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#FutureDecoded

Mobile BI with Microsoft tools

Andrea Martorana Tusa

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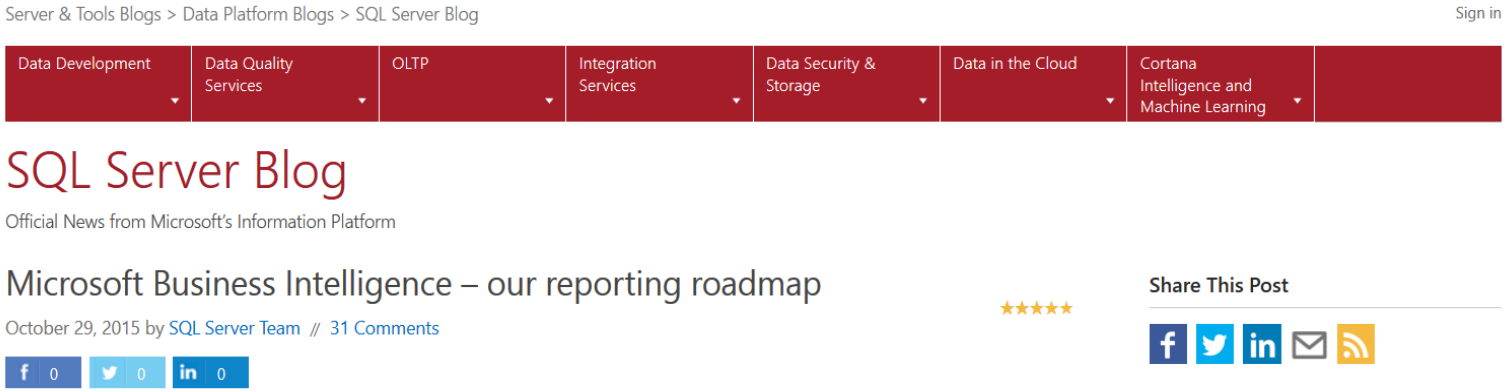
About me | Andrea Martorana Tusa

- Analyst programmer working in IT department of **Banco Popolare**. Focused on all the applications involved in Human Resources management.
- SQL Server & Oracle development, data warehousing, reporting, BI, Analysis Services, C#, R.
- MCTS “SQL Server Developer”.
- Speaker at SQL Saturdays in Italy & abroad, SQL Nexus, PASS Italian Virtual chaper. Author on sqlservercentral.com, UGISS (User Group Italiano SQL Server).

Agenda

- Microsoft's new platform for mobile Business Intelligence
- Mobile with new Report Publisher (SQL Server 2016)
- Mobile with Power BI
- Mobile with SSRS
- Choosing the right tool
- Q & A

Microsoft reporting roadmap



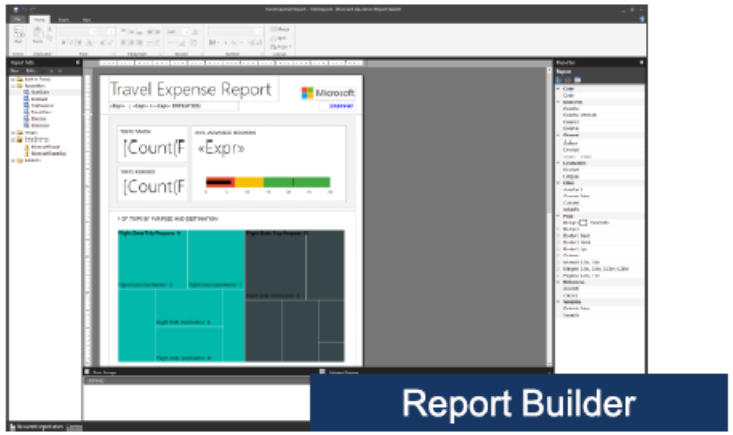
- During PASS Summit 2015, Microsoft revealed its strategy to harmonize reporting content types across platforms and systems. They set up the guidelines of future developments for BI reporting.
- One of the key features announced was the introduction of **mobile reports,** that is reports optimized for mobile devices.

(Microsoft Business Intelligence – our reporting roadmap
http://blogs.technet.com/b/dataplatforminsider/archive/2015/10/29/microsoft-business-intelligence-our-reporting-roadmap.aspx)

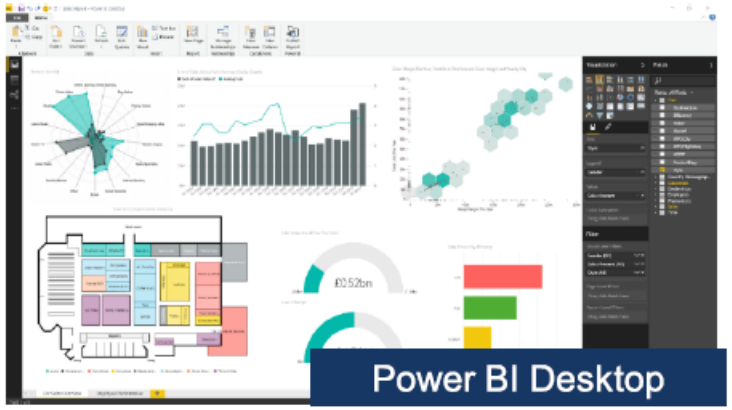
The four Microsoft BI report types

The new approach distinguishes **four types** of reports, based on production technology and delivery method:

Paginated Reports



Interactive Reports



1) Paginated Reports. Standard report type, with many elements and complex business logic. Built with Report Builder or SSDT (Visual Studio).

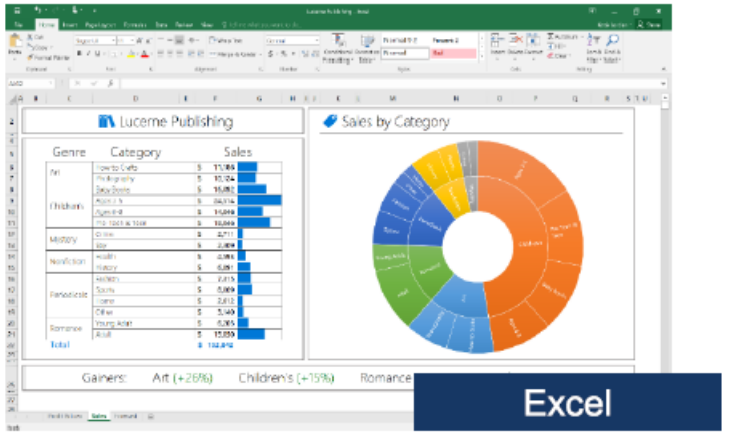
2) Interactive Reports. Allow dynamic and interactive view. Built with Power BI Desktop.

(Microsoft Business Intelligence – our reporting roadmap
http://blogs.technet.com/b/dataplatforminsider/archive/2015/10/29/microsoft-business-intelligence-our-reporting-roadmap.aspx)

The four Microsoft BI report types

Mobile Reports

Spreadsheets



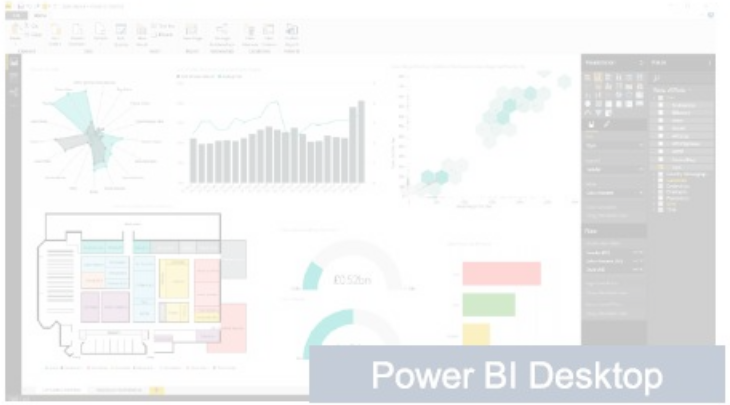
3) Mobile Reports. Specially optimized for mobile devices with simple logic and few elements. Built with Datazen Technology.

4) Analytical reports and charts. Created with Excel directly by end users.

(Microsoft Business Intelligence – our reporting roadmap
http://blogs.technet.com/b/dataplatforminsider/archive/2015/10/29/microsoft-business-intelligence-our-reporting-roadmap.aspx)

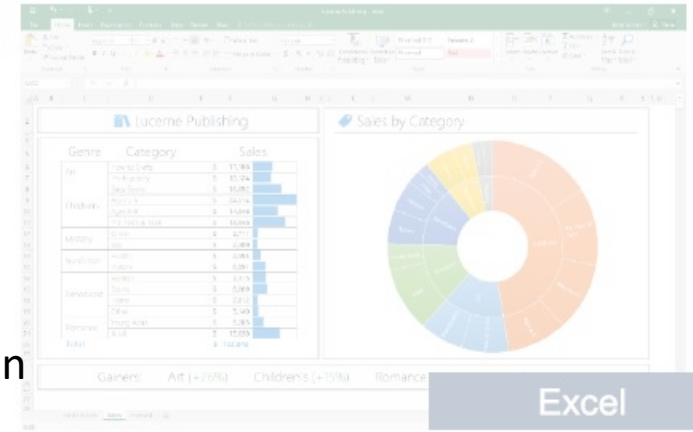
The four Microsoft BI report types

Interactive Reports



Power BI Desktop

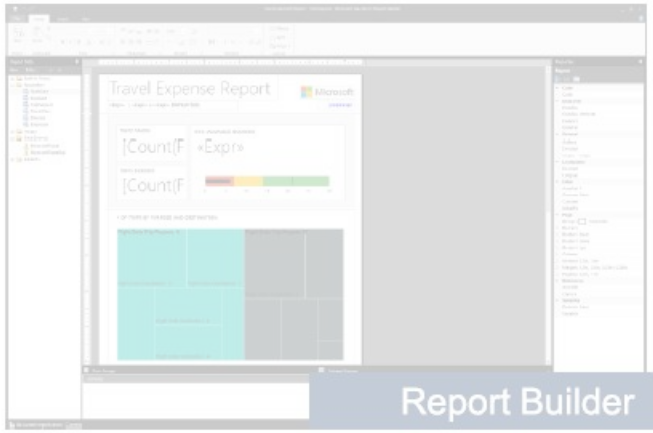
Spreadsheets



Excel

Today we'll focus on mobile reporting

Paginated Reports



Report Builder

Mobile Reports

Datazen

Support for mobile reports

According to the new model, SQL Server Reporting Services 2016 is the comprehensive platform for on-premises BI report delivery. In the new release, Microsoft added support for **mobile reports and KPI**.

(Microsoft Business Intelligence – our reporting roadmap
http://blogs.technet.com/b/dataplatforminsider/archive/2015/10/29/microsoft-business-intelligence-our-reporting-roadmap.aspx)

Unified Mobile BI experience

The Microsoft promise …

*… Whether using SQL Server Reporting Services on-premises, Power BI in the cloud, or both as your report delivery solution, there is a **single mobile application** for consumption of all mobile reports.*

*All of your mobile BI content is at your fingertips from within a **single, unified mobile app** to deliver insights any way, anywhere and from any device …*

(Microsoft Business Intelligence – our reporting roadmap
http://blogs.technet.com/b/dataplatforminsider/archive/2015/10/29/microsoft-business-intelligence-our-reporting-roadmap.aspx)

Towards Integration

From parallel convergences …

… to integration

SSRS

Datazen

Power BI

How can we create mobile reports?

Based on the new vision and development strategy, Microsoft's BI offer for mobile reporting is now made up of the following tools:

On-premises

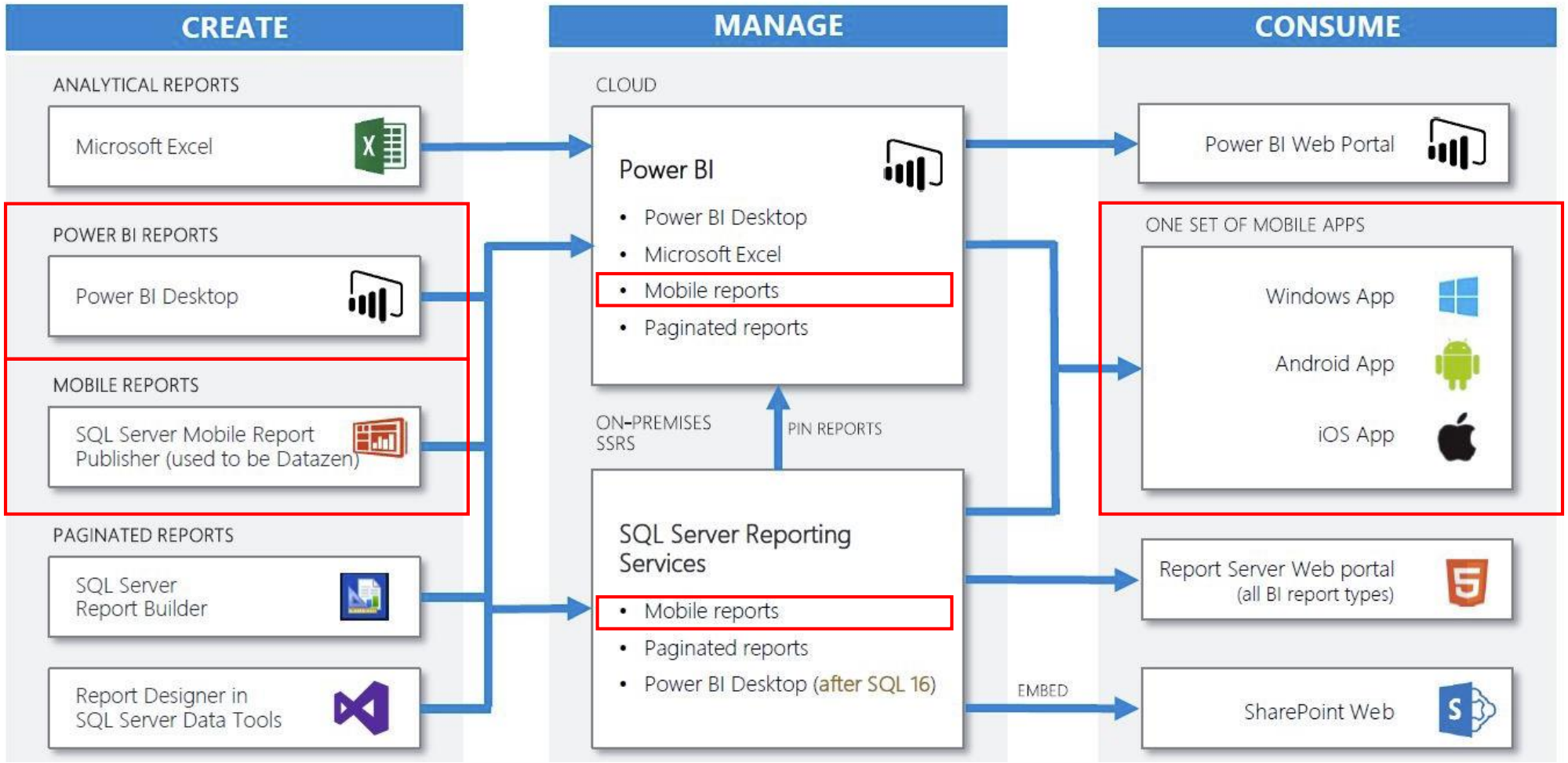
- **SQL Server 2016 Mobile Report Publisher**

  (former Datazen)

- **Power BI**

Cloud

Placement for mobile BI according to Microsoft



Mobile Report Publisher

Mobile Report Publisher

SQL Server Mobile Report Publisher is the new reporting tool expressly dedicated to create and delivery **mobile BI**.

It is based on **Datazen** technology a company acquired from Microsoft on April 2015. Datazen products were merged into SQL Server 2016 to build a complete BI platform for viewing reports on phones and tablets.

With Mobile Report Publisher developers can easily realize reports, dashboards and KPIs and publish immediately on every device.
Everything integrated natively into SQL Server Reporting Services 2016.

https://blogs.msdn.microsoft.com/sqlrsteamblog/2015/12/17/introducing-mobile-reports-and-a-brand-new-web-portal/

Mobile Report Publisher

Mobile Report Publisher key features are:

- Quickness and simpleness. It's really easy to use
- Unified dashboards designer for any visualization
- KPI repository
- Native apps for all mobile platforms (Windows, iOS, Android)
- Direct browser access via HTML5 rendering
- Automatic rendering in any screen size
- Data sources availability

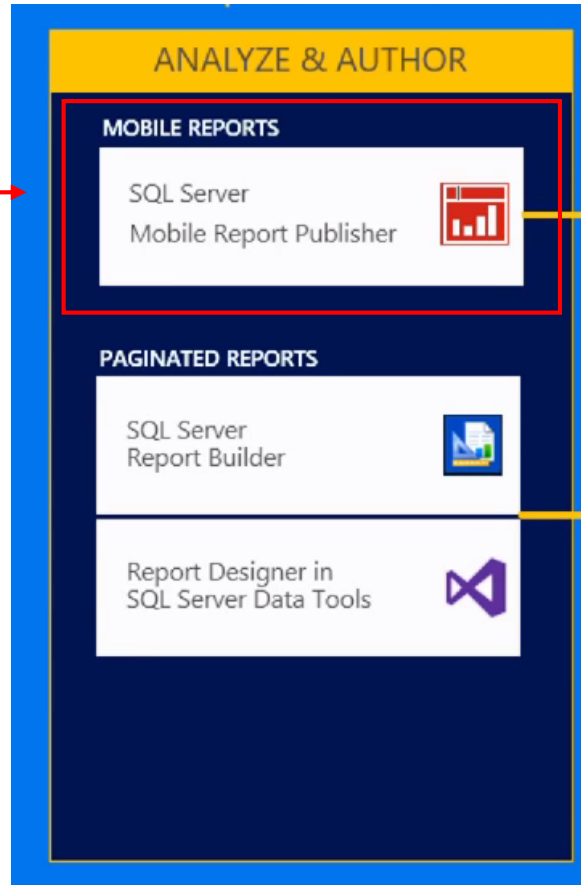
Mobile Report Publisher

The unique layout creation technology enables efficient coverage of the entire BI presentation layer and perfect scaling to all screens size for:

- Mobile phones
- Tablets
- Laptops
- Desktops
- Large screens

Mobile Report Publisher

Dashboards are built locally on developer's computer using the Publisher app and then published on Reporting Services server.



Power BI mobile app

What do I need to publish reports?

To create and publish report you need:

- SQL Server 2016 Mobile Publisher on your laptop
- SQL Server 2016 Reporting Services with:
  - a data source
  - a dataset to connect to
- Power BI app on mobile devices (tablet, smartphone)

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SQL Server 2016 Mobile Report Publisher
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DEMO

Try yourself. Scan QR Code!

User : globalitalianvc

Password: 27Marzo2016

www.futuredecoded.it

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Pro & Cons

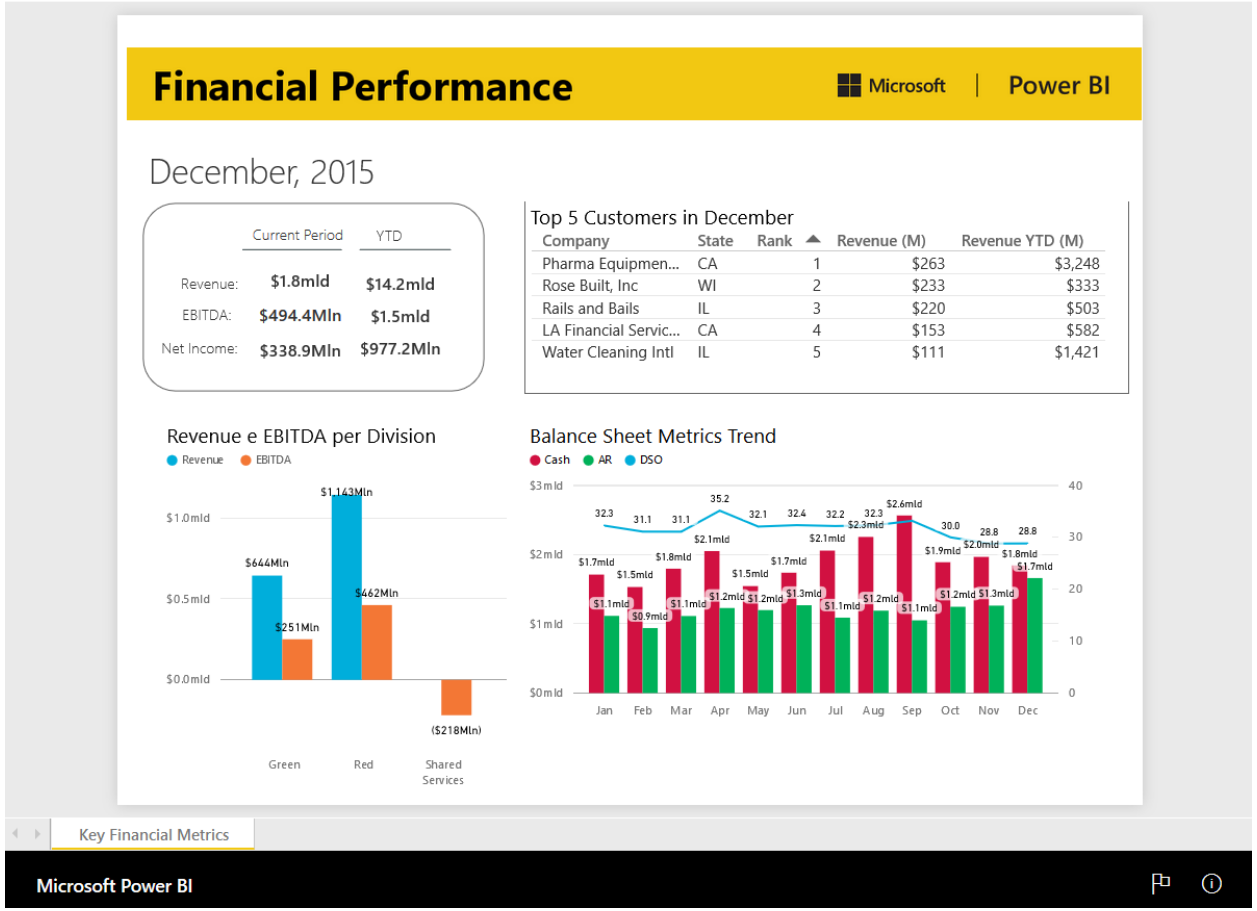
Why use Mobile Report Publisher for mobile BI

- It's made to this …. Fits natively for every device
- Low learning path
- Rapid dashboards creation and development
- Easy delivery method
- Many data sources available
- Corporate security and profiling. Reporting Services authentication rules
- Free (bundle with SQL Server)

Why not use Mobile Report Publisher for mobile BI

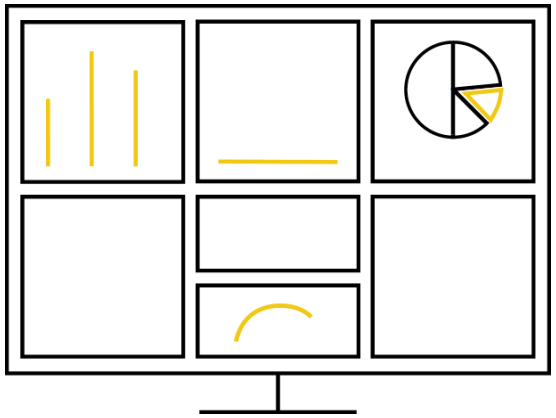
- Simple business logic
- No objects behavior personalization
- Simple navigation
- Needs a app to be executed
- Need IT professional to set up and configure server application
- No data manipulation allowed. Query must be prepared in advance
- Manages little volumes of data

Power BI


Financial Performance
Microsoft | Power BI
December, 2015
Current Period
YTD
Revenue: $1.8mld $14.2mld
EBITDA: $494.4Mln $1.5mld
Net Income: $338.9Mln $977.2Mln
Top 5 Customers in December
Company State Rank Revenue (M) Revenue YTD (M)
Pharma Equipmen... CA 1 $263 $3,248
Rose Built, Inc WI 2 $233 $333
Rails and Bails IL 3 $220 $503
LA Financial Servic... CA 4 $153 $582
Water Cleaning Intl IL 5 $111 $1,421
Revenue e EBITDA per Division
Revenue EBITDA
$1.0mld
$0.5mld
$0.0mld
$644Mln
$251Mln
$1,143Mln
$462Mln
($218Mln)
Green
Red
Shared Services
Balance Sheet Metrics Trend
Cash AR DSO
$3mld
$2mld
$1mld
$0mld
40
30
20
10
0
Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Key Financial Metrics
Microsoft Power BI

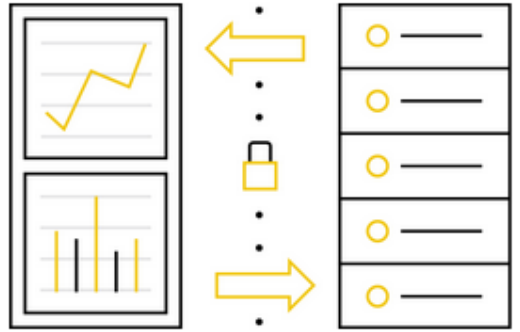
What is Power BI?

Microsoft Power BI is the new **cloud-based** business analytics service that helps create live operational dashboards from on-premises and cloud data in one central location that you can access across a range of devices.
With Power BI you can:



Create stunning interactive reports

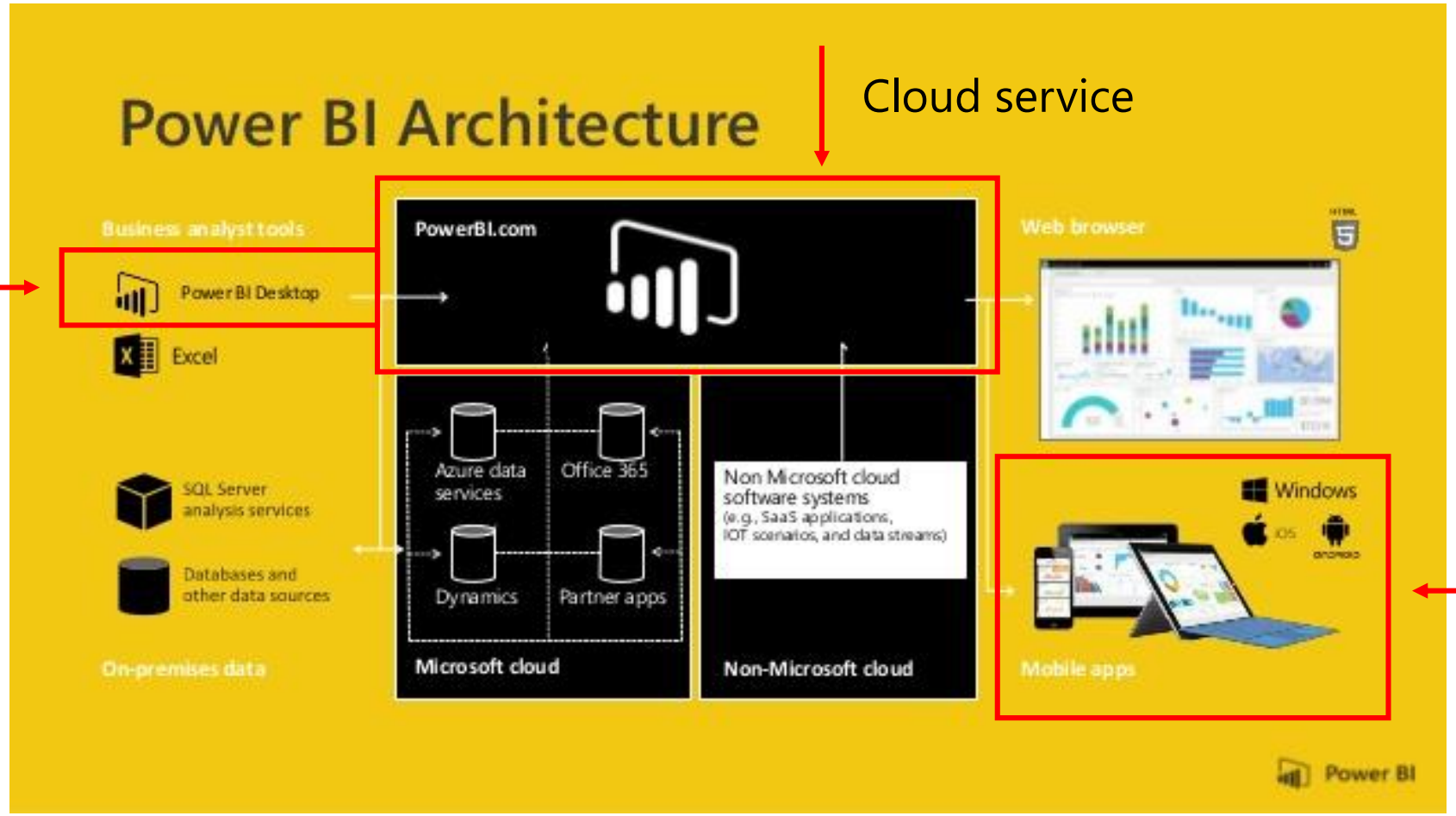
Monitor your business at-a-glance



Transform, analyze, visualize data

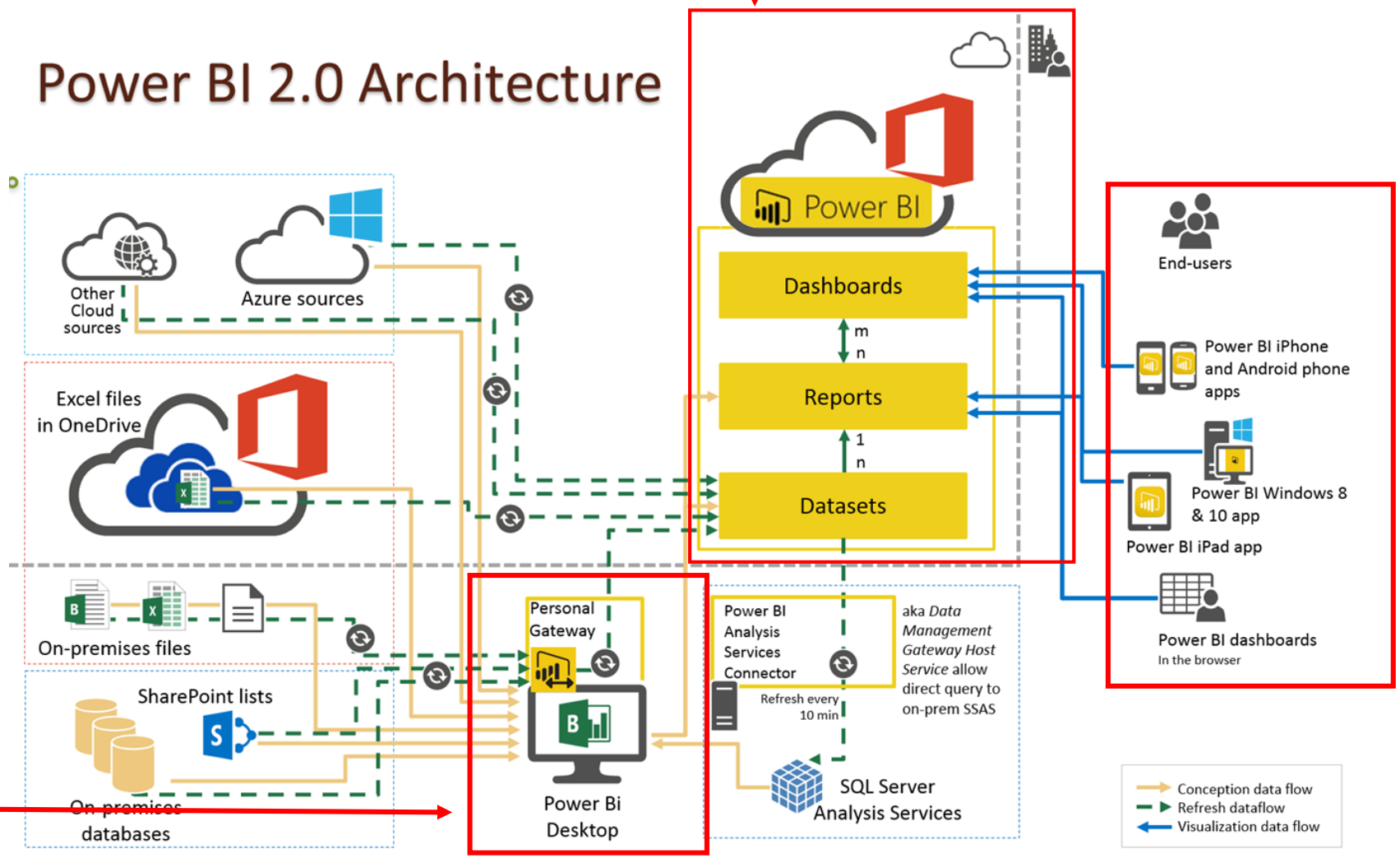
Architecture

Desktop app



Mobile app

Architecture



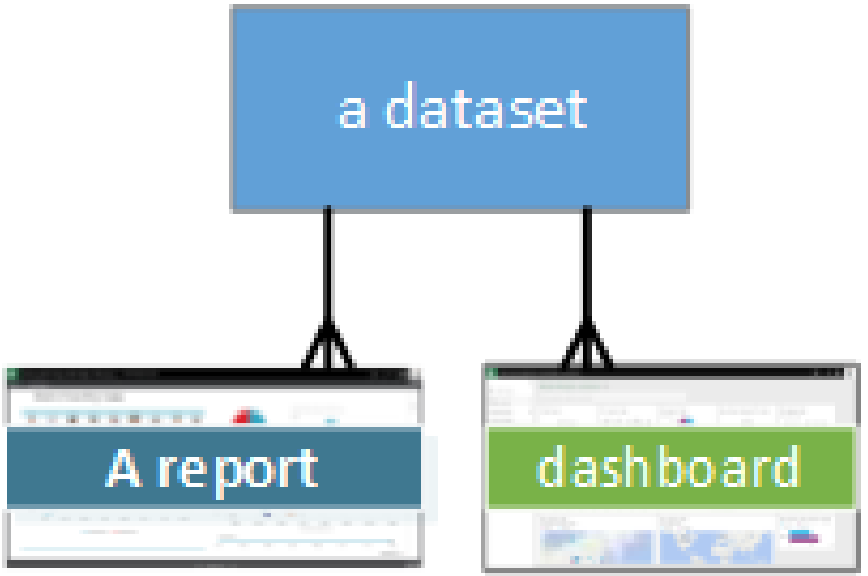
Desktop app

Mobile app

Architecture

Three basic objects type:

- **Datasets:** collection of data (tables). All tables of in a dataset can be completed with relationships, measures, calculated columns, etc.
- **Reports:** visualization tools arranged on a page
- **Dashboards:** collections of tiles pinned from reports.



Power BI Mobile App

Developed for monitor users business, get fast answers, gain and share business insights with rich visuals.

Available on

iOS

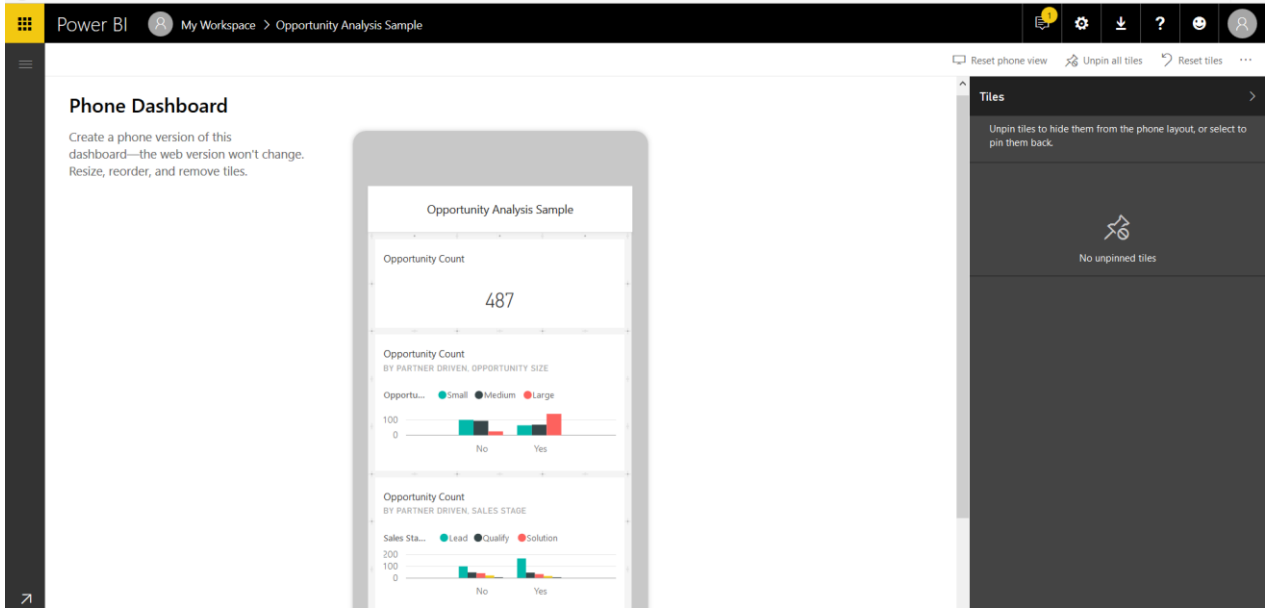
Windows Phone

android

Optimized phone view

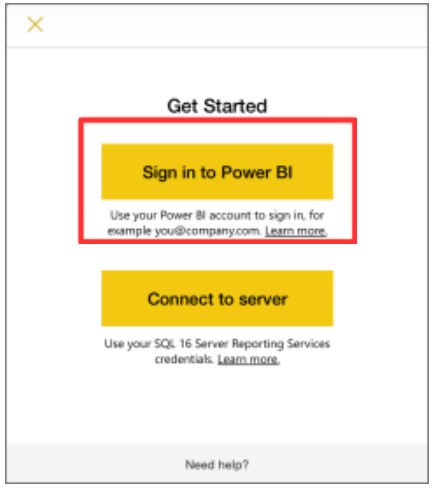
Create a phone-optimized view setting layout for your reports and dashboards. Choose which visuals you want to show and resize them to fit in portrait mode.

Power BI Desktop - Reports

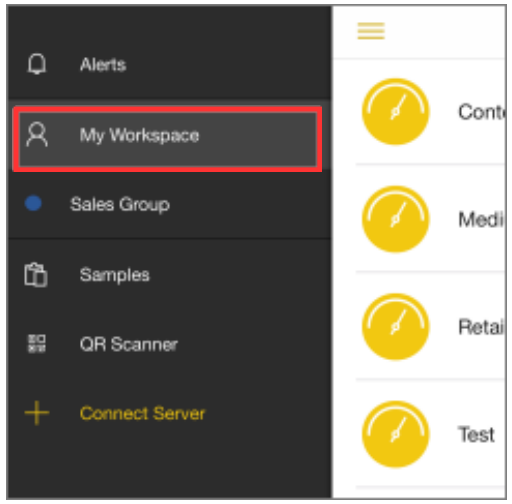


Power BI Service - Dashboards

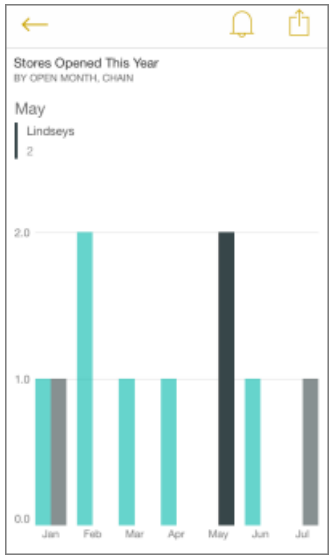
Mobile App – how to get started



Open the app. Sign in and choose what you want to see



Choose My Workspace and tap on the dashboard you want to open



DEMO

Power BI mobile app

- Set report layout in Power BI Desktop
- Publish a report
- Set dashboard layout in Power BI service
- Open the app
- Navigate through reports and dashboards in mobile app

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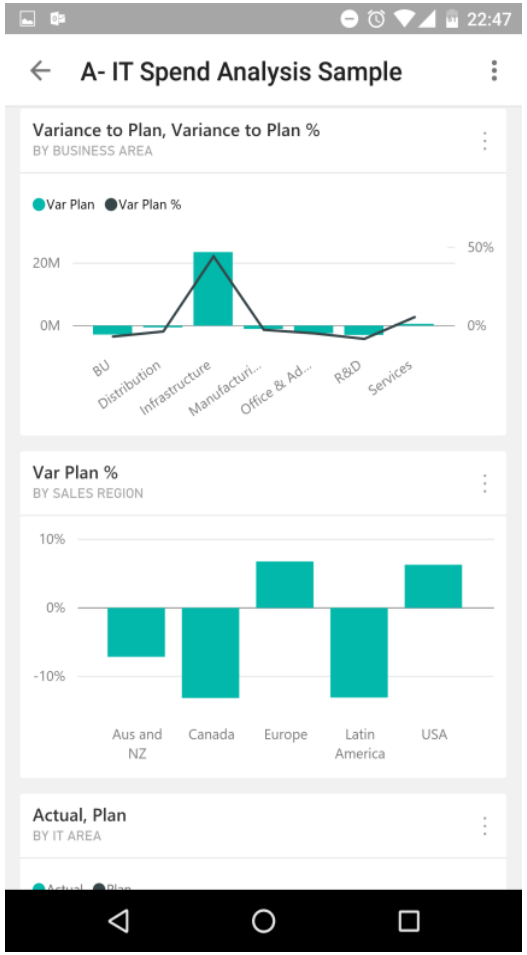
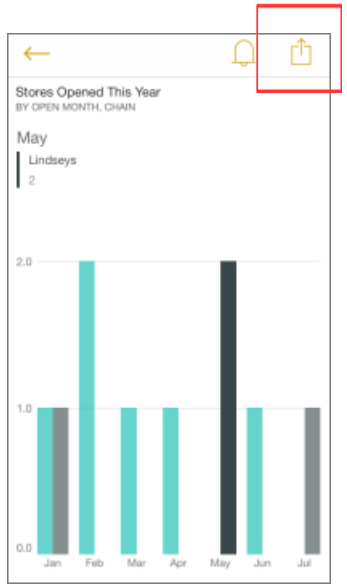
Mobile App – user experience



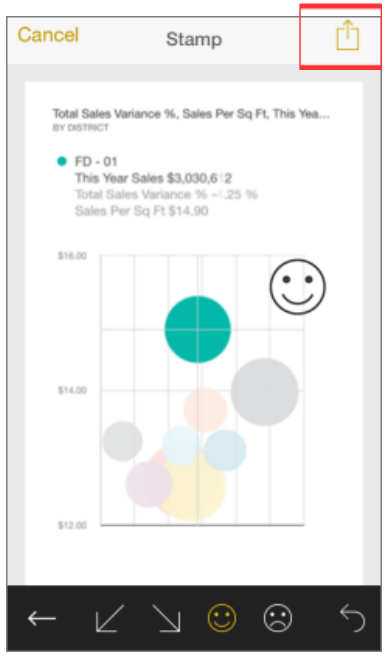
With Power BI mobile app, users can:

- Have live access to dashboards, reports and KPI, either on cloud or on premises
- Interact and navigate tiles, to get data insights
- Sort charts and data,
- Drill through inside mobile reports and KPIs or navigate to external URL
- Stay up-to-date with data-driven alerts
- Share dashboards with other users
- Collaborate and interacts with groups and content packs
- Annotate and share a snapshot of a single tile
- Create picture tiles into dashboards
- Scan a Power BI QR code (generated by Power BI Service)

Mobile App – interact with tiles



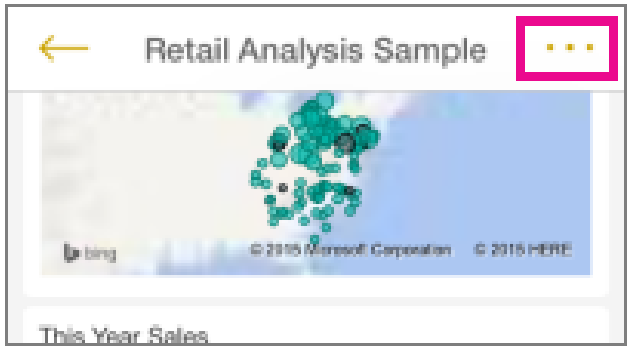
Tap a tile and it opens in focus mode



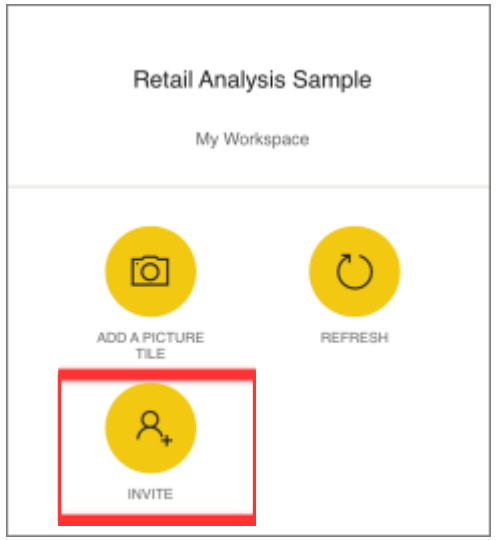
If you tap on share icon, you can add comments or signs to the tile

After annotating, type the share icon again and you can send the tile by e-mail.

Mobile App – share a dashboard



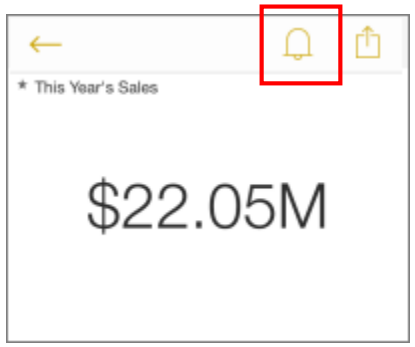
In the upper-right corner of the dashboard, tap the ellipsis to open the dashboard menu.



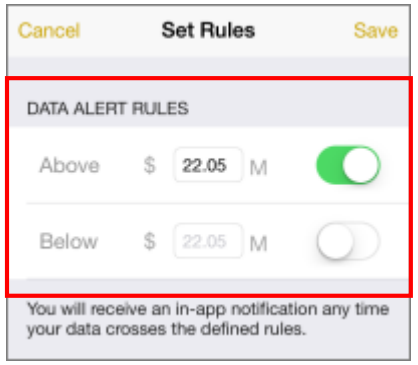
Tap **Invite**

Type names and a message to accompany your dashboard invitation. Your colleagues get an email invitation with a direct link to the dashboard.

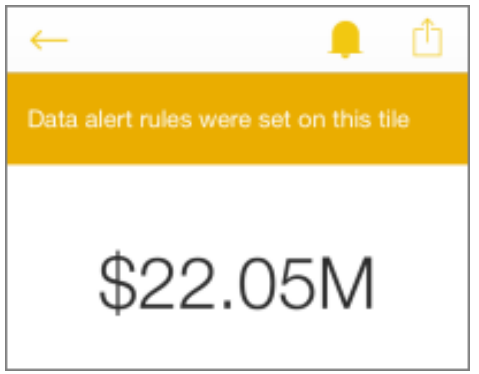
Mobile App – set data alerts



You can set alerts to notify you when data in your dashboards changes beyond limits you set. Alerts work for tiles featuring a single number.

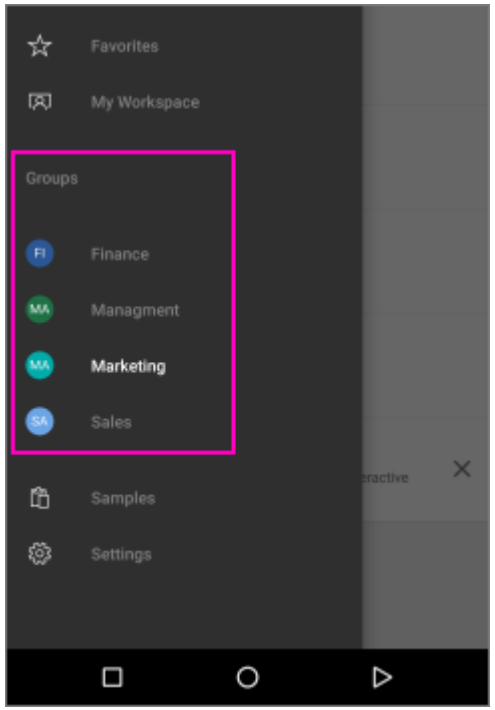


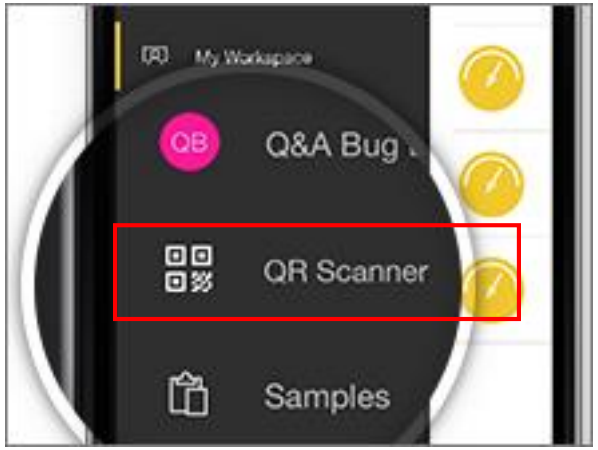
Tap the bell icon. Set numbers to receive alerts.



When the data in the dashboard is refreshed, you'll receive an alert if the new value is above or below the number you set.

Mobile App – Groups – QR Code



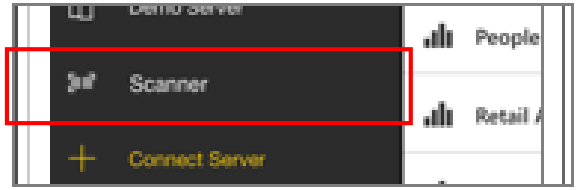


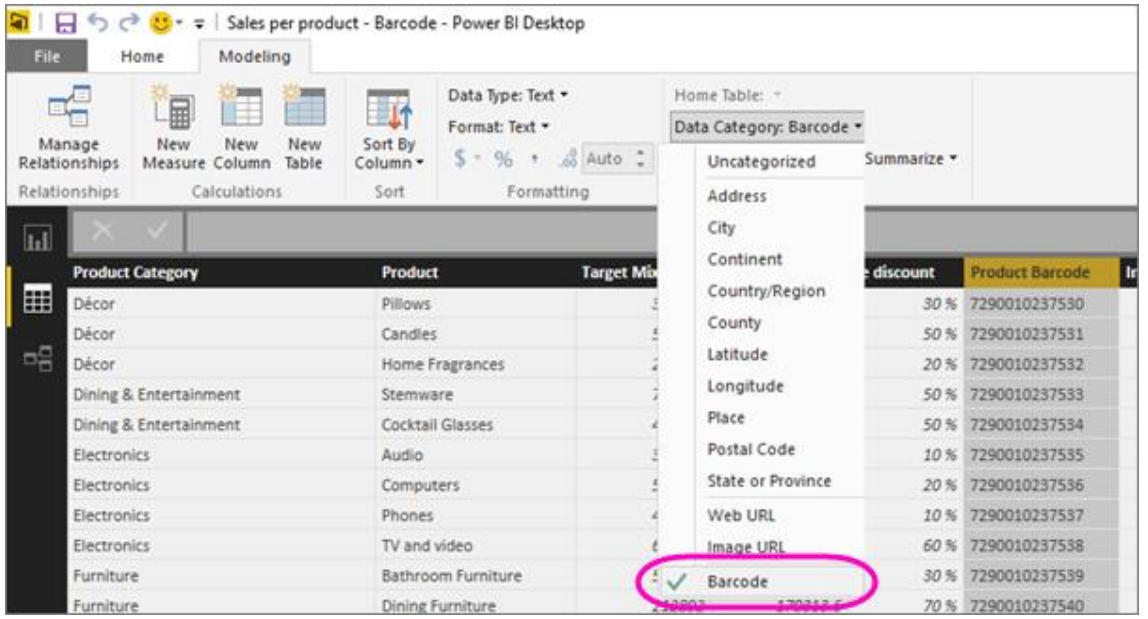
You can collaborate and interact with group dashboards and content packs you created on Power BI service

You can create a QR code in Power BI services and then scan that code for immediate access to a relevant tile, right from your phone.

Mobile App – barcode

With the Power BI scanner for iOS, you can now scan barcodes printed on products. This will display related reports filtered by the scanned value.





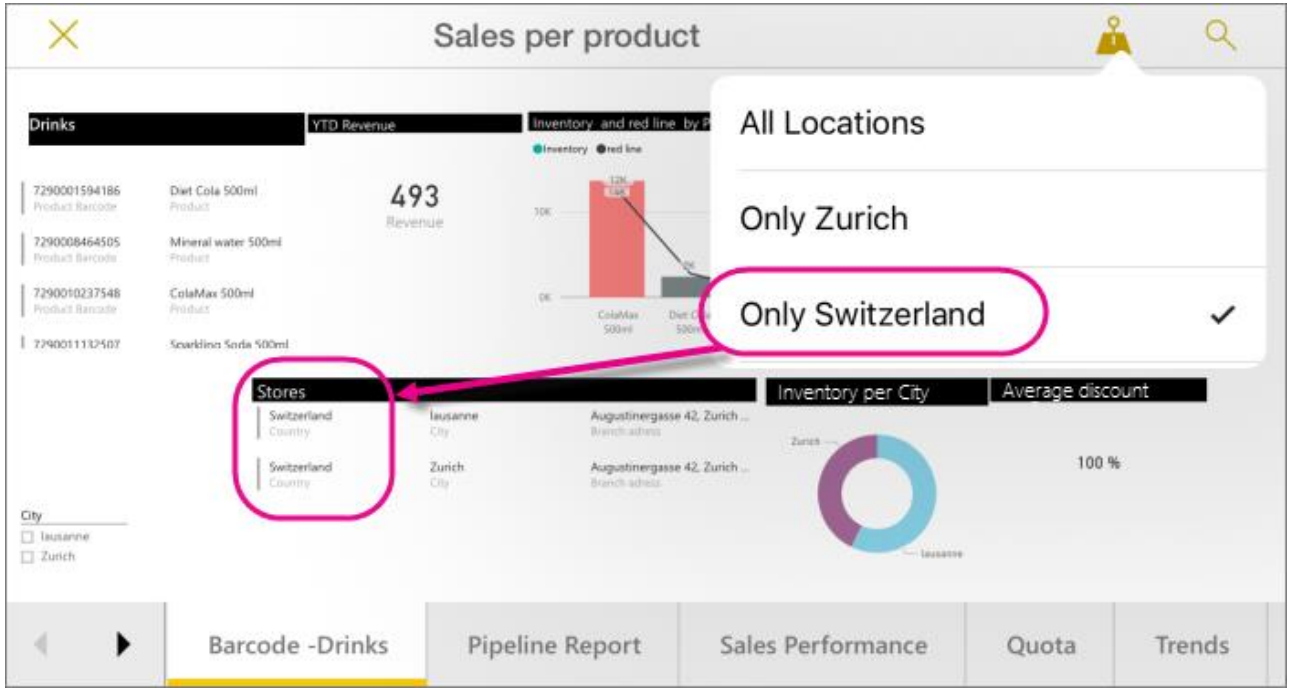
To filter a report by barcode value, you need to categorize data in column as a barcode type.

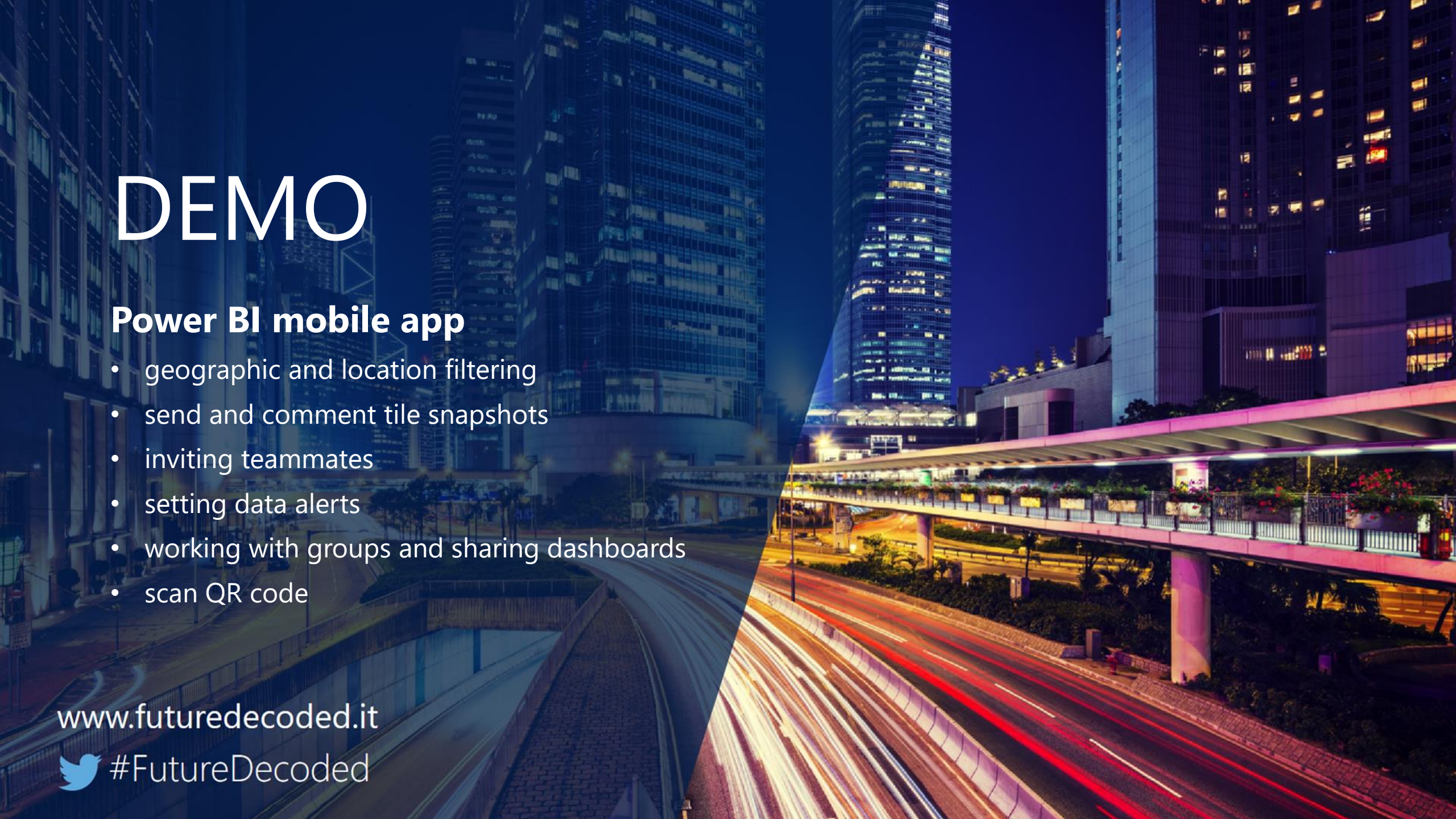
Mobile App – Geographic filtering

When you create reports in Power BI Desktop, you can categorize geographical data for a column. Then, when you view that report in the Power BI mobile app for iOS, Power BI automatically provides geographical filters that match where you are.

Tap the pin in the upper right corner of your report. You can filter on the locations you set up in the report.

You can even center any map tile on your dashboard to your current location to see only geographic points that are near you.





DEMO

Power BI mobile app

- geographic and location filtering
- send and comment tile snapshots
- inviting teammates
- setting data alerts
- working with groups and sharing dashboards
- scan QR code

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DEMO

Scan Power BI generated code …

Power BI

… or try the "Publish to Web" service

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Pro & Cons

Why use Power BI for mobile BI

- Fits perfectly on every device
- Lots of data sources both on-premises and on-line
- Advanced data modeling and manipulation (Power Query, M language)
- Simple report and dashboards creation and development
- Easy delivery method
- Customizable layout
- High interactivity with tiles
- User custom visuals
- Suitable for expert users to perform Self Service Analysis. No need for IT professionals

Why not use Power BI for mobile BI

- Cloud service
- For working on-premises, it needs a gateway
- No direct real time acess to data. It needs a gateway for connection
- Needs a app and a login to be executed
- No easy manual settings for groups collaboration and content packs creation
- User profiling and visibility rules
- No easy way to deliver contents within a Corporate
- Needs a third-party tool to deliver app updates
- No subscriptions
- Cost for Pro license (9,99$ month/user)

Choosing the right tool

What's the “scope“ of every tool? Are there overlaps?

SQL Server Mobile Report Publisher: mobile, on-premises dashboards, with high interactivity and few elements. *Fitted for distributed mobile Corporate BI*

Power BI: hybrid reports and dashboards, integrating data from both on-premises, Internet and cloud data sources. Highly customizabile and advanced data shaping. *Fitted for Self Service BI, data analyst, and groups collaboration*

Resources

Microsoft Business Intelligence – our reporting roadmap
http://blogs.technet.com/b/dataplatforminsider/archive/2015/10/29/microsoft-business-intelligence-our-reporting-roadmap.aspx

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http://www.communitydays.it/
www.futuredecoded.it
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