

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

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

1. Lead qualification

- Streamline data entry for leads on existing accounts & contacts
- Convert leads to influencers instead of new opportunities

2. Opportunity revenue estimation

- Replace opportunity product lines with predefined cost estimate fields
- Calculate opportunity total value from day & rate fields

Part 3

3. Pipeline development

- Capture opportunity count and revenue per sales stage
- Schedule data snapshots of historical pipeline size

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 | ...

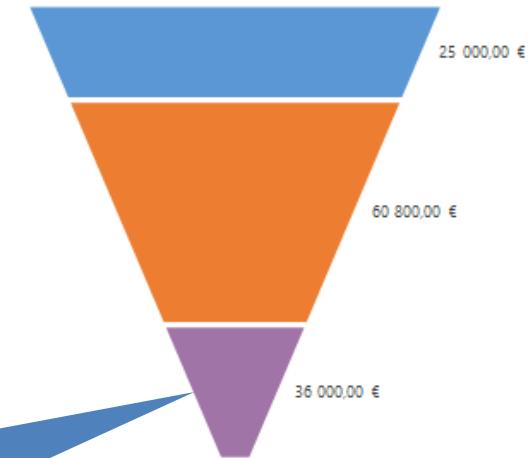
Open Opportunities ▾

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 ▾

+ | X | M | ...



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

1-Qualify | 2-Develop | 3-Propose



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

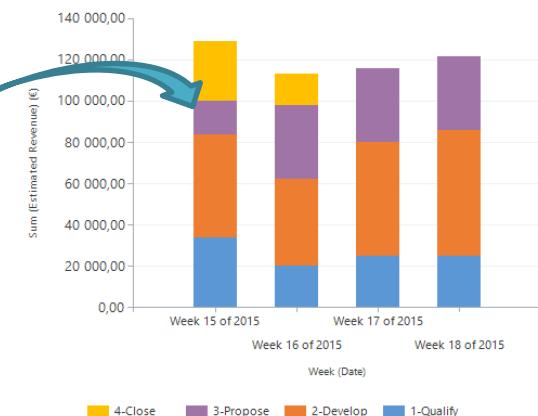
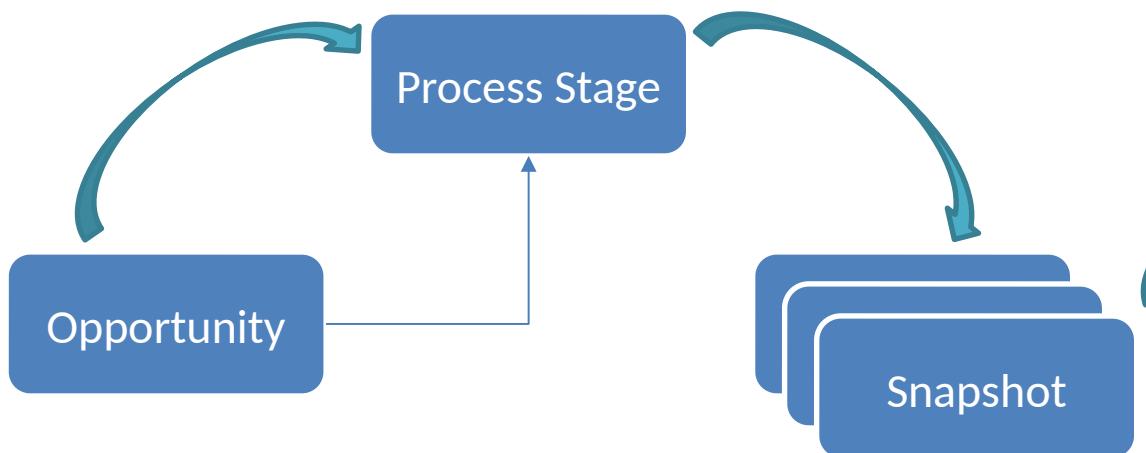


Pipeline Snapshots: Solution Architecture

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	
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

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

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

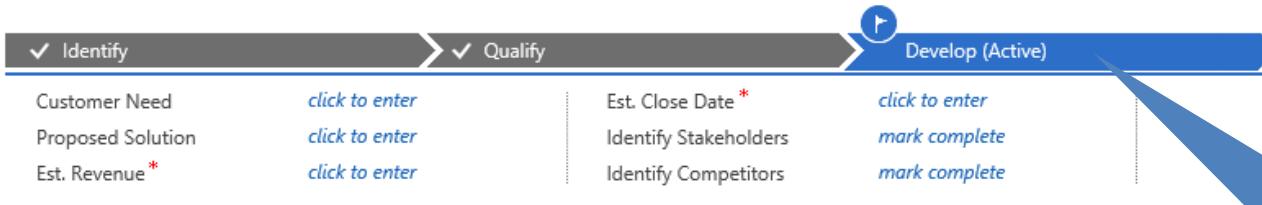
...And the other for counting the number of opportunities



Linking Opportunities to Process Stages via Workflow

OPPORTUNITY ▾

Fabrikam's CRM upgrade



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 2011 and need to catch up to the latest version.

POSTS ACTIVITIES NOTES

[Enter post here](#)

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, Inc.
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

The screenshot shows a Microsoft Dynamics 365 interface for a 'PROCESS STAGE' record named '3-Propose'. The top navigation bar includes 'Microsoft Dynamics', 'Home', 'SALES', 'Process Stages', '3-Propose', and other standard navigation icons. The main content area displays the following details:

Stage Category*	3-Propose	Opportunity Count	2	Estimated Revenue	36 000,00€
Name *	3-Propose	Last Updated On	4.5.2015 5:19	Last Updated On	4.5.2015 5:19

Below this, a section titled 'Opportunities' lists 'Open Opportunities' with the following data:

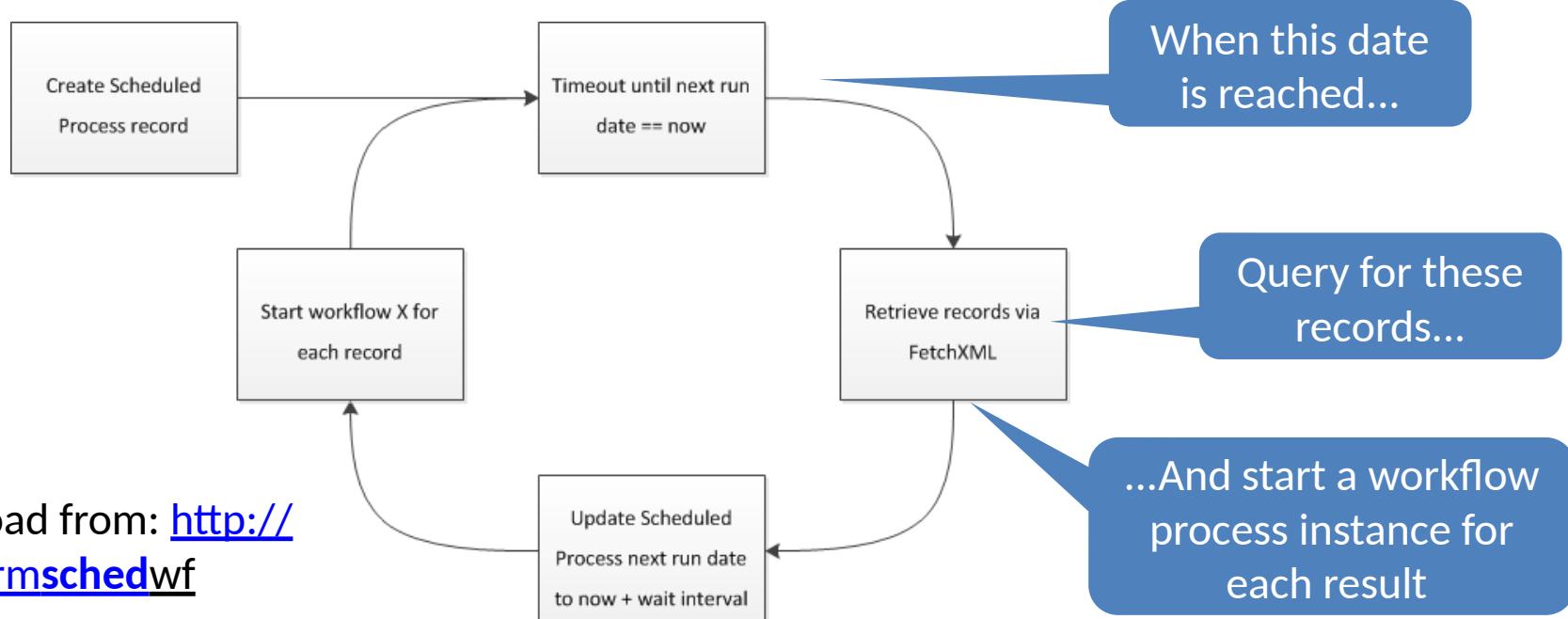
Topic	Potential Customer	Process Stage	Est. Close Date ↑	Est. Revenue	Rating	Owner
They sell many of the same items that we do - need t...	Contoso Pharmaceuticals...	3-Propose	30.4.2015	26 000,00 €	Hot	Jukka Niiranen
6 orders of Product SKU JJ202 (sample)	Fabrikam, Inc.	3-Propose	1.5.2015	10 000,00 €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





Configuring the Scheduled Process

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

Select the Process Stage entity

Select "Download Fetch XML"

Look for: Process Stages

Use Saved View: Active Process

Status Equals Active

Select

Download Fetch XML

Use Fetch XML to download your query in XML.

FetchXML.xml - Notepad

```
<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 * Process Stage Snapshot

Activate As Process

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 Process Stage

Category Workflow

Options for Automatic Processes

Scope Organization

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

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

Process: Process Stage Snapshot

Create Snapshot

General

Date `{Execution Time(Process)}`

Owner `{Owner(Process Stage)}`

Name * Snapshot of Process Stage `{Name(Process)}`

Stage `{Stage Category(Process Stage)}`

Estimated Revenue `€ {Estimated Revenue(Process Stage)}`

Opportunity Count `{Opportunity Count(Process Stage)}`



Snapshots Created

Microsoft Dynamics CRM | SALES | Snapshots

+ NEW EDIT ✓ ACTIVATE ⚏ DEACTIVATE ⚗ DELETE | ⚖ ASSIGN ⚖ SHARE ...

→ Active Snapshots ▾

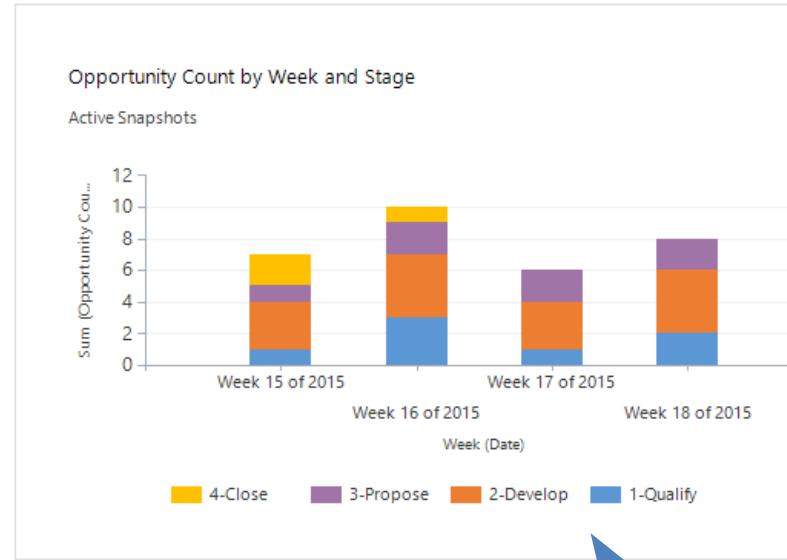
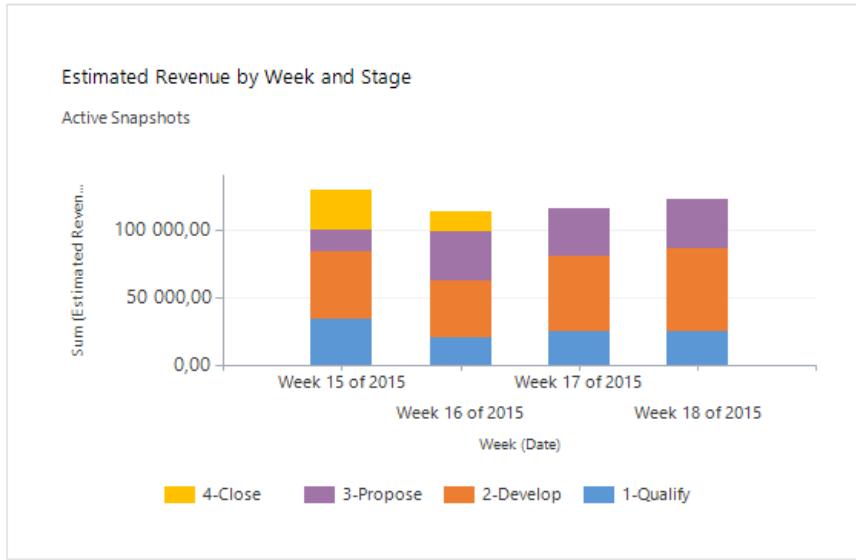
✓	Date ↑	Stage ↑	Estimated Revenue	Opportunity Count
	28.4.2015	1-Qualify	25 000,00 €	2
	28.4.2015	2-Develop	60 800,00 €	4
	28.4.2015	3-Propose	36 000,00 €	2
	28.4.2015	4-Close	0,00 €	0
	21.4.2015	1-Qualify	25 000,00 €	1
	21.4.2015	2-Develop	55 000,00 €	3
	21.4.2015	3-Propose	36 000,00 €	2
	21.4.2015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



Open Opportunities ▾

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	
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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!