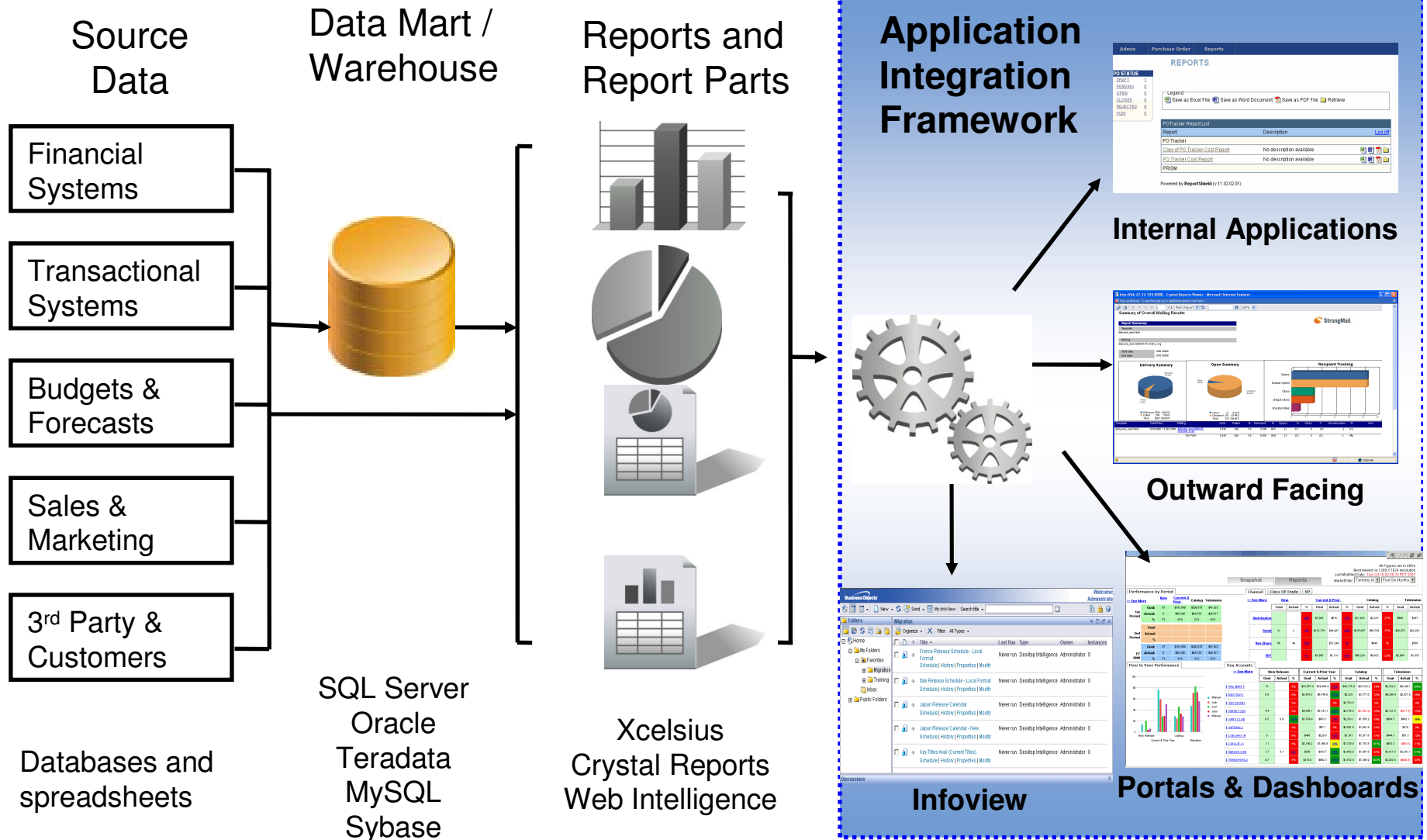


Maximizing the Tool

Integrating Crystal Reports & Web
Intelligence into your applications

Kevin McManus

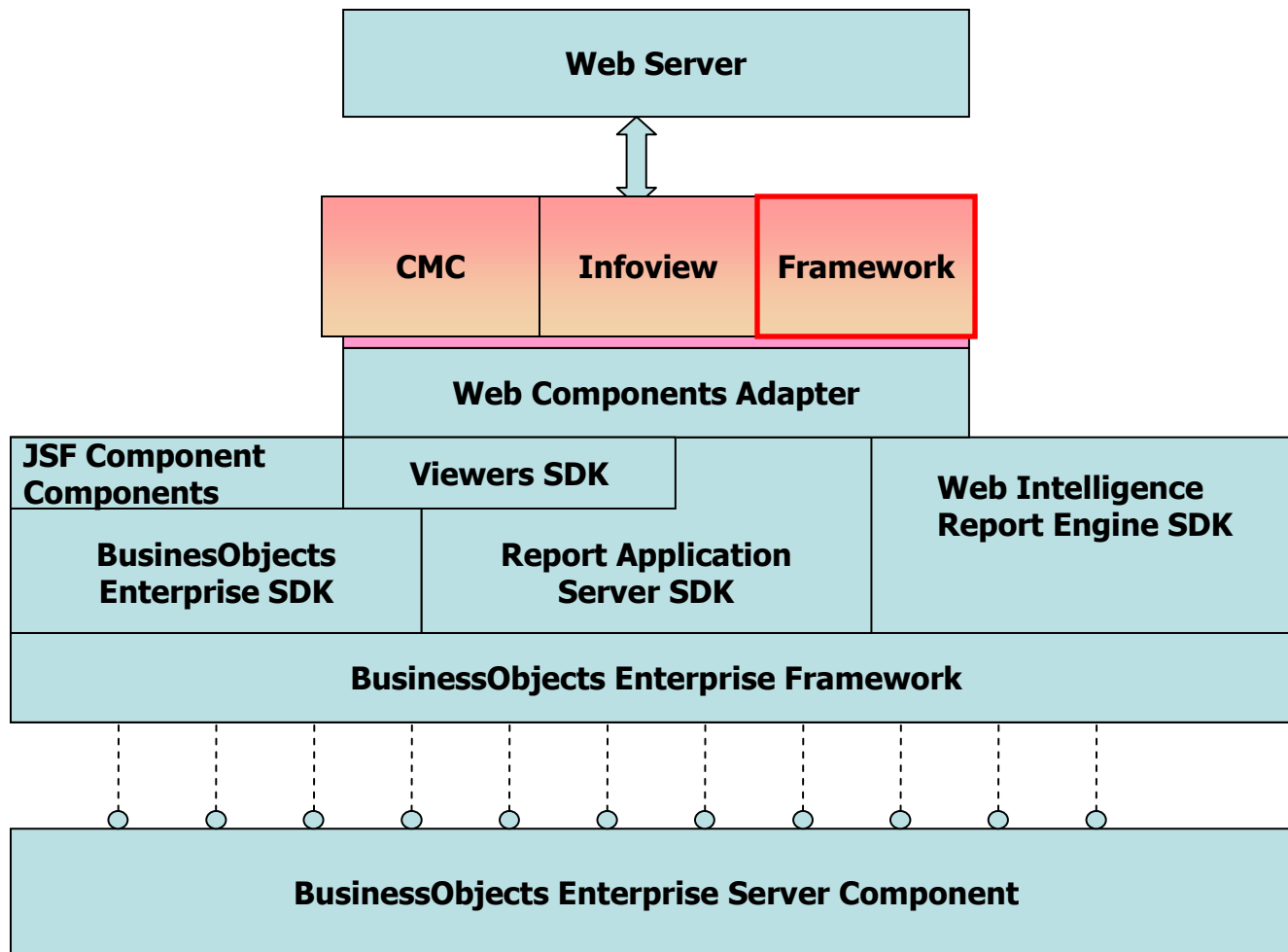
SAAS MODEL



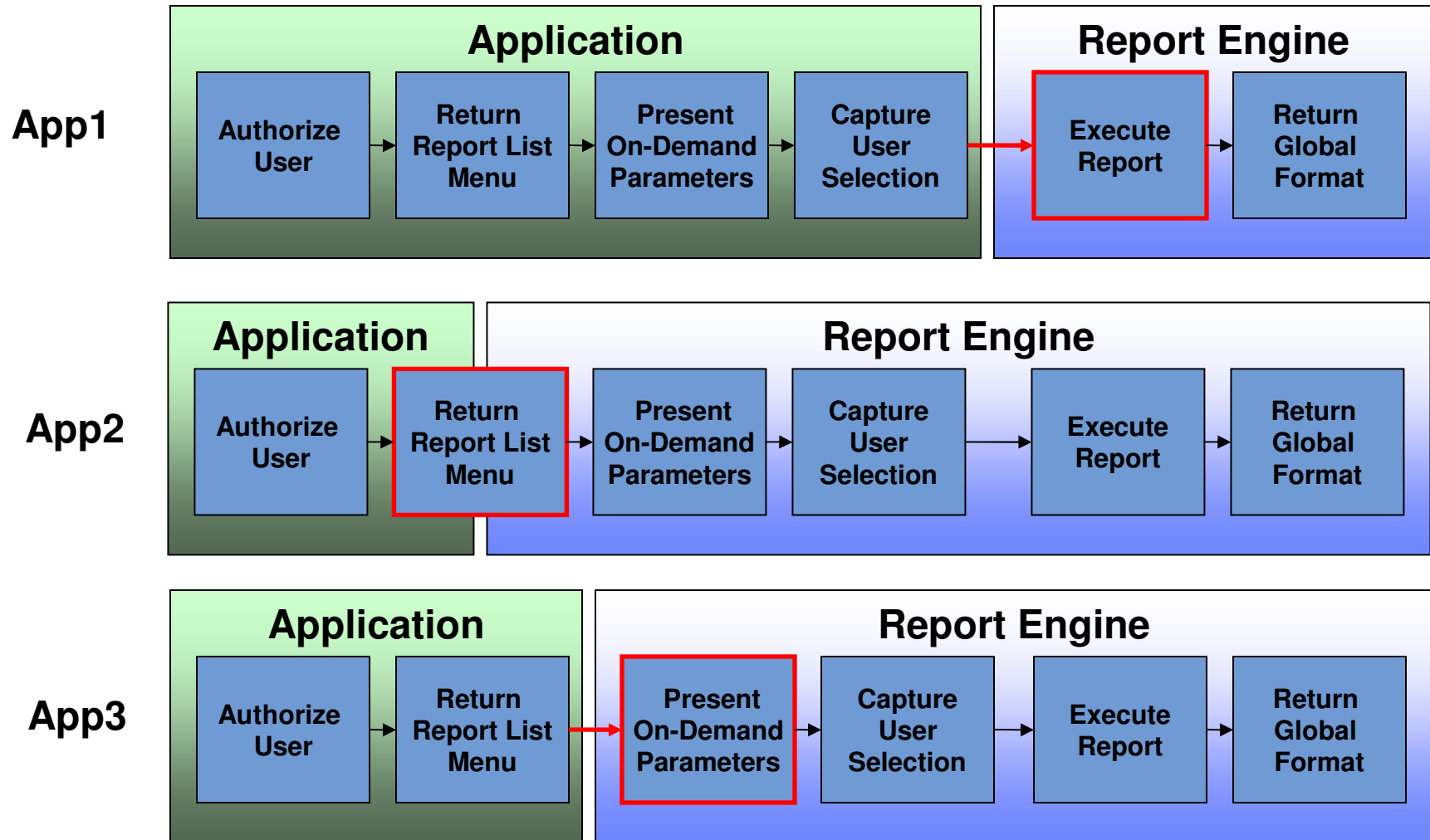
BRINGING ROI

- ▶ By sharing Business Objects XI technology, a company can
 - ▶ Save on user training costs
 - ▶ Save on administrative costs
 - ▶ Save on Custom Project Development Costs
 - ▶ Save on licensing and maintenance through a single platform
- ▶ By Getting involved early as the BI Architect for a project
 - ▶ Reduce project risks by using known technology
 - ▶ Reduce project risk of designing poor BI solutions
 - ▶ Reduce the amount spent on design and development by using plug-in solutions

ARCHITECTURE



MULTIPLE ENTRY POINTS



FRAMEWORK MODULES



- ▶ Security Handler
 - ▶ For transfer authorization from existing application
- ▶ Report List Handler
 - ▶ For presented managed content
- ▶ Parameter Handler
 - ▶ To provider user interaction
- ▶ Viewer/Exporter
 - ▶ to provide user viewing
- ▶ Scheduler
 - ▶ Content subscription and distribution

REDUCE, REUSE, RECYCLE

- ▶ Business Objects Layer
 - ▶ Reuse and Recycle Webi and Crystal Content
- ▶ Database Layer
 - ▶ Reuse Existing CMC or Audit Repository Database
- ▶ Administration Layer
 - ▶ Reuse Security Administration through CMC
 - ▶ Interface with the Enterprise SDK
- ▶ Presentation Layer
 - ▶ Reuse in any web application
 - ▶ Interface with the Viewers SDK
- ▶ Interface Layer
 - ▶ Reduce duplicate coding through a single JSP or .NET Platform
 - ▶ URL Based



SECURITY HANDLER

- ▶ Non Trusted
 - ▶ Custom Login Screen



User Name:

Password:

Pressing the "Logon" button will display a list of all your report templates.

[home](#) | [support](#) | [contact](#)

- ▶ Trusted
 - ▶ Application / Portal Pass Through
 - ▶ URL, session, token, or cookie
 - ▶ Infoview or SSO

SECURITY HANDLER

- CAN IT BE TRUSTED?

```
IEnterpriseSession es = null;
ISessionMgr sessionMgr = null;
ITrustedPrincipal principal = null;
String cmsName = connInfo.cmsName;
String cmsAuthType = connInfo.cmsAuthType;
if ( session.getAttribute("CE_Session") == null ) {
    sessionMgr = CrystalEnterprise.getSessionMgr();
    // Userid provided by URL, cookie, session variable
    principal = sessionMgr.createTrustedPrincipal(
        userid,
        cmsName,
        appConnInfo.sharedSecret);
    es = sessionMgr.logon(principal);
}
```

REPORT LIST HANDLER

- ▶ Design Templates
 - ▶ Single Column
 - ▶ Multi Column

- ▶ Organization
 - ▶ Single Level
 - ▶ Multi Level
 - ▶ With/out personal folders

- ▶ Interaction
 - ▶ On Demand
 - ▶ Schedule
 - ▶ Export / Distribute
 - ▶ Single Window / Multi Window

Legend			
Save as Excel File	Save as Word Document	Save as PDF File	Retrieve
ReTracker Report List			
Report	Description		
BO XI Training - Viewers			
PO Tracker			
Copy of Re Tracker Cost Report	Cost Report		
Re Tracker Cost Report			
POT Developers			
POT DEV - Re Tracker Cost Report	No description available		
POT QA			
POT Users			

StrongMail Report List			
Report	Description		Log off
New Folder Col2			
---- Individual Mailing	No description available		
New Folder vesion 2 Col2			
Report 1: Summary of Overall Mailing Results			
Summary of Overall Mailing Results by Mailing	No description available		
Summary of Overall Mailing Results by Template	No description available		
---- Individual Mailing	No description available		
---- Individual Template	No description available		
Report 2: Summary Results for Top Domains			
Top Domains Report	No description available		
---Top Domains Failure Detail	No description available		
---Top Domains Failure Report	No description available		
Report 3: Summary Results for Embedded Link Tracking			
Report 4: Delivery and Failure Detail			
Report 5: Virtual Gateway			

REPORT LIST HANDLER



- ▶ Restriction handled by Business Objects Enterprise Security
- ▶ Results dynamically returned via query

```
oInfoObjectsReport = iStore.query("SELECT SI_ID, SI_NAME,  
SI_DESCRIPTION, SI_KIND FROM CI_INFOOBJECTS WHERE  
(SI_PROGID='CrystalEnterprise.Webi' OR  
SI_PROGID='CrystalEnterprise.Report') AND SI_INSTANCE = 0  
AND SI_PARENT_FOLDER = "+Folder.getID()+" ORDER BY  
SI_NAME");
```

- ▶ Presented in host application via frame or iframe

```
<iframe name="FRAME1"  
src="http://servername/businessobjects/enterprise115/repor  
tlaunch/reports.jsp?AppName=<%=appname%>&UserID=<%=userid%>  
" width="730" height="360" frameborder="0"></iframe>
```

PARAMETER HANDLER

- ▶ Gather requirements
- ▶ Determine how much is handled by out of the box handlers
- ▶ Design and Deliver on requirements in phased approach
- ▶ Get Feedback for next interaction
- ▶ Incorporate new features ahead of the curve

Summary of Overall Mailing Results by Template [Log off](#)

Template


Search for: **Search**


Available Choices		Selected Values
dailywire_west.html Unknown	> >> < <<	dailywire_arizona.html dailywire_northwest.html

Mailings

0515_dailywire_northwest_3.cfg dailywire_arizona-2006-05-16-22-00_	> >> < <<	
---	--------------------	--

Date Range

End Date 

Start Date 

Run Report | **Save Parameters** | **Retrieve Saved Parameters**

PARAMETER HANDLER



```
out.println("<tr><td><select class=\"pePromptListBox\"
    multiple size=\"+StrListLength+\" name='ll'+i+'>");

IReportParameterValue parameterFieldValue;
Iterator it =
    ReportParameter.getDefaultValues().iterator();

while(it.hasNext()) {
    {
    parameterFieldValue = (IReportParameterValue) it.next();
    String pvls =
        parameterFieldValue.makeDisplayString(Locale.US);
    if ((StrFieldVal.indexOf(pvls) != 0)) {
        out.println("<option value='\" +pvls2 + \"'>\" +pvls2 + "</option>");
    } //if
    } //while
```

EXAMPLE : WEB PART

Rankings by Section

Refresh Data

Page 1

Arial 9

Data Templates Map Properties

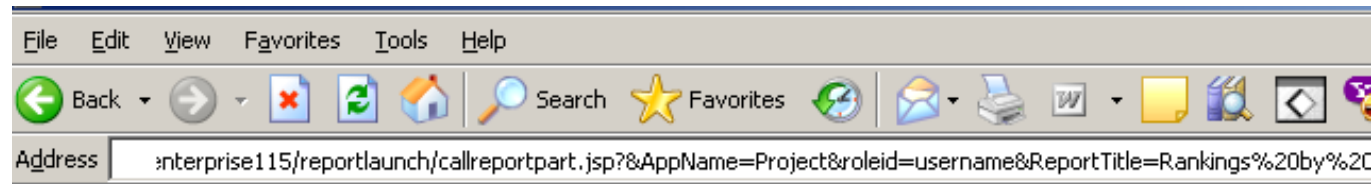
Data

- Rankings by Section
 - Portfolio Company
 - Portfolio Name
 - CompanyRank
 - Revenue/ Expense

Rankings by Section

Portfolio Name	Portfolio Company	Company Rank	Revenue/ Expense
Alternative Energy	Active Power, Inc.	4	\$19,647.80
	AstroPower, Inc.	7	\$3,620.40
	Ballard Power Systems Inc.	5	\$14,997.70
	Capstone Turbine Corporation	2	\$52,854.70
	Electric Fuel Corporation	8	(\$2,507.20)
	FuelCell Energy, Inc.	1	\$90,574.90
	H Power Corp.	6	\$7,438.40
	Plug Power Inc.	3	\$28,037.90
	Sum:		
#1 Company	FuelCell Energy, Inc.		\$90,574.90
Rest of Companies			\$124,089.70
% #1 Company			42%

EXAMPLE : WEB PART



Rankings by Section

Portfolio Name	Portfolio Company	Company Rank	Revenue/ Expense
Alternative Energy	Active Power, Inc.	4	\$19,647.80
	AstroPower, Inc.	7	\$3,620.40
	Ballard Power Systems Inc.	5	\$14,997.70
	Capstone Turbine Corporation	2	\$52,854.70
	Electric Fuel Corporation	8	(\$2,507.20)
	FuelCell Energy, Inc.	1	\$90,574.90
	H Power Corp.	6	\$7,438.40
	Plug Power Inc.	3	\$28,037.90
Alternative Energy	Sum:		\$214,664.60
#1 Company	FuelCell Energy, Inc.		\$90,574.90
Rest of Companies			\$124,089.70
% #1 Company			42%

EXAMPLE : WEB PART



Free Form

Use an image and text to express your creativity. When you're happy with how it looks, press "Create Gadget."

Rankings by Week

Rankings by Section

Portfolio Name	Portfolio Company
Alternative Energy	Active Power, Inc.
	AstroPower, Inc.
	Ballard Power Systems Ir
	Capstone Turbine Corpor
	Electric Fuel Corporation
	FuelCell Energy, Inc.
	H Power Corp.
	Plug Power Inc.

Title

[Add a link](#)

Image and text

Image:

[Change photo](#)

Text:

```
<iframe name="FRAME1"
src="https://servername/businessobjects/e
nterprise115/reportlaunch/callreportpart.jsp?
&AppName=PROJECT&roleid=administrato
r&ReportTitle=Rankings%20by%
20Section&type=wid&tab=0&instance=Last
&drillid=&roleid=username" width="730"
height="360" frameborder="0"></iframe>
```

Settings


Layout:

Background:

EXAMPLE : WEB PART

Home | **Research** | Google Finance | Add a tab

Rankings by Week



Business Objects
an SAP company

Rankings by Section2

Portfolio Name	Portfolio Company
Alternative Energy	Active Power, Inc.
	AstroPower, Inc.
	Ballard Power Systems Inc.
	Capstone Turbine Corporation
	Electric Fuel Corporation
	FuelCell Energy, Inc.
	H Power Corp.

Programmer's Notepad

- [Programmer's Notepad 2.0.8 Stable Released](#)
- [Programmer's Notepad 2.0.7.706 Released](#)
- [Programmer's Notepad 2.0.7.668 Released](#)

My Google Groups

[Crystal Developers](#) (702)

CONCLUSION

- ▶ Bring Greater ROI
- ▶ Save Money and Lower Risk on new projects
- ▶ Reduce, Reuse, Recycle
- ▶ Maintain a single set of BI application code
- ▶ STRATEGICAL THINKING
 - ▶ Don't Limit your organization to the types of BI employees are comfortable with.
 - ▶ They may only be asking for what they used at their last company
 - ▶ EXPAND THEIR MINDS : Build One new BI Application that pushes the limit beyond what they "Need to do today"
 - ▶ i.e. Real-Time Dashboard visible through organization on the intranet homepage
 - ▶ i.e. Automated Data Mining with alerts based on some simple metrics

Contact



- ▶ Kevin McManus
 - ▶ 877-857-7407
 - ▶ kevin@mcmanusconsulting.com
 - ▶ www.mcmanusconsulting.com