# SCM 651: Business Analytics

WEEK 4

# Agenda

Homework #1: review

Homework #2: discussion

Google analytics hints

Review of concepts

Group discussion of articles

- Minding the Analytics Gap
- Innovating with Analytics

# Homework #1

- Pivot table
- Pivot charts
- •Correlation any negative correlations?
- Regression any non-intuitive results?
- Prediction model
- Non-intuitive results and additional data

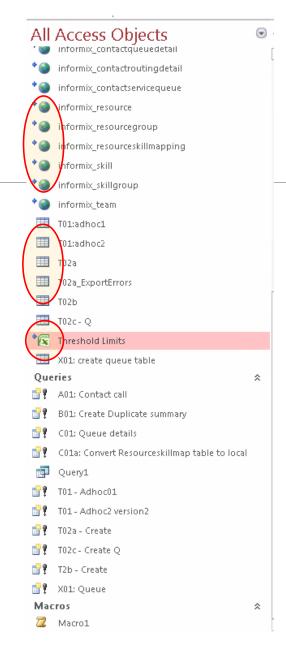
## Week 4 - Review

### Importing data into Access

Excel spreadsheets, text files, XML, et al.

## Relationships can be created

- When retrieving data
- Between common fields in two tables



#### Table Types

### Table Types

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### Table Types

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informix_agentconnectiondetail		55000136090	14622	28	0
informix_agentroutingsetting		55000136933	14622	153	0
informix_agentstatedetail		55000136715	14622	78	0
informix application		55000136386	14622	138	1
		55000135320	14622	263	0
informix_areacode		55000136267	14622	111	3
informix_campaign		55000136987	14622	75	0
informix_campaigncsqmap		55000136729	14622	144	32
informix_campaigndata		55000136939	14622	83	0
informix contactcalldetail		55000136704	14622	84	0
-		55000135776	14622	781	1
informix_contactqueuedetail		55000136179	14622	176	1
informix_contactroutingdetail		55000136844	14622	98	0
informix_contactservicequeue		55000137122	14622	89	0
informix resource		55000136045	14622	402	1
informix resourcegroup		55000135740	14622	176	0
		55000135657	14622	99	0
informix_resourceskillmapping		55000137120	14622	97	0
informix_skill		55000136218	14622	115	0
informix_skillgroup		55000136294	14622	194	1
informix team		55000136913	14622	91	0
_		55000136953	14622	103	0
		55000136613	14622	149	0
T01:adhoc2		55000136590	14622	193	0
<b>Ⅲ</b> T02a		55000137131	14622	74	0
T02a_ExportErrors		55000135723	14622	163	1
■ T02b		55000136871	14622	199	0
		55000135593	14622	117	37
Ⅲ T02c- Q		55000135983	14622	203	2
Threshold Limits		55000136885	14622	42	0

## Week 4 - Review

#### Grouping

- Collapses together rows of data according to the field grouped
- It does not form calculations

#### Criteria

Identifies a subset of data

#### Calculations

 Can be used to calculate min, max, sums, average, standard deviations, variance, counts, etc.

## Week 4 - Review

## Dirty data

 To identify inconsistent key fields used to match two tables, use both a left and right join

#### Complex queries

 Important to clean out dirty data and ensure that you have correct relationships before performing a complex query

## Homework #2

Campaign time frames, costs, effectiveness

Future campaign: geographic regions, key words, day of week and time of day

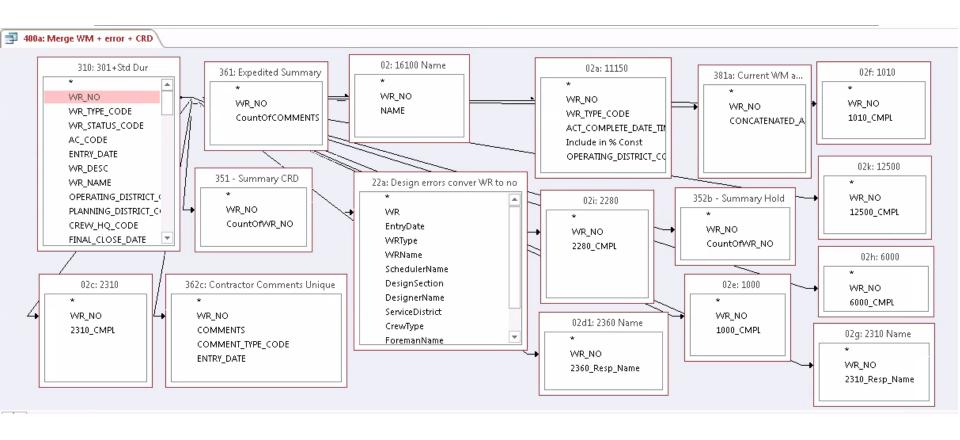
Allocation of costs by program and region

Performance measures

Other data that would be helpful

Example of how to find information in Google Analytics

#### Complex Queries



# Article #1: Minding the Analytics Gap

- Minding the Analytics Gap
  - What is the barrier to using analytics?
  - What can be done on the production and consumption side of analytics to overcome this barrier?
  - Describe the three levels of analytics maturity

# Article #1: Minding the Analytics Gap

- Minding the Analytics Gap
  - What is the barrier to using analytics?
    - Translating analytics into business actions
  - What can be done on the production and consumption side of analytics to overcome this barrier?
    - Production: data analysts can learn more about business
    - Consumption: managers can takes steps to become savvier at understanding analytical results
  - Describe the three levels of analytics maturity
    - Analytically Challenged: lack data management and analytical skills
    - Analytical Practitioners: use analytics for operational purposes; "just good enough data"
    - Analytical Innovators: more strategic in analytics applications; place high value on data,
      higher levels of data management and analytical skills

# Article #2: Innovating with Analytics

## Innovating with Analytics

- Describe the three characteristics of analytics innovators
  - Tend to use more data: strong correlation between analytics to create competitive advantage and how much data they use
  - Manage information more effectively: strong correlation between competitive advantage and how company manages information transformation (capturing data, analyzing, aggregating, integrating, insights to strategy)
  - Speed: stronger need for speed, process to analyze data more quickly