


Data Management Solutions

Assessment and Selection




Overview

- Determine needs
- Review solution types
- Select possible solutions
- “Objectively” analyze
- Select solution




Needs Analysis

- Types of data
- Reporting/Integration needs
- Growth directions
- Future R/I needs





Solution types

- PC non-DB application (DON'T)
- PC database app
- PC watershed data management app
- Client/Server
- Internet software solution (self host)
- Internet service




Assessment

- F.O.O.D. C.R.I.M.E.S.
- C.O.S.T.



F.O.O.D.

- Features
- Ownership
- Openness
- Data Integrity



C.R.I.M.E.S.

- Customizable
- Reliable
- Integrated
- Multi-user/Accessibility
- Ease-of-use
- Scalable



C.O.S.T.

(Cost of:)

- Computer Hardware and Infrastructure
- Operation and Maintenance
- Software
- Training



Solution types

- Spreadsheet (DON'T!!!!)
- PC Database (e.g., MS Access)
- PC Application (e.g., NMBS WaMP)
- Client/Server (e.g., STORET)
- Internet App
- Internet Service (e.g., POWR's)



Analysis grid

- Assign importance for each category in FOOD CRIMES and COST.
- Numerical weighting sums to 100
- Assign valuation for each solution
- 10 indicates "best case"
- 1 indicates "worst case"



FOOD Analysis Grid

	Features	Owner	Open	Data Integrity	Score
Weight	19	5	3	15	
Access	2	10	10	5	
	38	50	30	75	193
NMBS	5	9	5	7	
	95	45	15	105	260
STORET	8	9	8	9	
	152	45	24	135	356
POWR	7	2	3	6	
	133	10	9	90	242



CRIMES Analysis Grid

	Custom	Reliable	Integr.	Multi	Ease	Scales	Score
Weight	12	10	4	8	10	4	
Access	9	9	9	2	2	2	
	108	90	36	16	20	8	278
NMBS	2	8	8	4	6	2	
	24	80	32	32	60	8	236
STORET	7	9	8	9	2	9	
	84	90	32	72	20	36	334
POWR	2	8	7	9	7	3	
	24	80	28	72	70	12	286



COST Analysis Grid

	Comp Hard	Oper & Maint	Software	Train	Score
Weight	2	2	2	4	
Access	10	8	7	4	
	20	16	14	16	66
NMBS	10	9	10	5	
	20	18	20	20	78
STORET	2	1	1	1	
	4	2	2	4	12
POWR	10	9	8	7	
	20	18	16	28	82



Results of THIS Analysis

- For THIS set of scores and weights, STORET "wins"
- These scores and weights arbitrary
- Handout shows three sample scenarios
- 1 criteria's weight **can** make tremendous diff

	Score
Access	537
NMBS	574
STORET	702
POWR	610



Graphical review

		Access	
		non-Internet	Internet
Free		NMBS WaMP	EASI DataShed POWR
Cost			
Investment Required		AVStreams W.A.T.E.R. STORET	Chesapeake Bay Alliance



Questions?

