Successful Evolutionary Change of Portfolio Management

Pawel Brodzinski

@pawelbrodzinski
Hi, I’m Pawel

Lunar Logic
http://lunarlogic.io

Blog
http://brodzinski.com

Twitter
@pawelbrodzinski
Why portfolio?
A system of local optima is not an optimal system at all; it is a very suboptimal system

Eliyahu Goldratt
Processing the waste more effectively is cheaper, neater, faster waste

Stephen Parry
New project:

Est. cost: 600 000
Est. income: 1 000 000
Est. effort: 60 man months
Deadline: Nov 2014
<table>
<thead>
<tr>
<th>Name</th>
<th>Class</th>
<th>Est. Cost</th>
<th>Income</th>
<th>Profit</th>
<th>Pro</th>
<th>% Comp</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfa</td>
<td>New</td>
<td>450 000</td>
<td>600 000</td>
<td>150 000</td>
<td>33%</td>
<td>56%</td>
<td>Oct 2014</td>
</tr>
<tr>
<td>Bravo</td>
<td>New</td>
<td>420 000</td>
<td>480 000</td>
<td>60 000</td>
<td>14%</td>
<td>71%</td>
<td>Aug 2014</td>
</tr>
<tr>
<td>Charlie</td>
<td>New</td>
<td>130 000</td>
<td>180 000</td>
<td>50 000</td>
<td>38%</td>
<td>60%</td>
<td>Jul 2014</td>
</tr>
<tr>
<td>Charlie</td>
<td>Maintenance</td>
<td>80 000</td>
<td>120 000</td>
<td>40 000</td>
<td>50%</td>
<td>0%</td>
<td>Nov 2014</td>
</tr>
<tr>
<td>Lima</td>
<td>Maintenance</td>
<td>360 000</td>
<td>450 000</td>
<td>90 000</td>
<td>25%</td>
<td>50%</td>
<td>Dec 2014</td>
</tr>
<tr>
<td>Mike</td>
<td>Maintenance</td>
<td>180 000</td>
<td>210 000</td>
<td>30 000</td>
<td>17%</td>
<td>17%</td>
<td>Nov 2014</td>
</tr>
<tr>
<td>November</td>
<td>Maintenance</td>
<td>480 000</td>
<td>620 000</td>
<td>140 000</td>
<td>29%</td>
<td>50%</td>
<td>Dec 2014</td>
</tr>
<tr>
<td>Sierra</td>
<td>Product</td>
<td>240 000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What do we see?
Excel frenzy
WYSIATI
What You See Is All There Is

Source: Daniel Kahneman: Thinking Fast and Slow
Cost-driven decisions
If you fall for estimation as your way of valuing projects in the portfolio, you are doomed to fail

Johanna Rothman
Clearly

Visual Portfolio Management Application

1: 1
TFB: too f*cking big
NFC: no f*cking clue

WWW.CLEARLY.IO

made with ❤️ by Lunar Logic
New project:

Est. cost: 600 000
Est. income: 1 000 000
Est. effort: 60 man months
Deadline: Nov 2014

@pawelbrodzinski  #agile2014
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Lean (5 people)</td>
<td>Lima</td>
<td>Lima</td>
<td>Lima</td>
<td>Lima</td>
<td>Lima</td>
<td>Lima</td>
</tr>
<tr>
<td>Team Flow (4 people)</td>
<td>Alfa</td>
<td>Alfa</td>
<td>Alfa</td>
<td>Alfa</td>
<td>Alfa</td>
<td></td>
</tr>
<tr>
<td>Team WIP (7 people)</td>
<td>Bravo</td>
<td>Bravo</td>
<td>Bravo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Kata (5 people)</td>
<td>November</td>
<td>November</td>
<td>November</td>
<td>November</td>
<td>November</td>
<td>November</td>
</tr>
<tr>
<td>Team CoD (5 people)</td>
<td>Mike</td>
<td>Mike</td>
<td>Mike</td>
<td>Mike</td>
<td>Mike</td>
<td>Mike</td>
</tr>
<tr>
<td>Team TPS (4 people)</td>
<td>Charlie</td>
<td>Charlie</td>
<td>Charlie</td>
<td>Charlie</td>
<td>Charlie</td>
<td>Charlie</td>
</tr>
</tbody>
</table>

- Yellow: Client's project
- Purple: Maintenance
- Green: Product development

@pawelbrodzinski  #agile2014 http://clearly.io/
http://zsoltfabok.com/blog/2014/04/schedule-portfolio-board/
http://www.slideshare.net/NinaSchwab/the-tupalocom-kanban-story-lkse-2012
http://brodzinski.com/2012/01/project-portfolio-kanban-first-changes.html
http://brodzinski.com/2012/05/project-portfolio-kanban-better-board.html
Focus on one level of work
More than a single project per team?
Cost of context switching

![Graph showing the cost of context switching with Working Time and Loss to Context Switching. The graph compares one to four tasks.](#)

Source: Gerald Weinberg, Quality Software Management: Vol. 1 System Thinking
Zeigarnik Effect

Tendency to experience intrusive thought about an objective left incomplete

Source: S. Greist-Bousquet, N. Shiffman: The effect of task interruption and closure on perceived duration
Teams that worked only on a single project were significantly better in terms of defects density.

Larry Maccherone
Time to market

@pawelbrodzinski  #agile2014
Deadlines

A B C A B C A B C

---

A B C

DEADLINE

@pawelbrodzinski  #agile2014
Expediting
Meet PMO Manager: The Juggler
My first experience was this: 113 ongoing projects for 25 developers

Klaus Leopold
Work in Progress limits
Variability!
WIP limits by conversation

http://blog.brodziński.com/2013/03/wip-limits-by-conversation.html

https://www.flickr.com/photos/lushpup/3276579680
# Portfolio Kanban

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team A</td>
<td></td>
<td>ALPHA</td>
<td>ALPHA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>BETA</td>
<td>BETA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RHO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team B</td>
<td></td>
<td>GAMMA</td>
<td>GAMMA</td>
<td></td>
<td>GAMMA</td>
<td>GAMMA</td>
<td></td>
<td>GAMMA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team C</td>
<td></td>
<td>DELTA</td>
<td>DELTA</td>
<td>DELTA</td>
<td>DELTA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team D</td>
<td>EPSILON</td>
<td>EPSILON</td>
<td>EPSILON</td>
<td>EPSILON</td>
<td>EPSILON</td>
<td>EPSILON</td>
<td>EPSILON</td>
<td>EPSILON</td>
</tr>
<tr>
<td>Team E</td>
<td>THETA</td>
<td>IOTA</td>
<td>IOTA</td>
<td>IOTA</td>
<td>THETA</td>
<td>THETA</td>
<td>THETA</td>
<td>THETA</td>
</tr>
<tr>
<td>Team F</td>
<td>KAPPA</td>
<td>KAPPA</td>
<td>KAPPA</td>
<td>KAPPA</td>
<td>KAPPA</td>
<td>KAPPA</td>
<td>KAPPA</td>
<td>KAPPA</td>
</tr>
<tr>
<td>Sigma</td>
<td>LAMBDA</td>
<td>LAMBDA</td>
<td>LAMBDA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team G</td>
<td>MU</td>
<td>MU</td>
<td>MU</td>
<td>MU</td>
<td>MU</td>
<td>MU</td>
<td>MU</td>
<td>MU</td>
</tr>
</tbody>
</table>

@pawelbrodzinski  #agile2014
Start with what you have
Agree for evolutionary change
Respect current situation
Encourage leadership on all levels
Visualize
Limit WIP
Manage flow
Make policies explicit
Implement feedback loops
Improve collaboratively, evolve experimentally
Visualize
Limit WIP
Manage flow
Make policies explicit
Implement feedback loops
Improve collaboratively, evolve experimentally
New project:

Est. cost: 600 000
Est. income: 1 000 000
Est. effort: 60 man months
Deadline: Nov 2014

and the contract is signed...
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Team Lean (5 people)</td>
<td>Lima</td>
<td>Lima</td>
<td>Lima</td>
<td>Lima</td>
<td>Lima</td>
<td>Lima</td>
</tr>
<tr>
<td>Team Flow (4 people)</td>
<td>Alfa</td>
<td>Alfa</td>
<td>Alfa</td>
<td>Alfa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team WIP (7 people)</td>
<td>Bravo</td>
<td>Bravo</td>
<td>Bravo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Kata (5 people)</td>
<td>November</td>
<td>November</td>
<td>November</td>
<td>November</td>
<td>November</td>
<td>November</td>
</tr>
<tr>
<td>Team CoD (5 people)</td>
<td>Mike</td>
<td>Mike</td>
<td>Mike</td>
<td>Mike</td>
<td>Mike</td>
<td>Mike</td>
</tr>
<tr>
<td>Team TPS (4 people)</td>
<td>Charlie</td>
<td>Charlie</td>
<td>Charlie</td>
<td>Charlie</td>
<td>Charlie</td>
<td>Charlie</td>
</tr>
</tbody>
</table>

Legend:
- **Client's project**
- **Maintenance**
- **Product development**
<table>
<thead>
<tr>
<th>PROJECT</th>
<th>TYPE</th>
<th>CLIENT</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfa</td>
<td>New</td>
<td>Nada</td>
<td>An experimental project in a new business area for a new client. The collaboration with a client doesn't go as well as planned and there is a significant risk that finishing the project will require much more effort than currently assumed. It is a fixed price project that is paid after delivery. Total worth of penalty clauses is worth 25% of the contract.</td>
</tr>
<tr>
<td>Bravo</td>
<td>New</td>
<td>Una</td>
<td>A project for a long-standing client of the company. It is a fixed-price project paid at the final delivery. Total worth of penalty clauses is 30% of contract.</td>
</tr>
<tr>
<td>Charlie</td>
<td>New</td>
<td>Bisso</td>
<td>A project for a new client. There are potentially new projects coming from that client in future. There is a separate 4-month long maintenance contract signed with the client that will follow up the project's completion. This is time and material contract paid for the effort spent on the project monthly (14k for a man month worth of work).</td>
</tr>
<tr>
<td>Charlie</td>
<td>Maintenance</td>
<td>Bisso</td>
<td>The goal of the project is to ensure smooth transition of long-term maintenance of the project to the client's team. There's no fixed number of people that have to work on this one.</td>
</tr>
<tr>
<td>Lima</td>
<td>Maintenance</td>
<td>Terra</td>
<td>It is a yearly contract, paid in quarterly installments. It is maintenance of the old project built by the company in the legacy technology. The client hasn't run any other projects with the company for more than 3 years already.</td>
</tr>
<tr>
<td>Mike</td>
<td>Maintenance</td>
<td>Una</td>
<td>It is a yearly contract. It is paid at the end of each 6-month period proportionally. There is no commitment for a number of people working on the project as long as issues are addressed without delay.</td>
</tr>
<tr>
<td>November</td>
<td>Maintenance</td>
<td>Karte</td>
<td>It is a yearly contract. Monthly installments of 52k paid for a team of 4 people working on the project. In a case of a shrinking the team revenues would be changed proportionally as long as all important issues are addressed without delay.</td>
</tr>
<tr>
<td>Sierra</td>
<td>Product</td>
<td></td>
<td>At the moment paying subscribers provide 10k revenues monthly. Effort spent on development of the product is aimed to grow the subscription base.</td>
</tr>
</tbody>
</table>
Shifting discussion from cost and income to value and cost of delay
What is value?
Cost of Delay

**Fixed Date**
- Cost of delay
- Time

**Standard**
- Cost of delay
- Time

**Intangible**
- Cost of delay
- Time
Risk management
What else could you do?
Backlog is a list of unvalidated product options

Ellen Gottesdiener
Projects and products are (unvalidated) options too.
Real Options
Options have value

Options expire

Never commit early unless you know why

Source: Olav Maassen, Chris Matts, Chris Geary: Real Options
Common problems with portfolio management
Visualization helps to understand the current situation and informs discussion on starting new projects.
WIP limits (by conversation) address the problem of too many concurrent projects and steer discussion about value.
Constraints

introduced by

the method shift

to focus from cost

and income to

value and

incentivize

saying no
Portfolio Kanban is not about choosing the work you do; it’s about choosing the work you don’t do.
Mind shift from looking through the attractiveness glasses to looking through capabilities glasses
Thank you

Pawel Brodzinski

brodzinski.com
lunarlogic.io
@pawelbrodzinski