

A Non-Developer's Guide to Smarter Sales Processes in Microsoft Dynamics CRM 2015

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Part 3: Pipeline Development

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About This Presentation



- These are the slides from a live webcast on MSDynamicsWorld.com, presented on May 6th 2015
- The webcast recording is available on YouTube: <http://bit.ly/crm15salesprocess>
- The topics are covered in more detail in blog posts at <http://survivingcrm.com/>



About Me



- Dynamics CRM consultant from Helsinki
- Working at [Digital Illustrated Finland](#)
- Dynamics CRM addict since 2005
- Frequent blogger & #MSDYNCRM evangelist on social media
 - Blog: survivingcrm.com
 - [@jukkan](#) on Twitter
- Microsoft MVP since 2013
- Focused on improving CRM solution usability & information work efficiency



Jukka Niiranen

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Consultant @ Digital Illustrated
Microsoft Dynamics CRM MVP



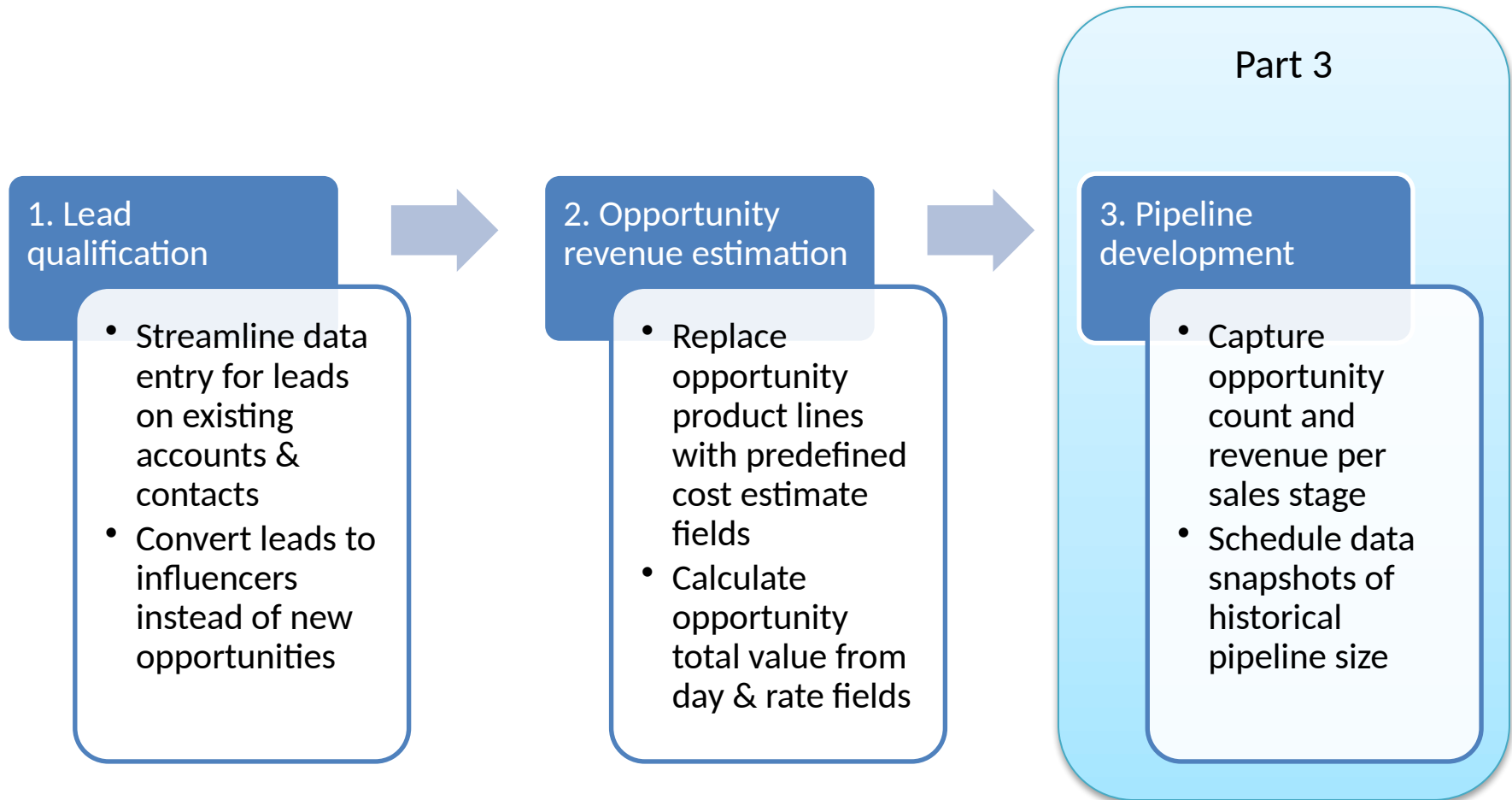
Customizing Dynamics CRM as a Non-Developer



- Point & click configuration/customization tools of Dynamics CRM have come a long way
- The ratio of custom code vs. configuration in typical CRM solutions is decreasing
- Solution delivery often requires the creative *combination* of several CRM configuration options
- The goal of this article series is to demonstrate a few scenarios where such combinations are used for delivering new functionality for the CRM sales process



Customization Scenarios Explored in This Series



Pipeline Development





The Problem

- CRM gives an up-to-date status of the current sales pipeline by opportunity sales stage
- Won or lost opportunities create a permanent record of when the deals were closed
- This is however not sufficient data to project what the size of the pipeline was at a *previous* point in time
- Therefore, it's not possible to see the development *trend* of the open opportunity pipeline from the standard CRM data model



Current Pipeline View

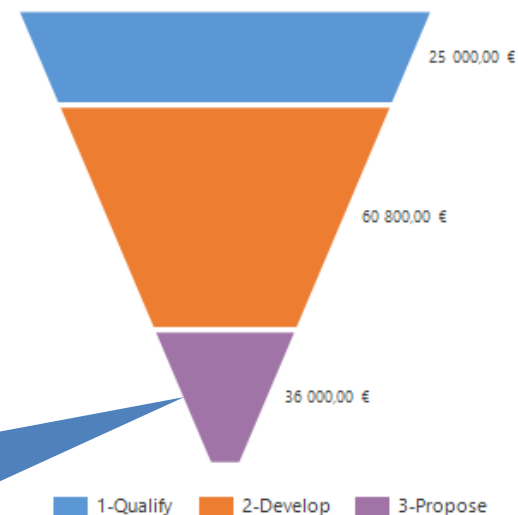
+ NEW | DELETE | COPY A LINK | EMAIL A LINK | RUN REPORT | EXPORT TO EXCEL | IMPORT DATA | ...

Open Opportunities

Search for records

✓	Topic	Potential Customer	Process Stage	Est. Close Date ↑	Est. Rev
	Fabrikam's CRM upgrade	Fabrikam, Inc.	2-Develop		
	This isn't an opportunity!	WOW! Architects	2-Develop		
	Will be ordering about 110 items of all types (sa...	Coho Winery (sample)	1-Qualify	31.3.2015	25 000,00 €
	They sell many of the same items that we do - n...	Contoso Pharmaceuticals (...)	3-Propose	30.4.2015	26 000,00 €
	6 orders of Product SKU JJ202 (sample)	Fabrikam, Inc.	3-Propose	1.5.2015	10 000,00 €
	MSE implementation	Litware, Inc. (sample)	1-Qualify	15.5.2015	
	CRM upgrade analysis	Blue Yonder Airlines (samp...	2-Develop	21.5.2015	5 800,00 €
	Needs to restock their supply of Product SKU AX...	Blue Yonder Airlines (samp...	2-Develop	29.6.2015	25 000,00 €
	Very likely will order 18 Product SKU JJ202 this y...	Alpine Ski House (sample)	2-Develop	1.8.2015	30 000,00 €

Sales Pipeline



"Hmm, I wonder if our sales pipeline is healthier now than it was last month? Wish I would have taken a screenshot..."



The Solution

- Create a custom entity "Process Stage" to represent each stage in the opportunity business process flow
- Use Rollup Fields (new in CRM 2015) to collect information about open opportunity count and value in each stage onto this new entity
- Create a custom entity "Snapshot" to store historical data of the Rollup Field values
- Schedule a recurring workflow process to create new Snapshots once a week

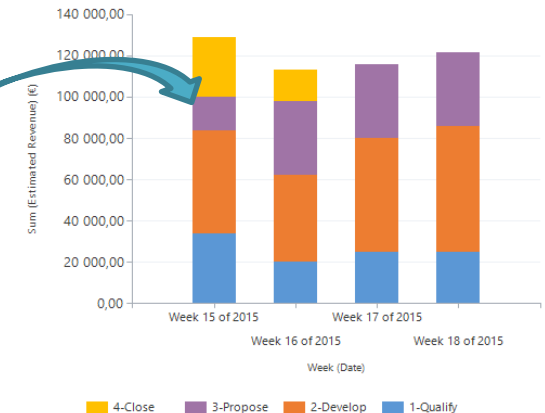
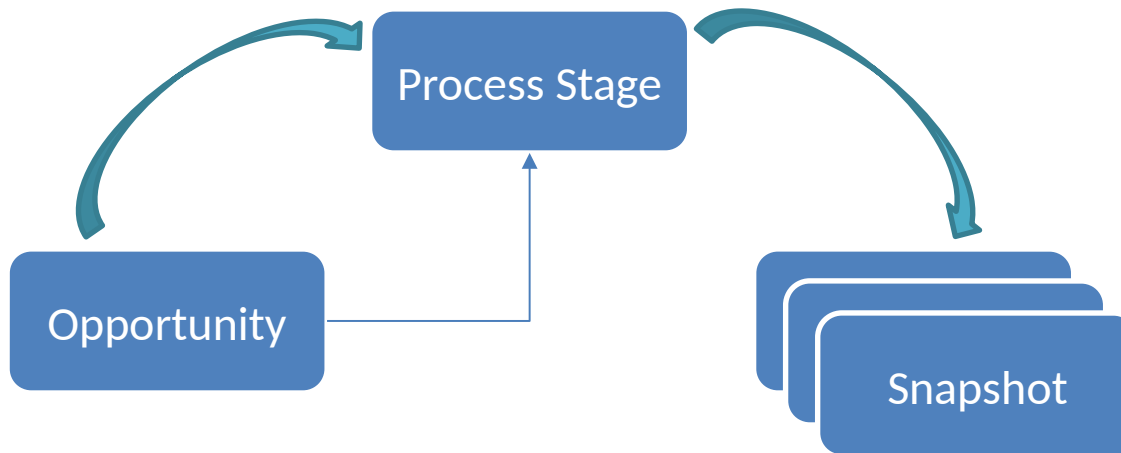


Pipeline Snapshots: Solution Architecture

1. Rollup Fields automatically collect the metrics from open opportunities

2. Recurring workflow creates historical snapshots of these metrics

3. Snapshots are visualized via charts to show weekly pipeline trend





Two Custom Entities

Solution: Solution 1

Components

Solution Solution 1

Information
Components
Entities

- Account
- Contact
- Lead
- Opportunity
- Process Stage
- Snapshot
- Option Sets
- Client Extensions
- Web Resources
- Processes
- Plug-in Assemblies
- Sdk Message Processing S...
- Service Endpoints
- Dashboards
- Reports
- Connection Roles
- Article Templates
- Contract Templates
- Email Templates
- Mail Merge Templates
- Security Roles
- Field Security Profiles
- Routing Rule Sets
- Case Creation Rules
- SLAs

Component Type: All

New | Add Existing | Delete | Remove | Publish

Show Dependencies | Add Required Components | Managed Properties

✓	Display Name	Name	Type ↑
✓	Sales Pipeline	Sales Pipeline	Dashboard
✓	Contact	contact	Entity
✓	Account	account	Entity
✓	Lead	lead	Entity
✓	Snapshot	jukkan_snapshot	Entity
✓	Process Stage	jukkan_processstage	Entity
✓	Opportunity	opportunity	Entity
✓	Stage Category	processstage_category	Option Set
✓	Lead Type	jukkan_leadtype	Option Set
✓	Lead to Opportunity or Influencer Sal...	Lead to Opportunity or Infl...	Process
✓	Lead to Opportunity Sales Process	Lead to Opportunity Sales...	Process
✓	Cost estimate to Est. Revenue	Cost estimate to Est. Reve...	Process
✓	Process Stage Snapshot	Process Stage Snapshot	Process
✓	Opportunity Process Stage	Opportunity Process Stage	Process
✓	Qualify influencer lead	Qualify influencer lead	Process
✓	jukkan_process_stage_32.png	jukkan_process_stage_32.p...	Web Resource
✓	jukkan_process_stage_16.png	jukkan_process_stage_16.p...	Web Resource
✓	jukkan_snapshot_16.png	jukkan_snapshot_16.png	Web Resource
✓	jukkan_snapshot_32.png	jukkan_snapshot_32.png	Web Resource

Process Stage will be used as a lookup field on the opportunity records, to enable counting the Rollup Field values from related opportunities

Snapshot will be used for capturing copies of the Rollup Fields values from Process Stage entity



Two Rollup Fields on Process Stage Entity

ROLLUP FIELD

Estimated Revenue

▲ SOURCE ENTITY

Source: **Process Stage**

Use Hierarchy: **NO**

▲ RELATED ENTITY

Related: **Opportunities (Process Stage)**

▲ FILTERS (OPTIONAL)

If **Status** equals **"Open"**

+ Add condition

▲ AGGREGATION

SUM of Est. Revenue

Create Rollup Fields that retrieve data from the open child opportunities related to each process stage

Use one Rollup Field to sum up the total estimated revenue

ROLLUP FIELD

Opportunity Count

▲ SOURCE ENTITY

Source: **Process Stage**

Use Hierarchy: **NO**

▲ RELATED ENTITY

Related: **Opportunities (Process Stage)**

▲ FILTERS (OPTIONAL)

If **Status** equals **"Open"**

+ Add condition

▲ AGGREGATION

COUNT of Opportunity

...And the other for counting the number of opportunities



Linking Opportunities to Process Stages via Workflow

OPPORTUNITY ▾

Fabrikam's CRM upgrade

✓ Identify	✓ Qualify	🚩 Develop (Active)
Customer Need click to enter	Est. Close Date* click to enter	
Proposed Solution click to enter	Identify Stakeholders mark complete	
Est. Revenue* click to enter	Identify Competitors mark complete	

Summary

Topic*	Fabrikam's CRM upgrade
Contact	Mike Mitchell
Account	Fabrikam, Inc.
Purchase Timeframe	--
Currency*	euro
Budget Amount	--
Purchase Process	--
Process Stage	2-Develop
Description	They're on Dynamic CRM 4.0.11 and need to catch up to the latest version.

POSTS ACTIVITIES NOTES

Both Auto posts User posts



Mike Mitchell

Lead: Qualified by Jukka Niiranen and converted to Contact Mitchell, Opportunity Fabrikam's CRM upgrade.
On Mike Mitchell's wall
Yesterday



Fabrikam's CRM upgrade

Opportunity: Created by Jukka Niiranen for Account Fabrikam
On Fabrikam's CRM upgrade's wall

Whenever the Opportunity's BPF stage changes, run a workflow process...

...Which updates the custom Process Stage field with a value that matches the BPF stage



Process Stage with Related Opportunity data

Use the standard Stage Category option set field to group data

Related opportunity values roll up to the Process Stage form

Microsoft Dynamics 365 | SALES | Process Stages | 3-Propose

Create | Jukka Niiranen Org 2

PROCESS STAGE
3-Propose

Owner*
Jukka Nii

General

Stage Category* 3-Propose
Name* 3-Propose

Opportunity Count 2
Last Updated On 4.5.2015 5:19

Estimated Revenue 36 000,00€
Last Updated On 4.5.2015 5:19

Opportunities

Open Opportunities

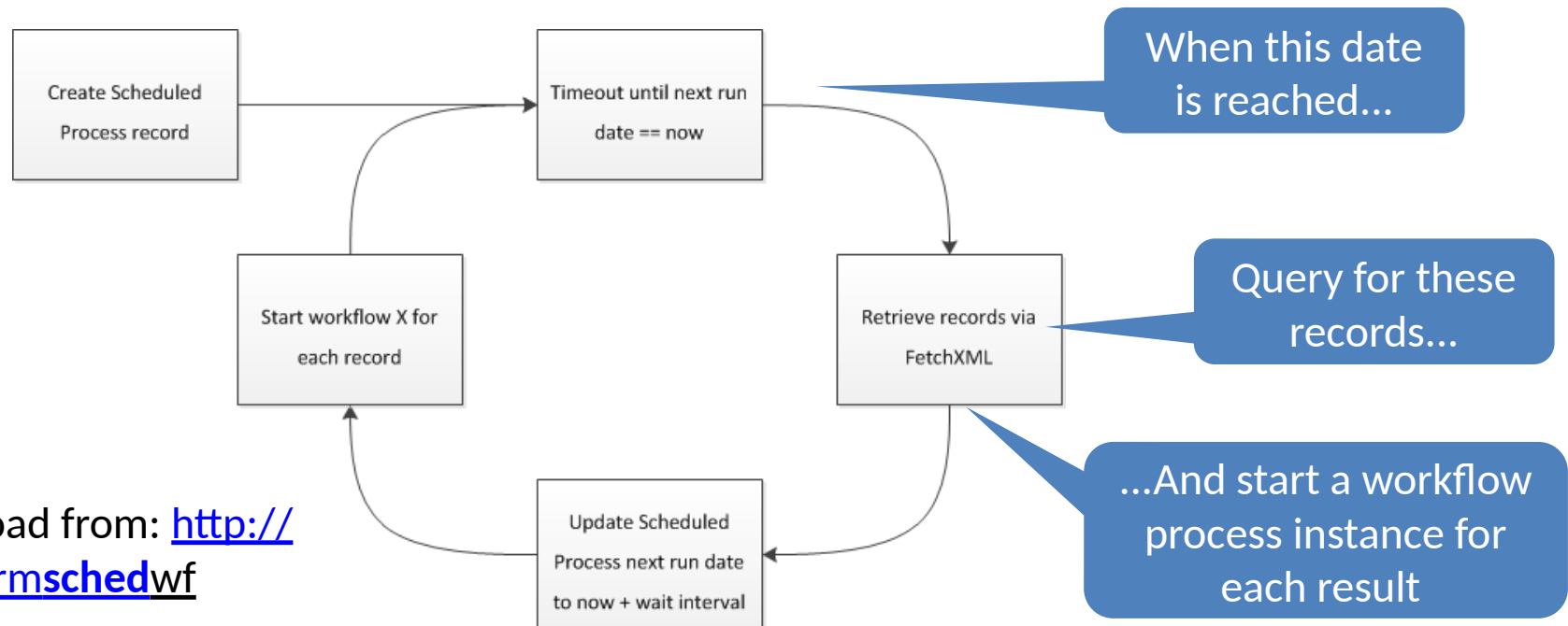
Topic	Potential Customer	Process Stage	Est. Close Date ↑	Est. Revenue	Rating	Owner
They sell many of the same items that we do - need t...	Contoso Pharmaceuticals...	3-Propose	30.4.2015	26 000,00 €	Hot	Jukka Niiranen
6 orders of Product SKU JJ202 (sample)	Fabrikam, Inc.	3-Propose	1.5.2015	10 000,00 €	Hot	Jukka Niiranen

Related opportunities shown in subgrid for quick reference



Solution: “Scheduled Recurring Workflows”

- Open source solution from [Lucas Alexander](#)
- Contains one custom workflow activity that allows you to run a specific workflow process weekly/daily/hourly on specific records



Download from: <http://bit.ly/crmschedwf>



Configuring the Scheduled Process

+ NEW DEACTIVATE DELETE EMAIL A LINK RUN WORKFLOW START DIALOG ...

SCHEDULED PROCESS : INFORMATION

Opportunity snapshots by Process Stage

General

Name*	Opportunity snapshots by Process Stage	Workflow	Process Stage Snapshot
Entity type*	jukkan_processstage	Frequency*	Weekly
Last run date	28.4.2015 23:01	Next run date	5.5.2015 23:01

QUERY

```
<fetch version="1.0" output-format="xml-platform" mapping="logical" distinct="false">
  <entity name="jukkan_processstage">
    <attribute name="jukkan_name" />
    <attribute name="jukkan_opportunitycount" />
    <attribute name="jukkan_estimatedrevenue" />
    <attribute name="jukkan_processstageid" />
    <order attribute="jukkan_name" descending="false" />
    <filter type="and">
      <condition attribute="statecode" operator="eq" value="0" />
    </filter>
  </entity>
</fetch>
```

Which workflow process do we want to schedule?

When should the process be executed?

What's the (FetchXML) search criteria for records to run it on?



Before Scheduling the Process

- We'll need the Fetch XML query criteria for the records the scheduled process will be searching for
 - In our case, all active Process Stage records
- Then we'll need the workflow process that we want to apply to all these records
 - A workflow process to create a Snapshot record with the current pipeline values per each Process Stage



Grabbing the Query Criteria from Advanced Find

The screenshot shows the Microsoft Dynamics CRM Advanced Find interface. A blue callout bubble points to the 'Process Stages' dropdown in the 'Look for' field, with the text 'Select the Process Stage entity'. Another blue callout bubble points to the 'Download Fetch XML' button, with the text 'Select "Download Fetch XML"'. Below the interface, a Notepad window titled 'FetchXML.xml - Notepad' displays the fetched XML query.

Look for: Process Stages **Use Saved View:** Active Process

Download Fetch XML

Use Fetch XML to download your query in XML.

FetchXML.xml - Notepad

```
File Edit Format View Help
<fetch version="1.0" output-format="xml-platform" mapping="logical" distinct="false">
  <entity name="jukkan_processstage">
    <attribute name="jukkan_name" />
    <attribute name="jukkan_opportunitycount" />
    <attribute name="jukkan_estimatedrevenue" />
    <attribute name="jukkan_processstageid" />
    <order attribute="jukkan_name" descending="false" />
    <filter type="and">
      <condition attribute="statecode" operator="eq" value="0" />
    </filter>
  </entity>
</fetch>
```



Process Stage Snapshot Creation Workflow

Process Name *

Activate As ▼

Available to Run

☒ Run this workflow in the background (recommended)

☒ As an on-demand process

☐ As a child process

Workflow Job Retention

☒ Automatically delete completed workflow jobs (to save disk space)

Entity

Category

Options for Automatic Processes

Scope

Start when:

☐ Record is created

☐ Record status changes

☐ Record is assigned

☐ Record fields change

☐ Record is deleted

Workflow is created against the Process Stage entity, run as on-demand process

▼ Step description: None provided.

If Process Stage:Status equals [Active], then:

- Copy Process Stage record field values to a new Snapshot record

Create: [Snapshot](#) [View properties](#)



Process: Process Stage Snapshot

Create Snapshot

▸ General

Date	<input type="text" value="{Execution Time(Process)}"/>	Stage	<input type="text" value="{Stage Category(Process Stage)}"/>
Owner	<input type="text" value="{Owner(Process Stage)}"/>	Estimated Revenue	€ <input type="text" value="{Estimated Revenue(Process Stage)}"/>
Name *	Snapshot of Process Stage <input type="text" value="{Name(Process Stage)}"/>	Opportunity Count	<input type="text" value="{Opportunity Count(Process Stage)}"/>

Creates a new Snapshot record with values copied from the current Process Stage Rollup Fields



Snapshots Created

Microsoft Dynamics CRM | SALES | Snapshots

+ NEW EDIT ACTIVATE DEACTIVATE DELETE ASSIGN SHARE ...

Active Snapshots

✓	Date ↑	Stage ↑	Estimated Revenue	Opportunity Count
	28.4.2015	1-Qualify	25 000,00 €	2
	28.4.2015	2-Develop	60 800,00 €	4
	28.4.2015	3-Propose	36 000,00 €	2
	28.4.2015	4-Close	0,00 €	0
	21.4.2015	1-Qualify	25 000,00 €	1
	21.4.2015	2-Develop	55 000,00 €	3
	21.4.2015	3-Propose	36 000,00 €	2
	21.4.2015	4-Close	0,00 €	0
	14.4.2015	1-Qualify	20 000,00 €	3
	14.4.2015	2-Develop	42 000,00 €	4
	14.4.2015	3-Propose	36 000,00 €	2

The scheduled process will create new Snapshots for each Process Stage once a week

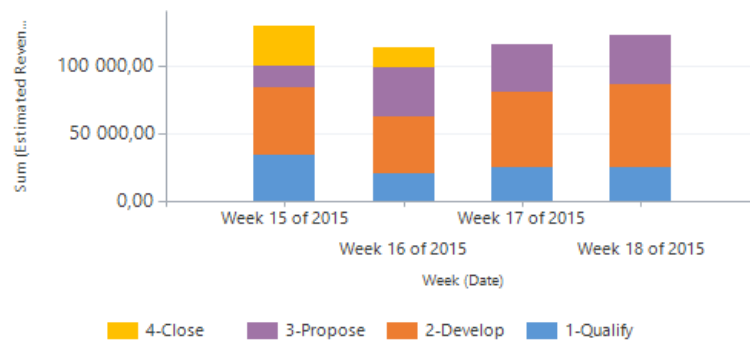


Pipeline overview dashboard

Sales Pipeline ▾

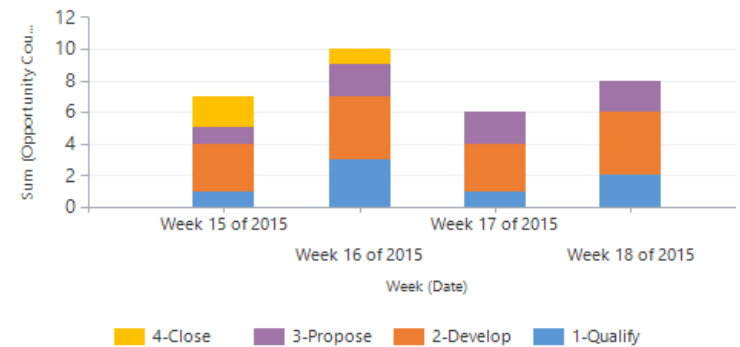
Estimated Revenue by Week and Stage

Active Snapshots



Opportunity Count by Week and Stage

Active Snapshots



Open Opportunities ▾

Search for records 🔍

Topic	Potential Customer	Process Stage	Est. Close Date ↑	Est. Revenue
This isn't an opportunity!	WOW! Architects	2-Develop		
Will be ordering about 110 items of all types (sample)	Coho Winery (sample)	1-Qualify	31.3.2015	25 000,00
They sell many of the same items that we do - need t...	Contoso Pharmaceuticals...	3-Propose	30.4.2015	26 000,00
6 orders of Product SKU JJ202 (sample)	Fabrikam, Inc. (sample)	3-Propose	1.5.2015	10 000,00
MSE implementation	Litware, Inc. (sample)	1-Qualify	15.5.2015	
CRM upgrade analysis	Blue Yonder Airlines (sam...	2-Develop	21.5.2015	5 800,00
Needs to restock their supply of Product SKU AX305;...	Blue Yonder Airlines (sam...	2-Develop	29.6.2015	25 000,00 € Hot

Charts & dashboards can be used for summarizing the pipeline development trends

Final Notes





Next Steps

- Read more articles on Microsoft Dynamics CRM customization best practices at <http://survivingcrm.com/>
- Follow [@jukkan](#) on Twitter for the latest #MSDynCRM related news and tips
- Check out the Dynamics CRM webcasts series at <http://msdynamicsworld.com/webcasts>
- Thanks for viewing these slides & enjoy customizing your Dynamics CRM environment!