

Spreadsheets versus Relational Data Model

Data Management and Business Performance Management

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Spreadsheets versus Relational Data Model

- ▶ Relational data model – essentially tabular data
- ▶ Spreadsheets already provide tabular data
- ▶ Differences?
- ▶ Why switch from spreadsheets to relational databases
- ▶ Migration

Example – Room Management in Excel

	A	B	C	D	E
1	RoomNo	Level	NoOsSeats	Equipment	Kind
2	A029	1	40	Whiteboard, Beamer, Sound	Lecture Room
3	A030	1	60	Whiteboard, Beamer (2), Sound, Video	Lecture Room
4	A121	2	35	Whiteboard, Beamer	Lecture Room
5	A140	2	35	Whiteboard, Beamer	Lecture Room
6	A210	3	35	Whiteboard, Beamer	Lecture Room
7	A231	3	20	Beamer, PC (20)	PC Room
8					
9					

Navigation: TA_A, TA_C, TA_D, WH_PBH

	A	B	C	D	E
1	RoomNo	Level	NoOsSeats	Equipment	Kind
2	C340	3	1		Office
3	C420	4	1		Office
4	C701	7	1		Office
5	C825	8	2		Office
6					
7					
8					
9					

Navigation: TA_A, TA_C, TA_D, WH_PBH

	A	B	C	D	E
1	RoomNo	Level	NoOsSeats	Equipment	Kind
2	D105	2	280	Whiteboard, Beamer, Sound	Lecture Room
3					
4					
5					
6					
7					
8					
9					

Navigation: TA_A, TA_C, TA_D, WH_PBH

	A	B	C	D	E
1	RoomNo	Level	NoOsSeats	Equipment	Kind
2	PBH426	4	40	Whiteboard, Beamer	Lecture Room
3					
4					
5					
6					
7					
8					
9					

Navigation: TA_A, TA_C, TA_D, WH_PBH

Discussion of Excel Solution

- ▶ Understandability
- ▶ Integrity enforcement / consistency
- ▶ Redundancy
- ▶ Handling auf large volumes of data
- ▶ Analytics

Relational Data Model for Room Management

