Play soccer, not football: How to foster a whole-team approach by thinking in activities rather than roles

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Asynchrony Solutions, Inc.
# Game plan

<table>
<thead>
<tr>
<th></th>
<th>1&lt;sup&gt;st&lt;/sup&gt; half</th>
<th>2&lt;sup&gt;nd&lt;/sup&gt; half</th>
<th>Extra time</th>
<th>Penalty kicks?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roles vs. activities, soccer vs. football</td>
<td>Smells and remedies</td>
<td>Whole-team and lean-kanban</td>
<td>A game of our own</td>
<td></td>
</tr>
</tbody>
</table>
What is “whole-team approach”?

The entire team works as a unit to share responsibility for producing high-quality software in a timeframe that maximizes its value to the business.

Team of generalizing specialists

XP practice that advises you to have sufficient skills within the team itself to get the job done

#1 on Crispin and Gregory's list of “key success factors” for agile testing
Some benefits

1. Lowers risk to delivery
2. Improves velocity/cycle time
3. Produces better ideas
4. Reduces defects and other waste
5. Allows team to work within budget
6. Increases work satisfaction
### Some agile roles and activities

<table>
<thead>
<tr>
<th>Role</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programmer</td>
<td>Program</td>
</tr>
<tr>
<td>Tester</td>
<td>Model</td>
</tr>
<tr>
<td>Customer/Product owner</td>
<td>Test</td>
</tr>
<tr>
<td>Coach/scrum master</td>
<td>Specify requirements</td>
</tr>
<tr>
<td>Architect</td>
<td>Exploratory test</td>
</tr>
<tr>
<td>Deployment engineer/build master</td>
<td>Plan/estimate</td>
</tr>
<tr>
<td>Database analyst</td>
<td>Design interactions and screens</td>
</tr>
<tr>
<td>UI/UX designer</td>
<td>Manage backlog</td>
</tr>
<tr>
<td>Process facilitator/tracker</td>
<td>Deploy/release</td>
</tr>
<tr>
<td>Technical lead</td>
<td>Design architecture</td>
</tr>
<tr>
<td></td>
<td>Design/update database</td>
</tr>
</tbody>
</table>
Every team member has equal value

We hold these truths to be self-evident, that all men are created equal,
Why soccer? (and why *not* football?)
## Football vs. soccer: differences

<table>
<thead>
<tr>
<th>Football</th>
<th>Soccer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positions are highly specialized</td>
<td>Positions are grouped in broader roles, with one exception (goalie)</td>
</tr>
<tr>
<td>Team is divided into units: offense, defense, kicking, punting, kick return</td>
<td>Team is divided only into broad interacting lines</td>
</tr>
<tr>
<td>Units enter the field in stages</td>
<td>Entire team is always on the field</td>
</tr>
<tr>
<td>Play is usually linear, one-way, “single-threaded”</td>
<td>Play is more simultaneous, “multi-threaded”</td>
</tr>
<tr>
<td>Play is stop-and-start, with delays</td>
<td>Play is more continuous flow</td>
</tr>
<tr>
<td>Decisions are made via command-control</td>
<td>Team self-organizes for decisions</td>
</tr>
<tr>
<td>End-of-game plays sometimes rest on a particular role (e.g., kicker)</td>
<td>Anyone can be a hero</td>
</tr>
</tbody>
</table>
Over-specialization limits ability to cross roles

<table>
<thead>
<tr>
<th>Football (NFL)</th>
<th>Avg. Height</th>
<th>Avg. Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wide Receiver</td>
<td>6’0”</td>
<td>200</td>
</tr>
<tr>
<td>Quarterback</td>
<td>6’3”</td>
<td>224</td>
</tr>
<tr>
<td>Cornerback</td>
<td>5’11”</td>
<td>192</td>
</tr>
<tr>
<td>Offensive Lineman</td>
<td>6’4”</td>
<td>310</td>
</tr>
<tr>
<td>Kicker</td>
<td>6’0”</td>
<td>203</td>
</tr>
<tr>
<td><strong>Standard deviation</strong></td>
<td>2.2</td>
<td>48.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Soccer (World Cup)</th>
<th>Avg. Height</th>
<th>Avg. Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defender</td>
<td>6’0”</td>
<td>169</td>
</tr>
<tr>
<td>Midfielder</td>
<td>5’11”</td>
<td>159</td>
</tr>
<tr>
<td>Forward</td>
<td>5’11”</td>
<td>166</td>
</tr>
<tr>
<td>Goalie</td>
<td>6’2”</td>
<td>182</td>
</tr>
<tr>
<td><strong>Standard deviation</strong></td>
<td>1.4</td>
<td>9.6</td>
</tr>
</tbody>
</table>
Soccer

What are the roles and activities of soccer?
Whole-team approach in scoring a goal
One player’s interactions
Interactions of the most specialized
What whole-team doesn’t mean
Activities -> overlapping roles
Activities -> overlapping roles
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Activities -> overlapping roles

- specify requirements
  - Business analyst
- Code acceptance tests
  - Programmer
- Exploratory test
  - Tester
Overlapping roles = shared skills
Overlapping roles = shared skills
One player’s skills and activities
Smells (and remedies)
Smell: Emphasis on titles

Chart showing allowed numbers for football positions
Remedy: Decouple roles from activities

We are ALL testers!
Smell: Heroes and goats
Remedy: Let go of the controls
Smell: Individualization at standups
Remedy: Make decisions together
Smell: People sit in the same places every day (a.k.a. my box, my chair)
Remedy: (really) pair together
Smell: Tools influence your actions (instead of the other way around)
Remedy: Use flexible tools that facilitate whole-team approach
Smell: Odd-man out
Remedy: Power of three
Smell: “Not my job”
Remedy: Make time for and share skills (a.k.a. Have courage -- and humility)
Remedy: (really) co-locate
Smell: Quiet workspace
Remedy: Face-to-face communication
Remedy: As soon as you see a silo, make a card for it
Extra time

YES WE KANBAN

limitedwip­society.org
How kanban facilitates whole-team approach
How kanban facilitates whole-team approach
How kanban can *inhibit* whole-team approach
How whole-team approach reduces some of the 7 wastes

1. Partially Done Work
2. Extra Features
3. Relearning
4. Handoffs
5. Delays
6. Task Switching
7. Defects
Trading your helmet for shinguards
Now: a game of our own!

- Simulates specialization and whole-team approach
- Object: Complete stories using skill cards and build a cohesive “product”
How you play

• One player pulls one of the four story cards for the team to work on and replenishes the backlog with a card from the story draw pile.
• Decide where in the product board the card will be placed.
• Solve the card by playing skill cards, ensuring:
  – Each color must match a number on the card (at least one of each skill card is played).
  – Each number on the card must be represented.
• If you cannot solve a started card, set it aside and continue.
• When you complete a story, place the card into the product board and draw a skill card of the color you played to replenish your hand.
• Story cards must all face the same way
## Scoring

<table>
<thead>
<tr>
<th>Add points for</th>
<th>Subtract points for</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each completed story in your product</td>
<td>Each story that is in progress</td>
</tr>
<tr>
<td>Each unit in the longest contiguous boundary in your product</td>
<td>Each time you change the position of a story in your product board</td>
</tr>
</tbody>
</table>
Setup

• Divide into teams of 4-6.
• Choose one person to be scorekeeper. If you have five or more people on your team, you can optionally have someone be an observer.
• Each team gets a deck of playing cards and a deck of story cards.
• Draw four story cards and place them face up on the table.
Round 1: Play as specialists

- Each player gets seven cards of one suit
- Players cannot trade or pair to solve stories
- One player decides which story to start on
- First player who works on the card must specify on the product board where it will go
Round 2: Play as a whole team

- Each player gets four cards of one suit
- Team may discuss together which card to start on
- Team may discuss together where story goes on product board
- Two or more players can combine cards (same or different suit) whose sum equals one of the numbers on the story card
- When two players work together to solve a card, they each get a bonus skill card (in addition to the one they replenish with) of the suit of their pair’s card
Game retrospective
Additional questions and thanks

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