

# Dynamics CRM 2013 Customization and The Platform Evolution

Jukka Niiranen (@jukkan)





# Today's agenda

- History of Microsoft's CRM platform
  - CRM 2013 – the start of the next chapter?
- Effects of mobile computing
  - One app – many, many clients
- Customizing CRM today
  - Design more than just the data model
- Delivering responsive solutions
  - ...with no code!



# About me

- Dynamics CRM consultant from Helsinki, Finland
- Worked with the platform since 2005
- Frequent blogger & #MSDYNCRM evangelist on social media
  - Blog: Surviving CRM at [niiranen.eu/crm/](http://niiranen.eu/crm/)
  - [@jukkan](https://twitter.com/jukkan) on Twitter (& many other networks...)
- Awarded as Microsoft MVP last year
- Focused on improving CRM solution usability & information work efficiency

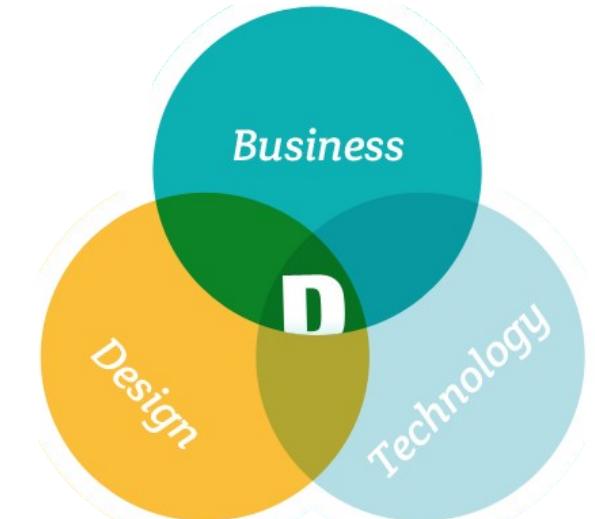




# About Digital Illustrated



- Digital Illustrated is an agile technology agency that creates business value with Microsoft technologies.
- We focus on solutions that improve customer experience, social collaboration and business agility.
- Designing and implementing consumer-grade enterprise solutions built on platforms like SharePoint, Dynamics CRM, Yammer, Azure
- Founded in 2011, growing fast, and owned by the employees
- ***THIS JUST IN! Download a free CRM Online goal visualization app for your Windows Phone 8 device from [crmgoals.com](http://crmgoals.com)!***



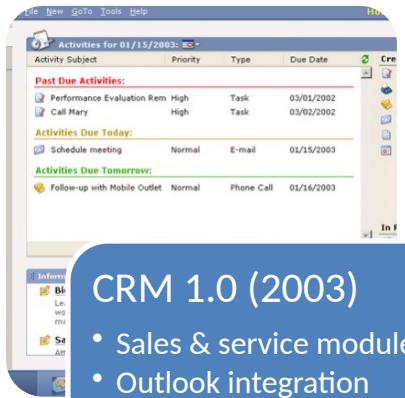
# HISTORY OF MICROSOFT'S CRM

*CRM 2013 – The start of a new chapter?*



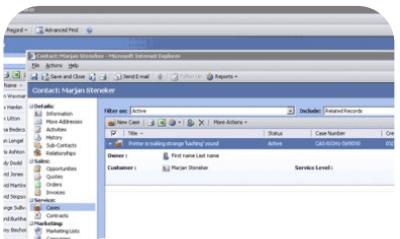


# The first chapter of CRM: 2003-2011



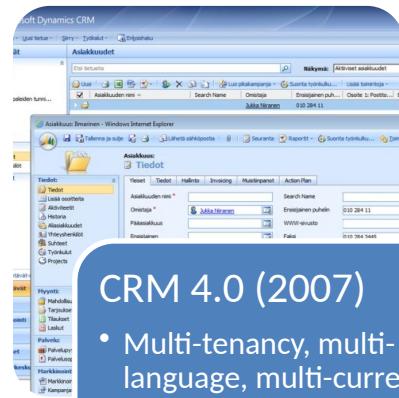
## CRM 1.0 (2003)

- Sales & service modules
- Outlook integration



## CRM 3.0 (2005)

- Custom entities (XRM)
- Marketing module
- SSRS reporting



## CRM 4.0 (2007)

- Multi-tenancy, multi-language, multi-currency
- Windows Workflow Foundation
- From callouts to plugins
- Report Wizard



## CRM 2011

- Charts & dashboards
- The Ribbon
- Solution model
- Native Outlook app
- Form subgrids, web resources, goal management, dialogs

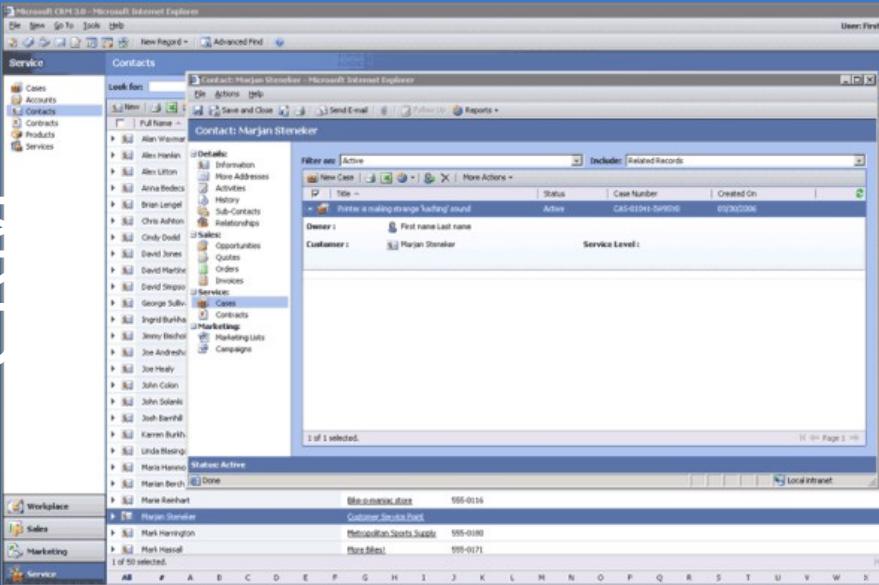


# From evolution to revolution?

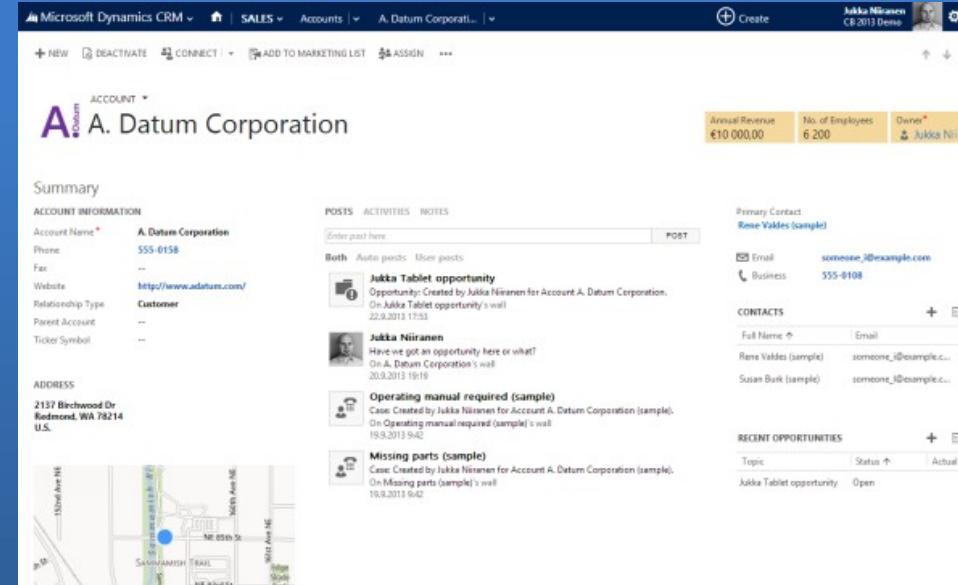
- The first 4 major releases of CRM were a steady evolution:
  - New functionality and options being added alongside existing ones
  - Platform components replaced with more robust technologies
- CRM 2011 was a “*more of everything*” release, a pinnacle of this chapter
- CRM 2013 no longer continued on this familiar path, instead it could be seen as an “*everything’s different*” type of a paradigm shift

# User interface evolution CRM applications: Microsoft vs. Salesforce

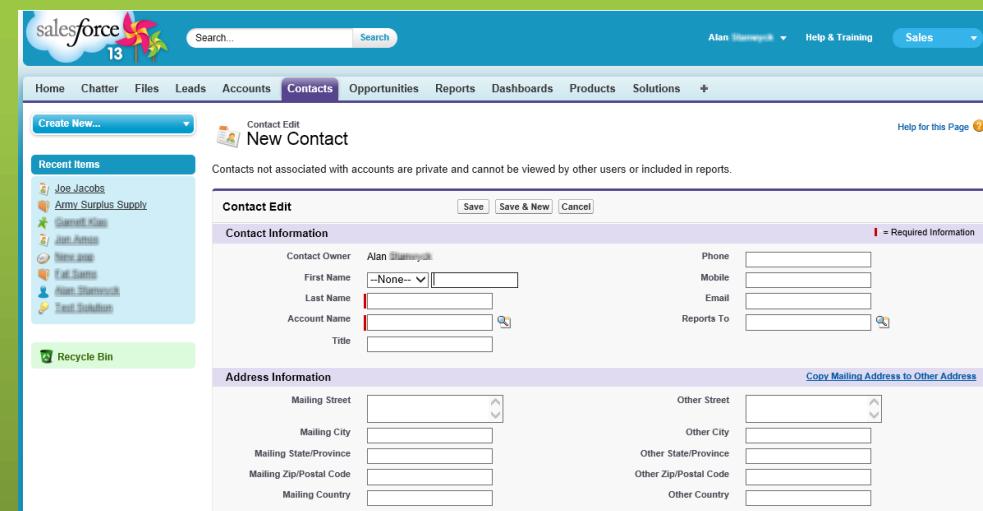
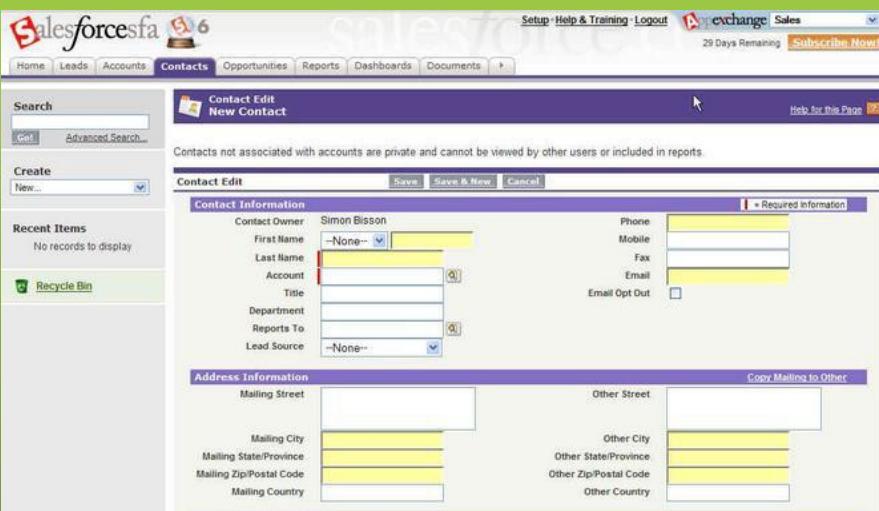
Microsoft  
Dynamics  
CRM



2013



Salesforce



**DIGITAL  
ILLUSTRATED**  
DESIGN TECHNOLOGY SUCCESS



# CRM design principles: then and now

## Aaron Elder's WebLog

Microsoft CRM and the wonderful world of making it work for you...

2004

MSDN Blogs > Aaron Elder's WebLog > Microsoft CRM User Interface Part 3 of 4

### Microsoft CRM User Interface Part 3 of 4



MSDNArchive 16 Sep 2004 8:37 AM | 4

#### ISV User Interface Guidelines, Etc.

This section will give you pointers and guidelines for developing UI's that "play nice" in the Microsoft CRM space. This will help your user's interact with your add-on more efficiently and will help you "professional lookup".

**Note:** A lot of what you see below are guidelines and principles. Rules of course are meant to be bent on occasion, and in the interest of time and ship dates we had to bend some. You will have to use your best judgment when it comes to putting these guidelines to work for you.

**Note:** Some of this stuff is going to change in v2.0...

#### 1.) Interface Principles and Overview

##### Keywords to describe the MSCRM User Interface:

###### Clean

Having no imperfections or blemishes; Free from clumsiness; Devoid of restrictions or encumbrances;

###### Elegant

Characterized by or exhibiting refined, tasteful beauty of manner, form, or style.

###### Simple

Not involved or complicated; easy; not overly complex;

2013

Simple  
Usable  
Modern  
Fast

Loved

- Focus on the essential functions with a clear, consistent purpose that matches user intention
- Measure usability, incorporate feedback into designs
- Use appropriate web interpretation of Windows® 8 UI to create delightful, engaging people and process centric experiences
- Design and deliver great perceived performance

- Design for Love. Create software that people not only want to use, but simply can't live without

# THE EFFECTS OF MOBILE COMPUTING

*One app – many, many clients*



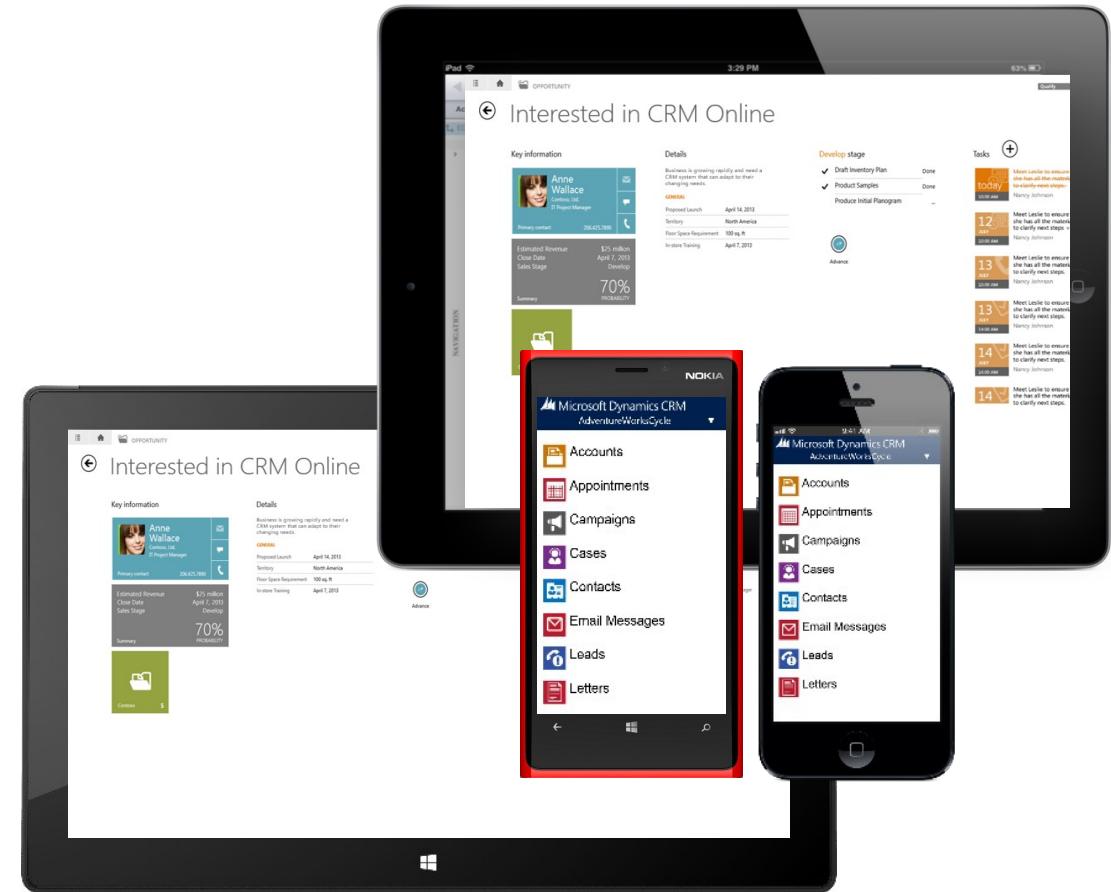


# Mobile CRM concept: then and now

What Microsoft originally thought it was



What it actually turned out to be





# CRM 2013 Client Types

## Web

SALES Accounts Supercell |

My Work DASHBOARDS WHAT'S NEW ACTIVITIES

Summary

ACCOUNT INFORMATION

Account Name	Supercell
Phone	--
Fax	--
Website	<a href="http://www.supercell.com">http://www.supercell.com</a>
Parent Account	--
Ticker Symbol	--

POSTS ACTIVITIES NOTES

Enter post here

Both Auto posts User posts

Jukka Niiranen These guys just sold 51% for a whopping \$1.53 bil On Supercell's wall 28.10.2013 22:21

Supercell Account: Created By Jukka Niiranen On Supercell's wall 28.10.2013 22:04

Itämerenkatu 11-13 00180 Helsinki Finland

The specified credentials are invalid. You can sign up for a free developer account at <http://www.bingmapspointer.com>

## Outlook

FILE Accounts View Charts Add Customize

New Edit Merge Delete Send Direct Email Add to Marketing List Assign

Records

Sales My Active Accounts

Search My Active Accounts

ACCOUNT NAME	MAIN PHONE	ADDRESS
C W D C Metal Fabrica...	914-861-9748	Kat...
Calaveras Prospect	732-628-9909	Tom...
Cali Sportswear Cuttin...	973-936-5095	Litt...
Cambridge Inn	908-409-2890	Pitt...
Campbell, Jan Esq	215-964-3284	Phil...
Campbell, Robert A	201-920-9002	Kean...
Can Tron	314-732-9131	Sair...
Cangro Transmission Co	303-402-1940	Eng...
Cape & Associates Rea...	978-626-2978	Wil...
Capitol Reporters	916-591-3277	Sac...
Carmichael, Jeffery L Esq	415-306-7897	San...
Carol, Drake Sparks Esq	650-933-5072	San...
Carriage House Cllsn ...	847-519-5906	Elk...
Carroccio, A Thomas Esq	931-273-8709	Tulla...
Cascade Reality Adviso...	505-977-3911	Las...
Casco Services Inc	602-390-4944	Pho...
Case Foundation Co	817-765-5781	Ken...
Centerline Engineering	602-919-4211	Pho...
Central Die Casting Mf...	757-682-7116	New...
Centro Inc	512-587-5746	Rou...
Century 21 Krall Real E...	336-822-7652	Burl...
Century Communicati...	602-277-4385	Pho...

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## Tablet

### Sales Dashboard

Pinned Tiles

The Cracker Box Mason, Ohio Gabriele Cannata 1-555-555-0146

Matthew Miller Senior Web Administrator The Cracker Box

Interested in 3D Print... 25 Probability

My Activities

DATE	ACTIVITY	NOTES
12 July 12:29 PM	Review the RFP Library	Interested in Pr...
13 July 11:37 PM	Identify Decision Maker from Ric... Rave Sales for C...	Interested in Fa...
15 July 12:29 PM	Prepare sales presentation fo... opportunity.	Interested in Pr...
19 July 3:16 PM	Review the RFP Library	Interested in Fa...
22 July 3:16 PM	Prepare sales presentation fo... opportunity.	Interested in Fa...
25 July 5:06 PM	Review the RFP Library	Interested in La...
28 July 5:06 PM	Prepare sales presentation fo... opportunity.	Interested in La...

## Phone

9:41 AM Microsoft Dynamics CRM AdventureWorksCycle

- Accounts
- Appointments
- Campaigns
- Cases
- Contacts
- Email Messages
- Leads
- Letters



# Key Differences Between Clients

Web	Outlook	Tablet	Phone
<ul style="list-style-type: none"><li>• Mostly single window</li><li>• Sitemap as global Nav Bar</li><li>• 3 column form layout by default</li><li>• No more Ribbon</li></ul>	<ul style="list-style-type: none"><li>• Sitemap shown as folders</li><li>• Ribbon in main window</li><li>• Popups for record details</li><li>• Preview form as single column</li><li>• No Global Quick Create</li></ul>	<ul style="list-style-type: none"><li>• Standard forms rendered for touch</li><li>• One dashboard</li><li>• Business Rules supported</li><li>• Scripts supported</li><li>• No HTML or iFrames support</li></ul>	<ul style="list-style-type: none"><li>• Separate Mobile forms</li><li>• Business Rules not supported</li></ul>



# Client Support Considerations

- Every supported client option will require testing – and support
- Outlook client is still frequently needed for tracking individual emails and other activities, regardless of the CRM 2013 Server-side Sync support
- Not all of your entity form functionality may work when accessing the record via the CRM for Tablets app
- The Web UI can be accessed with many non-PC devices



# CUSTOMIZING CRM TODAY

*Design more than just the data model*





# Traditional CRM system

**Tietueiden valinta**  
Kirjoita haettavat tiedot Etsi-ruutuun ja valitse Etsi. Valitse sitten haluamasi tietue ja valitse OK.

Etsi: [ ] Etsi

Hanketyppi: Tutkimus, Koulutus, Kokeilu ja kehittäminen, Hallinnon hankkeet, Esielävitys, Sijoitus, Kotimainen rahastosijoitus, Kansainvälinen rahastosijoitus, Peruspääoman rahastosijoitus

Hankeryhmä: Rahjohitushanke

Näytön järjestys: 1

Tiedosto: Toiminnot: Ohje

Tallenna ja sulje, Lähetä sähköpostia, Seuranta, Raportit

**Hanke: Office 365 ja alustapäivityksen valmistelu**

**Tabbed navigation**

**Forms resembling traditional paper forms for data entry**

**Popups everywhere!**

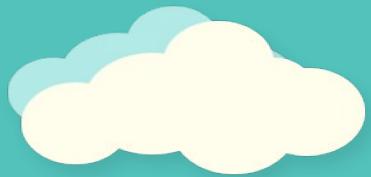
**“Exploding” related records menus**

**Focus on individual records**

**Little visual guidance available, just fields**

**Annotations:**

- A callout points to the left sidebar with the text “Exploding” related records menus.
- A callout points to the tabs at the top of the main form with the text Tabbed navigation.
- A callout points to the data entry fields with the text Forms resembling traditional paper forms for data entry.
- A callout points to a modal dialog box with the text Popups everywhere!
- A callout points to the sidebar with the text Focus on individual records.
- A callout points to the bottom right of the form with the text Little visual guidance available, just fields.



# Modern CRM system

Every window is a  
“main window”

Microsoft Dynamics CRM | HANKEET | Hankkeet | Asiakkuudenhallinnan kehityshanke | + UUSI | POISTA AKTIVIOINTI | POISTA | DELEGOI | JAA | ...

HANKE : TIEDOT

Asiakkuudenhallinnan kehityshanke

Uusi Hankke > ✓ Tunnustelu > Tunnustelup

Aloituspäivä \* 20.11.2013  
Päätymispäivä \* 20.5.2014

Numero 9021 Hankevastaava \* Petri Tilan syy Aktiivinen Aloituspäivä 20.11.2013

Rahoituspäätös > Sopimus < Seuraava...

**Yleiset**

**Perustiedot**

Nimi \* Asiakkuudenhallinnan kehityshanke  
Hankevastaava \* Petri  
Asistentti Testikäyttäjä  
Rahoitukseen saaja A. Datum Corporation (sample)  
Lyhyt kuvaus testataan hanketta

**Aikataulu**

Aloituspäivä 20.11.2013  
Voimassa oleva pä --  
Alkuperäinen aloit 20.11.2013  
Alkuperäinen päät 20.5.2014

**Lisätiedot**

Hankkeen lähde Toimintasuunnitelmasta  
Nimi englanniksi CRM development project  
Nimi ruotsiksi CRM projektet

Luotu 14.11.2013 13:25 Luonut Petri Muokattu 26.11.2013 12:16 Muokkaaja Jukka Niiranen Aktiivinen

**VIESTIT** **AKTIVITEETIT** **MUISTIINPAN...**

Kirjoita viesti tähän Viesti

Molemmat Automaattiset viestit Käyttäjien viestit

**Testiraportti**  
Hankkeelle Asiakkuudenhallinnan kehityshanke on lisätty uusi tuotos Testiraportti. Kohteen Testiraportti seinälle 26.11.2013 16:50

**2003**  
Hankkeelle Petrin testihanke 1 on lisätty uusi sopimus nr. 2003, nimi (puuttuu). Kohteen 2003 seinälle 25.11.2013 22:04

**Päätöksen asiakirjat**  
Hankkeelle Petrin testihanke 1 on lisätty dokumentti Päätöksen asiakirjat, jonka omistaa Petri Kohteen Päätöksen asiakirjat seinälle 25.11.2013 21:53

**4001**  
Hankkeelle Petrin testihanke 1 on lisätty uusi sopimus nr. 4001, nimi (puuttuu). Kohteen 4001 seinälle 25.11.2013 21:41

**Rahoitukseen saajan tiedot**

**ASIAKASTIEDOT**

**A. Datum Corporation (sample)**

Suhteen tyyppi --  
Puhelin 555-0158  
Ensisijainen yli Rene Valdes (sample)

**Hankkeet**

Aloituspäivä ↑	Nimi	Numero
1.4.2014	Toinen hanke	1002
2.1.2014	Testihanke 1	1001

1 - 2 / 3 4 Sivu 1 >

**Viimeisimmät aktiviteetit**

Aihe	Liityy	Aktiviteetin tyyppi
Tee testidataa	A. Datum C...	Tehtävä

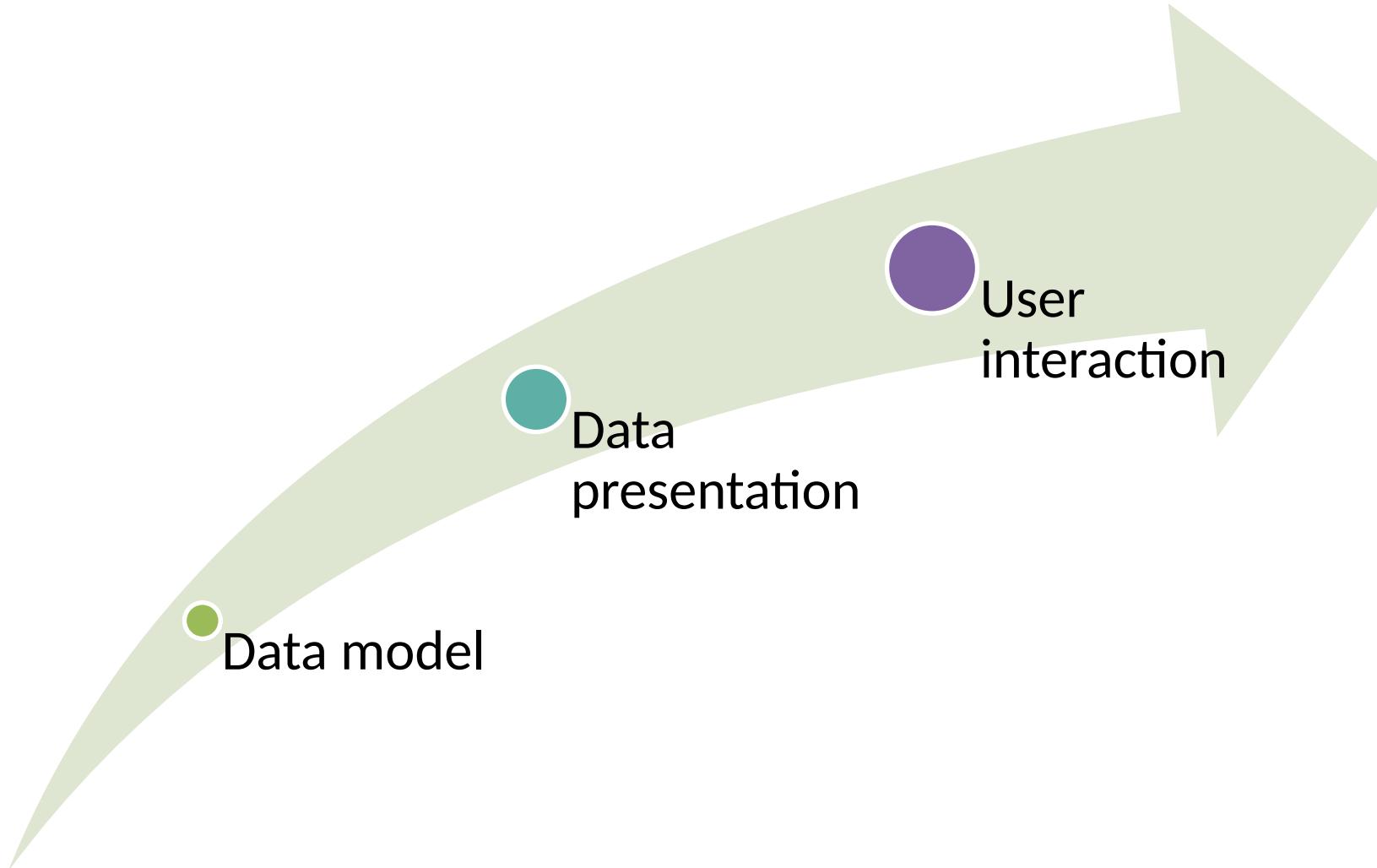


# CRM is not a graphical UI for designing database tables

- CRM customization has traditionally been too much focused on just the data model
- End user experience cannot be the direct result of the data model – it requires proper design work in its own right
- How to store the data and how to present it to the user are becoming more and more independent design tasks in CRM
- However, data model cannot be defined without considering its impact to end user experience



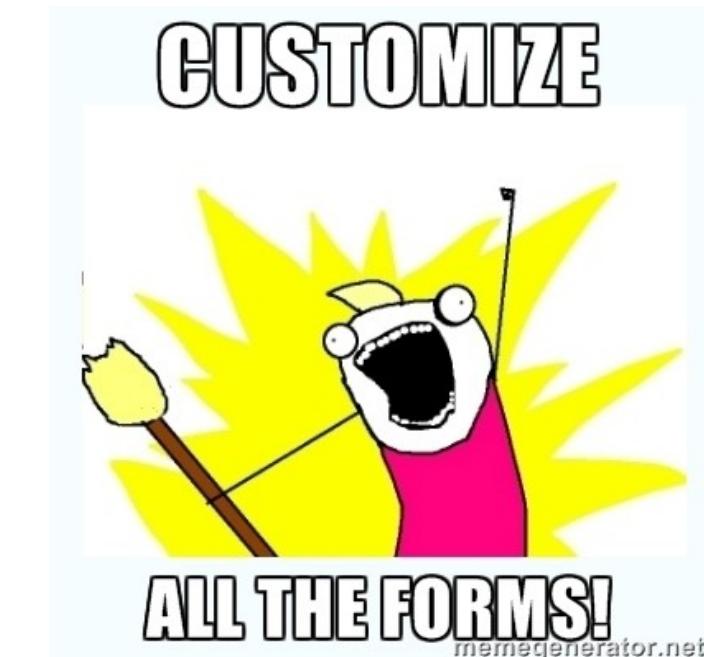
# Levels of CRM solution design





# CRM 2013 considerations for user interaction design

- Design the Sitemap
- Promote child records on parent forms
- Be creative with Quick View Forms
- Test and customize Quick Create
- Optimize the Command Bar
- Simulate your process before implementing Business Process Flows





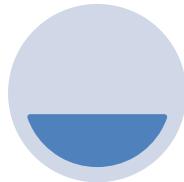
# Delivering responsive solutions

*...with no code!*



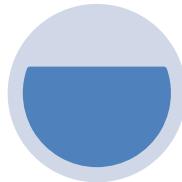


# No-code process automation tools in CRM



## CRM 4.0

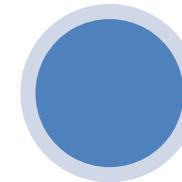
Workflows



## CRM 2011

Workflows

Dialogs



## CRM 2013

Workflows

- Asynchronous
- Real-time

Dialogs

Business Process  
Flows

Business Rules

Actions

# Microsoft Dynamics CRM 2013 Process Automation Functionality

Business Rule	Real-Time Workflow	Asynchronous Workflow	Dialog
<ul style="list-style-type: none"><li>Executes before save event (form onLoad and field onChange)</li><li>Applied to data updates through UI only</li><li>For working with a single record</li><li>Cannot access data from related records</li><li>Can manipulate data and UI</li></ul>	<ul style="list-style-type: none"><li>Executes on save event</li><li>Applied to data updates through UI and API</li><li>For working with single or multiple records</li><li>Can access data from parental records</li><li>Can manipulate data only</li></ul>	<ul style="list-style-type: none"><li>Executes after save event</li><li>Applied to data updates through UI and API</li><li>For working with single or multiple records</li><li>Can access data from parental records</li><li>Can manipulate data only</li></ul>	<ul style="list-style-type: none"><li>Executes on user demand</li><li>Not applied on any data updates</li><li>For working with a single record</li><li>Can access data from parental records and query data</li><li>Can manipulate data only</li></ul>



# Advanced UI customization: then and now

MSDN Blogs > Joris Kalz's WebLog on MSDN > Part II of Advanced UI Customization

## Part II of Advanced UI Customization



Joris Kalz 27 Jul 2005 9:40 PM

5

RATE THIS  
★★★★★

Friends of Microsoft CRM! I got a lot of feedback regarding my first example. Thank you very much! And some of you sent me great suggestions how to make it better. A really smart one came from Anton Dorrestijn. He took the basics of my example and reinvented it with much more mojo. The result is much more flexibility and it will avoid some serious issues.

Basically it works like the following:

- Create HttpModule and tap into the OnBeginRequest event.
- In the event handler use Response.Filter to filter the stream that is send to a client.
- In the filter use some code to insert a link to a stylesheet
- In the stylesheet create a 'behavior' (link to htc file) for the body element
- In the htc file, route the ondocumentready event to an Init() function.
- Do anything you want in the Init() function.

Sounds pretty good! Look at the picture what you can do with it:



E.g. hide the Details tabs depending on the value of the field Relationship Type

BUSINESS RULE: Account

## If Supplier, hide customer related fields

### CONDITION

If Relationship Type equals "Supplier"



### ACTION

Hide field **Account Rating**

Hide field **Category**

Hide field **Credit Hold**

Hide field **Credit Limit**

Hide field **Customer Size**

### Set visibility

#### Field

Account Name

#### Status

Hide field

Originating Lead



Other Phone

Owner

Ownership

Parent Account

Payment Terms

# TAKEAWAYS





# “Everything is different in CRM 2013 because...”

- It's consumed via a client applications of different shapes & sizes
- It accepts your old customizations but it presents them in completely new surroundings
- It opens the doors for non-developers to build a truly intelligent, responsive business application



# Want to learn more about CRM 2013?

- Watch out for an updated CRM 2013 edition of the **CRM Field Guide** – a book written by Dynamics CRM MVPs:  
<http://www.crmfieldguide.com/>
- Go and read more about the latest Dynamics CRM news and tips on my **Surviving CRM** blog: <http://niiranen.eu/crm/>



Thanks for your time!

