

Using Cultural Knowledge to Develop Niche Markets



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Setting the Stage...

- Wood products companies faced radical change during last decade: production driven!
- New competitive environment
 - Global competitors - Consolidation
 - Substitute products - Environmental groups
 - Increased power of big boxes
- Last couple of years: Costs have surged for all products whereas softwood lumber and wood panels are some of the few commodities whose prices have not increased

Today is not enough to be production and cost-driven

Market-Oriented Companies

- Seek to understand customers expressed and latent needs – by doing so, they can gain sustainable competitive advantage
- Necessary the use of novel techniques
- One of those new techniques is to survey lead users: early adopters!

Culture

- The question is whether marketing tactics learned from lead users in one country do work on the same lead users in another country or region....
- Culture mediates everything: “A way of life, cultivated beliefs, learned behaviors....whose meanings provide a set of orientations for members of a society and are transmitted by them” (from Gupta 2003)

Culture Impacts the way of Doing Business

- Country specific examples related to forestry and forest products
 - **Uruguay**: cattle raising and interminable grasslands are the norm – forests block the view!
 - **UK**: plywood customer; “My company exists since before the foundation of Uruguay!”
 - **Mexico**: where 60- or 90-day payment terms are the norm and cash is almost a “foreign” word

Two Studies of the Same Lead Group

- Lead customer group of the construction industry: Architects!
- Two studies: performed in 2001 and 2008: both looked at architects
- The 2001 study found compelling differences between architects of the US and Chile
- The 2008 study looked only at Chilean architects

2001 Study: Chile and US Architects

- 20 interviews with US and Chilean architects and structural engineers
- Followed by US nationwide mail questionnaire: 1200 questionnaires
- Also convenience sample of 85 largest architect offices in Chile
- Typically, market research uses Lykert-type scales: they do have disadvantages
- There are alternatives that exist since the 70's: Conjoint and Cluster Analysis

Typical
 problem of
 Likert-type
 scales!:
 Conjoint
 does not
 have it

2. The following is a set of possible attributes that you may consider when selecting the **interior finishing material** for a home or another type of construction. In the case of decorative panels (say, a composite panel with an exterior veneer that has the appearance of red oak), please mark the level of importance of each attribute when deciding which material to specify/purchase:

	Less important ← ↔ More important						
Honest material: material is what it seems to be	1	2	3	4	5	6	(7)
Appearance, warmth and tactile sensation of the material	1	2	3	4	5	6	(7)
Concern about the glue vapors of the material (offgassing)	1	2	3	4	5	6	(7)
Durability and maintenance issues (fungi and insects concern)	1	2	3	4	5	6	(7)
Environmentally sustainable	1	2	3	4	5	6	(7)
Low cost	1	2	3	4	5	6	(7)

3. The following is a set of possible attributes that you may consider when selecting **laminated lumber structural members** for a home or another type of construction. Please mark the level of importance of each attribute when deciding which material to specify/purchase:

	Less important ← ↔ More important						
Strong material, that permits small cross – sections for long spans	1	2	3	4	5	6	(7)
Appearance, warmth and tactile sensation of the material	1	2	3	4	5	6	(7)
Concern about the glue vapors of the material (offgassing)	1	2	3	4	5	6	(7)
Uniform quality of the material, from load to load and throughout piece (exact dimensions, straight)	1	2	3	4	5	6	(7)
Adaptability of the material (easy to trim, easy to work with)	1	2	3	4	5	6	(7)
Feasibility of curved shapes with the material	1	2	3	4	5	6	(7)
Dimensionally stable	1	2	3	4	5	6	(7)
Environmentally sustainable	1	2	3	4	5	6	(7)
Low cost	1	2	3	4	5	6	(7)

2001 Study: Conjoint Analysis

- Conjoint basically involves respondents ranking a set of cards
- A subset of all possible combinations of product attributes allows to determine the relative importance of each feature in the purchasing decision of customers
- **8 cards:** Materials (Wood, steel, concrete, masonry), with attributes (1) Environmental sustainability, (2) Cost, (3) Availability, (4) Familiarity of the workforce with the material

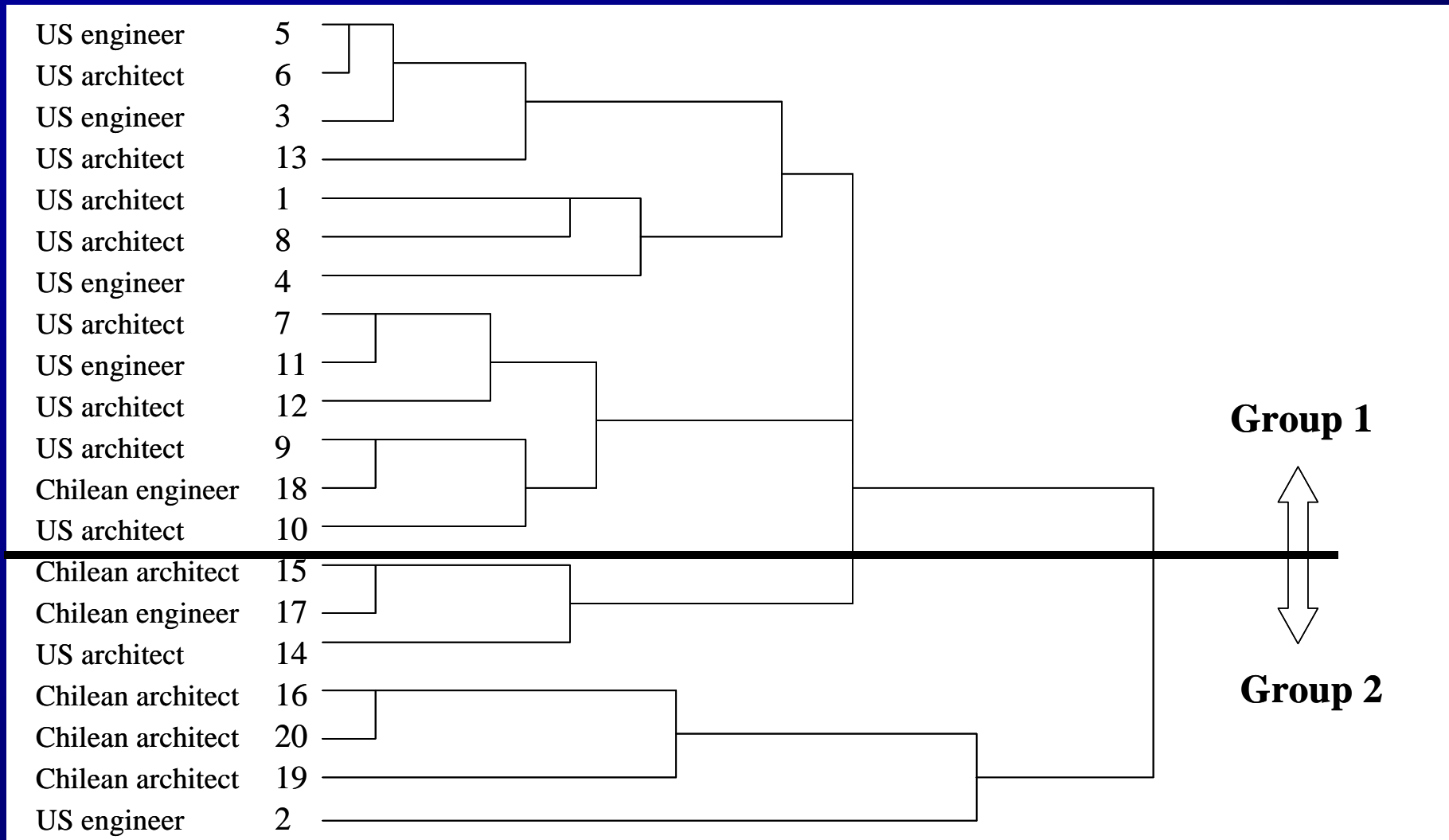
2001 Study: Conjoint Analysis Results

Utilities of Env. Sust for US and Chilean professionals

US engineer	2.00	Chilean engineer	0.75
US engineer	2.00	Chilean architect	0.50
US architect	2.00	US engineer	0.25
US architect	2.00	US engineer	0
US architect	1.50	US architect	0
US architect	1.50	US architect	0
US architect	1.50	Chilean engineer	0
US architect	1.25	Chilean architect	- 0.25
US architect	0.75	Chilean architect	- 0.50
US engineer	0.75	Chilean architect	- 0.50

Extremely rare to find such a clear separation!

2001 Study: Cluster Analysis Results



All variables used: not just Env. Sust!

2001 Study: Conclusions

- Environment separates US people from Chileans, but environment only secondary importance after technical attributes (availability, uniform quality, dimensional stability) and cost

Quantitative results may differ from interviewer perceptions acquired during qualitative part

- Younger architects in the US were not greener than older ones: **contrary to belief** (p-value = 0.23 from t-test between people older and younger than 46)!

2001 Study: Conclusions (next)

- **Material preferences of architects and engineers very similar!!** – consistent with findings of Kozak and Cohen (1999)
- It is possible to obtain good response rates in the US with a mail questionnaire (34%, for largest US architect study at that time)
- Not the case in Chile – **many mail questionnaires end up in the trash**
 - Method employed: Mail questionnaire and follow-up by phone: each office had to be called an average of 15 times!! for a 62% response rate

2008 Study: Conjoint Analysis

- Part of a research for developing a niche market for temperate hardwoods
- **9 cards:** Materials (Radiata pine, Tropical lumber and a branded plantation hardwood), with attributes (1) Environmental sustainability, (2) Cost, (3) Availability, (4) Familiarity of the workforce with the material



Weyerhaeuser | South America

Carta 4

Rank:

Material.....	Madera Tropical
Sustentable.....	Si
Costo.....	Alto
Familiaridad.....	Bajo
Disponibilidad...	Escasa

2008 Study: Conjoint Analysis

■ Hypotheses:

1. Architects would have gotten greener in Chile (from 2001 to 2008)
2. Younger architects would be different and greener than older ones
3. Tropical lumber: Low Appeal?
 - Typically inconsistent supply and quality, with doubtful environmental credentials

■ Hypothesis 1: Any greener? No!

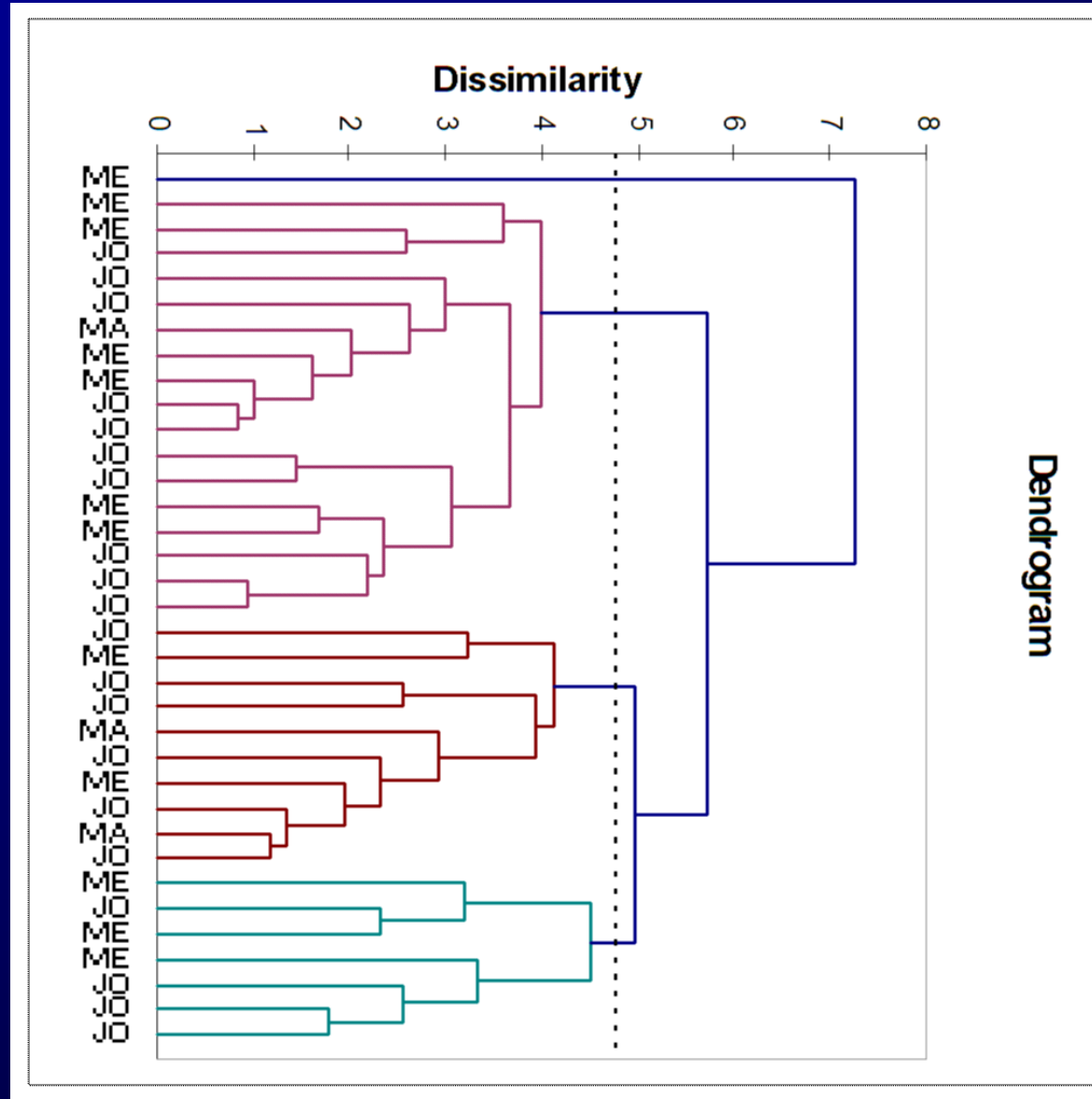
- Conjoint analysis even shows an average negative utility for environmental sustainability

2008 Study: Dendrogram

Hypothesis 2: Younger different? No!

No difference between age segments: up to 35, 35 to 50 and older than 50 years

(Kruskal-Wallis test and dendrogram)



Dendrogram

2008 Study

- **Tropical lumber: Low Appeal? Seemingly so...**
 - Suggestive evidence that tropical lumber is not quite liked, even if people is told the material is sustainable, available, etc (One-way ANOVA F-test $p=0.099$)
- **Female architects – greener!**
 - There is strong evidence that female architects are greener than male (one-sided p -value = 0.047 from t-test on regression coefficients)

Managerial Implications

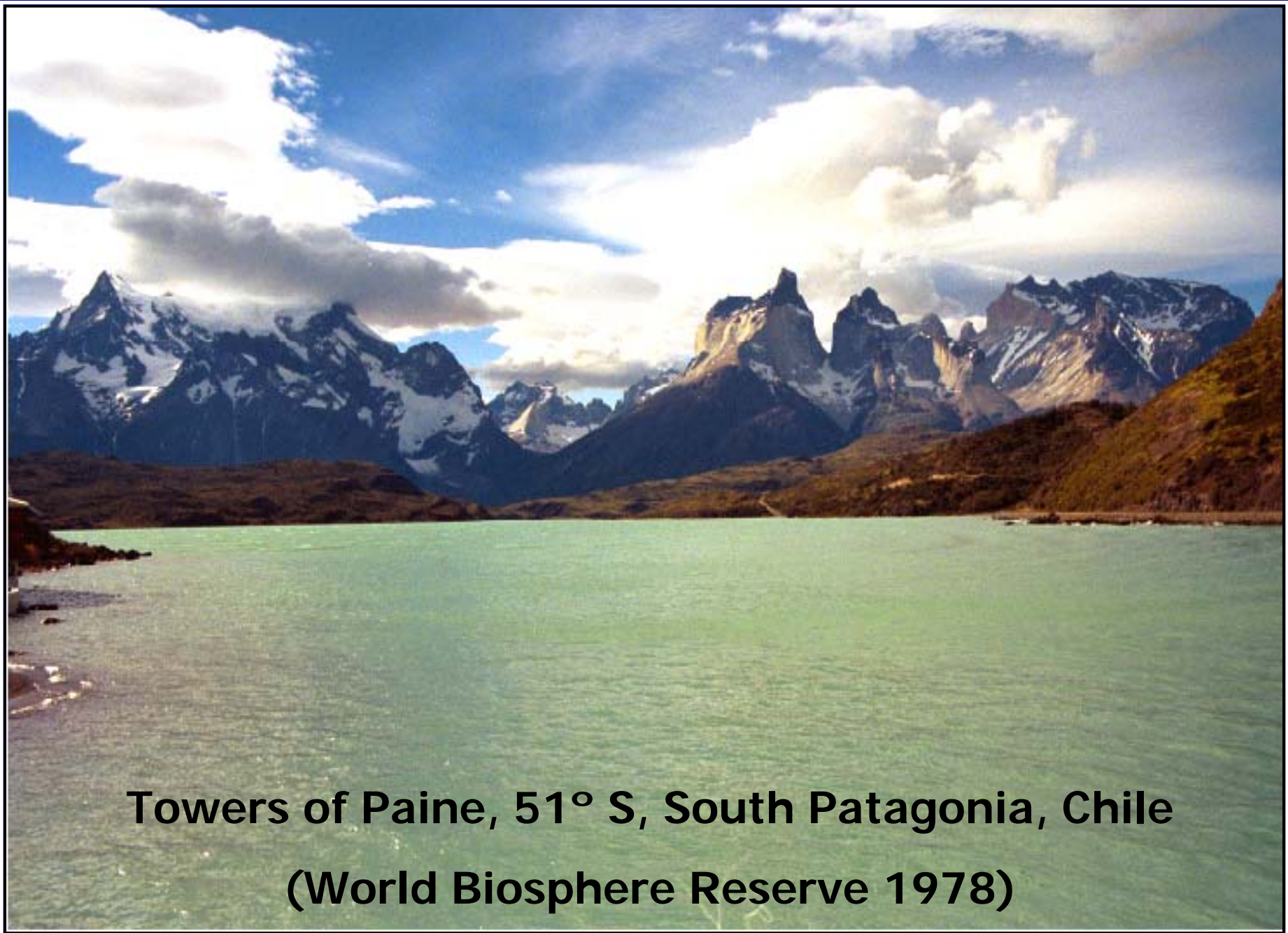
- Interviews suggested a high importance of the environmental friendliness of a material: but conjoint and cluster analyses indicated its importance seems to be low among architects: **quantitative results differ from qualitative perceptions!**
- US architects do appreciate environmental advertising by forest products companies – **opposes statements from several authors!**

Managerial Implications (2)

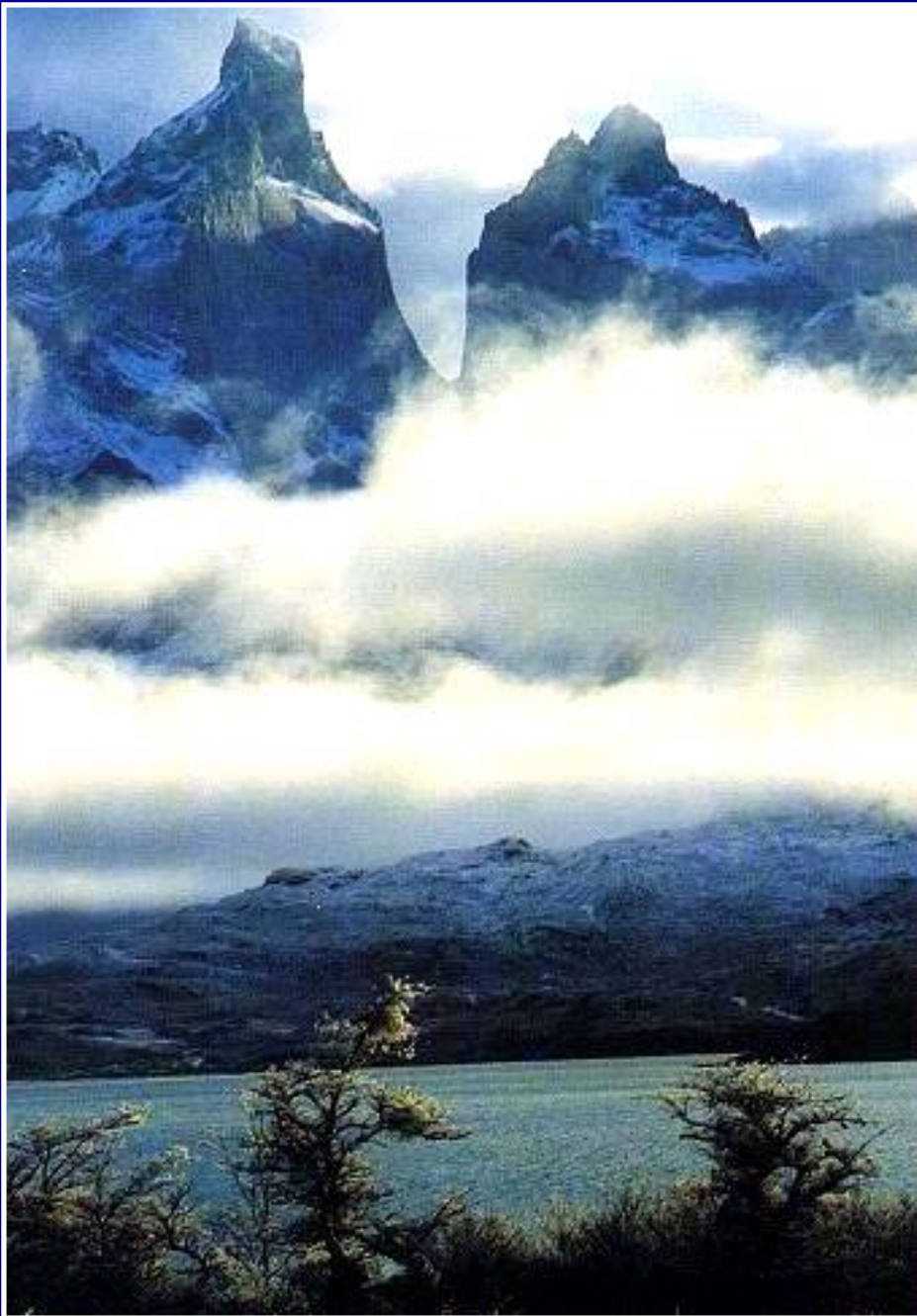
- Most effective results would be obtained if the same advertising stresses both quality and environmental attributes of a wood product
- **Chile** - tropical lumber seems to not be popular among architects, even if it is said to have good environmental credentials, good availability and the workforce is familiar with it.
 - **Marketing of temperate hardwoods should stress its non-tropical nature**

Managerial Implications (3)

- Chile - Female architects are greener!
- Chile - Introduction of a temperate hardwood needs to invoke the “honest material” appeal (material is what it seems to be) - “gusto” for a true wood grain that provides warmth and difference to a design.



**Towers of Paine, 51° S, South Patagonia, Chile
(World Biosphere Reserve 1978)**



Questions?