- **Introduction to Using Smart Lists to Enable Planning in a Pure Excel Grid Like View**

  - **Planners Have a Familiar Look and Feel**

  - **Easily Copy and Paste from Excel Lists**

  - **No Need for Page Dimension Dropdowns**

- **Common in Workforce and Capex Applications**

  - **Employees Lists**

  - **Assets/Projects Lists**

  - **Modules Allow for Planners to Use Smart Lists but Not for Dimensions**

- **The Need**
- **Traditional Methods**
- **Using Smart Lists**
- **How to Ensure Go-Forward Data Integrity**
- **Potential Drawbacks**
- **Q&A**

- **The Application has 4 Aggregating Sparse Dimensions**
  - **Planners Need to Enter Data for All 4**
  - **Planners Need the Ability to Slice and Dice on All 4**
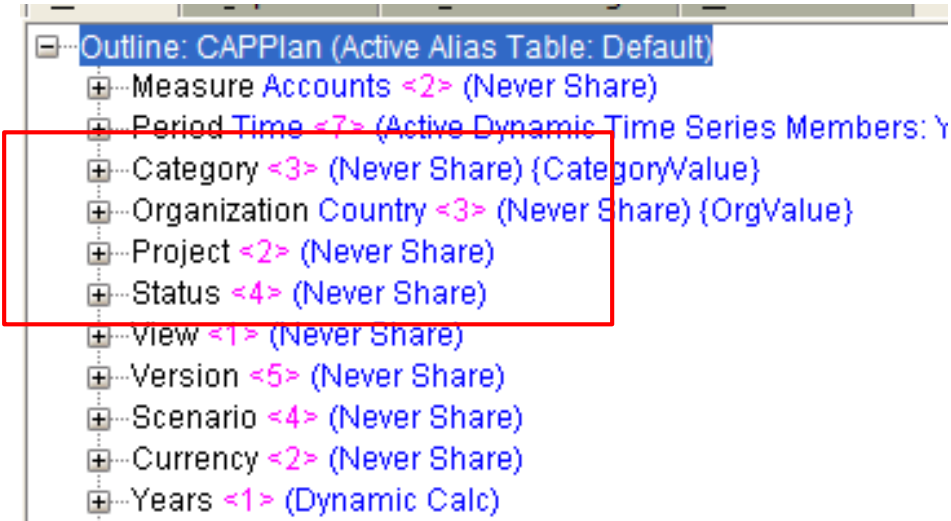
THE NEED

- **Planners Prefer to Operate in Excel Table Format**
  - **However Dimension Fields Present a Problem in Planning Forms**
  - **The Issue is Commonly Known to Developers as "Relevant Combinations"**

Project Title	Organization	Status	Category	Project Start	Operating Life	Payback Period (Years)	NPV	AARR (%)	2014 EBITDA ($MM)	2015 EBITDA ($MM)	2016 EBITDA ($MM)	2017 EBITDA ($MM)	2018 EBITDA ($MM)	2019 EBITDA ($MM)
A	Texas	Existing	Margin Enhancement	2015	10	7.51	0.01	18%	0.24	–	0.02	0.02	0.02	0.02
B	Texas	Existing	Growth Advantage	2018	10	7.67	0.38	18%	8.50	–	–	–	–	0.85
C	Texas	Existing	Value Advantage	2019	10	7.48	0.54	18%	11.00	–	–	–	–	–
D	Texas	Existing	Optimization	2019	10	7.63	0.14	18%	3.10	–	–	–	–	–
E	Texas	Existing	Building	2014	20	1.5	1.69	30%	6.62	0	0.33	0.33	0.33	0.33
F	Texas	WIP	Margin Enhancement	2019	20	4	1.51	21%	17.01					
G	Texas	WIP	Growth Advantage	2015	21	5	2.81	19%	39.80		2.00	2.00	2.00	2.00
H	Texas	WIP	Value Advantage	2019	11	15	(39.61)	7%	144.70	–	–	–	–	–
I	Texas	WIP	Optimization	2014	25	14	(430.00)	8%	4,820.00	(5)	15.74	196.64	215.68	237.17
J	Texas	WIP	Building	2014	25	14	(274.00)	10%	6,040.00	(0)	(5.88)	12.80	221.00	229.00
K	Texas	Add	Margin Enhancement	2014	5	1.7	51.00	142%	95.39	–	18.18	18.62	19.07	19.53
L	Texas	Add	Growth Advantage	2015	10	1.96	17.16	101%	61.62	–	1.73	6.88	7.11	7.38
M	Texas	Add	Value Advantage	2014	–	N/A	N/A	N/A	N/A	–	–	–	–	–
N	Texas	Add	Optimization				0.81	32%	12.50					
O	Texas	Add	Building	2017	25	4.5	15.20	194%	127.25	–	–	–	4.10	5.40
P	Texas	Add	Building	2014	25		5.00	33%	36.25	–	0.70	1.56	1.60	1.64

TRADITIONAL METHODS

- **Multiple Page Dimensions in Form**
    - **Planner Must Identify the Relevant Combos in the Dropdowns**
    - **Inefficient Process for the Planners**
    - **Planners Cannot Get One Clean List Until All Data is Entered**

TRADITIONAL METHODS

- **Dimensions Nested in the Rows of the Form**
    - **Planner Must Identify the Relevant Combos in the Rows**
    - **Inefficient Process for the Planners**
    - **Planners Cannot Get One Clean List Until All Data is Entered**
    - **Bad Form Performance (Cannot suppress Empty Rows)**

			Project Name	AFE Project Num	Spend
Project1	Margin Enhancement	WIP	Margin enhancement project for east side of Bayway	123456	100
		Existing			
		Add			
	Growth Advantage	WIP			
		Existing			
		Add			
	Value Advantage	WIP			
		Existing			
		Add			
	Optimization	WIP			
		Existing			
		Add			
	Building	WIP			
		Existing			
		Add			
Project2	Margin Enhancement	WIP			
		Existing			
		Add			
	Growth Advantage	WIP			
		Existing			
		Add			

Scenario:2015 Budget

Organization1

TRADITIONAL METHODS

- **Planner Provides Data Table Pre-Cycle**
  - **Not a Viable Option in Best Practice Organizations**
  - **Manual Process is Mistake Prone**
  - **Dimension Build and Data Load Required**
  - **Defeats the Purpose of Planning Data Forms**

				Jan	Feb	Mar
Project1	Organization1	WIP	Margin Enhancement	100	150	200
Project2	Organization1	WIP	Margin Enhancement	110	160	210
Project3	Organization1	WIP	Growth Advantage	120	170	220
Project4	Organization1	Add	Growth Advantage	130	180	230
Project5	Organization1	Add	Value Advantage	140	190	240
Project6	Organization2	Add	Optimization	150	200	250
Project7	Organization2	Add	Building	160	210	260
Project8	Organization2	Add	Building	170	220	270
Project9	Organization2	WIP	Optimization	180	230	280
Project10	Organization2	WIP	Margin Enhancement	190	240	290

USING SMART LISTS

- **Using Smart Lists and Attribute Calculations**
    - Planner Simply Assigns the Metadata Using a Smart List Dropdown
    - Efficient Process for the Planners
    - Good Form Performance (Only 1 Dimension in the Rows)
    - Data Initially Saved in General Dimension Members

- **Attribute Calculations Run on Save Based on the Smart List Values**
    - **Calc Compares the Smart List Value to a Numeric Attribute Dimension Value**
    - **If Values Match the Data is Copied from Generic to Intended Member**

- **Data is Now Available for Slice and Dice**
  - **Data Exists within the Proper Metadata**

Spend	Base	Jan	Working	2015 Budget	Local Currency	FY15	Organization
			WIP	Add			
	Margin Enhancement	Project1	100				
	Margin Enhancement	Project2	110				
	Growth Advantage	Project3	120				
	Growth Advantage	Project4		130			
	Value Advantage	Project5		140			
	Optimization	Project6		150			
	Building	Project7		160			
	Building	Project8		170			
	Optimization	Project9	180				
	Margin Enhancement	Project10	190				

Example Code

/* We must clear out the previous population of data in case the planner changes their choice for the project */

FIX (WIP, Existing, Add)

       CLEARBLOCK All;

ENDFIX

/* For WIP status, populate it for the project when Status? is 1 (which is the smart list value for WIP */

  WIP (IF("Status?"->"Category NA"->"Status NA"->"Period NA"->"Year NA" == 1)

        IF("Category?"->"Category NA"->"Status NA"->"Period NA"->"Year NA" == @AttributeVal("CategoryValue"))

           "Category NA"->"Status NA";

        ENDIF

  ENDIF)

- **The Smart List Values and Attribute Values Must Stay in Sync**
  - **Use One Table that Assigns a Value for Each Member**
  - **Use ETL Tool to Update Smart List in the Planning Repository**
  - **Use Metadata Tool to Update Attribute in the Planning Repository**
  - **Any Additions or Moves Would Cause a Change in Values for Existing Members**
    - Because of this, the calculation cannot run again for existing members (Use right-click menu to add new)
    - Or, the calculation must run again for ALL relevant members of an organization

- **Extra Processing Time Since Calculations Must Run on Save to Copy the Data**
  - **Keep the Organization/Entity Dimension as a Page Dimension**
    - **Each Planner Most Likely Plan for One or Few Organizations Anyway**
    - **Allows the Calc to FIX on the One Organization**

QUESTIONS?

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