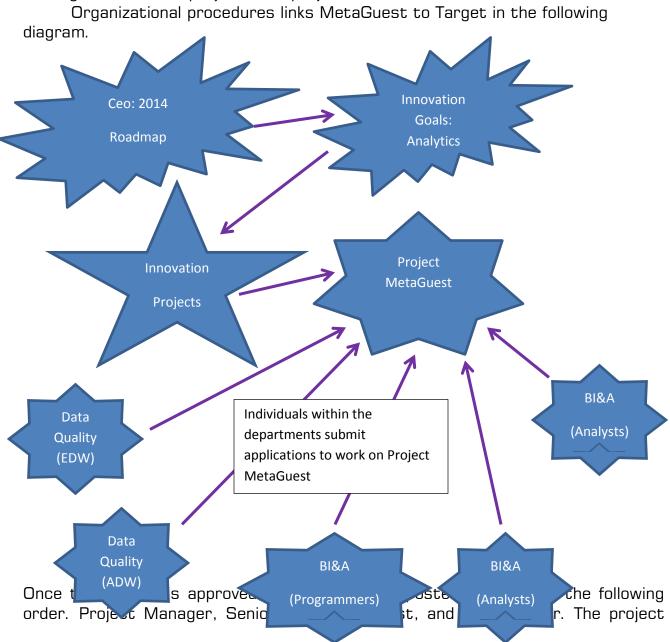
Staff Management Plan

Staff Acquisition: Given the matrix structure of Target, this project will follow suit. This project falls within the overall Innovation project space, of which all departments contribute towards. The positions will be communicated from the director to the mangers, and sent out via email through the project promotion channel. The resource calendar along with the time phased budge can be found in appendix 2 and 3. Resources are based on hourly completion and must be followed within the order detailed in appendix 2. Given the detailed, disparate, and relatively short nature of the programming and analysis positions, roles are subject to one contributor rather than adding additional resources. Applications are open until filled and manager consent is necessary for all analyst/programmer roles with a signature required for understanding the resource calendar, which will serve as the release notice. Given the high nature of the roles for this project, it is expected that team members will balance the project with their other assigned responsibilities. There is not additional training needed for this project. Recognition and rewards will be communicated to mangers as well as the annual performance review. Compliance and safety is within the parameters of the general work contracts of all participants.

Schedule Management Plan

The full project schedules can be found in appendix 2 and 3. Given that this project is internal, time constraint is more of a focus rather than resource. Project MetaGuest falls within the corporate initiative as an Innovation Project and is allotted 20% of team member's time per day. The resource schedule shows a detailed breakdown based on hourly resource use. Building on the resource schedule, the hours role up into days and days role up into weeks, which can be seen on the Schedule Model Development chart. The level of accuracy is estimated down to the hour, which is the core unit measure for this project.

MetaGuest requires nine different coding languages, which requires nine different programmers. In addition, the coding responsibilities are rather short in comparison to coding norms, the two mentioned nuances inhibit any resource leveling to utilize the project little project slack.



schedule model maintenance can best be described through the following diagram:

Activity	WBS	Hours	Description			
	Code					
Α	1.1.1.1	5	Establish Guest			
			RFV Breakdown			
			from Demo Table			
			Data			

Activity	WBS	Hours	Description
	Code		
В	1.1.1.2	5	Establish Lifestage
			Breakdown from
			Guest Table

Activity	WBS Code	Hours	Description
С	1.1.1.3	10	Guest Trips and Spend from Transaction Table (Very Similar Table)

Activity	WBS	Hours	Description
	Code		
D	1.1.2	10	Trend Stable
	1.1.2.1		Guest Logic for
			Weekly Interval

Activity	WBS Code	Hours	Description
E	1.1	10	Document Key
	1.1.1		Metrics for MetaGuest as Best
			Practice
			(Milestone)

MetaGuest has 6 activities similar to Activity E where code is documented and thoroughly analyzed. These activities are planned with the intention of being the main point for project maintenance and a gut check for overall progress. Within these activities changes are most likely to be made, and the project change form will be used. The similar activities are: E, H, K, O, R, and U. Each of these activities also serve as a project milestone.

Control thresholds are within Target's general operation thresholds, and requires no further documentation. Performance measurements are primarily subjected to documentation standards and efficient code running. At each milestone, the senior analyst will communicate with programmers and analysts if the basic coding is not up to standard. Reporting formats will be in basic Target best practices documentation as seen below:

Leadership and Project Management Experiences

Through my young career, I have had the amazing opportunity to work for exceptional leaders, project managers (PMs), as well as PMs in a leadership capacity. Jointly, there have been instances with the above positions where experiences were soured as a result of failed performance.

In my past position, I worked in refugee resettlement and my supervisor was responsible for the global operations for the organizations. On multiple occasions, I had other companies offer me positions, often making more than 50% more of what I was being paid. The main reason why I remained in my position was my supervisor was an amazing leader. In his previous role in the banking industry as an executive, he led over 200 individuals and managed the underlying responsibility.

During our first one on one meeting, he truly inspired me through the following experience. This is how the first conversation went (Verbatim) "Hi Dan, it's nice to meet you, I've heard you have been doing some great work around here. I am hoping that in our first meeting you can help me better understand where I can help the projects you are currently working on, where you might need resources that I can help you get, and finally share with me areas where I should stay out of your way (Richard Payne)." I was truly blown away from this first interaction, and walking away from that meeting I felt that my boss was for me. He most exemplified servant/transformational leadership theory. Richard understood my driver personality, how to motivate me beyond the position, and inspire me to grow as one of his subordinates. He took the time before the meeting to research my work and understand how best to motivate me. In the long run, this set him up for success because through his demonstration of servant leadership I became inspired to perform, win for the department, and make him look good. Our team was very effective under Richard's leadership because he led by example and his leadership style acquiesced very well with everyone on the team.

As I take on more leadership roles, I strive to put into action the three main points Richard asked me. Tell me about your work, how can I help, how can I stay out of the way? As I work with people, this communicates that the leader cares, seeks to positively transform the individual, and recognize the need to stay out of certain projects (this build trust). These are rather simple concepts, but I greatly desire to put them into practice as I move forward in leadership.

While in my refugee resettlement role, I observed another leaders interaction. In many instances, this leader failed to enforce a model work ethic through little

time in the office or MBWA. Furthermore, he failed to inspire his team as well as convey that he cared about their work. On a personal level, this individual was very friendly, smart, and easy to converse with. As a leader, his failure to inspire, convey genuine interest, and demonstrate work ethic resulted in two of his subordinates quitting as well as his administrative assistant.

The takeaways from the above situation are simple yet profound. Leaders need to demonstrate they are hard workers, simply put. I saw firsthand how morale is linked to the demonstration of a work ethic. Second, taking genuine interest in someone's work goes beyond asking the question, "what are you working on?" One needs to act engaged and seek to further another's work. Third, inspiration is not easily executed. It takes intention, apt delivery, and sincerity. I don't doubt that the failed leader sincerely wanted his subordinates to succeed, but he failed to inspire his team.

As I develop my leadership skills, I will hone in on demonstrating a solid perception of work ethic, inspiration, and sincerity. These attributes are not easily executed, but I have a deep passion to develop.

Alaska is a beautiful state, and I had the opportunity to work as a project manager on construction project. The primary client was an Athabascan Chief, and we were building a Retreat Center on his land. Mid-way through the project funding was greatly reduced due to the Great Recession. The Sr. Project Manager (SPM) had known for months that the project was ill funded but failed to communicate the change until two weeks before major construction was to start on the main facility. This created ill-will and a feeling of distrust between the clients and our construction teams. Work massively slowed, relationships were unnecessarily strained, and productivity suffered. The major failings were the lack of communication and failure to manage expectations. Setbacks are inevitable, but the SPM gravely misunderstood the clients need for continual communication about finances and not just the project's wins. I have learned from this scenario to manage key relationships with great intent, and no news if often bad news. Part of managing a relationship is being candid, I understand it is important to win over clients, but honesty with tactfulness sustains a relationship. As a result of the SPM lack of communication and management, the entire team had great difficulty implementing the rest of the project.

Chapter 15 of Project Management discusses international projects and culture. When I was in Afghanistan, I had the opportunity to experience my Project Manager navigate Afghan politics exceptionally well. He would meet with provincial governors, mayors, and heads of state but purposely kept at arms distance. Corruption was rampant by USAID standards and he maintained social acumen without getting caught up in the politics. He maintained a position of honoring those in authority without being called upon for "favors". Our team learned the value of managing relationships from a safe distance. As a result of the PMs shrewd cultural navigation, out team had top talent and remained focused on the task at hand as opposed to loosing focus and energy on matters not relevant to our

project. I have applied this to my working relationships in that when managing projects I purposely avoid conversations and places where I might lose focus.

One of my major first projects in refugee resettlement was to host a huge dinner for Somali dignitaries, government officials, and local refugees. My manager was the acting senior project manager (SPM) and one of the key honored guests. When the night of the big dinner was in full swing, we had a huge turnout. As the event progressed, my SPM jumped in the front lines of the evening by taking out trash cans, serving food to the refugees, and cleaning up mild spills. I was taken back by and inspired by his hands-on approach, there was no task too low that he would not take on. Walking away from that project, the team and I learned that if our SPM would serve a project in the capacity he demonstrated that night, we too would have to emulate that same attitude and behavior. The bar was raised after that night, and the team grew in maturity from the sense that we all new that the buck stopped with us and we were inspired to take on any task to fruition for the sake of a successful project. Since that night, in my new company and role if we are entering a meeting and someone is setting up I will jump in and assist in the setup. I do whatever it takes to assist in completion of remedial tasks despite who is or isn't looking. The overall theme I have applied is despite years of work and titles, there is no role that a project manager should participate in that is too low.

My project manager in Afghanistan did a great navigating the political landscape of Afghanistan, but he had trouble leading the local Afghans on our team. Issac was Ugandan, and in his culture they value direct communication and being blunt. Afghanistan is more of an Asian culture in that shame is never directly imposed on individuals. The danger in applying shame came have very negative consequences. Issac on multiple occasions would castigate locals Afghans and other team members in front of other Afghans and team members. This resulted in massive amounts of shame being imposed on individuals. As a result of his cultural insensitivity, one of our team members threatened to blow up our compound and he was fired. In addition, the Afghan nationals would avoid and lie to Isaac because of his confrontational management style. There was a great deal of dysfunction and our team failed to bond. I have learned that when correcting and reprimanding individuals to do it in private (most situations), and have an attitude of restoration not confrontation. This has helped me to preserve relationships while still being candid.

Earned Value Analysis (EVA) Schedule

Status Report: Ending Period One											
Task	% Complete	EV	AC	PV	CV	SV	CPI	SPI			
Α	100%	500	500	500	0	0	1	1			
В	100%	500	500	500	0	0	1	1			
С	100%	1000	1000	1000	0	0	1	1			
D	100%	1000	1000	1000	0	0	1	1			

Project MetaGuest

Cumulative Total 3000 3000 3000 1 1

Notes: Analysts finished work on time and looking forward to back documentation.

Status Report: Ending Period Two

Task	% Complete		EV	AC	PV	CV	SV	CPI	SPI
Α	1	.00%	500	500	500	0	0	1	1
В	1	.00%	500	500	500	0	0	1	1
С	1	.00%	1000	1000	1000	0	0	1	1
D	1	.00%	1000	1000	1000	0	0	1	1
E	1	.00%	1000	1000	1000	0	0	1	1
Cumul	ative Total		4000	4000	4000	0	0	1	1

Notes: Back documentation is set in place and project is ready for dashboard design.

Status Report: Ending Period Three

Task	% Complete	EV	AC	PV	CV	SV	CPI	SPI	CPI%	SPI%
Α	100%	500	500	500	0	0	1	1		
В	100%	500	500	500	0	0	1	1		
С	100%	1000	1000	1000	0	0	1	1		
D	100%	1000	1000	1000	0	0	1	1		
Е	100%	1000	1000	1000	0	0	1	1		
F	80%	320	500	400	-180	-80	0.64	0.80		
G	100%	600	600	600	0	0	1	1		
Н	100%	400	400	400	0	0	1	1		

Cumulative Total 4320 5500 5000 -180 5% 3% -80 0.949 0.971

Notes: The design for MicroStrategy has taken longer than expected

based on server connection issues. Please note that back documenting

is still on track because the Tableau design has finished first and project slack.

The issue is cleared up because the Microstrategy programmer

put in an extra hour during the time period, and slack was available.

Status Report: Ending Period Four

Task	% Complete	EV	AC	PV	CV	SV	CPI	SPI	C	PI%
Α	100%	500	500	500	0	0	1	1	1	0%
В	100%	500	500	500	0	0	1	1	1	0%
С	100%	1000	1000	1000	0	0	1	1	1	0%
D	100%	1000	1000	1000	0	0	1	1	1	0%
Ε	100%	1000	1000	1000	0	0	1	1	1	0%

0%

5%

F	100%	400	600	400	-200	0	0.667	1	1	33%
G	100%	600	600	600	0	0	1	1	1	0%
Н	100%	800	900	800	-100	0	0.889	1	1	11%
1	80%	600	600	600	0	0	1	1	1	0%
J	80%	600	600	600	0	0	1	1		0%

Notes: The server set back the Microstrategy dashboard design, but extra hours by the programmer as well as project slack did not cause an overall adverse effect on the project. The Senior Analyst need to spend an additional hour in period four back documenting the process, but the ADW and EDW data warehouse connections were not delayed. The project slack and ability to add extra hours to the project has quelled the overall server issue.

5800 7300 6400 -300

Cumulative Total

Status Report 1.4

0 0.951

1

Period one finished without any issue, there was five hours of slack for activities A and B but there was no need to utilize the slack. Period two introduced the back writing component of the project and serves as a natural check for code writing. The third period suffered a server issue that resulted in the activity cost being hire and completion was delayed.

Server issues at Target are not an uncommon issue, especially in the data structure for MicroStrategy. Many buyers and senior buyers at Target query from this server, which is why the delay and issues persist. The initial planned value was only \$400 because this is the easiest dashboard to create and design for the overall project. At the end of the third time period only 80% of the activity was completed, which resulted in the earned value equaling \$320. Given the project structure, there was slack for this activity and one hour was used in this instance, which resulted in the actual cost being an extra \$100. The cost variance is a negative \$180 because an extra hour was added and the activity was only 80% complete. In addition, the schedule variance was behind -80. The CPI and SPI metrics show this activity is behind schedule and over cost. I created a percentage metric that simply takes 1 minus the CPI and SPI values. This shows for the cumulative CPI the project is over budget by 5% and the schedule is behind by 3% compared to the current planned value.

Period four shows that the server issue did not proceed into this time period except for an additional hour of documentation for the senior analyst. This back documentation does not inhibit the work for the ADW and EDW data warehouse connections, because there was slack for activity F.