THE NEW PRODUCT WATERFALL



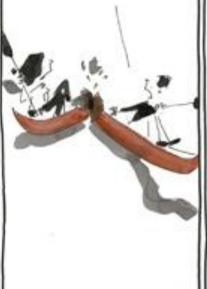
HOW DO WE CHART OUR ENTIRE COURSE IF WE DON'T KNOW WHAT'S AHEAD?



WHATEUER HAPPENS, DUST KEEP PADDLING!

BUILD

I WISH WE'D DESIGNED FOR THIS SCENARIO UPFRONT



TEST

PATCH IT AS BEST WE CAN. NOTIME TO CHANGE COURSE NOW



TOM FISHBURNE. COM

PLAN

@ 2010



Aaron Thibault
Vice President of Product Development
Gearbox Software

Producers are a lot like Baggers.



Producers are a lot like Badgers.





Production Roles

There are a lot of roles in production!

- APs & Project Managers
- Dept/Line (Technical, Art, Story, etc.) Producers
- Task Jockeys & Production/BI Analysts
- Marketing Producers & Product Managers
- Senior Producers / Project Heads
- Executive Producers (many flavors)
- Development Directors
- Online, Live and DLC Producers
- Outsourcing and External Team Producers
- Scrum: Owners, Masters, Pigs & Chickens

Be Useful.

Things that will make you useful:

- Paying attention to people's needs.
- Eliminating distractions.
- Gathering information regularly that impacts quality and deadlines, and using it proactively.
- Learning the tempo and groupings in your studio.
- Being visible and having answers.
- Being self-aware and understanding the impact of what you're saying.
- Sticking to your strengths (during work hours).
- Being an example of mastering one's craft.
- Understanding how quality and speed happens.

Don't be useless.

Things that make you useless:

- Distracting focused people.
- Talking when you should listen.
- Staying in your seat.
- Blurting / introducing confusion.
- Abdicating.
- Hiding.
- Unintentional misdirection.
- Offering creative ideas without basis/training.
- Not following up. And being flaky.

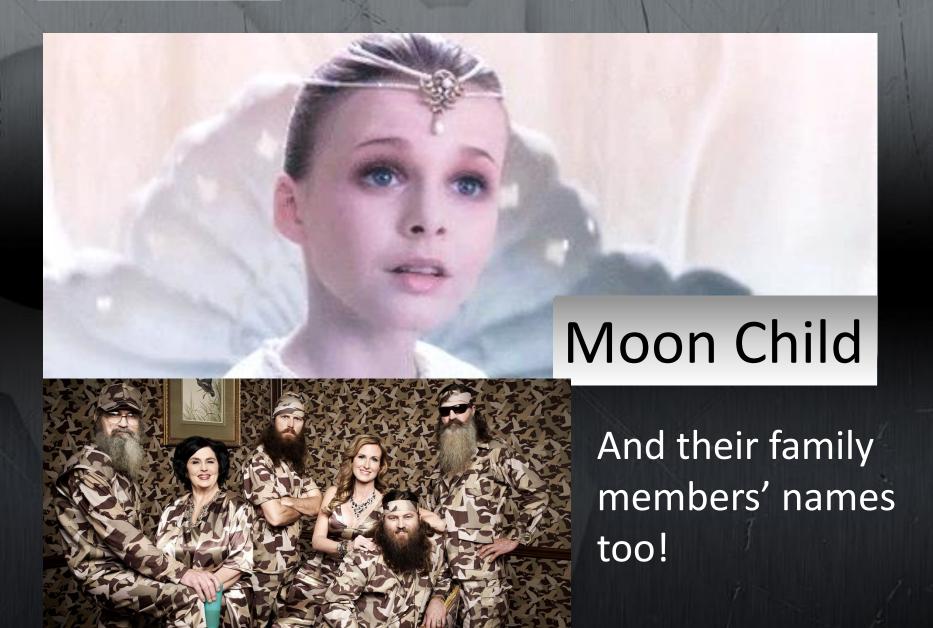




TEST: Coach people so they value your feedback and want more of it

- Content Critique (work output) For Leads and Directors
- Behavioral Coaching (soft skills) Realm of Producers
- Please maintain consistency to providing small notes
- Coaching note: If people aren't following a process, that's behavioral, and could be due to any number of things...
 - Education about process / complexity
 - Poor tools / pipeline
 - Lack of process relevance
 - Lack of attention / integration into larger picture
 - Long periodicity of feedback / review
 - Be holistic when coaching about process!! The process might suck.

SKILL TEST: Learn everyone's name!





The Iron Triangle



TEST: Transmogrification

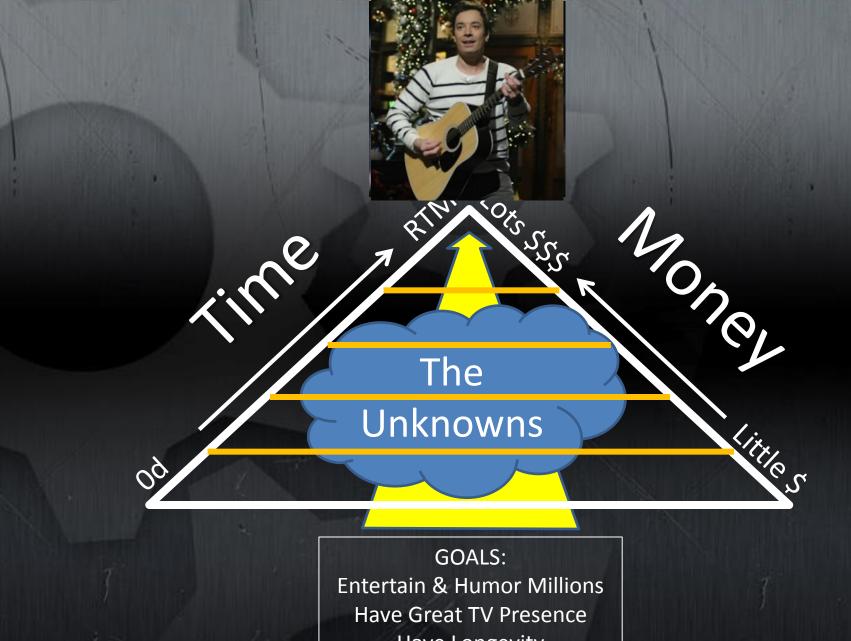




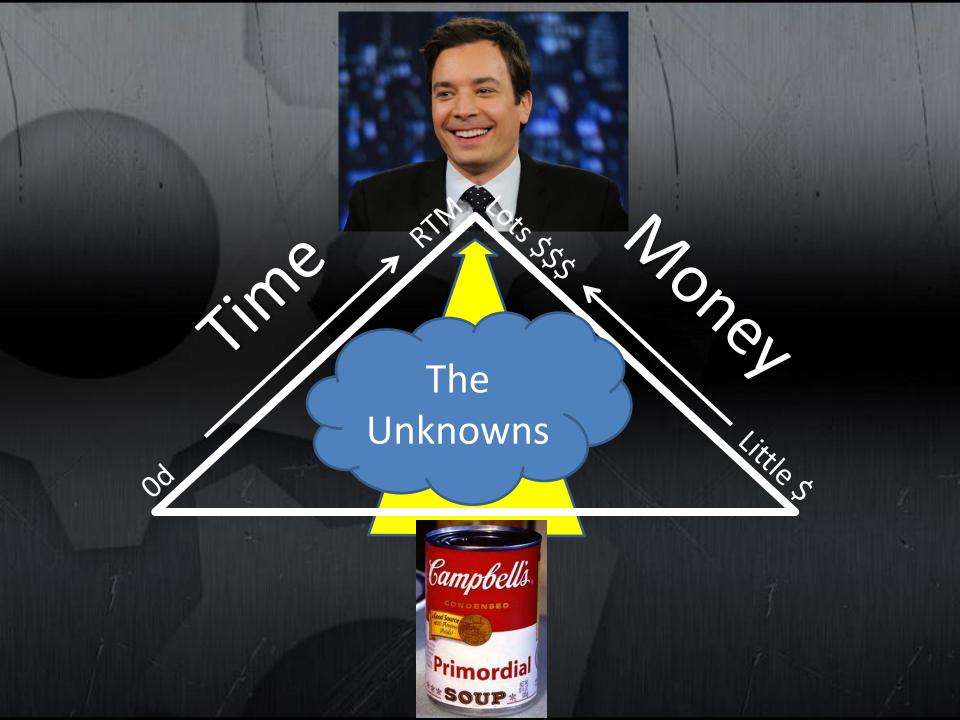
Effort Over Time Reduces Unknowns



Intent & Ideas:
Opportunity Space in
Primordial Goo



Have Longevity Leverage Diverse Interests

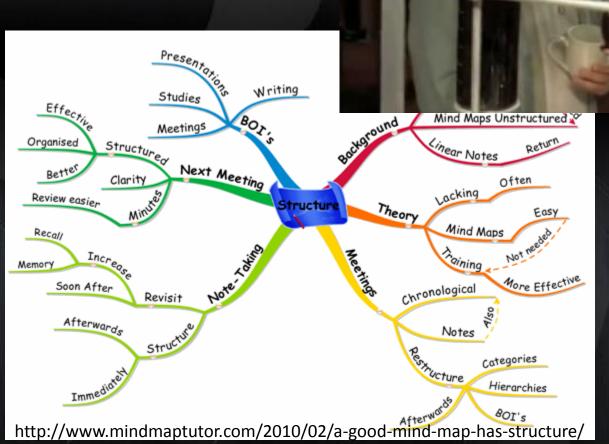


Get the Team's Support for Great Data

- Great Data -> Awesome Reporting -> Promotion!
- The Bootstrapping Approach of Prediction for Informing Decision Makers (just means asking devs questions and getting reliable answers)
- Devs don't want to crunch; they want to know decisions are helping them
- Devs do want to make great games; they want to know decisions are helping them
- Build strategy and processes around
 - Making great games and entertaining people
 - Building sustainable, masterful teams
 - Work | Life Balance
 - Helping decision makers
 - Reliable information about status, goals and risks
 - Providing focus and meaningful goals to devs; tracking, tools, etc.

TEST: Can you make great coffee?

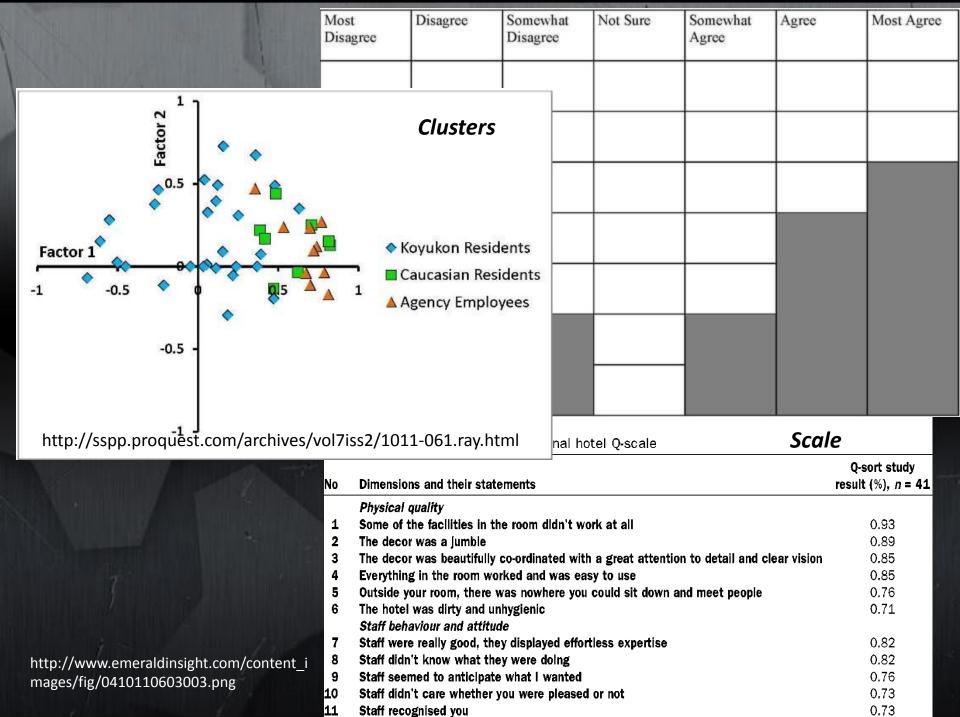
Distill what is complex using science!



Create structure so that unstructured problems can be understood and solved.

Data from Opinions

- Surveys with good Likert scales
- Q-Sort for understanding viewpoints
- Factors, Clustering and Correlation (Regression)
- A data driven basis for weighting POVs
- Things like...
 - Who are your dept's quality leaders?
 - What should you focus on?
 - What will make your team better?
 - What processes need to be fixed?



How Quality Happens

- In the presence of passion.
- When people care about common goals.
- In the presence of trustworthy critique.
- When people are having fun and pursuing mastery; the joy of improvement and results.
- When people are well matched to what they're doing.
- When there is a peer group / community.
- When the consequence of failure is personally unacceptable.

How Speed Happens

- When people are highly engaged and focused.
- When people are aligned to common goals.
- When tasks are organized and prioritized; when work queues are reliable.
- When distractions are very low.
- When people feel good.
- When goals are clear and a bit challenging.
- When momentum is sustainably built.
- When the end is in sight; milestones and releases.

Milestones & Releases

- Logical schedules are awesome.
- Planning, therefore, is pre-awesome.
- Planning and scheduling are continuous.
- New information must be integrated!
- Dates help people focus.
- Dates, therefore, are good for quality and speed.
- Dates are a great tool for making new dates.
- Backwards planning!
- Forwards Planning!
- Dependencies and Relationships

Planning to be Prepared: A Schedule for Massive Organizational Readiness

PL BILL CABLE -XX XΧ RIVER SYNCHRONIZATION AA PLUM EΑ BT 1 AXIS WHITE ALPHA OBJ MATRIX RT 2 LARRX OBJ RAUL AA ROSE AXIS BLACK BT 3 Mission: Deliberate Attack 100 BT 4 -14 H-5 +22 HR -10 +2 TIME HŔ HR HR HR HR HR HR HR HR Fights from Fights from Monitors movement **ENfires** Reserve ENEMY Cont DEF Prep counterbattery 1st Defibelt imain belt ACTION deployed (1) Launch (2) Cont DECISION deep Attack Attack AVN BN AVN BN DEEP atk EA A Atk Reserve Recon routes, Screen Find RECON secure food areas Cable River COPs E BNs move Lead BNs Secure BNs in Cross Atk OBJ Secure Atk OBJ CLOSE Rts:1-4 QBJLamy ATK PSNs move LD OBJPaul LD Lamy Paul Moves 2d on CONT Atk CONT Atk RESERVE Moves **OBJPaul** Rts384 or Defend MP Level 1 R Attack REAR Response MPNs MPNs MPNs MPNs SPT Protect Protect Protect ADA Hold Move to LD Lead BNs Tight Tight Tight Def Coord w/ Fire Provide Atk EN Atk RAG Spt Atk Move to find FIRESPT OBJ Paul fire psns SPT, art y Prep fire SEAD DS. Reserve Find RAG/ Confirm EN Confirm Confirm latest Locate EN IΕW Reserve loc **ENJocation** Reserve move hewond OBJs EN Resenie Begin def **ENGR** Clear routes: Mobility spt to lead BNs on axes Gear MSR Prep Def/Atk prep O/O Resupply Resupply Resupply Resumply SUSTAIN **OBJ**Paul unit movesion axes OBJĽámy unit moves Coord cross LD. TAC CP moves Main CP Main CP 02 main, AA Rose owlead BN on Rt 3 Prep move moves

http://www.aiai.ed.ac.uk/~arpi/SUO/resources.html

X-Platform Development Phases

Analysis & Ideation

Execution

Concept

Pre Production

First Playable

Vertical Slice (Can be multiple)

Production Greenlight

Alpha

Localization/Translation

Beta

Pre-Certification Pass -> ZBR

Cert Submission

RTM

Manufacturing

Prop & Shelf

Live:

- Micropatches
- Patches, TUs, Compatibility Packs
- DLC offerings

Core Leads / EP

Biz / Legal

Concept/Core Leads

PrePro Team

...with content support

Slight ramp up for core goals

Rush to Horizontal Slice

Content Complete??!

Kit prep

Focus on polish. Triage!

No more bugs please. Uber Triage!

Hope you focused on the platforms...

Submission is approved!!

5-6+ weeks

Timing: when physical meets digital

Live team operational

Questions when Release Planning

- What are the platforms?
 Branching?
- How many regions?
- How many versions?
- Compatibility?
- Localization?
- How are builds made?
- Where are they stored?
- How are they distributed?
- Demo builds?
- Digital and/or non-digital?
- How long for mastering & distribution?

- How long for cert?
- Who approves the submission build?
- Who makes the ISO?

Managing Up

- The best thing you can do is help your boss know what's going on ASAP with anything that would surprise her/him not to know.
- Over deliver every time. Don't over promise!
- Consider making infographs and other simple communication tools that executives can pass around for reference.
- Maintain your credibility and integrity. Don't lie, and commit to finding out answers when you don't know.

Optimize Your Time

- There's always going to be a lot to do.
- Capture, categorize, sort, prioritize, execute, assess, repeat. Do it in parallel.
- Keep great notes, in one place.
- Recap what you've learned for the people who are affected by it. Email digests are handy and leave a good trail. Reporting and disseminating is a skill.

Know your Version Control!

- Whether Perforce, SVN, Team Foundation...
 - Learn it inside and out
 - Understand your VCS file and metadata organization
 - Permissions and accounts
 - Learn how to set up new users with template user types
 - Learn and be an advocate for your department's check in policies
 - Subscribe/watch check-ins to be aware of changes!

Have a Philosophy

- Be a Truth Seeker and Be Flexible
- Create your own **Production Philosophy**
- Make it logical and relatable; be able to explain it.
- Learn something everyday and reflect how your learnings relate, add to, or modify your

production philosophy

Mine is simply

Lead through Constant Change,
Inspired by The Book of Five Rings
by Miyamoto Musashi.

Precepts

Know Yourself

Be Confident

Be Ready

Learn

Lead

Examples...

Trust and Credibility

From Experiencing Change

Process is as Process Does

Get the Facts, Fill your Gaps

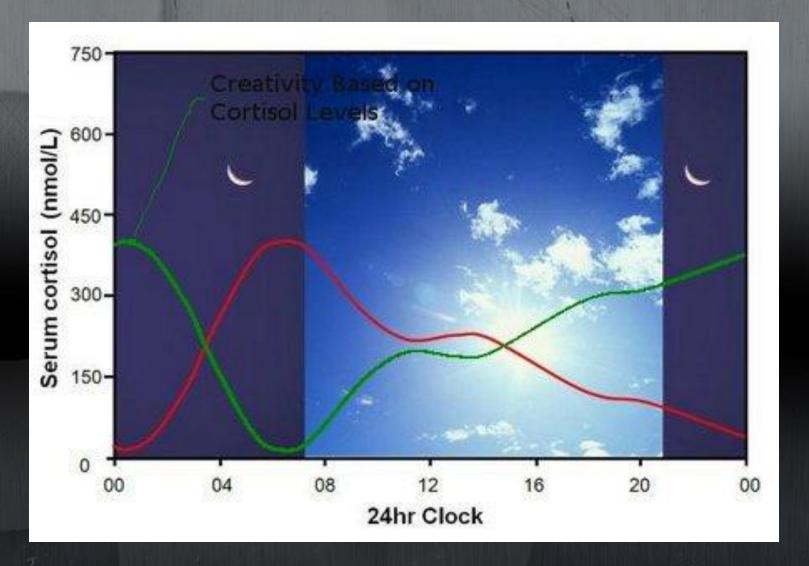
Communicate and Execute

Team Needs, and your role in caring for them...

When people trust that you care about their needs, you can build a Team and then Consensus.

Move people to a place where they can imagine Mastery as their biggest Opportunity for Security.

When people's needs are met, they are able to focus on doing quality work and caring for the needs of others (like Customers).



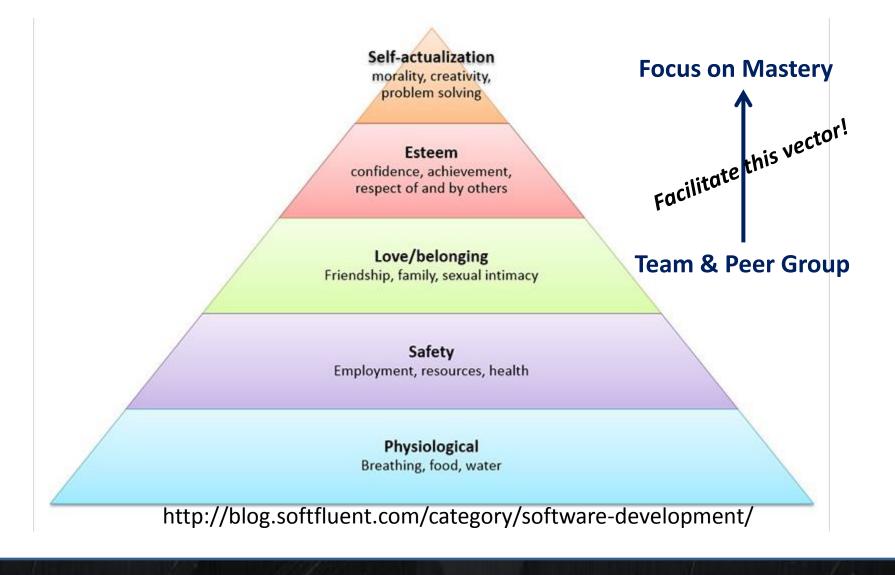
Michael Plishka, 2008: Creativity vs. Cortisol

http://zenstorming.wordpress.com/

based on: http://www.ncbi.nlm.nih.gov/pubmed/176503?dopt=Abstract

http://www.wired.com/science/discoveries/magazine/17-01/st 3st

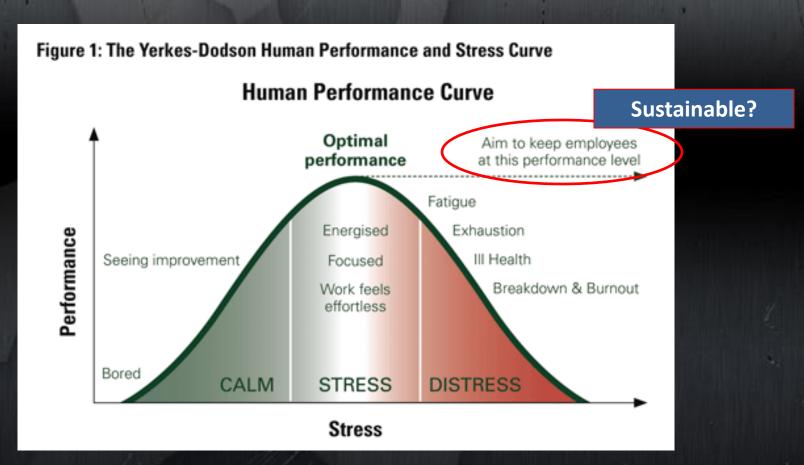
Maslow's Heirarchy & Talent Management



DO NOT WAIT TO DO DIFFICULT THINGS THAT MUST BE DONE

- To coach people
- To release consistently low performers
- To prepare new schedules / budgets
- To protect the greater good
- Stop doing / eliminate things
 - Whose cost outweigh their value
 - That harm team morale
 - That harm customers
 - That harm financial stakeholders
- To hire great people
- To ask for help!

People's value exists over time, not at one sample point.



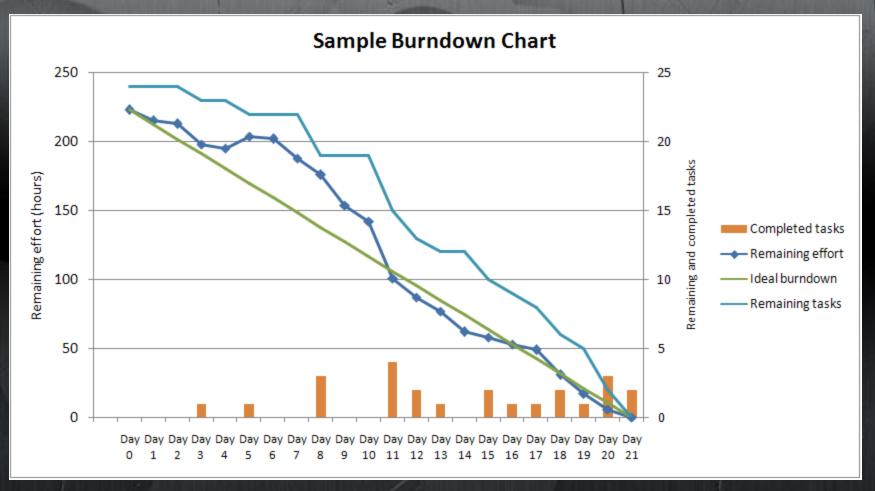
http://www.thinkadvisor.com/2012/07/24/stress-for-success-pt-1-how-to-handle-the-stress-o

Forecasting & Predictive Analysis

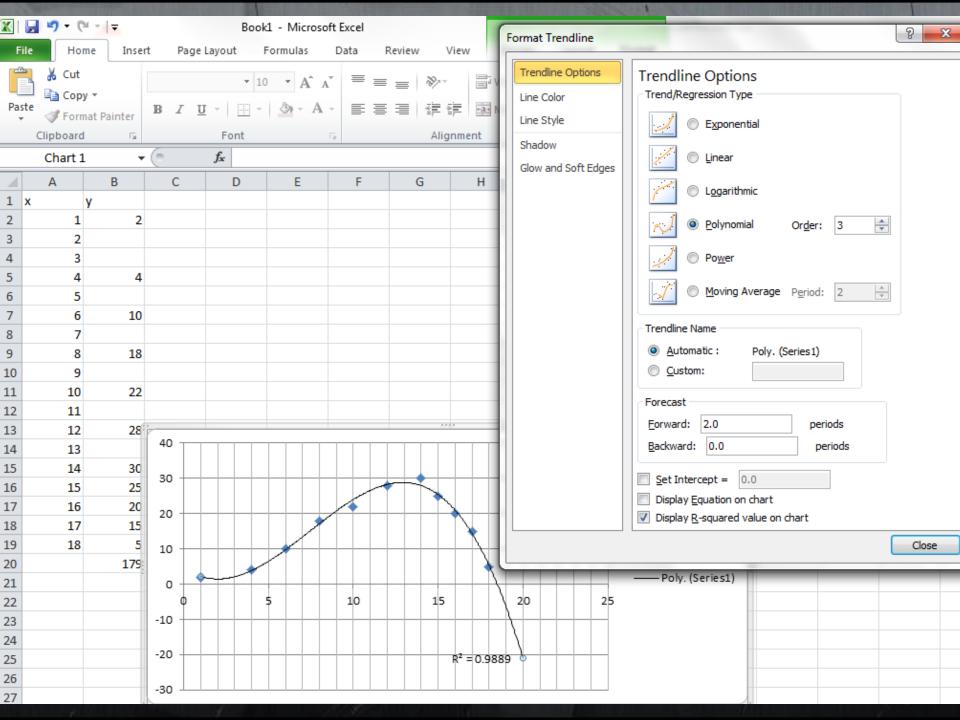
- Good for Matchmaking, Burndowns and Wagers
- Probability requires great counting skills and tools
- Make sure you can explain accuracy / risk factors (Confidence Intervals)



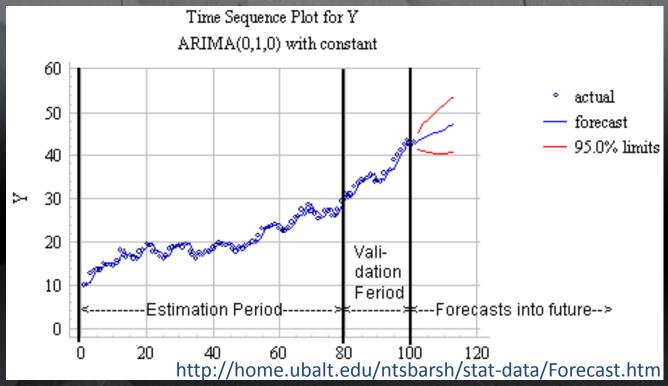
Estimation



Innovative and challenging work



Time Series Statistics Forecasting with Trend Analysis



Integrated autoregressive + moving average trend model

Using Project Data (Created vs Resolved) to forecast:

- Time to Beta (assumes Alpha complete)
- Time to ZBR
- Time to Submission

Using Data Science to Transform Information into Insight

John W. Foreman

DATASMART

"Data Smart makes modern statistic methods and algorithms understandable and easy to implement. Slogging through textbooks and academic papers is no longer required!" —Patrick Crosby, Founder of Statilat & first CTO at OkCupid

WILEY

Methodologies

"...our ability to catch things earlier needs to be improved. And our job is to continually rethink what we are doing. But we will never get it right." —Ed Catmull 13 Mar 2014, Fast Co. interview

Waterfall
Spiral
Iteration
Agile / Scrum
Lean / Kanban

Dependency Chains
Risk Analysis & Phases
Release Early & Often
Prioritization & Tempo
Work Leveling & Efficiency
Time Boxes for All Methods

Eliminate Errors and Waste!

- Bad for Morale
- Bad for Quality
- Bad for Deadlines
- Bad for Perception
- Bad for Games

You Need to Understand, Respect and be an Advocate for Value

The Value of...

- Customers
- Developers / The Team
- Quality
- Money / Finance
- Time and Opportunity Cost
- Timing; Adaptability and Market Windows
- Publishing; Forecasting, Marketing and Distribution
- External Partnerships; outsourcing, contracts, etc.

You are a Guardian of Value

TEST: What is the Present Value of receiving \$104 in one year if you demand a 4% return on your investment today?

 $PV = FV(1/1+interest rate)^n$

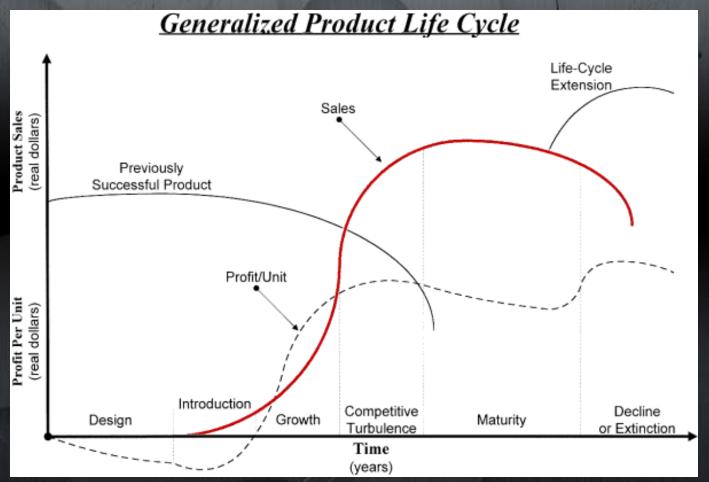
 $PV = 104(1/1.04^1) = 104(1/1.04) = 100

http://seattlecentral.edu/faculty/moneil/A230/AppxC/Ch15AppxA.htm

- What is the value of that hero asset in a month?
- What is the value of a good matchmaking system in 6 mos?
- What is the value of a campaign game in one year?
- What is the value of having a more epic game than the other guys in two years? (Team goal or Biz goal..?)

MS Deliverables for some, rank priority for others.

Diffusion of Innovation and S Curves: A 101 Topic For EPs and Product Owners



Follow Up:
TED Talk by Simon Sinek
Diffusion of Innovations by Everett Rogers

