



CRONOS LEUVEN
UCLL DATA MODELING CV APP

LEUVEN



FACTS & FIGURES

An overview about the Cronos Group



FACTS & FIGURES



+4000
People



+600
New hires



+284
**Competence
centers**



+400M
Revenue



8%
**Yearly
Growth**



International

CRONOS COMPANIES IN LEUVEN

CRAFTWORKZ

needle
evidence based strategy & innovation



calibrate

comark



CRONOS – IBIZZ – OPTIS

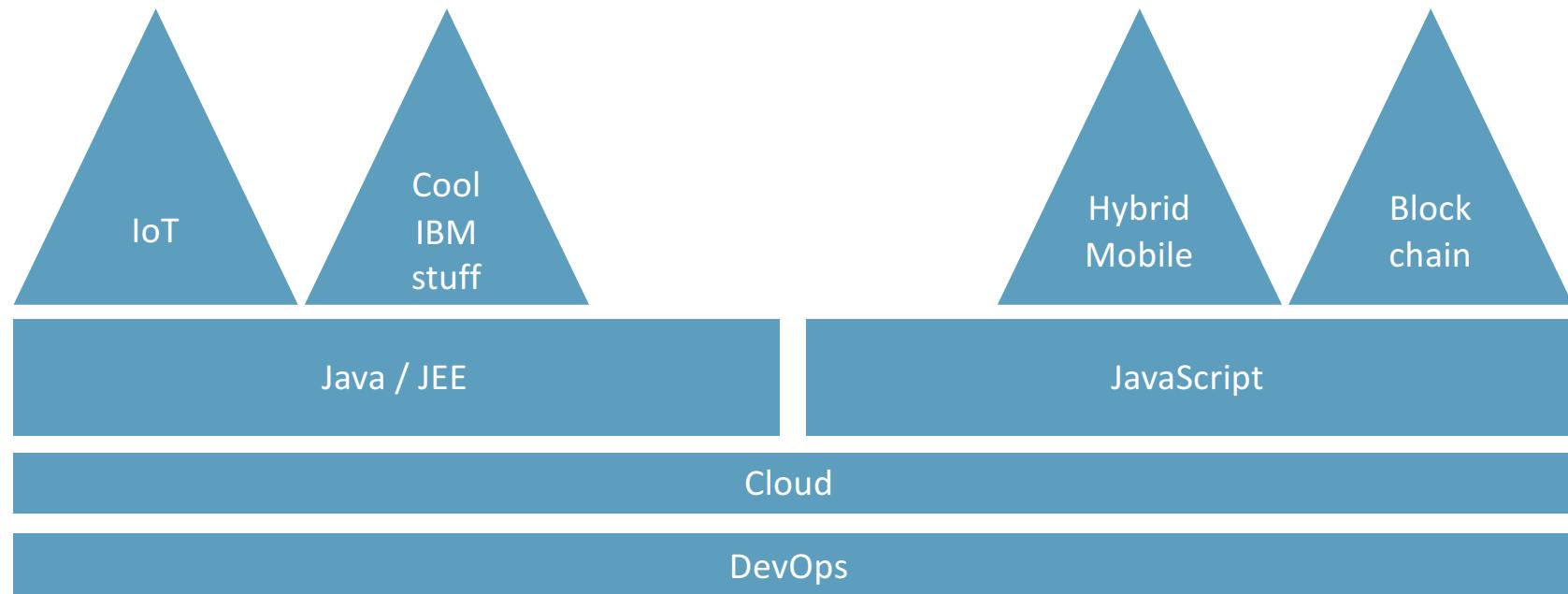
tom.decan@cronos.be

@TomDecan

Company
in NL

Optis

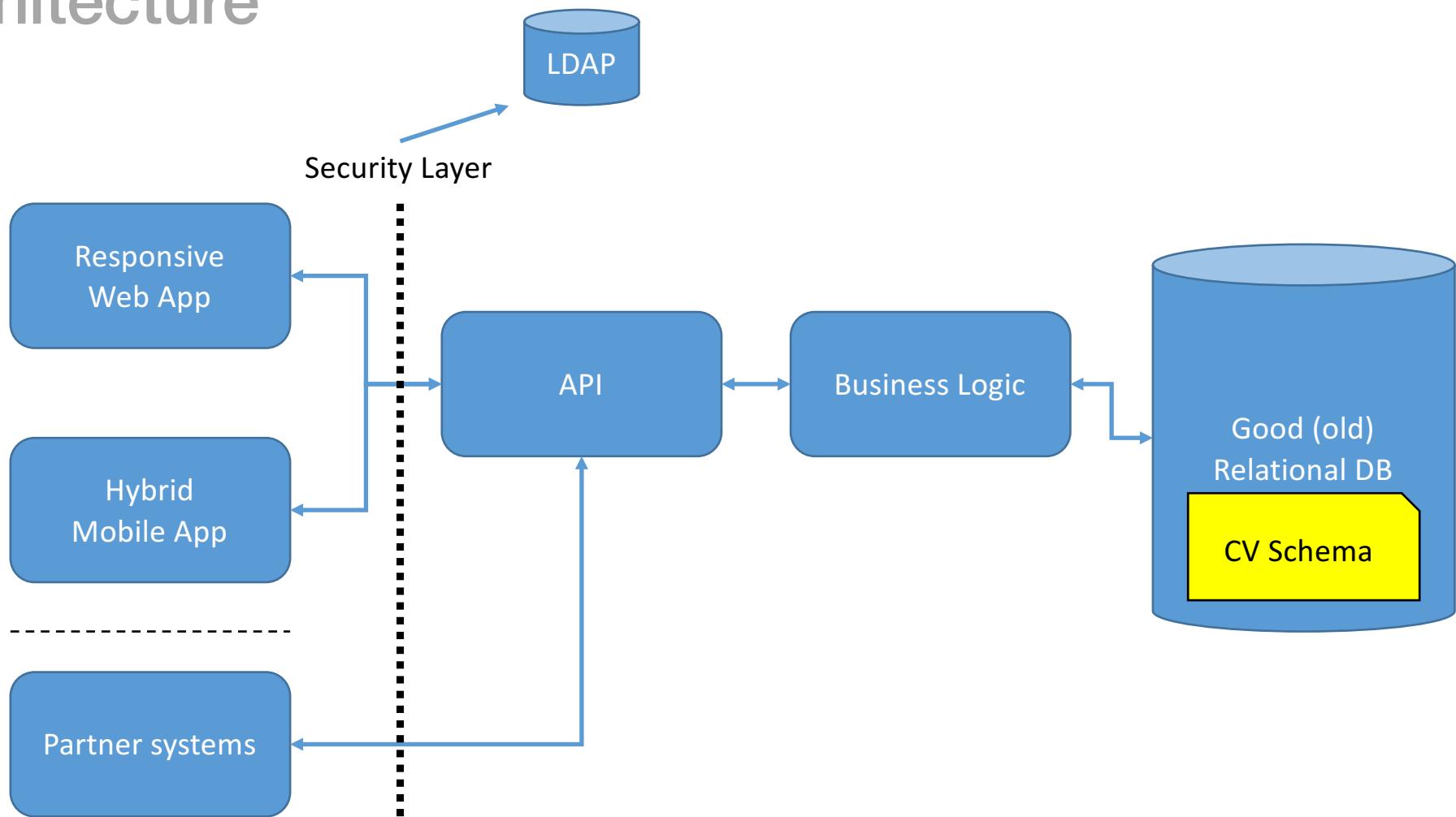
Our strategy



A black and white photograph of a person's hands typing on a laptop keyboard. A solid blue rectangular overlay banner is positioned across the middle-left portion of the image. The banner contains the text "PROBLEM STATEMENT" in large, bold, white capital letters.

PROBLEM STATEMENT

Architecture



Target : create a DB model for a CV application

- Why not dump the CV in MS word format in the DB ☺ ?
 - We want to have structured and precise search capabilities
 - We want to calculate the months / years of experience with certain technologies (ex. for RFPs)
 -

So ... start to model

Requirements (Part 1)

Nr	Importance	Requirement
1	Must	We want to be able to generate a CV from the database as a report in MS Word.
2	Must	We have European ambitions so multilingual content (aiming at NL and EN)
3	Must	Cronos structure – many daughter companies and hence “brands” (logo’s are important to put at the top of the CV)

Requirements (Part 2)

Nr	Importance	Requirement
4	Must	Consultants name and limited personal data must appear on the CV (Year of birth, Gender, Nationality)
5	Must	Certificates , achieved by the consultant (Certificate, date, percentage)
6	Should	Languages : CEFRL.

Requirements (Part 3)

Nr	Importance	Requirement
7	Should	Education (level, date achieved, title)
8	Must	<p>Projects that a consultant worked on:</p> <ul style="list-style-type: none">- description of project, problems solved, duration (start date, end date)- skills (technology) used on the project- Function (Role played) on the project (+ responsibilities)- Tasks executed on the project
9	Should	extra trainings (Date, training organizer, title training)

Requirements (Part 4)

Nr	Importance	Requirement
10	Must	Skills (technology – <u>Category</u> , description, level, experience (duration))
11	Could	Be able to store the CV in MS Word format and know when the consultant is presented to which customer
12	Could	Be able to include soft skills (description and level)
13	Could	Be able to log an audit trail of the users activities.



10 ITEMS - NEVER TO FORGET

Ideas to industrialize DB modeling (1)

- Make it fast !
 - Index from day 1
 - Test with at least 100K records
 - Track growth requirements Y2Y (Important Non-Functional requirement)
- Version management !
 - Check in using a version management system (ex GIT)
 - different per environment (DTAP) (Branch)
- Model using a tool (DB independency)
 - Ex. PowerDesigner ... generate your scripts
 - Maintainability (Effort)
- Communication to all stakeholders
 - Make it visual (ex A3, color coding) including the version number
 - Include constraint names (PK, FK, UK, ...), index names

Ideas to industrialize DB modeling (2)

- DevOps
 - Part of the build process
 - Automate via scripts !
 - Part of product increment
- Structure
 - Separate DDL from DML (code tables)
- Standards
 - naming conventions
- OR mapping tools to generate DB structure
 - In most cases not allowed !

Ideas to industrialize DB modeling (3)

- Never put business logic inside a DB
 - PL/SQL (exception triggers)
- Language
 - be consistent
 - Preferably EN (Intl. support)
 - Sometimes hard to translate !