

# Microsoft Dynamics CRM 2011 (CRM2011)

From a Technical point of view



Communicate with IT

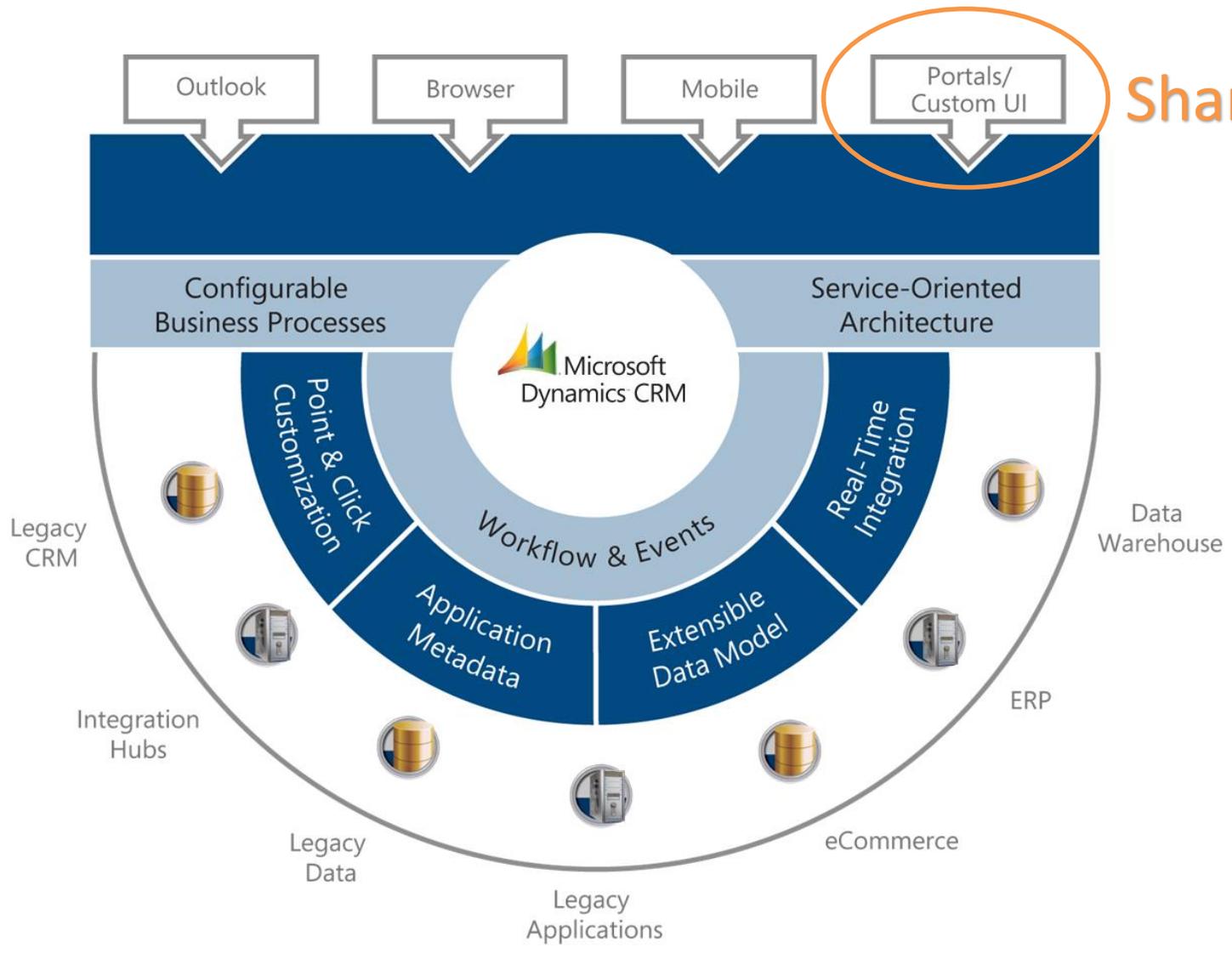
- Intro
  - Ramón Soto Mathiesen
- CRM2011
  - Architectural Overview
  - From a development point of view
  - SharePoint 2010 integration

- Delegate: 2013-
  - Stilling: CRM Architect
  - CRM Projekter: Forhåbentlig rigtig mange 😊
- Uddannelse: 2005-2010
  - cand.scient datalogi bifag i matematik (DIKU/Pisa/HCØ)
  - Er også MCP + MCSA + MCSE + MCDBA 😊
- Netcompany: 2010-2012
  - Stilling: Senior Software Architect
  - CRM Projekter : ISS, DSR, Peugeot, Konica Minolta, Mærsk Drilling, Ældre Sagen, Søfartsstyrelsen, Oticon A/S, Brüel & Kjær, ...
- Scan Jour: 2007-2010
  - Stilling: System developer
  - POLSAG (ESDH) – [C++, C#, JavaScript, Oracle, ...]
- Danish Dental Association: 2000-2007
  - Stilling: System Administrator & software developer
  - Arkivarius (ESDH) – [C#, JavaScript, MSSQL, ...]

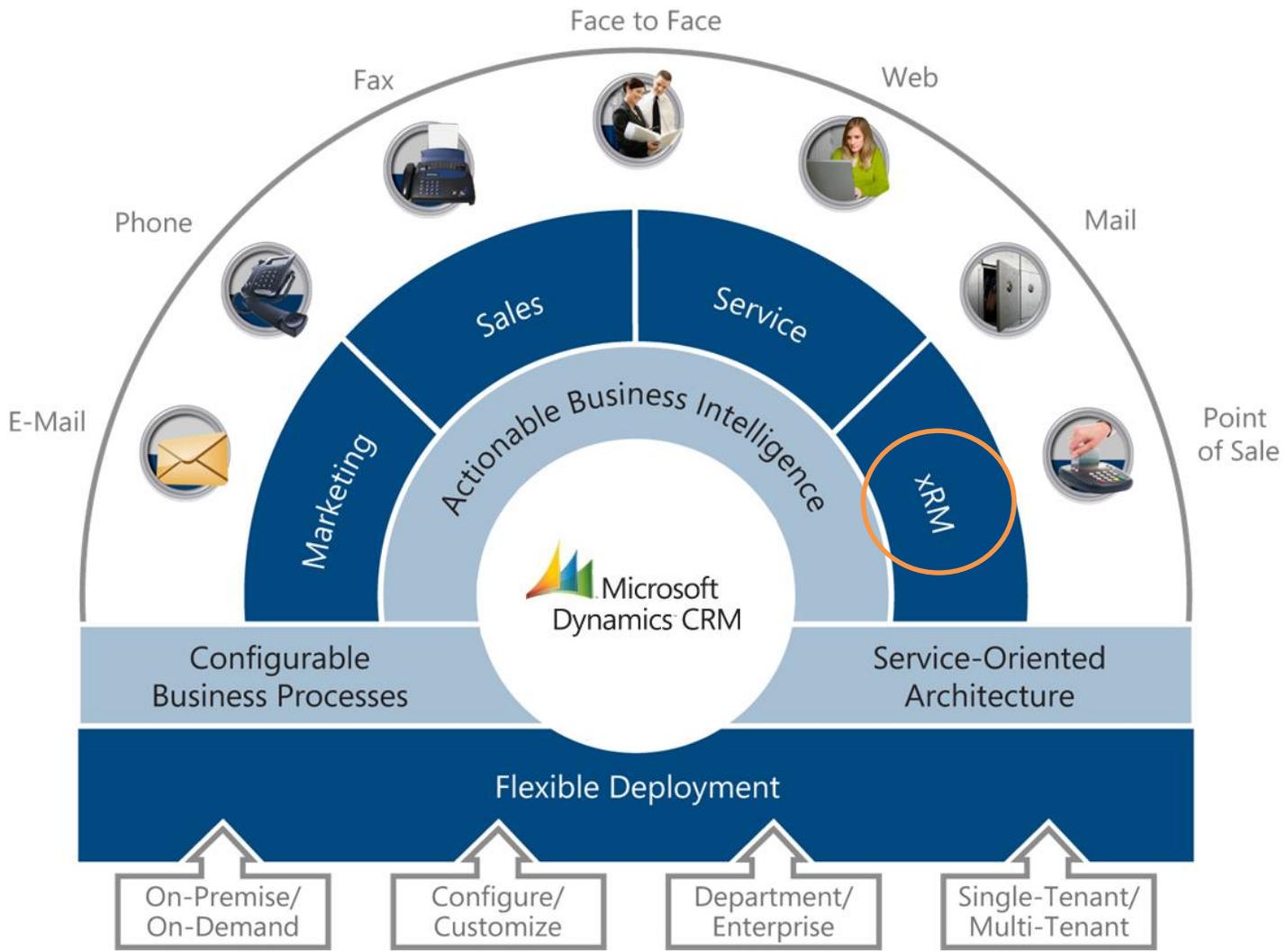




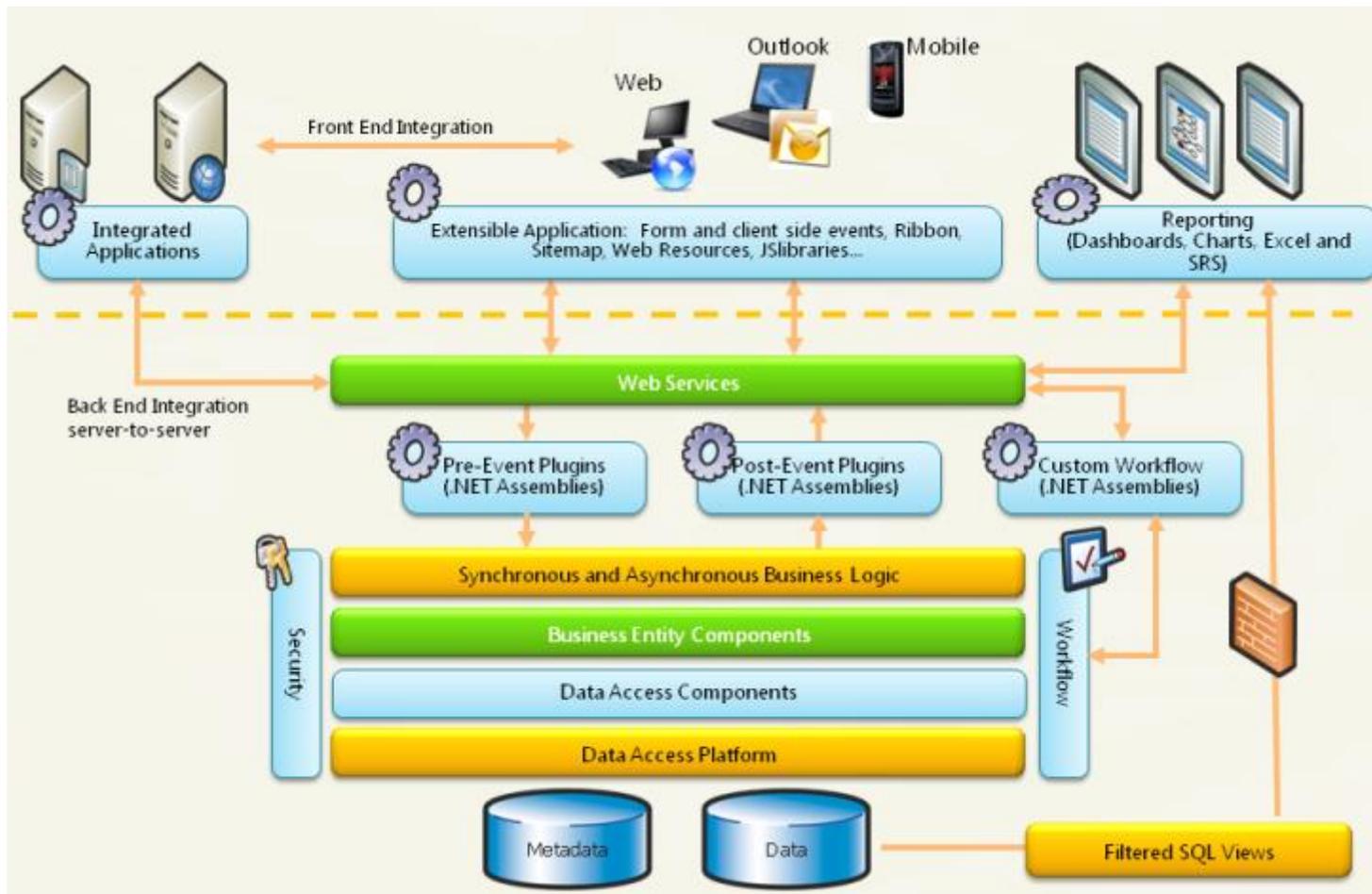
SharePoint



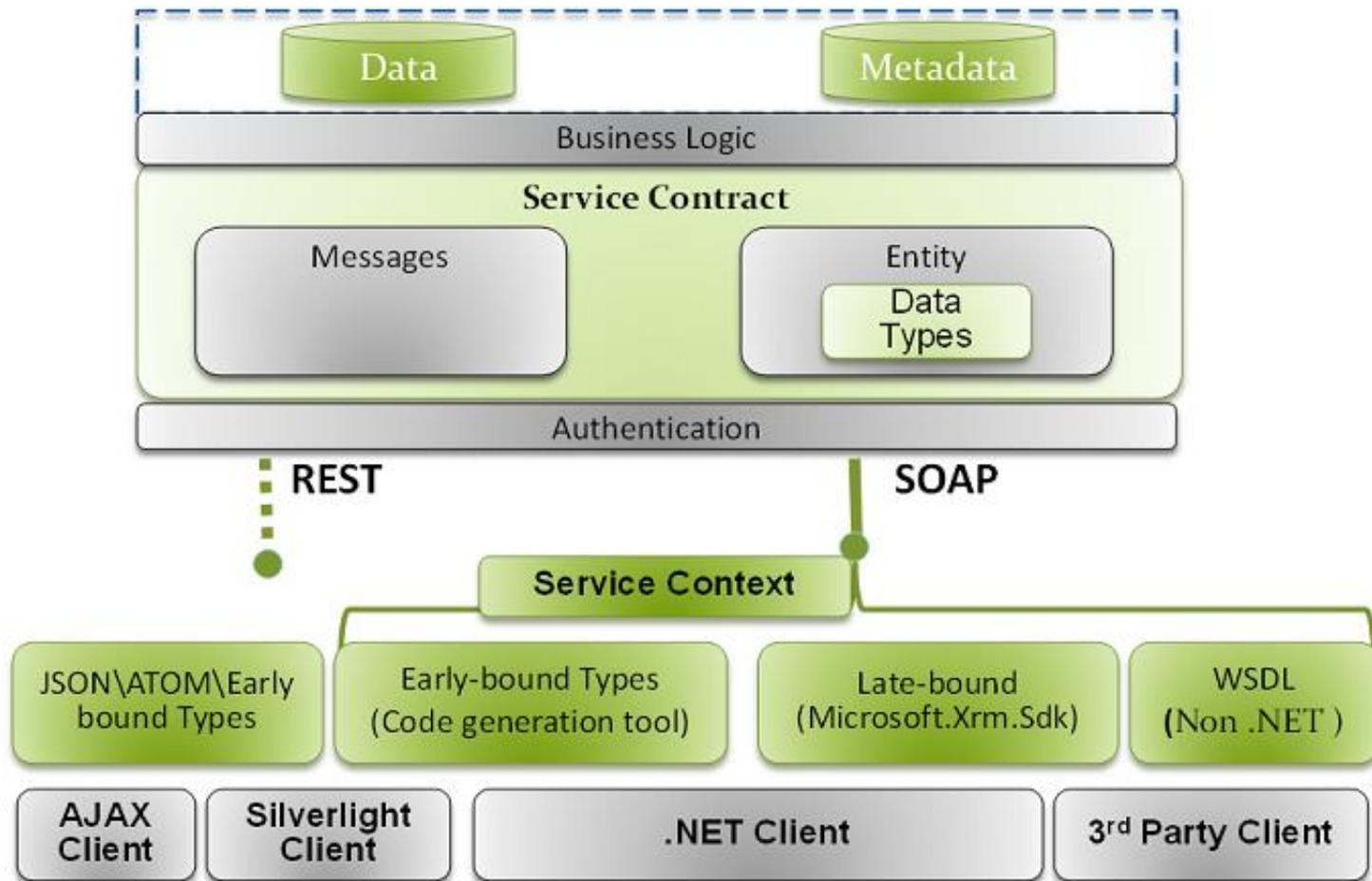
- Overordnede
  - .NET 4.0
  - Windows Workflow Foundation 3.0
  - SQL Server 2008 SP1 64bit or 32bit
  - Windows Server 2008 SP2 or R2 64bit
  - Cross-browser + Metro UI ... Snart med udgivelse af Polaris opdateringen ☺
- Hvorfor er platformen relevant og smart for Delegate?
  - Da den kommer med et færdigt produkt out-of-the-box (CRM) er det muligt at hurtigt opsætte en Demo/POC og efterfølgende arbejde videre på løsningen (xRM). Det passer jo meget fint med Delegates Agile (Scrum) kultur.
  - Der er indbygget standard integration til SharePoint og det er også muligt at bygge en helt ny UI som tilgår CRM forretnings logik (mere senere i slides)
  - Teknisk er platformen veldefineret og meget robust. Den kan nemt tilpasses til kundernes infrastruktur og behov (migrering, integrationer, on-premise/online, ...)
  - Det er sjældent et CRM projekt ikke også kick-starter andre projekter hos kunderne:
    - SharePoint dokument bibliotek eller Portal for ekstern tilgang
    - BI data warehouse for reportering



# CRM2011 – From a development point of view (under-the-hood)



- **Out-of-the-box (OOB):**
  - Support for Configurations/Customizations to data model and UI
  - WSDL Based Endpoint that exposes the data model and all business logic
  - Integrated SQL security based on CRM roles (access from SQL or Excel)
- **Client-side:**
  - JavaScript support (only on entity Formulars but not entity Lists)
  - CSDL Based Endpoint: OData + REST API
  - No ASP.NET support as ISV folder is @deprecated
    - Use custom app/web services instead
- **Server-side:**
  - Plugins (.NET assemblies)
    - Pre- and Post- transaction events (Sync- and Asynchronous)
  - Visual Workflows (WWF 3.0) & Custom Workflows (.NET assemblies)
    - Only Post- transaction events (Asynchronous)
- Reports & Custom Reports by using SQL 2008 BIDS
- Custom applications (ex: online applications on Azure)
- Custom services (ex: for integrations)





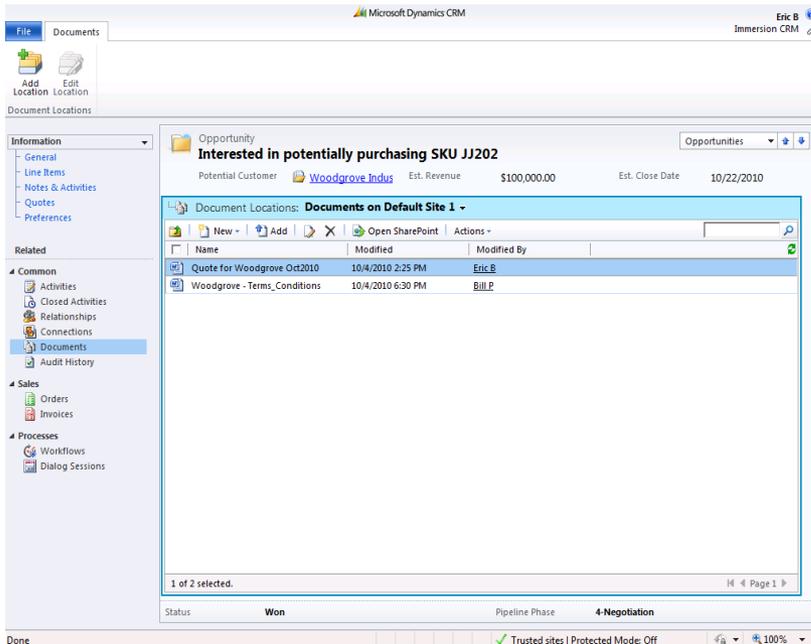
SharePoint

<p>Unstructured &amp; Semi-structured Data</p>	<p>Social Engagement &amp; Collaboration</p>	<p>Information Evolution &amp; Storage</p>	<p>Informal Rules</p>	<p>Enterprise Search</p>	<p>Across Teams &amp; Domains</p>
<p>Structured Relational Data</p>	<p>Interactions, Activities &amp; Tasks</p>	<p>Information Generation &amp; Analytics</p>	<p>Formalized Processes</p>	<p>Data Query &amp; Filter</p>	<p>Within Teams &amp; Domains</p>

CRM

**Remark:** CRM2011 .NET 4.0 vs SharePoint 2010 .NET 3.5

- Out-of-the-box (OOB):
  - SharePoint Document Management in CRM. Two Step Setup:
    - Install SharePoint WSP
    - Configure CRM Locations & Entities



Out of the Box Experience

Document Library  
per CRM entity

Folder per CRM  
record

Mainly: Visual  
Application  
Integration

No Metadata /  
Attribute  
Synchronization

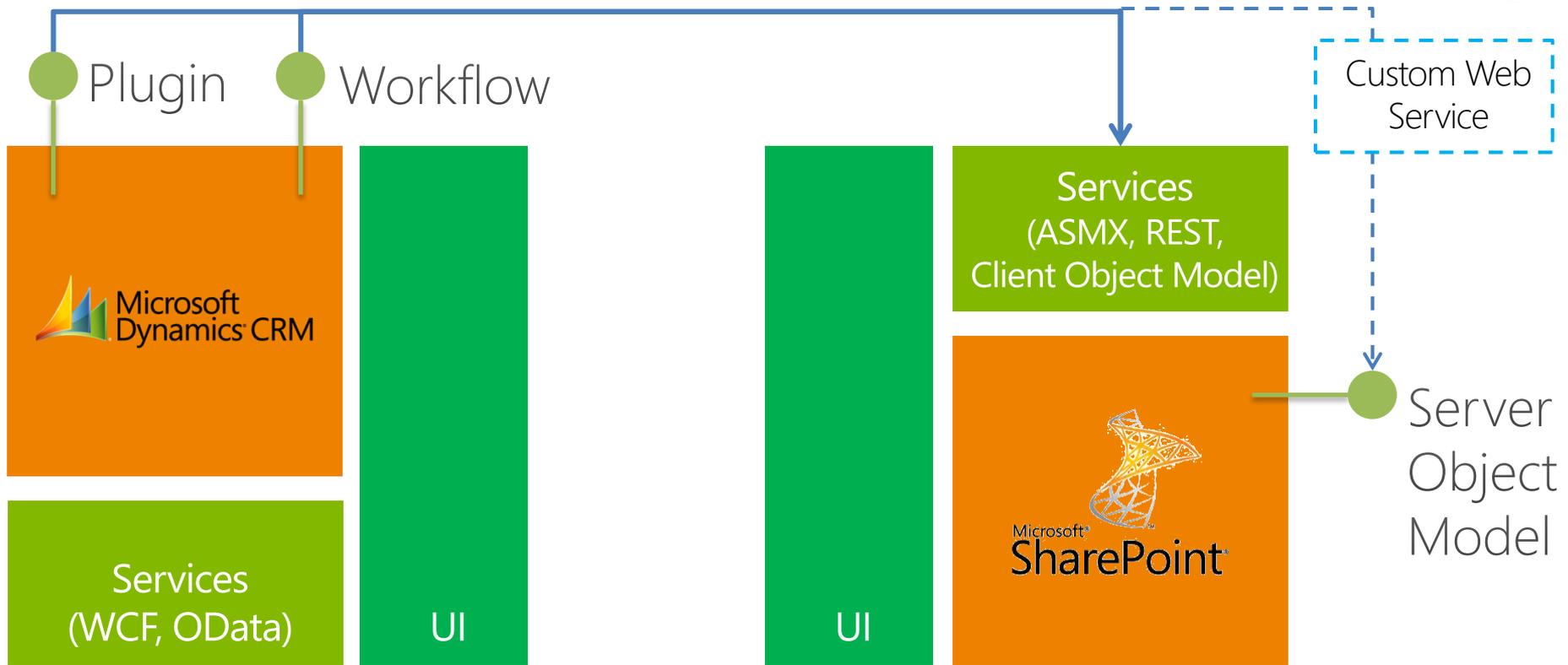
- Common Scenarios:
  - Control & Automate Provisioning
    - Decide what kind of storage is created, where and when
  - Expose CRM data to SharePoint
    - Publish CRM Data to a broader audience and make it Searchable CRM Data as Metadata on SharePoint items and within Office
  - Combine, Compose & Collaborate
    - Bridge structured and unstructured environments
  - Understanding the possibilities and limitations are key but ... the sky is the limit!!! 😊

Controlled  
Provisioning

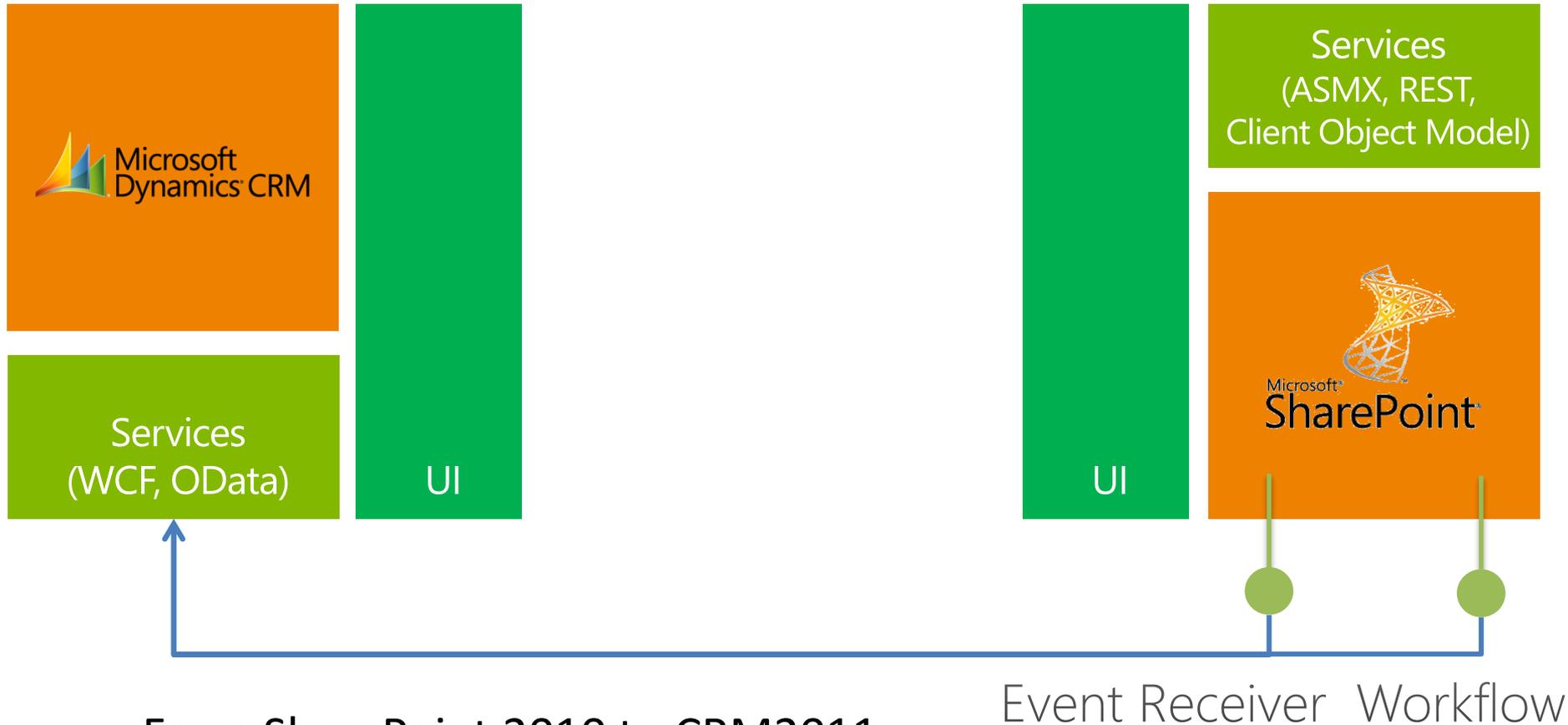
Broader Audience  
& Search

Metadata

Combine the best  
of 2 worlds



- From CRM2011 to SharePoint 2010:
  - Use SharePoint Client Object Model
  - Use SharePoint Web Services (ASMX)



- From SharePoint 2010 to CRM2011:
  - Use the CRM WSDL/CSDL Based Endpoint

Spørgsmål?