From Vision to Concept to Reality

Robert Vellinga
Salman Shaikh
Lyndon Cerejo

People matter, results count.
Flow

- From Vision to Reality with Rapid Design & Visualization
- The Coca-Cola Company Stories
- What’s Next: Rapid Application Development
The Storytellers

Robert Vellinga
North American Lead
– Rapid Design & Visualization
robert.vellinga@capgemini.com

Sal Shaikh
CokeChannel | CokeSolutions Lead
salshaikh@coca-cola.com

Lyndon Cerejo
User Experience Lead
– Rapid Design & Visualization
lyndon.cerejo@capgemini.com
RDV - Accelerate the visioning of technology innovations and Accelerate the reality of a technology innovation.

**Rapid**
Rapid design and testing of hypotheses iteratively accelerates solution design

**Design**
Collaborative design approach delivers business solutions within defined constraints

**Visualization**
Using simulations to explore complex ideas with business and technology users

“These simulations typically cut software development projects and expenses by more than 10%.”

- Fred Killeen  
  *GM - Chief Systems & Technology Officer*

- RDV Launched within Capgemini in 2006
- RDV in North America – 45 Consultants
- RDV Globally – 200+ Consultants
- Total Projects with RDV – 320+ projects
- Revenues Impacted Annually - $35million
- Innovation partnerships with: iRise, Microsoft, Mendix, Adobe, Yammer
Benefits of RDV

Integrated validation of software... through Visualizations... before development... increases IT project efficiency and effectiveness

Integrated validation...
Define and design an optimal user experience that delivers business value and fits with IT architecture and systems used

...through visualizations...
Seeing is believing: Interacting with software enables stakeholders to understand what they will get, what they will have to use and what they will have to develop

...increases efficiency and effectiveness!
Visualization from the start of a project delivers project efficiency (less rework, less requirements & design time) and effectiveness (high acceptance and productivity)
RDV Methodology

RDV is Capgemini’s user-centered design methodology for accelerating the discovery, definition, and validation of requirements through iterative rapid prototyping, participative design sessions, and usability testing with customers and stakeholders.

**Develop Design Insights**
- Whiteboard interaction flows
- Create screen layouts
- Create navigation model / information architecture

**Design Synthesis**
- Develop personas
- ‘What If’ exercises w/ SMEs & stakeholders
- Define scenarios

**Research & Analysis**
- Current state UX
- Requirements review
- Process mapping
- Targeted ethno research & analysis

**Screen Layout**
- End Users
- Business
- IT

**Simultaneous Definition & Review**
- Visualize, Review, Iterate Cycles
  - Interactive simulations
  - Participative design review sessions w/ SMEs & end users
  - Synthesize feedback & iterate simulations

**Validated Future State / Design Specs**
- Finalize simulations
- Final information architecture
- Style Guide
- Requirements support

**Initiate**

**Deliver**

**Actors**
- RDV Team
- Sponsor
- Business Stakeholders
- Technology Stakeholders
- End Users

From Vision to Concept to Reality – Visualize 2013
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Storytelling with visualizations and data that is relevant to the users and stakeholders

- User Research
- User Profiles
- Scenarios of Use
- Business Processes

- Legacy Systems
- Brand Standards
- System Designs
- Creative Design

- Names / Roles
- Nomenclature
- Representative Data
RDV Process Steps

User research
- Gathering initial input on users to understand specific needs, behaviours and goals.

Scenarios
- Only high-risk and high-impact requirements will be visualized and presented in a review & validation workshop.

Screens
- White-boarding of screen sketches and screen flows based on a task design & user experience best practice.

Documentation
- All visual elements of the GUI, navigation flow, general design principles, look & feel and functionality of each UI pattern, general usability and accessibility rules.

Validation
- Review & validation with all stakeholders (including users testing).

Visualizations
- Creation of the visualization, either in a mock-up or prototype.
RDV Impact

**Quantitative**

- 20-30% reduction of project cost
- 80% reduction in requirements-related defects
- 25% acceleration of the development cycle
- 58% reduction in customer support contact rate
- 400% increase in innovation

**Qualitative**

- Less discussions back and forth, reduced UI related critical severity defects and turnaround time
- Better UAT alignment allowing UAT duration to be compressed
- Better understanding of future state, change management and training needs
- Improved distributed development
Flow

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“Last year we did 2 major programs leveraging Capgemini RDV technology (Rapid Design and Visualization). And it was indeed rapid. We were able to delight our users faster and the solutions came to market much quicker. Therefore, we also saved money.”

- CHIEF DEVELOPMENT OFFICER; THE COCA-COLA COMPANY
Happiness Factory: behind the scenes, in a vending machine

Project Gateway: behind the scenes, making it “non-SharePointy”
Customers, Bottlers, Partners & Employees and other Business partners had multiple tools to get information, and to do business with Coca-Cola North America
- 12,000+ documents and 110+ applications spread across multiple parts of the business

Project Gateway aimed to create a seamless experience through a single portal aligning sales and marketing information
- One place with the business direction, information, resources, and tools needed to effectively, efficiently, and successfully get their jobs done

Existing high level requirements, wireframes and visual design based on a previous technology direction

Capgemini’s approach was to visualize the highly customized SharePoint solution using iRise during requirements elaboration
- Stakeholders’ experience with SharePoint were traditional out of the box implementations
- High fidelity simulations helped them visualize the custom branded SharePoint site
RDV tailored for Project Gateway

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**Research & Analysis**
- Current state UX
- Requirements review
- Process mapping
- Targeted ethnography & analysis

**Simulation & Review**
- Visualize, Review, Iterate Cycles
  - Interactive simulations
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  - Synthesize feedback & iterate simulations

- Validated Future State / Design Specs
  - Finalize simulations
  - Final information architecture
  - Style Guide
  - Requirements support

**End Users**
- Final information architecture
- Style Guide
- Requirements support

**Business**
- Define scenarios
- Participative design review sessions
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**IT**
- Interactive simulations
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**Actors**
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**RDV tailored for Project Gateway**

**Storyboard #1**

- RDV tailored for Project Gateway
- Visualize, Review, Iterate Cycles
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iRise simulations incorporated the voice of the customer and voice of reason.

Story #1

- Wireframes
- SharePoint considerations
- Visual Design

8 # of days for stakeholders to test drive main flow
From Vision to Concept to Reality

Creative Visual Design
based on the old technology direction

iRise Simulation
Creative visual design + SharePoint considerations and constraints

Actual SharePoint page
Matches iRise simulation
= no surprises for stakeholders
From Simulation to SharePoint
CokeSolutions was one of many other projects that followed the same process successfully:

- Design & Prototyping
- Simulating design options
- Usability testing
Benefits to CokeSolutions

2 months early launch

0 defects at UAT

100% increased site usage
RDV value delivered on other projects at The Coca-Cola Company

- 27% unnecessary requirements reduced
- 7% professional services fees savings (req. phase)
- 9% value of potential change requests avoided by end of req. phase
Demos

- iRise Visualization – used for usability testing
- CokeSolutions - Live site demo
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Future Design of Applications is “Outside-In”

“Inside-out”
– existing operations

“Outside-in”
– how to respond to change that is happening at the borders of, and outside the organization?‘

Different technologies and different business requirements
The Truth is…the linear experience of the Past has moved to a map and now a hub model

<table>
<thead>
<tr>
<th>Journey of the Past</th>
<th>Today’s Journey</th>
<th>Journey of the Future</th>
</tr>
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<tbody>
<tr>
<td><strong>Fulfillment</strong></td>
<td>![Fulfillment Image]</td>
<td>![Fulfillment Journey Image]</td>
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<tr>
<td><strong>Bricks and Mortar</strong></td>
<td>![Bricks and Mortar Image]</td>
<td>![Bricks and Mortar Journey Image]</td>
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<tr>
<td><strong>Online</strong></td>
<td>![Online Image]</td>
<td>![Online Journey Image]</td>
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The customer journey of the future will provide flexibility, convenience and transparency in experiences with any business.
Standard Requirements Process was defined and refined during Inside-Out Design era.

The broken process, lack of collaboration & rework has costly results on the application development process.

Gause, Donald & Gerald Weinberg, EXPLORING REQUIREMENTS: QUALITY BEFORE DESIGN
Design-Based Requirements Process is the way forward for Outside-In Design and Innovation

Design Process customers experience a 27% to 70% reduction in requirements based change requests.

Peter Coughlan, Jane Suri, Katherine Canales – IDEO THE JOURNAL OF APPLIED BEHAVIORAL SCIENCE, VOL 43
Agile & RAD: Design Spec Flywheel is defined by speed, iteration, design and ‘minimal viable products’
Rapid Application Development…

- The Digital Revolution has empowered forces external to the enterprise to drive the way of the future, requiring different technologies and different business requirements to fulfill the promise

- The current requirements through development process is a broken process with the lack of collaboration & rework has costly results on the application development process

- The use of a new design based requirements process in combination with an agile factory stack development and maintenance process will provide validation, clarity, and ROI impact

- Aim to produce minimal viable products and fit to build solutions
Summary

- From Vision to Reality with Rapid Design & Visualization
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About Capgemini

With more than 120,000 people in 40 countries, Capgemini is one of the world’s foremost providers of consulting, technology and outsourcing services. The Group reported 2011 global revenues of EUR 9.7 billion. Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore®, its worldwide delivery model.

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