

Discrete Choice SPSS Power Model

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Multivariate Solutions



Basics of Discrete Choice

- ◆ ***Discrete choice models are used on existing brands or packages (e.g. resort spaces).***
- ◆ ***Discrete choice models can be used to understand:***
 - ***Market strategy development***
 - ***New product design***
 - ***Market share, profitability, or margin optimization***
 - ***Branding issues (brand equity, co-branding, affinity branding, loyalty marketing)***
 - ***Customer retention and profitability.***

SPSS – The Orthogonal Design

As They Appear in the Questionnaire:

Please choose from one of the following vacation destinations:

- 1) Hotel by the Ocean in California for \$199
- 2) Villa in the Mountains in Florida for \$299
- 3) Hotel in the Mountains in California for \$249
- 4) Tent by a Lake in Florida for \$129
- 5) Tent in the Mountains in California for \$119

Using SPSS - Shaping The Data

- *The File Design*

- *Data File Returns a 'Choice'*

- *Use SPSS to Create an External File*

- *Allows Subsequent Stacking – Structure of dataset*

- *Flexibility to Include Additional Variables*

- *Structure.sav*

Place	Price	Hotel	Villa	Tent	Ocean	Mountain	Lake	California	Florida
1)	\$199	1	0	0	1	0	0	1	0
2)	\$299	0	1	0	0	1	0	0	1
3)	\$249	1	0	0	0	1	0	1	0
4)	\$129	0	0	1	0	0	1	0	1
5)	\$119	0	0	1	0	1	0	1	0

Using SPSS - Shaping The Data

STACK

Structure.sav



Answers.sav

RUN RUN RUN

```
NOMREG
```

```
Choice WITH Price Hotel Villa Tent Ocean Mountain Lake  
California Florida
```

```
/CRITERIA = CIN(95) DELTA(0) MXITER(100) MXSTEP(5)
```

```
LCONVERGE(0)
```

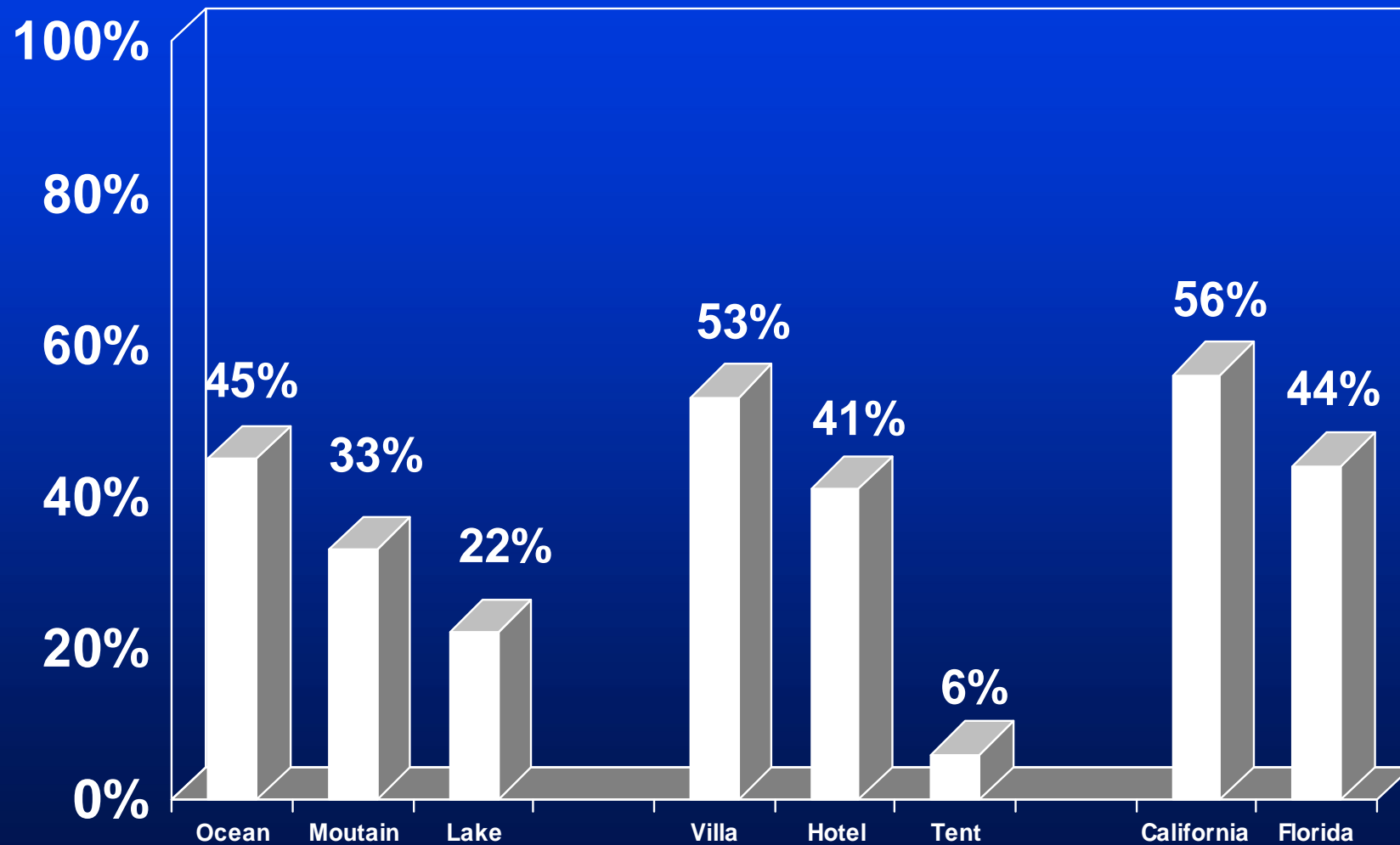
```
PCONVERGE(1.0E-6) SINGULAR(1.0E-8)
```

```
/FULLFACTORIAL
```

```
/INTERCEPT = INCLUDE
```

```
/PRINT = PARAMETER SUMMARY LRT .
```

Demand Curve for All Locations With Prices Held Steady At \$199



SPSS – Importing Into The Simulator

- ***The SPSS Output is Transferred Into An Excel Engine***
 - ***The Fitted Model is Then Run as a ‘Simulator’***
 - ***To Ascertain Price Sensitivity***
 - ***An Added Benefit***
 - ***Output into SPSS Price Elasticity Syntax***
 - ***Setting Parameters for Monte Carlo Simulations***
 - ***To Model Changing Marketplace Realities***

Price Elasticity – Florida Villa's

— Total Sample - - Travel Enthusiasts - - Frequent Flyers

	Average Elasticity
Total Sample	-1.21
Travel Enthusiasts	-1.14
Frequent Flyers	-1.15

