
Managers are from Mars, Developers are from Venus

Ted Neward

Neward & Associates

<http://www.tedneward.com> | ted@tedneward.com

Mars/Venus

In 1992, a book describing the differing mental models of relationships, organized by gender, tried to help couples see how each was inadvertently creating problems by assuming that the other was thinking the same way they were.

This book, "Men are from Mars, Women are from Venus", became a classic

In it, the author likens men and women as being from different planets (Mars and Venus), and claims that Martians and Venutians have diametrically different communication styles, emotional needs, and personal values from each other

Mars/Venus

Sound familiar?

Objectives

If developers and managers are going to achieve happiness, harmony and efficacy (which are prerequisites to having successful IT projects), we have to understand each other

NOTE: I said "understand", not "excuse"

Disclaimers

A few "ground rules" are necessary:

- These are gross stereotypes
(**Though stereotypes generally have a lot of truth in them**)
- I wasn't thinking of anybody in particular when I wrote these slides
(**That's my story and I'm sticking to it**)
- I am not trying to offend anybody
(**More accurately, I'm trying to offend everybody**)
- I clearly self-identify as "developer" more than "manager"
(**As such, my own biases will shine through**)
- There are no good guys, and no bad guys, in this story

Problem

How bad is it?

Problem

A cautionary tale...

- from "Rapid Development", by Steve McConnell

Problem

In the late 1990's, a new cartoonist emerged on to the scene

- Scott Adams, creator of "Dilbert", initially just wrote the strip to explore funny ideas
- In 1996 or so, he hit upon an idea that was, in retrospective, brilliant
- Then, as part of his book "The Dilbert Principle", he hit on another idea

Management

Mommy, where did pointy-haired bosses come from?

Management

Meet Frederick Winslow Taylor

- the "Father of Scientific Management"
- authored "The Principles of Scientific Management" in 1911
- in it, he described new principles about managing labor
 - "Work smarter, not harder" (complete with equations)
 - Management focus is about accountability, not accounting
 - "If you can't measure it, you can't manage it"
- Taylor created cost-accounting methods "to parse the financials of a firm down to its lowliest product"

Management

Taylor's Methodology

- Step One: Scientific Analysis (of the Process)
- Step Two: Scientific Selection (of the Workman)
- Step Three: Scientific Solution to "The Labor Problem"
- Step Four: Scientific Organization

Management

Taylor's Story

- in 1899, he realized that workers weren't working to their best
 - in particular, laborers loading pig-iron bars (92 pounds each) were only loading 12.5 tons/man/day**
- he equipped a number of "college men" with special-order decimal stopwatches, and sent them down to "the farm" to conduct some experiments
- he determined (through science!) that a laborer can load 47.5 tons/man/day

Management

Taylor's Story

- To him, hiring the proper workman was critical
- "For each distinct job, there is a type of man who is best able to perform it--a 'first-class man' for that particular line of work."
- For the process of loading pig-iron bars, who had two good virtues:
 - he was eager to earn extra cash
 - he was "mentally sluggish", "very stupid", "about as intelligent as an ox"

Management

Taylor's Story

- Scientific management would provide a basis for "ensuring hearty brotherly cooperation"
- Workers were operating under a "lump" theory of labor: that there is only so much work to go around, and therefore working at top speed means working oneself out of a job
- By changing the rate structure (to per-piece instead of per-hour) and sharing the wealth gained from increased productivity, workers would be motivated

Management

Taylor's Story

- 'Planning' and 'doing' are the two elemental functions of industry
- ... and they are best performed by two very different kinds of people
- Labor is crude and industrial, but the "science" of labor clearly isn't
 - "laborers are bodies without minds; managers are minds without bodies"**

Management

Taylor's Impact

- "Taylor in this movement is comparable to the Almighty"
- "Scientific Management... may well be the most powerful as well as the most lasting contribution America has made to Western thought since the Federalist Papers"
- "it was the invention of industrial management at the dawn of the twentieth century that turned enlightened policy and scientific discovery into global prosperity"
- "it is impossible to overestimate the importance of the scientific management movement in the shaping of the modern corporation and indeed all institutions of capitalist society"

Management

Taylor's Impact

- by 1910, Taylor's ideals were being trumpeted in the press
 - one headline read "A MILLION DOLLARS A DAY!"**
- he testified before Congress about his scientific principles
- it led to the foundation of the Graduate School of Business at Harvard (inspired by Prussia's efforts to establish war colleges)

Management

Only one problem with this story

Management

Only one problem with this story

- He made most of it up
 - employment records reveal basic factual errors
 - he sorely exaggerated the cost savings/profits
 - his "science" was pretty flawed; he calculated his 47.5 tons/man/day from an hours' sprint rate
 - no independent verification was ever attempted or allowed
- Two years after his "revolution" began...
 - Taylor was ordered to cease all work on its behalf
 - No appreciable benefit was seen
 - Taylor walked away with \$100,000 in consulting fees (~\$2.5 million today)

Development

Mommy, why are programmers so weird?

Development

A Cautionary Tale....

- from "The Inmates are Running the Asylum", by Alan Cooper

Architecture

What defines the difference between these two buildings?

- goals
- scope
- complexity
- materials
- process
- ... more

More importantly, how do we know when one "style" of building is more appropriate than another?



Development

The Ephemerality of Software

- What we do is invisible to most people
- Humans, for the most part, don't trust what they can't perceive/comprehend
- Thus, it stands to reason, they don't trust software developers

Analysis

What does this tell us?

Analysis

Although it should be obvious, managers and developers don't think alike

- ... we do fundamentally different things
- ... we are motivated by entirely different things
- ... we view the world pretty differently
- ... we draw our conclusions pretty differently

Actions

- Managers' jobs are about connecting with people and all the personality issues that involves
- Developers' jobs are about connecting with machines and all the strange prickly issues contained therein

Actions

- Managers' schedules are about neat, convenient one-hour chunks
 - they need to address human issues, in human ways, with human solutions
 - the creativity involved here isn't temporal in nature, but human
- Developers' schedules are about achieving flow and holding it
 - they need to think about how to solve problems in new and interesting ways
 - the creativity involved here isn't human, but creative and "bursty"

Actions

- Managers' schedules typically trump developers' schedules
 - "I'm the boss, we'll do it my way"
 - this destroys developer productivity in significant ways
 - flow is hard to hold; think of it like sleep

Motivations

Myers-Briggs Type Indicator (MBTI) is a personality preference test, measuring personalities along four distinct axes

- Extroversion (E) vs Introversion (I)
 - Interest in people and places (E) vs ideas (I)**
- Sensing (S) vs Intuitive (N)
 - Focus on the observable facts (S) or add interpretation (N)**
- Thinking (T) or Feeling (F)
 - decision-making based on logic (T) than personal values (F)**
- Judging (J) or Perceiving (P)
 - Planning, orderly execution (J) vs. flexibility/adaptability (P)**

Motivations

MBTI reveals...

- Somewhere between 50% to 66% of the computing population is I-dominant
 - ... compared to 25% to 33% of the general population**
- 80% of computer professionals prefer T over F
- 66% of computer professionals are Js
 - ... compared to 50% of the general population**

Motivations

NOTE: keep "motivation", "morale" and "job satisfaction" straight

- "Motivation": the forces that cause you to engage in work-related behavior and that determine the form, direction, intensity and duration of your efforts
- "Morale": your current desire to work at your job
- "Job satisfaction": your perception that your job allows you to fulfill your important job-related values

MANAGERIAL TIP:

- Motivation matters most on single projects
- ... but job satisfaction matters most for an organization's long-term development capability

Motivations

Top General Population Motivations (in order)

- Achievement
- Recognition
- Work itself
- Responsibility
- Advancement
- Salary
- Possibility for Growth

Motivations

Top Programmer Motivations (in order)

- Achievement
- Possibility for Growth
- Work itself
- Personal life
- Tech-supervision opportunity
- Advancement
- Interpersonal relations, peers

Motivations

Top Managerial Motivations (in order)

- Responsibility
- Achievement
- Work itself
- Recognition
- Possibility for Growth
- Interpersonal relations, subordinates
- Interpersonal relations, peers

Motivations

"Yeah, but come on; that stuff isn't really scientific"

- Think I'm pulling your leg?
- So have scientists and researchers, for decades
- But the new data is disturbing, showing that the traditional "pay me for what I do" is just... wrong

Motivations

The Candle Experiment

- I give you a box of nails, a candle, and a book of matches; your job is to attach the candle to the wall
(which is an interesting "out of the box thinking" problem in of itself)
- Now I tell half of you that I will pay you if you get it done faster
On average, the incentivized group took three-and-a-half minutes longer

Motivations

Incentives Don't Work

- Experiments demonstrate, over and over again, that attempts to "incentivize" people to do things...
 - ... including "goodwill" things, like donating blood...
 - ... or "conceptual" things, like come up with novel solutions...
- ... actually reduce efficiency
- "Rewards, by the very nature, narrow our focus. ... As [the candle experiment] shows, the rewards narrowed people's focus and blinkered the wide view that might have allowed them to see new users for old objects." (Drive)

Conclusions

So what do we do now?

Conclusions

Accept that you are different and likely to stay that way

- Management styles aren't likely to change any time soon
- Developers certainly aren't likely to change either
- Nor is the capitalist economic system

Conclusions

Accept that you do different things

- Developers aren't laborers; more like scientists or artists
- Developers aren't performing the same tasks every day
- The inherent nondeterminism in doing something new means scientific measurement is difficult up through all but impossible

Conclusions

Accept that you do different things

- Managers have to report progress
- Projects have to be evaluated for success/failure and continuation
- Some kind of visibility on the project is necessary for demonstrative and responsive purposes

Conclusions

Accept that you are different

- If you are a manager, and you motivate your people based on what would motivate you, you are extremely likely to fail
- If you are a developer, and you expect management to motivate you without you telling them what motivates you, you are likely to grow unhappy
- Some people (F's) will be inspired to hit unreasonable goals; T's will reject the goals entirely as illogical and dismiss them out of hand
- Thus, if you are a manager, get to know your people!

Resources

Books

- "The Management Myth: Why the Experts Keep Getting it Wrong"
 - by **Matthew Stewart, W.W.Norton & Company**
- "Rapid Development"
 - by **Steve McConnel, Microsoft Press**
- "The Inmates Are Running the Asylum"
 - by **Alan Cooper**
- "Drive"
 - by **Daniel H. Pink**