



Dynamics CRM 2013 Customization and The Platform Evolution

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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/
 - [@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

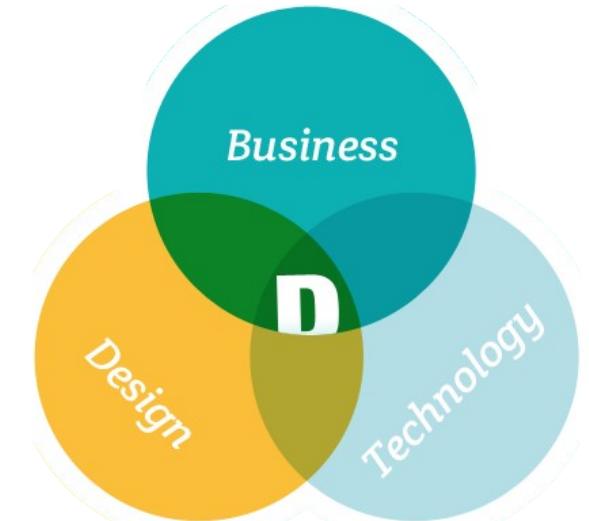




About Digital Illustrated



- 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!***



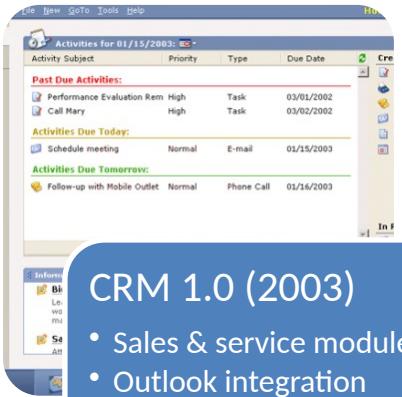
HISTORY OF MICROSOFT'S CRM

CRM 2013 – The start of a new chapter?



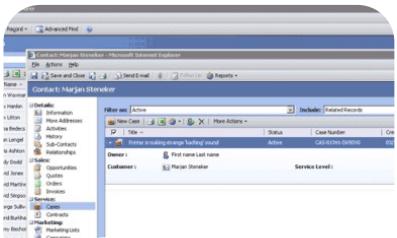


The first chapter of CRM: 2003-2011



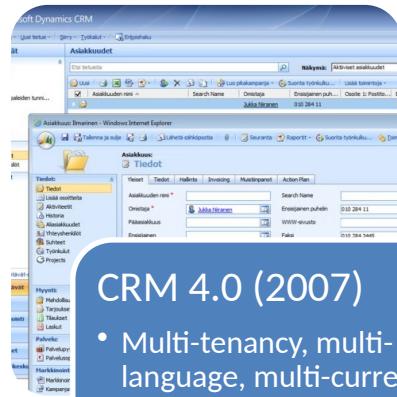
CRM 1.0 (2003)

- 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?

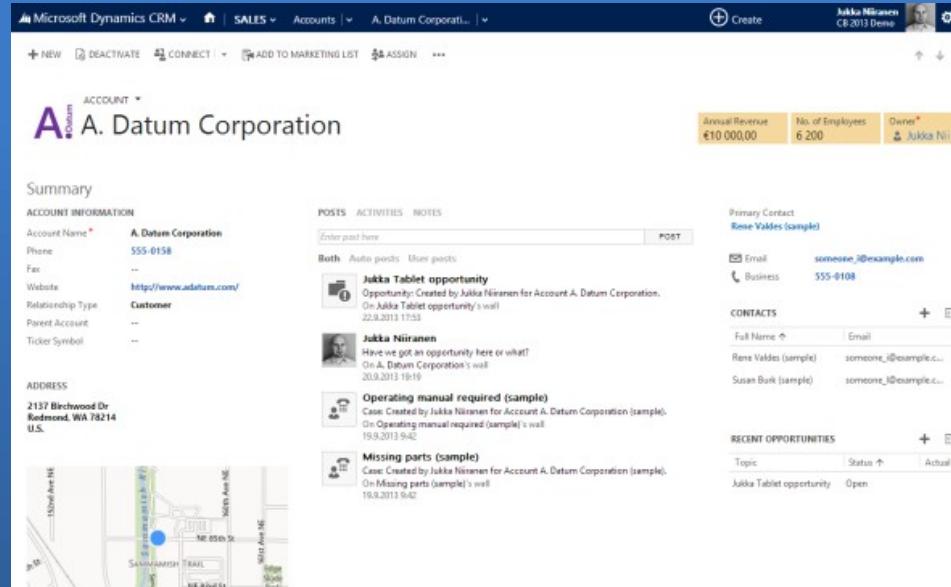
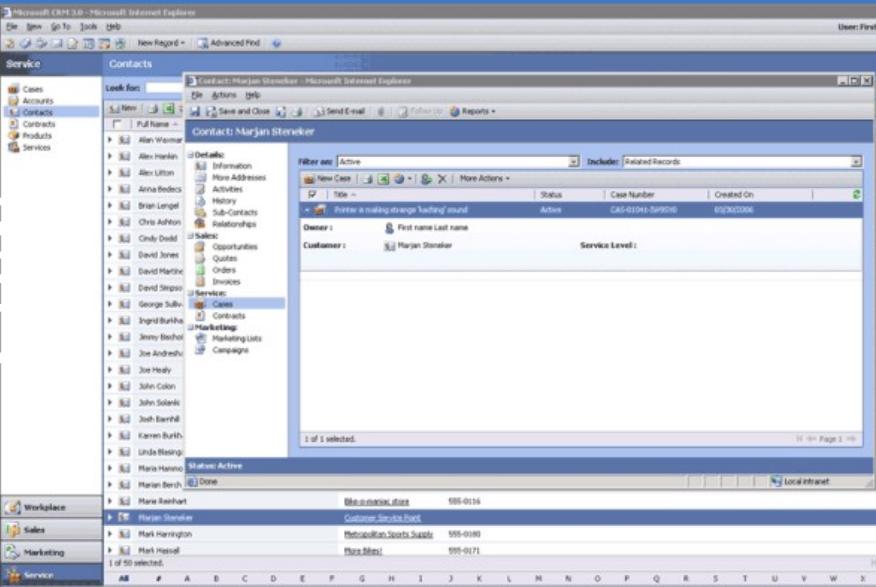
- The first 4 major releases of CRM were a steady evolution:
 - New functionality and options being added alongside existing ones
 - Platform components replaced with more robust technologies
- CRM 2011 was a “*more of everything*” release, a pinnacle of this chapter
- CRM 2013 no longer continued on 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

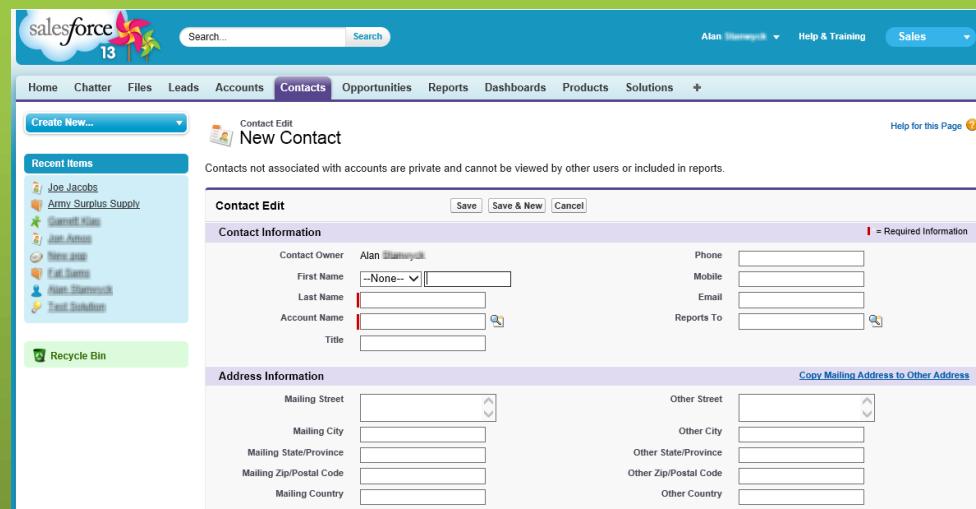
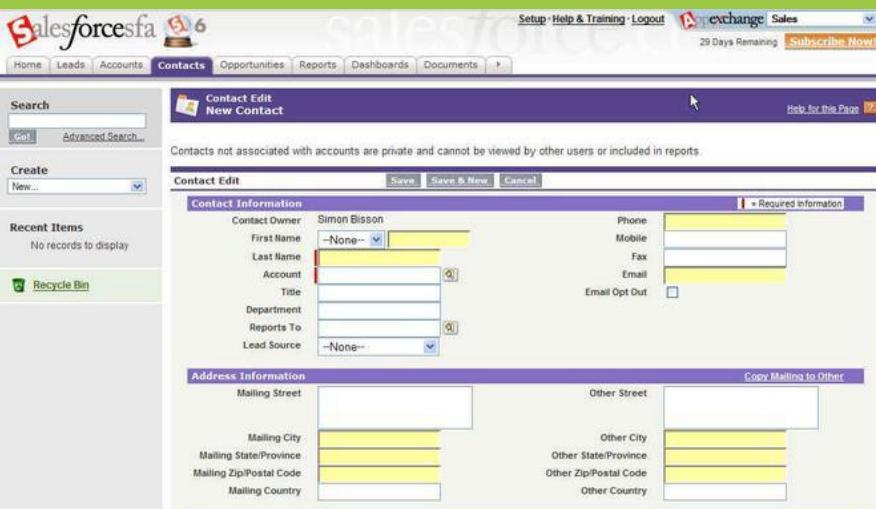
DIGITAL ILLUSTRATED

DESIGN TECHNOLOGY SUCCESS

Microsoft Dynamics CRM



Salesforce





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



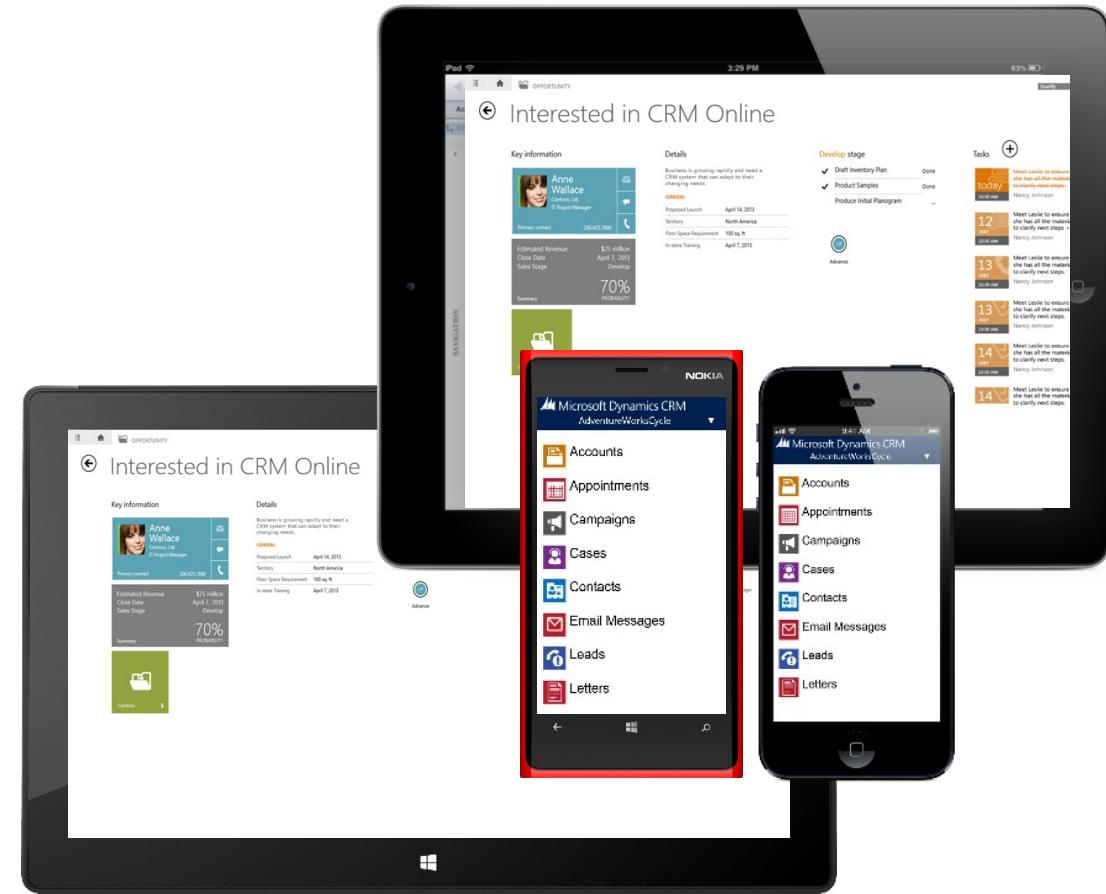


Mobile CRM concept: then and now

What Microsoft originally thought it was



What it actually turned out to be





CRM 2013 Client Types

Web

The screenshot shows the Microsoft Dynamics CRM Web interface. At the top, there's a navigation bar with icons for Home, Sales, Accounts (Supercell selected), and a 'WHAT'S NEW' button. Below the navigation is a summary section for the 'Supercell' account, displaying account information like name, phone, website, and address. It also shows a post from 'Jukka Niiranen' and a map of Helsinki with a location pin. A message at the bottom says 'The specified credentials are invalid. You can sign up for a free developer account at http://www.bingmapspatial.com'. The overall theme is light blue and white.

Outlook

The screenshot shows the Microsoft Dynamics CRM Outlook integration. The top ribbon has tabs for FILE, Accounts, View, Charts, Add, and Customize. The 'Accounts' tab is selected. The main area displays a list of 'My Active Accounts' with columns for ACCOUNT NAME, MAIN PHONE, and ADDRESS. The sidebar on the left lists various modules: Sales, Collateral, Customers, Accounts, Contacts, Goals, Marketing, My Work, Activities, Dashboards, What's New, Sales, Tools, Service, Collateral, Articles, Contracts, Products, Services, Customers, Extensions, Goals, My Work, Cases, Queues. The status bar at the bottom shows '1 - 100 of 512'.

Tablet

The screenshot shows the Microsoft Dynamics CRM Tablet client. It features a 'Sales Dashboard' with pinned tiles for 'The Cracker Box' account, 'Matthew Miller' contact, and an 'Interested in 3D Print...' opportunity. To the right, there's a 'My Activities' section showing a timeline of events from July 12 to 28, each with a small icon, date, time, and a brief description. The background is a light grey.

Phone

The screenshot shows the Microsoft Dynamics CRM Phone client running on an iPhone. The screen displays a list of client types: Accounts, Appointments, Campaigns, Cases, Contacts, Email Messages, Leads, and Letters. Each item has a corresponding icon and a red badge indicating notifications. The status bar at the top shows the time as 9:41 AM.



Key Differences Between Clients

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



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	Hankeryhmä	Näytön järjestys
Tutkimus	Rahjohitushanke	1
Koulutus	Rah	Tiedosto Toiminnot Ohje
Kokeilu ja kehittäminen	Rah	Tallenna ja sulje Lähetä sähköpostia Seuranta Raportit
Hallinnon hankkeet	Rah	
Esiselvitys	Rah	
Sijoitus	Sijo	
Kotimainen rahastosijoitus	Rah	
Kansainvälinen rahastosijoitus	Rah	
Peruspääoman rahastosijoitus	Rah	

1/9 valittu.
Ominaisuudet OK

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

The main window title is "Hanke: Office 365 ja alustapäivityksen valmistelu". The left sidebar shows a tree view of related records under categories like Tiedot, Myynti, and Markkinointi. A tabbed navigation bar at the top includes Yleiset, Asiakirjat, Kuvaus- ja tavoitteet, Rahoitus, and Hallinto. The main form contains fields for Hankkeen tila (Aktiivinen), Tiimi (Tieto- ja asiakirjahallinto), Avainalue (Sisäinen kehitys), and other details like Hankevastaava (Peter), Assistantti, and Toimintalohko (96). A warning dialog box is visible in the foreground, stating "Antamasi hankkeen nimen alku on jo käytössä. Valitse toinen nimi" (The prefix of the name you entered is already in use. Select another name) with an OK button.



Modern CRM system

Every window is a
“main window”

Microsoft Dynamics CRM | HANKKEET | Hankkeet | Asiakkuudenhallinnan kehityshanke | Jukka Niiranen | ?

+ 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...

All the latest related events

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

Aikataulu Aloituspäivä 20.11.2013 Voimassa oleva pä -- Alkuperäinen aloiti 20.11.2013 Alkuperäinen päät 20.5.2014

Lisätiedot Hankkeen lähte Toimintasuunnitelmasta Nimi englanniksi CRM development project Nimi ruotsiksi CRM projekten

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

VIESTIT AKTIVITEETTÄ MUISTIINPAN... Kirjoita viesti tähän Viess... Molemmat Automatiitiset 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

Rahoituksen saajan tiedot ASIAKASTIEDOT A. Datum Corporation (sample) Suhteenv tyyppi -- Puhelin 555-0158 Ensisisainen yli Rene Valdes (sample)

Hankkeet Aloituspäivä ↑ Nimi Numero 1.4.2014 Toinen hanke 1002 1 2.1.2014 Testihanke 1 1001 1 1 - 2 / 3 14 4 Sivu 1 >

Vilmeisimmät aktiviteetit Aihe Liitty Aktiviteettin tyypp Tee testidataa A. Datum C... Tehtävä

Data from parent & child records

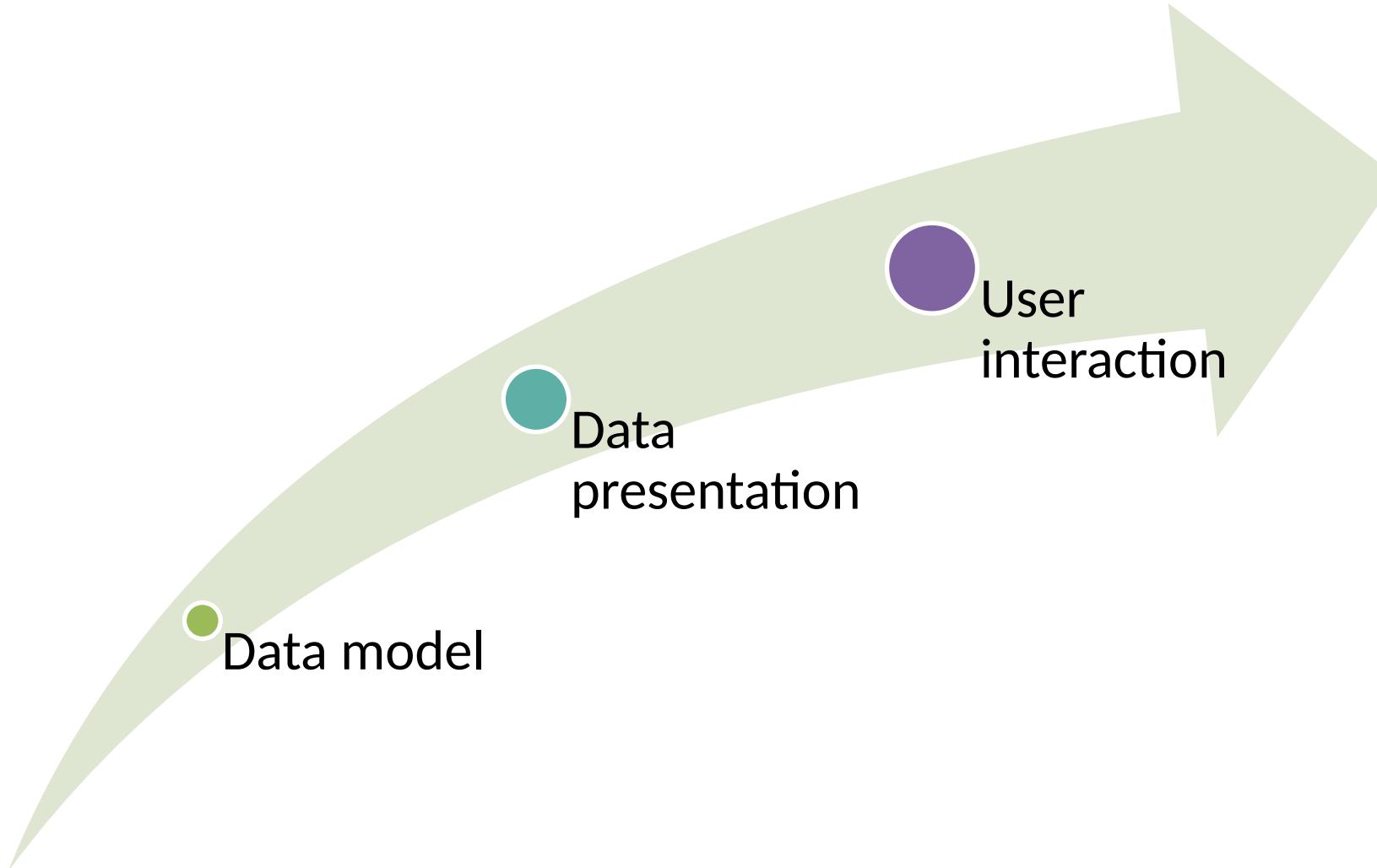


CRM is not a graphical UI for designing database tables

- 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





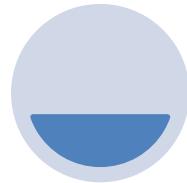
Delivering responsive solutions

...with no code!



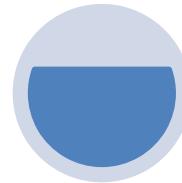


No-code process automation tools in CRM



CRM 4.0

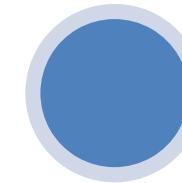
Workflows



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">Executes before save event (form onLoad and field onChange)Applied to data updates through UI onlyFor working with a single recordCannot access data from related recordsCan manipulate data and UI	<ul style="list-style-type: none">Executes on save eventApplied to data updates through UI and APIFor working with single or multiple recordsCan access data from parental recordsCan manipulate data only	<ul style="list-style-type: none">Executes after save eventApplied to data updates through UI and APIFor working with single or multiple recordsCan access data from parental recordsCan manipulate data only	<ul style="list-style-type: none">Executes on user demandNot applied on any data updatesFor working with a single recordCan access data from parental records and query dataCan manipulate data only



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

Originating Lead

Other Phone

Owner

Ownership

Parent Account

Payment Terms

Status

Hide field



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!

