KANBAN BURGERS

From 18 months to 3 with Kanban and punctuation points

ABOUT ME

Rodrigo Rosauro, Sr. Manager at RDI

- Technology passionate
- 16 years of experience in software development
- Developer & accidental manager
- Working with Kanban since 2013
- KCP





ABOUT RDI

- We design, build and support restaurant automation & e-Commerce software for McDonald's
- Our software runs on almost <u>37K restaurants</u>
- Processing approximately USD <u>\$53K per minute</u>
- A Capgemini company since August 2017



SO, WHAT IS A PUNCTUATION POINT?



PUNCTUATION POINTS

- Key moments that disrupt the equilibrium of the company
- Equilibrium is resistant to changes
- Punctuation points makes it easy to insert changes
- Financial crisis, regulatory changes, political changes, merger, acquisition, divestiture, split, IPO, outsourcing, CEO change, key man exit, reorganization, arrival of a disruptive innovation/insurgents in your market



How we achieved a 6-fold improvement in time-to-market (on a particular project)

ONCE UPON A TIME, IN A COMPANY FAR, FAR AWAY, WHERE WATERFALLS WHERE ALL AROUND, A PUNCTUATION POINT WAS BORN.

Oh my god, I'm definitely not good at storytelling – enough of that!

OUR FIRST PUNCTUATION POINT

The beginning of everything



FIRST PUNCTUATION POINT

- McDonald's came to the conclusion that our restaurant software time-tomarket could jeopardize their dominant position in the market
- At that time, it took 18 months from the conception of an idea until it was deployed to a McDonald's restaurant. (In the best case)
- Long periods of tests and stabilization, due to bad software quality
- We received the mission to solve that
 - A new software architecture was designed

NEW SOFTWARE ARCHITECTURE

- The new architecture was designed to improve our time-to-market
- Based on Microservices
- Test automation from the beginning
- "Green field" project
- ... It was my opportunity to introduce new processes and tools as well! ©

SCRUM CAME INTO PLAY

- We started the project with Scrum, per my own proposal
- The first sprints were a bit awkward, but we where making progress
- After three or four sprints, it was clear to me that we needed to change something. We would not be able to survive the Scrum learning curve in such a high-visibility project
- After discussing the issues with my Director, he suggested me to try Kanban

SO, KANBAN IT WAS!

- We started very simple, but evolved constantly
- After a couple of months using Kanban, the team satisfaction was visibly better
- We could quickly identify bottlenecks in the process, and the perception was that the flow had improved a little
- We decided to do give a proper Kanban training to the whole team
- After the training, it became much clearer that we needed a few important Kaizens

KAIZEN!

The first two Kaizens were very straightforward, as they didn't require any process change:

- Implemented a digital board (Yes, Jira...)
- Changed Jira workflows to add "Waiting" columns to represent queues

50 Backlog 3 To Do 1 In Progress 0 Waiting for review 0 Review 1 Waiting for test 1 Test

KAIZEN!

The next Kaizens required some level of process adjustment:

- JIT replenishment & refining process (Backlog -> To-Do)
- QA as part of the development teams (big company-wide change)
- WIP limits & cross-function swarming

FIRST RESULTS

- Average lead time reduced from 23 days to 8 days
- Defects reduced by 80%
- Average flow efficiency was 50%
- Still no measurable improvements in the throughput

THE SECOND PUNCTUATION POINT

Our opportunity to go Agile!



THE NEED FOR EXPERIMENTATION

- A new high-risk business concept was being designed, and it was absolutely unclear whether it would succeed or not
- This level of uncertainty required very quick feedback loops & experimentation between IT & business
- For this particular initiative, McDonald's agreed to go fully agile, and we implemented a dedicated Service Delivery Kanban covering all steps, from intake to delivery
- The customer was free to reprioritize, add and remove feature requests at will, as long as we had not started working on them yet (commitment point)

A WHOLE NEW EXPERIENCE

- 21 features were designed, implemented and deployed within a 18-months period
- Our average time to market was 3 months, generating valuable feedback to the business (compare that to 18 months that we had before)
- Quick feedback loops allowed the business to experiment a lot, and eventually even completely re-design the idea

AND WE LIVED HAPPILY EVER AFTER.

- THE END



RECAP



RECAP

- 1. Moment of equilibrium with Waterfall development
- 2. First punctuation point: New software architecture, "green field"
- 3. Scrum for a couple of months, then moved to Kanban
- 4. Kaizens
- 5. Second punctuation point: The need for experimentation
- 6. End-to-end Service Delivery Kanban
- 7. 18 months time-to-market reduced to 3 months

THANK YOU VERY MUCH

Time for questions!

