Using KNIME agile prototyping to establish PoV to project sponsors

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KNIME in Enterprise

Repositories
- Files
- Workflows
- Metanodes
- Custom Nodes

Operational Data Sources
- CRM
- ERP
- MySQL
- Postgres

Social Media
- Facebook
- Twitter
- Flickr
- LinkedIn

Data Marts
- KPI totals
- CI

Other Applications
- Hadoop
- MapReduce
- Hortonworks
- cloudera
- impala
- Action
- HP

Repositories
- KNIME Server
- MuleSoft
- Google
- Amazon Web Services
- IBM
- Microsoft

Event-driven Processes
- Event processing
- Data REST API

Data Lakes
- Hortonworks
- impala
- Action
- HP

Data Services on the Cloud
- Dropbox
- Rackspace

Reports
- Tableau
- Spotfire
- KNIME WebPortal
- BIRT
PoC

What Exactly is a POC

* This is most typically a demonstration project by a reduced team lasting only short time to prove feasibility and costs of a longer term project.

* The client contributes a minimal amount of labor (skills, investigators, or data) in project management and coordination.

* The client makes no investment in hardware, software, or skills in their IT or business departments.

* At the conclusion there is a demonstration of success against the objective, however, productive implementation is almost always outside the scope of the POC.
Value Driver

Value Increases as Data Sets Increase

Web Traffic, Social Media, Media Data, Machine Data

Targeting, Clustering/Dem and Generation

White Space Analysis

% Attainment
% AM
$ / AM
% Partners
% Customers

Example

Quarterly Sales Programs
Roll-out by Region/Segment/Technology

Increase Bookings: Cross-sell / Up-sell

Benefit Calculation Example

# Account Managers
$X Incremental Bookings
= $$$ Bookings
PoC Vs. PoV

What’s wrong with this?

If you’re a Big Data or analytics platform developer probably nothing. The successful PoC allows you to sell your platform to the client/sponsor – mission accomplished.

If you’re a data science consultant, same outcome. You sold some hours and hopefully established the basis for more billable work in the future.

But if you’re the Project Sponsor you got:

* A demonstration project just proving *feasibility* but leaving little or nothing behind in terms of results and right expectations.
From PoC to PoV

Proof of Value is still a demonstration project to estimate feasibility, but also to produce a few introductory results.

1. Your PoV Use Case is now the first small win, you can sell to C*O aiming to a larger scale and more funded project.

2. This PoV Use Case can already be integrated into actual operations, defining a first step process.

3. A PoV also requires involving other non-technical business /SME users. In this way, you’ll be gaining support and additional cheer leaders.

4. At the end of your PoV you’ll have a roadmap of real value.
Flight Plan

1. Potential Value
   - Awareness, Interest, Education
   - Evaluation – Business and Technical

2. Operational Value
   - Starting Point
   - Build Prototype
   - Start simple
     - Existing data
     - Existing applications (DWH, report, …)
   - Make prototype workflow
   - Evaluate model / results
   - Refine prototype with:
     - new easily accessible data
     - New techniques
     - New experimental goal
   - Define possible process

3. Strategic Value
   - Result Evaluation
   - Presentation C*Os / VPs
   - Meeting with C*Os and VPs
   - Sale Points:
     - It is feasible
     - Costs have been quantified
     - Results have been obtained on a small data set
     - Data and techniques could be extended with …
   - C*Os to check strategic and economic value and alignment with company general goals and priorities

4. Final Project
   - Project approved
   - Start Project
   - Data Science Project

Capabilities Required
- Data Knowledge
- Domain Expertise
- Business Case Identification/Quantification
- Data Science for possible Solutions
So many Use Cases …

- **Use case identification and prioritization** – consider starting with those that minimize organizational complexity, perhaps focusing on cost savings.

- **Business case** – careful not to burden with legacy cost (enterprise storage or DR) or seek absolute precision leading to analysis paralysis. Start simple.
  - Use existing use cases that can just be improved.
  - Take advantage of all the example workflows available in the KNIME EXAMPLES Server.

- “**Adult technical oversight**” – avoid disconnect between business leadership and hands-on technical teams, between power point stories the executives share and the practical realities on the team.
Prioritizing also through PoV
KNIME for PoV

KNIME fits well this architecture for PoV, because it is:

- **Versatile.** A large number of techniques to fit a large number of application domains.
- **Agile.** Quick and dirty prototyping is extremely easy and so are changes to make on the fly.
- **EXAMPLES Server.** Several examples already available and growing. Just download one, adjust it, run it.
- **Easy to Learn.** Learning time is fast. We cannot afford long learning times for a PoV.
- **Friendly.** As GUI as well as people.
Thank you!

Questions?

Now or

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