IPRO 317: Pervasive Training

*We're gonna train
the $#%& out of you!*

Team Objectives

- *Understand current corporate training systems and how they could be improved*

- *Develop an innovative program of training that:*
    - *eliminates concerns with traditional programs*
    - *is innovative*
    - *is self-sustained and fully automated*

Traditional Training

- *Seminars*

Traditional Training

- *Retreats*

Traditional Training

- *Online*

Traditional Training

- *Restrictive*
  Traditionally restricted to supervisor and management positions

- *Costly*
  Thousands of dollars for off site training

- *Time consuming*
  Takes workers away from their jobs for extended time periods.

- *General*
  Not specifically targeted to an individual's needs.

Easy Access
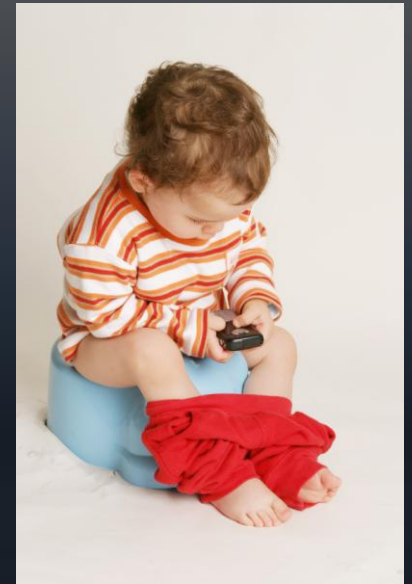
Pervasive Training

- *Very low cost*
  Due to web-based design of training program

- *Time efficient*
  Training delivered through PDA devices and email

- *Available*
  Open to all employees

- *Specific*
  Tailored to the individual, based on anonymous co-worker and supervisory feedback.

Pervasive Training

- *Self-awareness based*
    Employees receive feedback from the people who know them the best

- *Individually driven*
    Employees determine what is important for their job

Pervasive Training

- Helping companies become Learning Organizations where employee training and development are part of their everyday working life.

- Once a participating employee receives feedback training "nuggets" are sent via e-mail to hand held devices or laptops.

- Training nuggets provide encouragement in areas where the employee is doing well and tips on how to do better in areas where improvement is needed.

Group Breakdown

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              ┌─────────────────────┐
              │   Faculty Adviser   │
              └──────────┬──────────┘
                         │
              ┌──────────┴──────────┐
              │    Team Manager     │
              └──────────┬──────────┘
                         │
           ┌─────────────┴─────────────┐
┌──────────┴──────────┐     ┌──────────┴──────────┐
│    Research Team     │     │   Development Team   │
└─────────────────────┘     └─────────────────────┘
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Research

Group Breakdown

Steve Stanard

Ismail Hassan

Sravya Dasari

Paul Orawiec

Research Team Breakdown

Sravya Dasari

Preston Bailey | Noelle Bennett | Andrew Cho | Swathi Reddy | Archana Singh
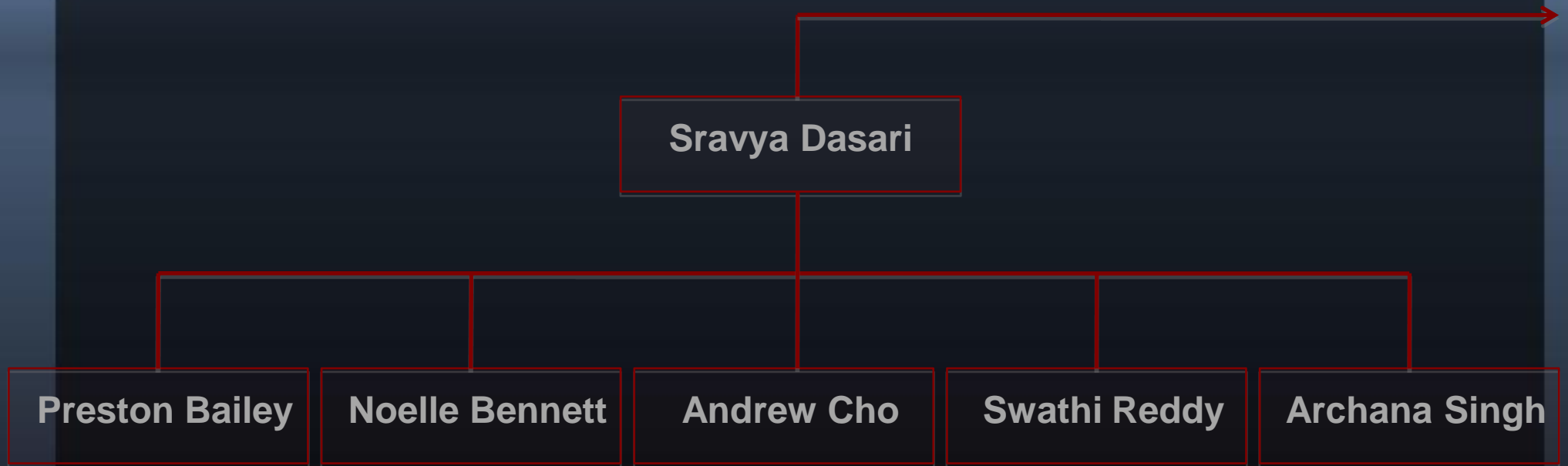
Research Progress

❖ *Talk to individuals in the field of corporate training.*

❖ *Survey training procedures in close to 10 companies and compare our method of 'Pervasive Training'.*

Next...

- ❖ *Brainstorm and come up with the 10 themes of utmost importance.*

- ❖ *Figure out sub –themes for each theme and hence complete the questionnaire.*

And finally...

❖ *We came up with a set of Training 'nuggets' for each subtheme, supportive and constructive nuggets.*

Survey

Lets get started!

1.) Is a good listener?

○ Strongly Dissagree	○ Dissagree	○ Neutral	○ Agree	○ Strongly Agree

2.) Communicates openly and honestly with others?

○ Strongly Dissagree	○ Dissagree	○ Neutral	○ Agree	○ Strongly Agree

3.) Is condescending when dealing with others?

○ Strongly Dissagree	○ Dissagree	○ Neutral	○ Agree	○ Strongly Agree

4.) Thinks things through before speaking?

○ Strongly Dissagree	○ Dissagree	○ Neutral	○ Agree	○ Strongly Agree

5.) Talks too much?

○ Strongly Dissagree	○ Dissagree	○ Neutral	○ Agree	○ Strongly Agree

6.) Helps coworkers when needed?

○ Strongly Dissagree	○ Dissagree	○ Neutral	○ Agree	○ Strongly Agree

Areas of development:

Communication to Raters

	Ratings	Results (All Raters)	
Trust	2	14.5	Yellow Zone
Teamwork	3	20	Green Zone
Comm.	2	13	Yellow Zone
Ethics	1	10	Red Zone
People Skills	1	7	Red Zone

KEY:
Green Zone = 17.6 – 25
Yellow Zone = 12.6 – 17.5
Red Zone = 5 – 12.5

No Improvement needed at this time

Show each item:
Green = 3.6 – 5
Yellow = 2.6 – 3.5
Red = 1 – 2.5

Items become training tidbits

LADDER

* **L**ook at the other person.
* **A**sk questions.
* **D**on't interrupt.
* **D**on't change the subject.
* **E**xpress emotion with control.
* **R**espond appropriately

OTHER SAMPLE NUGGETS

Emerson said: 'Every man is my superior in some way. In that, I learn of him.' If that was true of Emerson, isn't it to be a thousand times more true of you and me?"

MAJOR ETHICAL ISSUES

- GATHERING ACCURATE DATA

- MAINTAINING ANONYMITY OF INDIVIDUALS INVOLVED

- OBTAINING AN HONEST RESPONSE FROM INDIVIDUALS TAKING A SURVEY

- COPYRIGHT INFRINGEMENT WHEN USING LINKS AS NUGGETS

WHAT WE DID ABOUT IT...

- *ADDRESSED AS RATER 1, RATER 2... TO MAINTAIN ANONYMITY.*

- *THE RATINGS ARE STORED IN A SPECIFIC FORMAT, AGAIN TO MAINTAIN ANONYMITY.*

- *NOBODY HAS ACCESS TO THE DATA COMPILED EXCEPT THE DATABASE ADMINISTRATOR.*
- *PERSON BEING SURVEYED IS ALLOWED TO CHOOSE WHO SHOULD SURVEY THEM.*

- *WE DOUBLE CHECK THAT ALL THE LINKS WE USE ARE NOT VIOLATING ANY COPYRIGHT LAWS.*
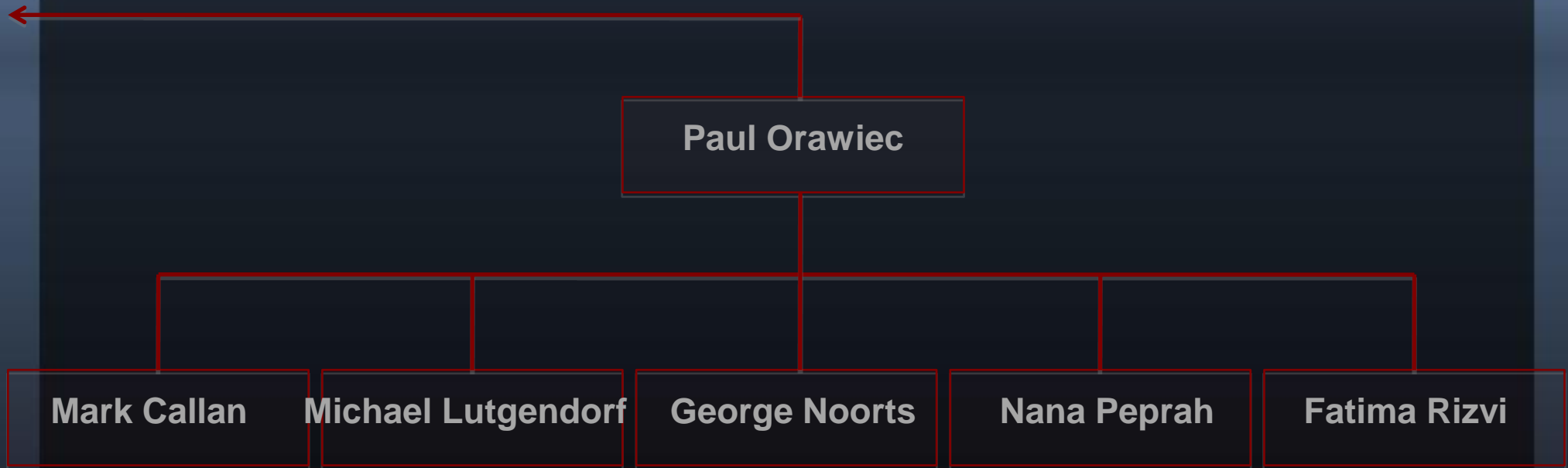
WHAT NEXT?

- RESEARCH TO DEVELOP MORE TRAINING NUGGETS.

- GET MORE PARTICIPATION FROM BIGGER COMPANIES.

- MODEL IT FURTHER FOR EVEN LARGER SCALE INVOLVEMENT.

Development

GROUP BREAKDOWN

Steve Stanard

Ismail Hassan

Sravya Dasari

Paul Orawiec

Development Team Breakdown

Paul Orawiec

Mark Callan

Michael Lutgendorf

George Noorts

Nana Peprah

Fatima Rizvi

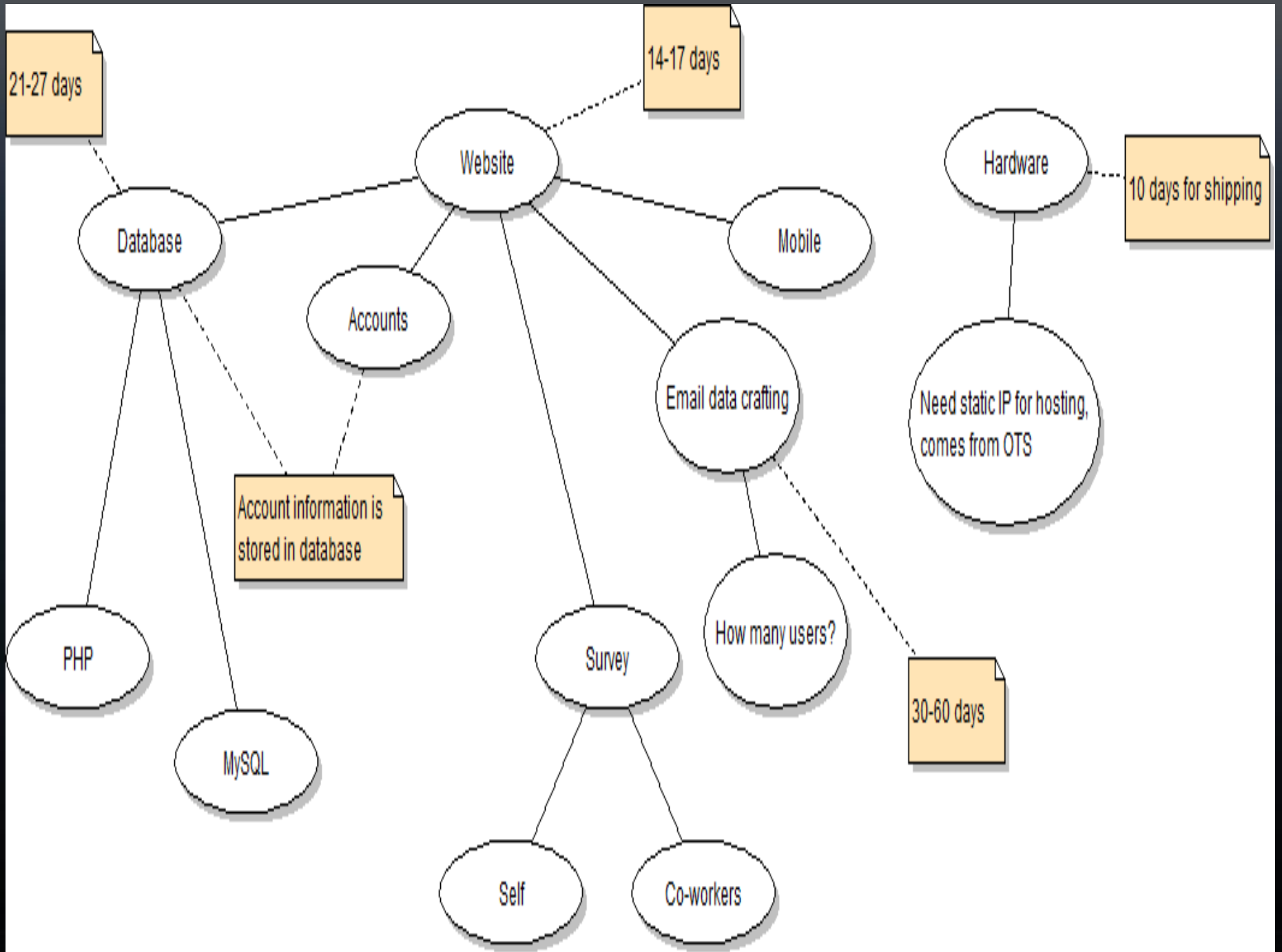# Initial Goals

- Collection and Implementation of user data.

- Integration of web functions with Database.

- Displaying user data as simplistically and seamlessly as possible.

- Figure out the best method of distribution. Mobile? E-mail? Just web?

- Field Tests- Epstein Global and an IIT Fraternity.

- Improvement of user experience from feedback.

What We Accomplished

A near feature complete website running on Linux (Built entirely from scratch, and only begging for help mercifully once!) using:

MYSQL (a database language)

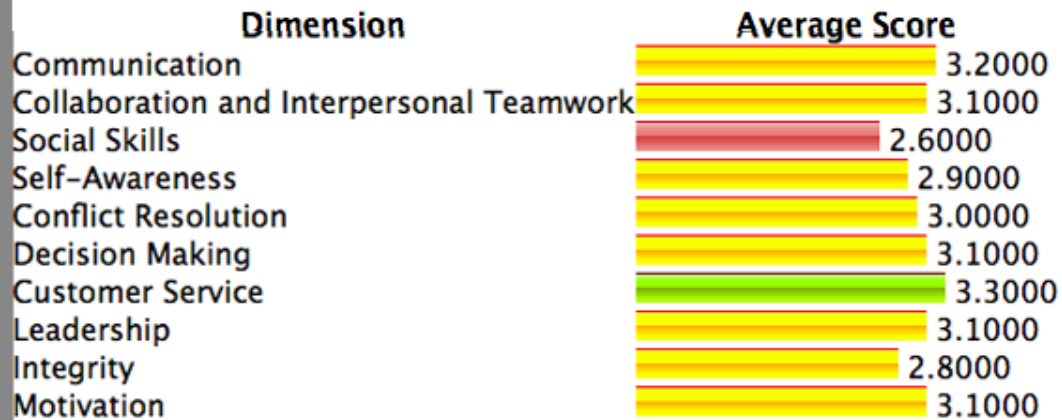.php (A scripting language to produce dynamic web pages)

Various web development languages.

An e-mail distribution system in which people can send feedback for clients scoring, and a way to distribute client training "nuggets".
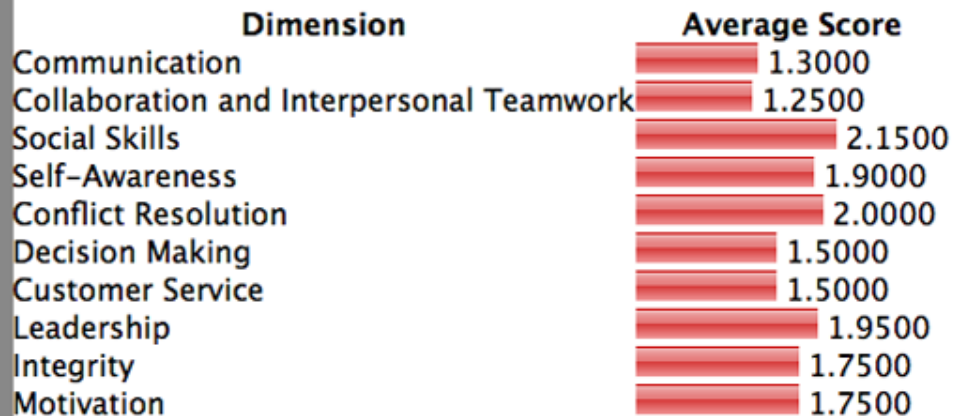
Results for Easter Bunny

Below shows an average score of how you were rated by peers.

Graph illustrated below show an average of your ratings per dimension.

Dimension	Average Score
Communication	3.2000
Collaboration and Interpersonal Teamwork	3.1000
Social Skills	2.6000
Self-Awareness	2.9000
Conflict Resolution	3.0000
Decision Making	3.1000
Customer Service	3.3000
Leadership	3.1000
Integrity	2.8000
Motivation	3.1000

Graph illustrated below show an average of how your peers rated you per dimension.

Dimension	Average Score
Communication	1.3000
Collaboration and Interpersonal Teamwork	1.2500
Social Skills	2.1500
Self-Awareness	1.9000
Conflict Resolution	2.0000
Decision Making	1.5000
Customer Service	1.5000
Leadership	1.9500
Integrity	1.7500
Motivation	1.7500

IMPACT

Web based distribution for training opportunities. (Ease of access)

Open to all levels for employees rather than just the top.

Tailored to the individual.

Lower cost.

Tracking of subjective quantifiable data. (The user can see if they've made any progress over time.)

Questions?