Visualizing Event Data in Your Business: A Case Study

Arthur Dayton

Heartland Oracle Users Group

October 26, 2017

Presenter

- Arthur Dayton – Senior Consultant
  - Speaker
  - Teacher
  - Education Chair IOUG North American Oracle Spatial and Graph Special Interest Group
  - Contributing Member to ODTUG BI Community committee
  - Dad to 2 boys

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Vlamis Software Solutions

- Vlamis Software founded in 1992 in Kansas City, Missouri
- Developed 200+ Oracle BI and analytics systems
- Specializes in Oracle-based:
  - Enterprise Business Intelligence & Analytics
  - Analytic Warehousing
  - Data Mining and Predictive Analytics
  - Data Visualization
- Multiple Oracle ACEs, consultants average 15+ years
- www.vlamis.com (blog, papers, newsletters, services)
- Co-authors of book “Data Visualization for OBI 11g”
- Co-author of book “Oracle Essbase & Oracle OLAP”
- Oracle University Partner
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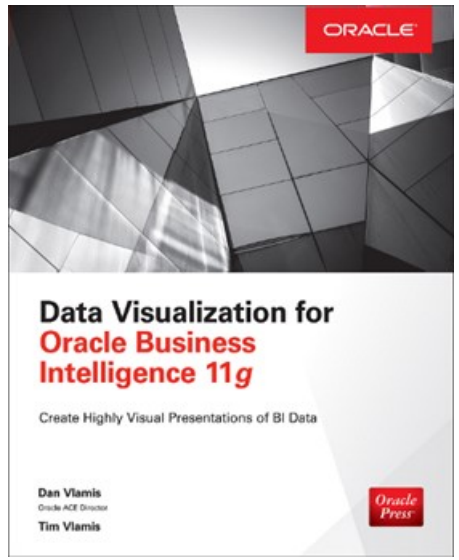

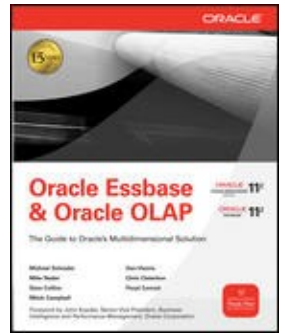

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Abstract

Individual events affect your business. So why is it that we always seem to look at sums and averages?

In this case study, we will examine the application of a business intelligence tool on measuring the safety of the transportation industry. It's all about events that take place in a traffic corridor, at specific points in time.

We will show how we built a custom visualization to display these events. Of course, we all want to decrease accidents, but if we cannot track individual events, how can we ensure that we are making our roadways safer?

Come hear (and see!) how we are handling event data in Oracle Business Intelligence in a live demo of a custom-built system.

Case Study - A particular instance of something used or analyzed in order to illustrate a thesis or principle.

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Analytics tends to focus on aggregates

- Aggregate measures are important but operational reporting often needs details.
- Details tend to be expressed in tables
- Visualizations can help bring context but specific operations can have very specific visualization needs that don’t come out of the box

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“Best Practice”

- Attitude of IT is often bend the organization to the software under the guise of “best practice”
- Don’t customize
- Change business processes to conform with software

- Sometimes organizations have a need for visualizations that don’t come out of box

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Scenario

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"I want you to find a bold and innovative way to do everything exactly the same way it's been done for 25 years."

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Scenario

- We have a report that is manually prepared for 100's of areas
- The report is an industry standard way of looking at something
- There isn't a way to create the visualization with OBI out of the box
- There is significant potential time savings if the report can be automated
- Not even a slight chance you will convince operations to change report and you might be fired for even suggesting it

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Business Case

- 300 – 400 individual reports being prepared monthly
- Approximately 1 hour per report
- If we assume $50 per hour cost that's $15-$20k month labor and lost opportunity to do something else
- Annualizes to between $180k-$240k
- Format of report isn't negotiable (according to business)
- Several hundred jpg images that would be extremely hard to reproduce that are a part of report and need to be used

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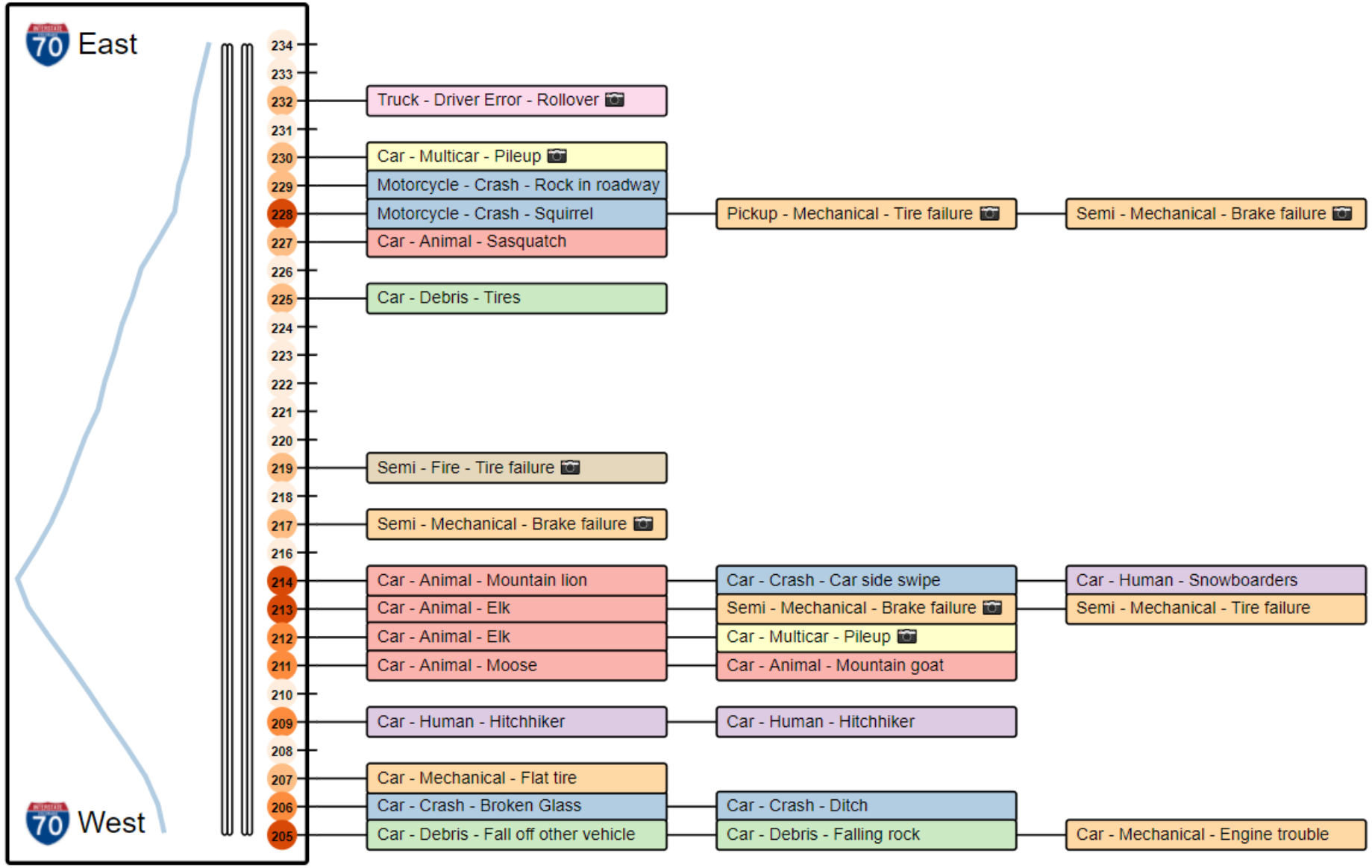
What are we trying to replace?



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Give Them What They Want

Use What We Have

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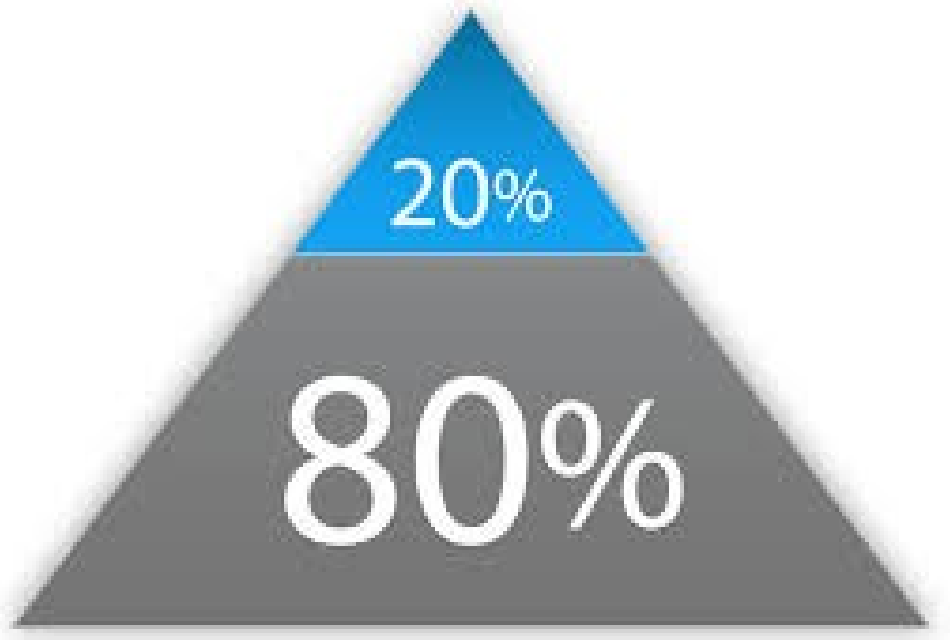
What do we have with OBI

- Data
- Metadata
- Connectivity
- Delivery
- Security
- Scalability
- Extensibility
- Familiarity
- Missing - the thing



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How do we get the rest of the way?

- Make what we need available
- Create an analysis to make data available
- Create what we need

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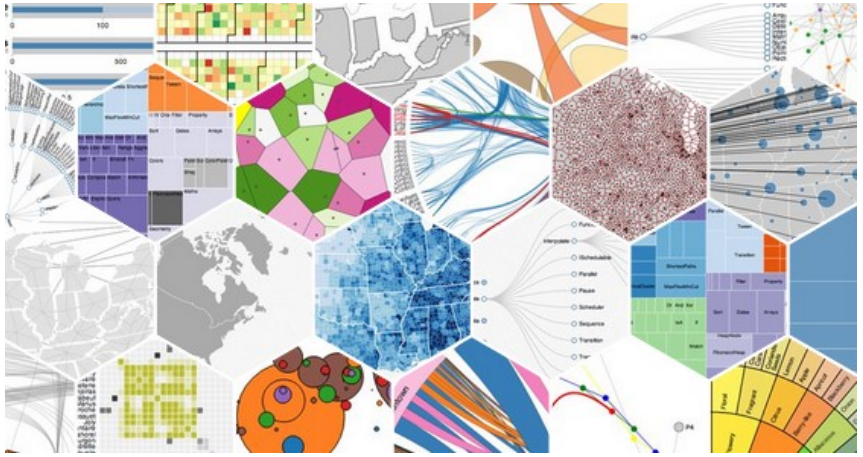
Where do we get what we need?

Open Source

jQuery
write less, do more.

W3.CSS
Faster and Better
Responsive Web Sites

D3



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Simple Example

Table

E9 Manager Name	E1 Sales Rep Name	1- Revenue
Anne Green	Larry Stephens	6,161,433
	Shannon Hennessey	4,484,281
Chris Jones	Charles Brooks	4,666,157
	Edilberto Mandani	5,173,504
Helen Mayes	Angela Richards	1,495,656
	Chris Jones	9,839,661
James Dowel	Fred Webster	1,960,766
	Jean-Michel Beauvis	4,313,803
Michele Lombardo	Aurelio Miranda	3,989,837
	Helen Mayes	12,620,584
	Monica Velasquez	24,656,359
	Paul Atkinson	4,421,362
	Sophie Bergman	24,272,569
Monica Velasquez	Anne Green	10,645,714
	James Dowel	6,802,426

Narrative

Anne Green	Larry Stephens	Shannon Hennessey			
Chris Jones	Charles Brooks	Edilberto Mandani			
Helen Mayes	Angela Richards	Chris Jones			
James Dowel	Fred Webster	Jean-Michel Beauvis			
Michele Lombardo	Aurelio Miranda	Helen Mayes	Monica Velasquez	Paul Atkinson	Sophie Bergman
Monica Velasquez	Anne Green	James Dowel	Steve Atkins		
Paul Atkinson	Tim Rector				
Peter Marzec	Bob Grant	Rozalia Girel			
Russell Wolin	Jack Benetti	Prakash Thekkate	Sandra Carrey		
Sophie Bergman	Peter Marzec	Russell Wolin			
Steve Atkins	Jonny Harston	Roger Wray			

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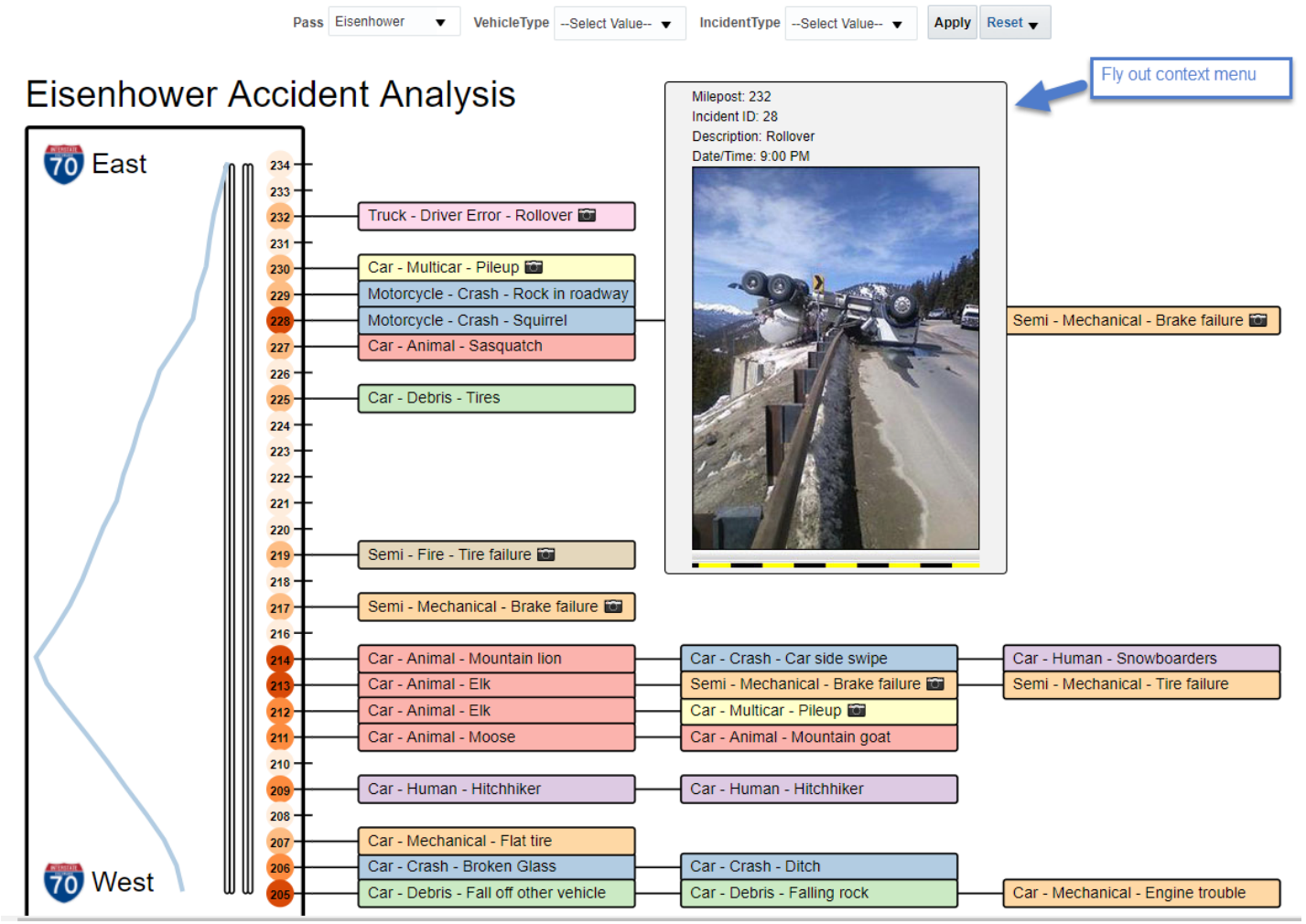
Not so Simple Example



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Demo

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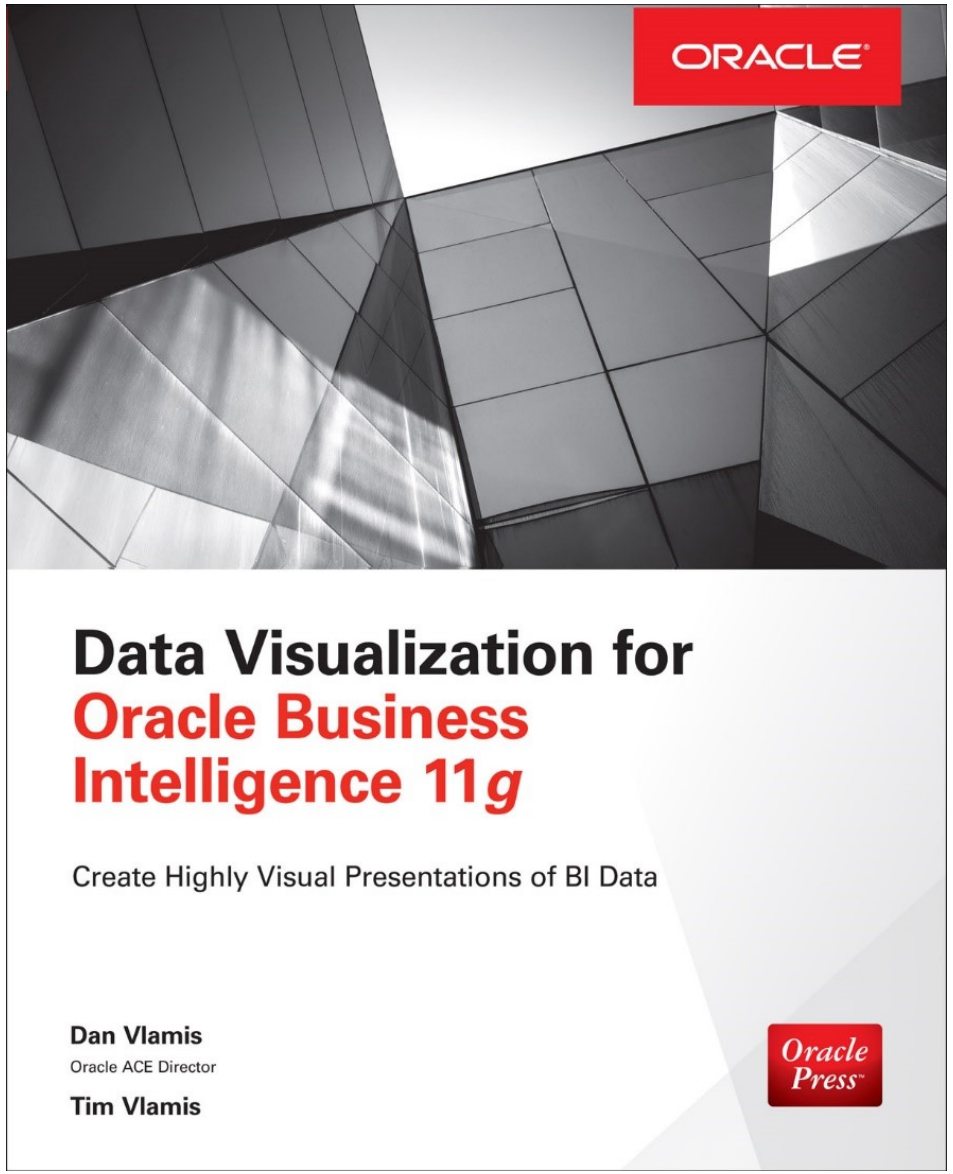
Drawing for Free Book

Add business card to basket

or fill out card



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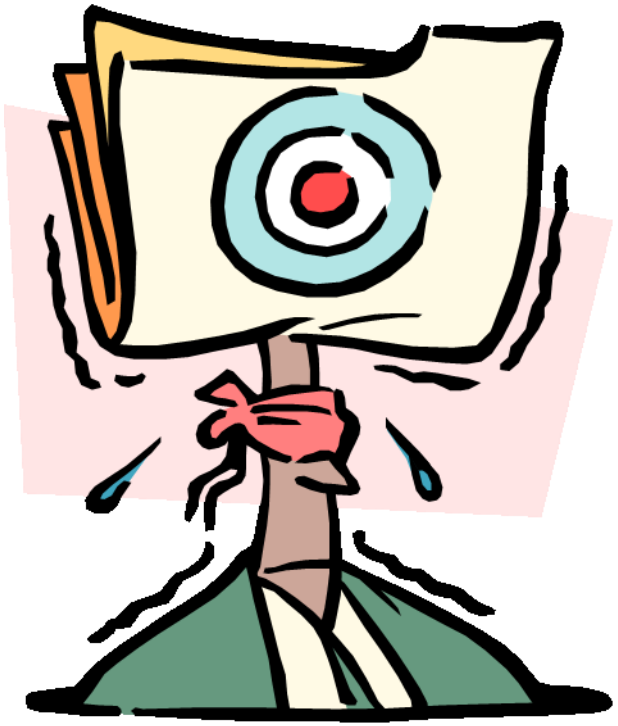
Questions?



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