ROTTERTDAM.  MAKE IT HAPPEN.
INTRODUCTION.

The WHY.
Martijn Groenewegen
Digital Strategy Manager

The HOW.
Erik van der Steen
RAD-agile Team Lead
Agenda.

1. Business Environment Context, the WHY
2. Value Drivers
3. Approach, the HOW
4. Timeline
5. Lessons Learned
6. Examples
ROTTERDAM. SOME OF IT ANYWAY
WHAT’S ROTTERDAM ABOUT

- 666,000 Inhabitants
- 175 Nationalities
- Second largest city
- *Inspiring and Innovative* (Lonely Planet)

- 15,000 Employees
- 5 Business Units for city development and maintenance
- 1 Business Unit for Services and Support
- Yearly budget 3.5 Billion

- 900 Employees
- 800 Applications
- 15 RAD apps made in 2018
- 20 RAD apps planned for 2019

- Active network of Innovative partnerships
- Digital Experiment Center since 2018
- Research Innovation contracts
WHY WORK AGILE WITH RAD.

1. **Strategic choice**
   - Need for Bimodal service delivery
   - Flexibility and Business Empowerment
   - Increase quality by co-creation

2. **Embrace need for shadow IT**
   - Increase control over IT
   - Compliancy
   - Risk mitigation
   - GDPR proof
   - Compensate exiting knowledge

3. **Modernize**
   - More mobile features
   - Legacy mitigation
   - Agility is needed
   - Reuse of Services
   - Low cost for experimentation
VALUE DRIVERS.

Public Service
- Service on Demand
- Higher satisfaction

Efficiency
- Better use of employee skills
- Increase productivity
- Faster throughput of service delivery
- Less malfunctions

Compliancy
- GDPR compliant
- Better Process Control
- Better Data Quality
- Less Risk

DevOps Costs
- Faster Dev (reusability)
- Less Dev Costs
- Less Ops Costs
- Managed Cloud
DECISION TIMELINE.

- Mar 2017: Workgroup starts exploring Agile options
- June 2017: Limited market exploration of low-code solutions
- Aug 2017: Start with existing Mendix experience
- Nov 2017: Expand existing license through Comparex
- Nov 2017: Acquire Enterprise License
- Dec 2017: Executive approval RAD approach
DIGITAL EXECUTION PRACTICE.

People

Process

Platform

Portfolio
ROTTERDAM APPROACH: PEOPLE.

What we did
- Centralized Expert team
- Business Product Owners
- Various Mendix partners
- Citizen Developers
- Agile/scrum training

What we learned
- Business PO and Scrum master are key for success
- Celebrate and show successes
- Share between teams
ROTTERDAM APPROACH: PROCESS.

**What we did**
- Iterative approach
- Architecture lead
- Sec & Priv by Design
- Circulate RAD brochure
- Present ourselves
- Integrate Quality (AQM)
- Retrospective done

**What we learned**
- Be strict on agile/scrum approach
- Organize kick off per BizDev team
- Integrate with the standing organization and processes
- Guard consistency: Code of Conduct
- Testing is integral part of BizDevOps
ROTTERDAM APPROACH: PLATFORM.

What we did
- Security measures implemented
- UX/UI implemented
- Reusability organized in private appstore and Gitlab (for hired staff)

What we learned
- Position of Mendix platform in infra
- More genericity enhances dev speed and control
- Adapt to interfacing with mode 1 IT
Dec 2017
Platform License

Jan 2018
Portfolio Workshops

Feb 2018
Start first app with selected partners

Mar 2018
First app live Celebration
  • ISA

Apr 2019
Hiring internal RAD staff

Jun 2019
Add test capability

Jul 2018
8 more apps developed

Aug 2018
Create Structure Plan

Sep 2018
Retrospective with all POwners and dev-partners

Oct 2018
Structure plan approved

Nov 2018
Retrospective

Dec 2018
Retrospective

Jan 2019
Maintenance organised

Feb 2019
More apps go live

Mar 2019
First app in Appstores

Apr 2019
Hiring internal RAD staff

May 2019
Create Structure Plan

Jun 2019
Add test capability

Jul 2019
More apps go live

Aug 2019
Retrospective

Sep 2019
Retrospective

Oct 2019
Structure plan approved

Nov 2019
Retrospective

Dec 2019
Retrospective

Jan 2020
Expanding RAD Expert team

Feb 2020
Add UX-UI and performance capability

Mar 2020
Implementing SAFe framework

Apr 2020
Hiring internal RAD staff

May 2020
Implementing SAFe framework

Jun 2020
Implementing SAFe framework

Jul 2020
Implementing SAFe framework

Aug 2020
Implementing SAFe framework

Sep 2020
Retrospective

Oct 2020
Retrospective
What we did

• Workshops
• Various business units
• Generic widgets
• Value Cases insight (>1M for 6 apps)

What we learned

• Generic widgets: identify asap
• Manage the RAD portfolio
• Value Cases for all apps upfront
• Set and check your KPI’s
• Define Mendix Fit
<table>
<thead>
<tr>
<th>App name:</th>
<th>ISA – Incoming Subsidy Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose:</td>
<td>Replace 4 Excel sheets to manage incoming subsidies, projects, tasks and finances that are stored in separate entities in our ERP system.</td>
</tr>
<tr>
<td>Targetgroup:</td>
<td>Internal department of 6 colleagues, who also create management information.</td>
</tr>
</tbody>
</table>

Dev-time: MVP in 6 weeks; live in 8 weeks; already second iteration live.

Partner: Value Case: 500,000 euros Yearly.
App name: THIS010 - Surveillance & Enforcement

Purpose: Replace shadow IT solution that is not GDPR proof and add similar functionality and thus rationalize various apps. Data centered enforcement is now possible.

Target group: Internal department of over 300 colleagues in the field and their management.

Dev-time: MVP in 6 weeks; live in 8 weeks with small group and now over 300 users; approx. 12,000 notifications per month.

Partner: JAM-IT

Case: 150,000 euros Yearly
**App name:** RBP – Citizen Visitor Parking management

**Purpose:** Replace commercial EOL product. Citizens can reserve a parking spot for their visitors at reduced rate in their neighbourhood.

**Target group:** Citizens of Rotterdam with a parking contract (approx. 80,000 contracts)

**Dev-time:** MVP in 8 weeks; lot of testing done; live after 4 months with native app in Appstore and Playstore

**Partners:** Internal Java Dev team and MANSYSTEM

**Value Case:** 300,000 euros Yearly
| App name: | trashR – Collecting Garbage on demand |
| Purpose: | Give shopkeepers the opportunity to request scheduled collection of garbage (plastic, cardboard, glass) from their shop. |
| Target group: | Shopkeepers of the Lijnbaan in Rotterdam |
| Dev-time: | MVP made by students in 8 weeks; made robust and live after 4 months with app through Flightcheck distribution |
| Partners: | and |
| Value Case: | 80,000 euros Yearly |
App name: 010 Projecten – Reports for the City Council

Purpose: Replace a PDF report on major projects, that was usually late because compiling it takes months.

Targetgroup: The City Council, but as open data for Citizens of Rotterdam and beyond.

Dev-time: MVP in 4 weeks. Second iteration just started.

Partner: incentro

Value Case: Considerable # Euros Yearly
<table>
<thead>
<tr>
<th><strong>App name:</strong></th>
<th><strong>BBA - Request Special Assistance</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose:</strong></td>
<td>Replace a horribly difficult 7 page PDF for citizens to request for special assistance. Makes sure no required evidence is missing out.</td>
</tr>
<tr>
<td><strong>Target group:</strong></td>
<td>Citizens of Rotterdam that require extra assistance due to their living circumstances.</td>
</tr>
<tr>
<td><strong>Dev-time:</strong></td>
<td>MVP in 13 weeks. Due to interface issues not yet operational.</td>
</tr>
<tr>
<td><strong>Partner:</strong></td>
<td>Intermediad</td>
</tr>
<tr>
<td><strong>Value Case:</strong></td>
<td>280,000 euros Yearly</td>
</tr>
</tbody>
</table>
We Thank our Business Partners.