Session 9

[Thursday 3rd period 1.5 hours - plenary]

Selling the art and joy of wood products to consumers

Speakers

Speaker:
Jim Birkemeier

Topic:
Full Value Forestry: New Jobs from Dead Trees on the Family Farm

Speaker:
Giedrius Leliuga

Topic:
Customer Needs and Control of Supply are the Keys to Success

Speaker:
M V Rao

Topic:
Etikoppaka – An Indian Village Perpetuating the Joy of Wood through the Tradition of Toy Art

Speaker:
Sudipta Dasmohapatra

Topic:
Consumer Purchase Trends and Perceptions in the USA

Full Value Forestry: New Jobs from Dead Trees on the Family Farm

Jim Birkemeier[1]

Abstract

Our family forest business sells thousands of high-value wood products direct to customers around the world. The first priority is to sell our solid wood flooring and natural furnishings to homeowners in our local community, we then export our surplus wood to distant customers using the internet. Our 200 acre forest is the most productive, natural, and beautiful woodlot in the region and our annual harvest is just a fraction of the trees that naturally die each year. In the midst of this major economic recession, we are using our dead trees, the natural output of our forest, to put people to work with well-paying and rewarding jobs. Using just 20% of our annual growth, we now support 4 full time jobs. The potential is one full-time job per 10 acres of forest land. I choose to use the smallest machinery possible and hire the most creative people I can. What we do is old-fashioned, just the opposite of Industrial Forestry today. This business model is universal, trees are a plentiful and low value commodity that can be manufactured and marketed on a small scale - to produce high-value products to create new jobs almost anywhere.

[1] Timbergreen Forestry, Timbergreen Farm, S11478 Soeldner Rd, Spring Green WI 53588, USA (Jim@TimbergreenForestry.com, jbirkemeier9@gmail.com)

Full Value Forestry

Our family harvested timber for the first time in 1974. I logged the best trees from 30 acres and the best bid we received for the logs was $1,400. That total amount was very disappointing and didn't even cover our costs. After earning a forestry degree from the University of Wisconsin and working for several years as a consulting forester helping other landowners sell their timber in the traditional timber industry, I harvested some more of our family timber. The thought was to do it right this time, but we had the same disappointing result. Timber prices are simply too low to pay for good logging and earn a fair price to the grower for their time, effort, and investment. Everyone else (the foresters, loggers, truckers, sawmillers, etc.) in the timber industry earns a good income for their time and investment. If the forest owner is not paid a profitable price for their timber, you better not call anything "Sustainable" when I'm around. Forests and Forest Owners are The Bottom of the Wood Chain – swallowed up and discarded by big industry. I chose to NOT be a sardine any longer. I tried every part of the industrial/government forestry system as a professional forester and as a forest owner for decades - and finally quit in disgust.

I relearned forestry in my own woods with my chain saw following the guiding gut feeling of 'do just the opposite' of what everyone else is doing in the timber industry. It worked! Now I can earn $1,400 from a single small tree that is considered worthless in the timber market, and I can earn many thousands of dollars per tree for our better timber.

As the landowner, timber grower, forest manager, logger, sawmiller, and woodworker, I learned the same knowledge of the native-American Menominee Tribal Forests in NE Wisconsin and the traditional German Dauerwald. The Menominee forest managers maximize the quality and quantity of timber grown while encouraging greater natural diversity. They grow a healthy tree as long as it is vigorous and the risk of allowing the tree to stand until the next harvest cycle is low. There is no maximum size or age for a tree, and they just harvest part of the natural output of the forest. The German Dauerwald emphasizes natural succession and regeneration, with the understanding to "watch nature". High-grading out the best trees or over-harvesting is Never Allowed. The Best Harvesting techniques and woodworking tools and methods have been gleaned by studying the Scandinavians.

Timbergreen Farm – The best of the best ideas from around the world have been sought out, modified, and personalized for maximum benefit to our family woodworking business. I looked at what resources I had right on the farm and found better ways than industrial logging:

- Let the good trees grow as long as they are healthy and vigorous.
- Harvest the worst trees first – improving the forest each cutting.
- Encourage natural succession and natural regeneration. Watch nature and learn!!
- Take only part of the natural output of the forest, what nature can spare.
- Never let market demand determine what trees are cut for short term profit.
- Perform a small annual harvest for a steady income and minimal impact.
- Pay a professional timber feller a good wage for excellent selective harvesting.
- Use the smallest possible equipment to move the logs, carrying the weight when possible to minimize soil damage.
- Solar heated lumber kilns produce excellent quality lumber. Isolate the solar collector from the insulated wood room.

- Make high value finished wood products from low value logs. Small, crooked, undesirable trees have great potential income.
- Use all wood waste for fuel, bedding, mulch, bonfires.
- Sell what you have, find the best use for every piece of wood harvested.
- Plan ahead to meet needs in the local economy first – then export extra wood.
- Happy customers sell more of your products when they show-off and tell their friends
- Each floor/product is a showpiece to new customers. Happy Customers become volunteer sales staff.
- Eliminate all the brokers, middlemen, shippers, wholesalers – Keep all the money at home in the local economy.
- Selling finished products gives feedback to become a better forester, logger, and woodworker.
- Sell each piece of wood for its highest value use. Make Value not Volume.
- Earn a high annual income to encourage protecting the forest for future production.
- Use the value of natural solid wood products to support well paying jobs and rewarding jobs for local people!
- Use the simplest, smartest method for each step.
- Do just the opposite of what the big timber industry would do.

Create Jobs Connecting the Forest to the Local Community

Last time I talked with Marshall Pecore, forest manager at Menominee Tribal Enterprises, he said they had one full time employee for every 400 acres of forest. Since my harvest cycle can be on an annual basis, instead of every 13 years like at Menominee, our timber management can be much more productive and efficient. Since we manufacture a much higher percentage of our harvested wood to a higher value and practice direct marketing, we can make a lot more money from every cut tree.

Making and installing flooring in the customer’s home can support one full time employee for every 20-40 acres of forest at Timbergreen Farm.

Spring Green Timber Growers retail store can support one full time employee for every 10 acres of forest. A wood products business that uses urban trees can support one full time employee for every 50 trees that would otherwise go into the chipper/landfill each year. Forests should directly and primarily benefit the forest owner and the local community, providing regular income, jobs, wood products, fuel, wildlife, water, recreation, etc. Direct marketing of high value wood products in a local economy can make this feasible.

You can choose to work in any part of this process. Spring Green Timber Growers do it every day – these numbers are real and can be duplicated by other small businesses. This chart shows the range in values obtainable for hardwood timber and wood products in the USA, October 2011.

Value Multiplied Wood Processing
Value Earned Per Tree in USD

Type of Tree	Scribner Tree Scale	Stumpage Value (USD)	$ Delivered to Mill	$ Kiln Dry Lumber	$Installed Flooring	'Mega Value' Products
Small Diam	10 bf	$.20	$2	$65	$250	$500
Crooked	250 bf	0	$20	$500	$2,000	$4,000
Undesirable	250 bf	$5	$20	$400	$2,500	$5,000
Average	300 bf	$60	$120	$1,200	$3,000	$6,000
Good Tree	300 bf	$120	$240	$1,200	$3,000	$6,000
Super Tree	400 bf	$2,400	????	$2,400	$5,000	$10,000

We choose to earn Hundreds of dollars per tree for small diameter timber and thousands of dollars per tree for saw-timber sized trees by selling installed flooring and 'Mega Value' products. We choose to sell our wood direct to customers and eliminate all the brokers, wholesalers, shippers etc., and keep all the money right here in the family business. We do this to protect and manage our natural forest.

Timber Growers actually earn just about the same money whether we process a tree with good commercial value or a 'worthless' tree. All species have about the same high value in this system.

Example – Red Oak Floor installed August 2011

I had installed a Red Oak floor in a local family's home in 2002. Nine years later they are remodeling a vacation home on Spencer Lake - 120 miles to the north, and again hired me to add my flooring. The wood was Red Oak – all from trees killed by the Oak Wilt fungus – that I had salvaged recently from my forest. Most of the wood was quartersawn with up to 7 ½" wide planks.

The trees were about 125 years old. I worked about 30 hours to fell and skid the logs, sawmill the lumber, kiln dry the boards, and manufacture the tongue and groove flooring. Great effort, high risks, large expensive machinery and a manufacturing facility were required. The value of the flooring pieces totaled about $1,800.00

Over the past nine years, this family has bought other lumber and wood products and visited our farm regularly. Knowing your customers and keeping them happy with excellent, personal service, encourages them to keep doing business with your company over and over.

On other jobs, the customers have volunteered to help install the flooring. Picking out the next board to use and working on the huge "wood puzzle" on their floor is very exciting for some homeowners. Nailing the boards to the floor is very simple work that anyone can learn in a few minutes, giving a greater sense of satisfaction and ownership in their new floor.

Often, we make custom air vent covers from matching wood, personalizing these pieces to the family when possible.

At the completion of each floor, we give the family a wood gift from our store – wooden pens, laminated cutting boards, laser cut ornaments, etc. They usually ask for a stack of our business cards to hand out to their friends when they show off their new work of wood art.

Installing the flooring ourselves is the key to success in the local market area!!

With flooring, we can earn about $10/board foot for a large volume of wood. This is the threshold value where I believe a small woodworking business can operate profitably. "Mega Value" products are higher priced items that take more time and skill to produce. Furniture, cabinets, countertops, stairways, etc. can earn $20/bf or higher but typically use less volume of better quality wood. Spring Green Timber Grower's retail store makes a variety of wood art creations using a laser cutter/engraver that can earn up to $500/bf for jewelry, boxes, ornaments, and other small items that we export around the world.

Global Certification vs Local Service

I was a Tree Farm Inspector long ago, and have known the industry Sustainable Forestry Initiative from the start. I was also the first Forest Stewardship Council Certified Resource Manager, and our family farm was the first FSC Certified small private forest with Chain of Custody to sell our wood - in our Great Lake States region of the USA back in 1998. Global "Certification" was not effective for our local wood sales as it was clear no area consumers knew about FSC or trusted it, while promoting our local reputation came at no cost and quickly became practical and money-making.

Global certification was very expensive with no significant benefit to our business - while providing excellent local service and earning word of mouth sales has been the main growth force of our success. Trust is earned locally, not bought globally.

Earning is limited only by the imagination.

The potential market for wood products is endless and growing. Woodworking is simple and practical on a small scale. Woodworking is nothing new, a traditional way of life that offers hope for the future.

Conclusion:

One very important lesson on processing low value trees into high value products: A landowner or timber grower owned business can actually sustainably harvest and manufacture low value logs, as they also get the high value of improving their forest and land resource. Without gaining the extra benefit of improving your forest, there is no incentive to process small, crooked, defective logs that are very expensive to carefully harvest. A business strictly wanting to make money woodworking can easily get better quality logs at cheaper prices from other landowners who do not value or manage their timber.

Earning high value for traditionally low value logs is essential to actually doing sustainable forest management – from the forest owner's point of view.
Detailed information on all aspects of this introduction:

www.TimbergreenFarm.com
www.TimberGrowers.Com
www.FullValueForestry.com
www.FullVigor.com

Full Value Forestry

Sustainable Forest Management
From the Forest Owner's
Point of View


Wood-Mizer

Slide 31


bhc


Bread and cheese is medicine for the well.
All you need is Cheese.
ALL YOU NEED IS CHEESE.
All you need is Cheese.
ALL YOU NEED IS CHEESE.


PLAYING CARDS - 2 JOKERS


Milieu


www.SGLaserArt.com


WWW.SOLASERART.COM


PROVENCE

Value Multiplied Wood Processing

Value Earned Per Tree in USD

Type of Tree	Scribner Tree Scale	Stumpage Value (USD)	$ Delivered to Mill	$ Kiln Dry Lumber	$Installed Flooring	'Mega Value' Products
Small D	10 bf	$.20	$2	$65	$250	$500
Crooked	250 bf	0	$20	$500	$2,000	$4,000
Unwanted	250 bf	$5	$20	$400	$2,500	$5,000
Average	300 bf	$60	$120	$1,200	$3,000	$6,000
Good Tree	300 bf	$120	$240	$1,200	$3,000	$6,000
Super Tree	400 bf	$2,400	????	$2,400	$5,000	$10,000

FullValueForestry.com

TimberGrowers.com
TimbergreenFarm.com
Jim@TimbergreenForestry.com

Customer Needs and Control of Supply are the Keys to Success

Giedrius Leliúga[2]

[2] Managing Director, Medžio Stilius (Wood Style), (giedrius@eco-wood.net)

CUSTOMERS NEEDS AND CONTROL OF SUPPLY ARE THE KEYS TO SUCESS

Bangalore, India 2011

Mr.Giedrius LELIUGA

MBA, forest engineer

Director

ECOWOOD, UAB www.ecowood.eu

LITHUANIA

Production of oak semi finished products, engineered flooring, doors and staircases

MEDŽIO STILIUS, UAB (*eng. Style of Wood* **)** www.parektas.lt

LITHUANIA

Sales and installation of oak flooring, doors and staircases.
5 retail showrooms in Lithuania

DUBAVA LTD,

UKRAINE

Sawmill in Ukraine. Production of oak sawn wood.

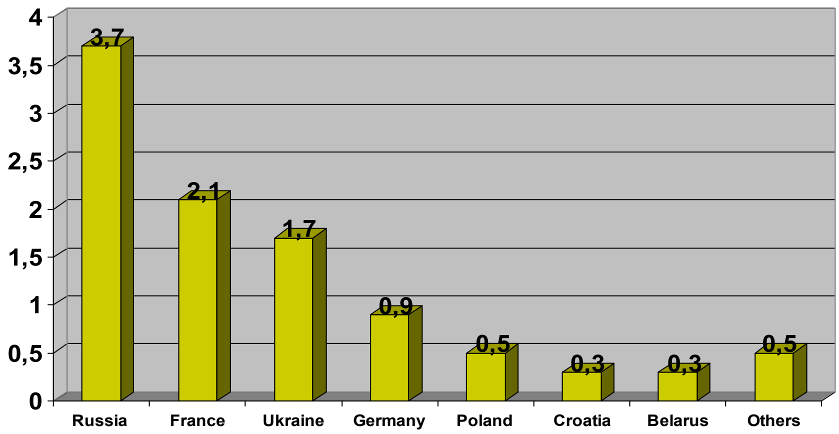
Total production per year : 100 thous.m2 flooring
3500 doors
200 staircases
1000 m3 semi finished products
Totally: 150 employees

Distribution channels

FROM FOREST DIRECTLY TO END USER

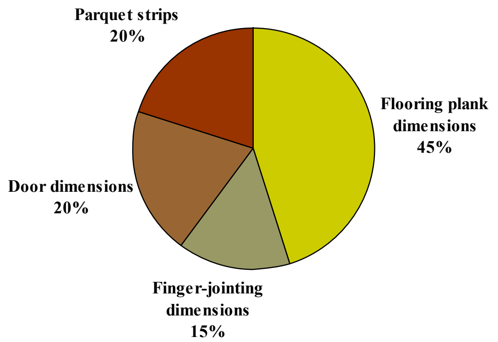
SAWMILL → PRODUCTION OF END PRODUCTS → SALES TO END USERS

European oak (Quercus robur) forest area (million ha), 2007

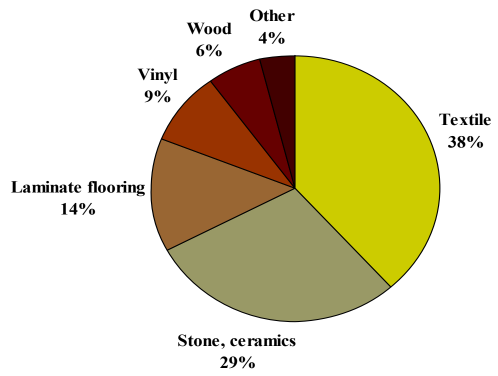


The oak forests in Europe are declining at the same speed as tropical forests

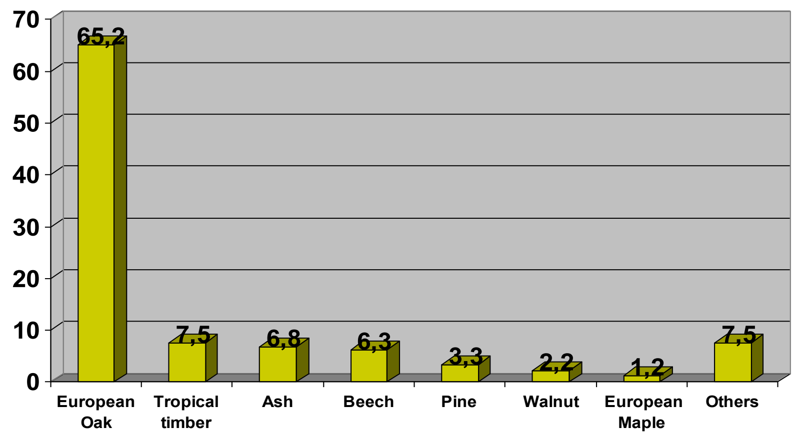
Sawn wood by assortments in DUBAVA sawmill, Ukraine (2011) from III quality log , 30 cm diameter



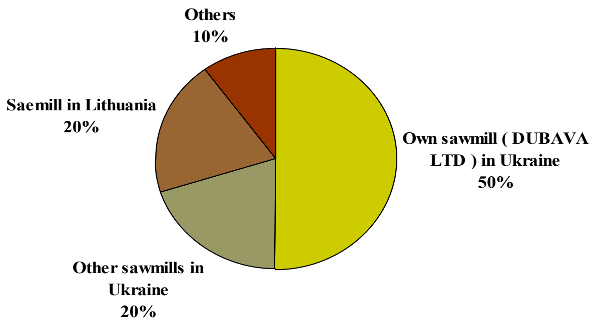
Consumption of floor covering products in EU in milion m2 (2007)



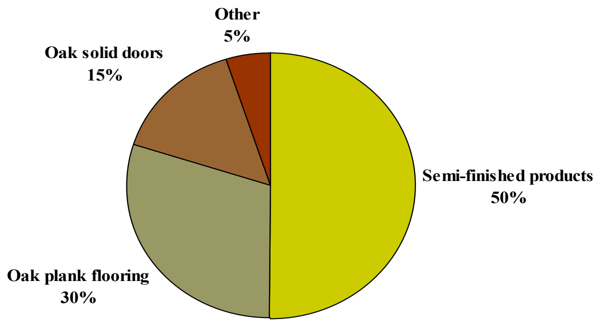
Species - Usage rate in 2010 (%)



Supply of oak sawnwood (%) to ECOWOOD, UAB (2011)



Production by product groups in ECOWOOD, UAB (2011)



Etikoppaka - An Indian Village perpetuating the Joy of Wood through the Tradition of Toy Art

M V Rao[3], M Balaji and S C Joshi[4]

Abstract

Etikoppaka, a remote village situated on the banks of river 'Varaha', 120 km south of Visakhapatnam in Andhra Pradesh state, India, is a wonderland of astonishing wooden toys. The entire village continues the tradition of transforming amorphous wood into attractive miniature objects. These admirable artworks include lively, nice and cute dolls, toys, bangles, curios, kickshaws, knick-knacks, items of décor and playing aids through wonderful carving and beautiful polishing. Over the years, the craft has been perfected, reflecting the artisans' care and interest in their surroundings and in nature. These artisans in fact create miniature worlds of life in wood that fascinate onlookers. Every household in the village is involved in toy making irrespective of their caste, creed or religion. The toys are in high demand all over the country, especially "Lepakshi Emporia" and tourist/ pilgrim centres. This article discusses this impressive cottage industry.

Key words: Etikoppaka, wood, toys, carving, polishing, cottage industry

[3] Wood Biodegradation Centre (Marine), Institute of Wood Science and Technology, *via* Yoga Village, Andhra University Post, Visakhapatnam-530 003 (mvrao@icfre.org)
[4] Institute of Wood Science and Technology, Malleswaram Post, Bengaluru-560 003

1. THE PREMISE

1.1 The scenario

Etikoppaka (17o29’03” N, 82o44’35” E), a remote village situated on the banks of river ‘Varaha’, 120 km south-west of Visakhapatnam in Andhra Pradesh state, India, is a wonderland of astonishing wooden toys. These handcrafted products are rich and varied, and include items as diverse as hair pins, ear tops and bangles to royal figures and their coterie (Fig.1); insects, birds (Fig.2 and 4) and animals (Fig.5) to traditional farmers (Fig.3) to characters from several religious faiths and so on and so forth. Over 200 artisan families form the mainstay of this eco-friendly (green) tradition of toy art in the village[5].

1. 
2. 
3. 
4. 
5. 

Fig.1: Royal figures and their coterie
Fig.2: Various kinds of birds
Fig.3: Farming activities
Fig.4: Matryoshka toys
Fig.5: Various kinds of animals

[5] http://etikoppaka.com/about-us/about-etikoppaka

1.2 The legacy

This legacy of toy making is an inheritance early 18th Century Nakkapalli, a village 25 km south-west of Etikoppaka[6]. During the early 20th Century, the artisans migrated to Etikoppaka because of abundant availability of suitable wood yielding trees around the place. It is probable that patronage came from the ruling courts ('rajas') of Vijayanagaram province who immigrated to this area at more or less the same period and settled, and as landlords acted as catalysts.

1.3 The forge

Subsequently, one of the landlords decided to transform this tradition in to a business enterprise so that the art and artisans could earn an independent living. During this transition, dyes and processes that enhanced the elegance and quality of the artistic produce were introduced. In due course, all the artisans of the village together formed a co-operative society and adapted to modernization, taking Small Scale Industries registrations, obtaining electricity connections, availing of help from banks and other financial institutions such as Andhra Pradesh State Finance Corporation and replacing the manual turneries with power operated ones. House construction assistance also seems to have been obtained by each of them from the State Government. The artisans even took precautions to install two motors (of 0.5 HP) each to overcome production loss in the event of trouble in one unit. This enabled the traditional industry to achieve great success.

1.4 The retreat

However, the traditional and associated business, despite continued support and encouragement from the landlords; suffered a sharp decline during the mid-1980's due mainly to work opportunities that arose for the second generation of artisans in the country's first co-operative sugar factory set up by the same landlords in early 1930's. Slowly, the society became defunct due to reduced strength, lack of unity, meager contributions and unfulfilling goals.

1.5 The crusade

This departure of a good number of artisans from the artistic tradition together with a discernibly grim future for this ancient art was encouraged one pragmatic young landlord to take instant action.

1.6 The revival

In order to save, revive and perpetuate the tradition of toy art and the joy of wood in turn, rallying call encouraged the launching of a consortium of artisans in the village. By convincing and exposing the remaining craftsmen to the contemporary/ emerging concepts and designs at national craft festivals/ exhibitions; confidence, enthusiasm, pride, competence and competitiveness were gradually restored among the artisans.

[6]http://ithappensinindia.com/beautiful-toys-etikoppaka-toys-from-ap-india-the-manufacturing-process-of-etikoppaka-toys-without-chemicals

The far-sighted example led to the involvement of the Fine Arts Department of Andhra University, the National Institute of Design and the National Institute of Fashion Technology in the development of enchanting new designs and aesthetic novel products that attracted innumerable connoisseurs, both national and international. This growing fame also led to the setting up of a well equipped design centre to train others in the craft at the village itself.

By such innovative approaches, indefatigable effort and constant persuasion, this reinvigorated the joy and appreciation of traditional wood art and made “Etikoppaka” the epitome of widely adored handicrafts.

1.7 The epithet

Today, this is the contemporary face of Etikoppaka handicrafts. For all this drive and drudgery, this person together with many artisans bagged several national and international awards and accolades.

2. THE DEXTERITY

2.1 The commitment

Every household in the village, irrespective of its religious, social or other affiliation; is involved in toy making and the entire village thus bears the torch of continuing the tradition of transforming amorphous wood into alluring miniature objects.

2.2 The penchant

Over the years, the craft has been superbly perfected reflecting the artisans’ relationship with their ancestral, cultural, ethnic, historic, mystic and religious subjects as well as contemporary civic and natural surroundings (Fig.6) (Rajani Kanth, 2011).

2.3 The creation

With their innate abilities, the artisans of Etikoppaka create miniature worlds of life in wood that beguile onlookers and stir their emotions. These skilled craftsmen create a vast array of wonderfully carved and beautifully polished items, from breezy, elegant and attractive bangles, curios, decoratives, dolls, kickshaws, knick-knacks to musical models, playing aids, roof hangings and toys (Fig.7 to 12)







Fig.6: Etikoppaka creations at a glance
Fig.7: Key chains, vermillion boxes etc
Fig.8: Tops, pen stands etc
Fig.9: Locomotives, religious items etc
Fig.10: Dolls, showcase items etc
Fig.11: Wall and roof hangings etc
Fig.12: Playing instruments etc

2.4 The pride

Astounded by this vivid creativity, a few more hamlets (e.g. Kailasapatnam) around Etikoppaka have also take up this marvelous art. The appealing handicrafts have achieved widespread renown and a pride of possession particularly among the affluent and semi-affluent all over the country and even in several foreign nations around the globe.

3. THE PRODUCE

3.1 The paraphernalia

Fig.13: Turnery **Fig.14: Working tools**

Astonishingly, almost all toys or their component are essentially carved out on a naive turnery (Fig.13) using a few plain tools (Fig.14), viz., hallowing chisel ('Lo uli'), nail-edged shaping chisel ('Goru uli') and sharp-tipped cutting chisel ('Mona uli') from a single variety of wood, with the turnery being operated by two artisans at the most is a small unit, occupying as little space as 1.5 x 0.9 m (1.35 m2 of area); generally installed on the floor in the porch (veranda) of each house.

3.2 The nucleus

Fig.15: Wrightia tinctoria wood (lops and tops) and working sizes (insets)

The chief raw material, ivory wood, commercially known as “Dudhi”, scientifically termed as Wrightia tinctoria (Roxb.) R. Br. (Family: Apocyanaceae) and locally named as “Ankudu” is obtained from nearby forest tracts (Fig.15). Mostly lops and tops of the trees are used to make the handicrafts since the length of the material is not the main criterion though girths of 2.5 to 15.2 cm are required. Girths above 15cm are a disadvantage too as they result in wastage of a good lot of raw material.

3.3 The processing

Fresh battens procured are kept under truss of the artisans own house and allowed to air-dry for two months. No biological damage of any kind (even that of fungi) is reportedly experienced during such seasoning. Afterwards, the material is made use of to produce various kinds of toys as per orders or requirement.

3.4 The sub-nucleus

The plant dyes, red and orange are prepared from Jafra (Bixia orellona L., Bixaceae), yellow from Turmeric (Curcuma longa L., Zingiberaceae), black from Karaka (Terminalia chebula Retz., Combretaceae) and green from Indigo (Indigofera tinctoria L., Fabaceae) in the village while a few more are obtained from Madhya Pradesh state. Concentrated extract of each natural dye is mixed with hot lac and made into ready to use bars (Fig.16) and discs (Fig.17)[7]. Though synthetic dyes were used some time during the 20th Century, the practice was reversed subsequently with growing environmental awareness.

[7] http://www.india-crafts.com/indian_heritage_products/etikoppaka _toys.html

Fig.16: Lacquer dye bars **Fig.17: Lacqyoutubuer dye discs**

3.5 The finishing

As each toy or component is made, it is lacquer polished on the turnery itself with the dye(s) required. Dry lac is pressed over the object and turnery operated continuously to produce the required heat and uniform coat of lacquer (Fig.18)[8][9]. Finally, the item is ready for polishing, employing dried leaves of screw pine (Pandanus fascicularis Lam., Pandanaceae) particularly growing in coastal areas, to achieve at a bright sheen.

Fig.18: Raw timber to finished toys

[8] http://www.india-crafts.com/indian_heritage_products/etikoppaka_ toys.html
[9] http://www.onlytravelguide.com/ andhra-pradesh/arts-crafts/etikoppaka-wooden-craft. php

4. THE TRADE

4.1 The outflow

The final produce flows into the domestic market through wholesale outlets in the village, oft-organized national craft festivals/ exhibitions, Andhra Pradesh State Handicrafts Emporia "Lepakshi" and private outlets in tourist/ pilgrim centres. Direct supply to the companies and agents is also carried out on placement of orders, but never supplied to the consumer directly, except in exhibitions.

4.2 The outspread

Improved packing coupled with a joint initiative with India Post has facilitated the dispatch of the artistic produce to places far and wide. During the recent past (1993 to 2006), the consortium supplied huge consignments of time-piece cases to national watch industries to Canada, USA, Germany, France, Italy and Australia with UNESCO permits, among other items. Annual turnover reached a peak of Rs. 3.2 million in 2007 (Rajani Kanth, 2011).

4.3 The outthrust

Trade with foreign countries slowly ceased due to new statutes such as forest certification, eco-friendly compliance labeling, etc. and the turnover dwindled down to 0.8 million a year by 2010. To comply with the latest export norms, the consortium proposes to seek assistance from the South East European University, Tetovo, Macedonia (Rajani Kanth, 2011).

5. THE CONUNDRUM

Although the untiring efforts of the artisans and their modern mentor led this age-old traditional cottage industry to enormous prominence against the odds and through several ups and downs, the enterprise is still beset with a couple of serious constraints that prove to be 'Domicile's swords' for the perpetuation of the art and unhindered progress of its creators. The first constraint is power supply and a continuous timber source.

5.1 Power supply

The village during most days of the year has a power supply only for a limited period especially during day from 0500 to 0900 hrs. This greatly affects the working schedule. Even at the time of supply, the voltage is usually low because of the operation of four rice mills and several irrigation motors nearby. Working under complete artificial illumination is reportedly not possible, as most of the artisans suffer from impaired vision because of specialized and concentrated work involved.

5.2 Timber source

'Dhudi' wood proved to be the material par excellence for ages for toy making as it is soft, easy to work with, withstands working heat, takes polish well, gives a good finish and offers no loss of material right from seasoning to finished product (Nazma et al., 1981).

The artisans report that lot of timber is available in nearby areas such as Kalyanalova, Lothugedda, Madugala and a little farther in Krishnadevaraya peta and Narsipatnam regions. Though not useful for any other end use, at present the timber resources are not accessible to the artisans.

Earlier (possibly till mid-1990s), the Andhra Pradesh Forest Department used to make available the required material under individual permits, but the practice was withdrawn subsequently for reasons not comprehended. As an alternative, the same Department had proposed to start a depot for supplying the material through normal departmental procedures of auctioning. Fearing cost escalation, the artisans did not follow up this proposal.

Therefore, for quite some time now, wood supply is mainly from a secondary source, the middlemen's syndicate, resulting in inconsistent timber supply at premium prices. The secondary sources bring in timber of various lengths and girths in bundles (mainly head loads). Usually each bundle containing 15 battens (each of 150 cm length and 5 to 8 cm diameter) suitable for making toys of different dimensions satisfies the raw material requirement of a unit for two days.

The artisans are not conservative or blind to change. They tried several other timbers [Diospyros sylvatica Roxb., Gatha, Ebenaceae; Eucalyptus tereticornis Sm., Red gum, Myrtaceae; Haldina cordifolia (Roxb.) Ridsd., Haldu, Rubiaceae; Manilkara hexandra (Roxb.) Dubard, Ceylon iron wood, Sapotaceae; Morinda citrifolia Noni, Indian mulberry, Rubiaceae; Moringa oleifera Lam., Drum stick, Moringaceae; Pterospermum canescens Bl., Mathi paila, Sterculiaceae; Syzygium cumin (L.) Skeels, Jaman, Myrtaceae and Ximenia Americana L., False sandal, Olacaceae] available in the vicinity to substitute 'Dudhi', at least to tide over during periods of difficulty. However, most of these timbers were found to be brittle and the rest to be too hard or dark tanned or easily perishable.

Still, the artisans are ready to try more alternatives. The authors also got a few timbers tested for their suitability [Anacardium occidentale L., Cashew, Anacardiaceae; Artocarpus chaplasha Roxb., Chaplash, Moraceae; Bombax ceiba L., Semul, Bombacaceae; Diospyros ferrea (Willd.) Bakh, Ebony, Ebenaceae; D. melanoxylon Roxb., Ebony, Ebenaceae; Eucalyptus tereticornis Sm., Red gum, Myrtaceae; Hevea brasiliensis (Willd. ex Juss.) Muell.-Arg, Rubber, Euphorbiacea; Leucaena latisiliqua (L.) Gillis, Subabul, Mimosaceae; and Pterocarpus marsupium Roxb., Bijasal, Fabaceae] (Fig.19). Of these, Rubber wood alone was found to meet with all the desired attributes. So the same can be explored to be adapted as an alternative provided the wood is properly seasoned and processed (with eco-benign wood preservatives). However, this timber has to be obtained at present from far off Kerala state as plantations of the species being raised, of late, in East Godavari and Visakhapatnam Districts take some more years to become handy for the purpose.

Fig.19: Trials by IWST with various alternative timbers (1.Cashew, 2.Chaplash, 3.Semul, 4.Ebony, 5.Red gum, 6.Rubber, 7.Subabul and 8Bijasal)

6. THE OPTIMISM

After the advent of Joint Forest Management (JFM) concept, the artisans of Etikoppaka have been involved in raising 'Dudhi' plantations from the beginning of the current Century and over 60,000 saplings are being brought up in about 120 ha of forest and non-forest areas with the support of the Forest Department (Rajani Kanth, 2011).

The artisans are eager to realize the advantage of this recent endeavor and are waiting with hope for the quick rejuvenation of their cottage industry.

7. THE SALVAGE

Although 'Dudhi' trees possess good coppicing ability, timber extraction from natural forest and wilderness is not permitted by the Forest Department. Similarly, though a large portion of the plantations (initially raised a decade or so ago) also attained exploitable phase, the same are also not allowed to be made use of.

Unless the Forest Department comes to the aid of the artisans with munificence in solving timber inputs and the Eastern Power Distribution Corporation Limited magnanimously ensures continuous power supply throughout the day time, the great tradition of international name and fame of the land is likely to be driven to oblivion before one can say "Jack Robinson" (Rajani Kanth, 2011).

8. THE REVELRY

In the long term interests of the (a) age-old tradition, (b) committed artisans, (c) admiring connoisseurs, (d) employment potential, (e) revenue augmentation and (f) foreign exchange generation, the government and its organs with all sincerity and promptness should recuperate the Etikoppaka handicrafts industry at the earliest possibility and recognize it as a proud tradition of the nation.

9. ACKNOWLEDGEMENTS

The authors express profuse thanks to the artisans of the Etikoppka handicraft industry and their champion for all the information provided and help extended in bringing out this article. Due acknowledgements are extended to the websites referred to in the narrative. Special thanks go to the Director General, Indian Council of Forestry Research and Education, Dehra Dun for the keen interest evinced and support given in materializing this communication.

10. REFERENCES

http://en.wikipedia.org/wiki/etikoppaka.

http://etikoppaka.com/about-us/about-etikoppaka.

http://www.india-crafts.com/indian_heritage_products/ Etikoppaka_toys.html.

http://ithappensinindia.com/beautiful-toys-etikoppaka-toys-from-ap-india-the-manufacturing-process-of-etikoppaka-toys-without-chemicals.

http://www.onlytravelguide.com/andhra-pradesh/arts-crafts/etikoppaka-wooden-craft.php.
Nazma, P, M, Ganapathy, N, Sasidharan, K, M, Bhat and Gnanharan, R, 1981, A handbook of Kerala timbers. Kerala Forest Research Institute, Peechi: 1-260.

Rajani Kanth, K, 2011, Etikoppaka toy industry on verge of closure. Business Standard (Online), Jul 08, 2011.

WELCOME TO
ALL DIGNITARIES AND DELEGATES

ETIKOPPAKA - AN INDIAN VILLAGE PERPETUATING THE JOY OF WOOD THROUGH THE TRADITION OF TOY ART

M. V. Rao* and S. C. Joshi$

* Wood Biodegradation Centre (Marine), Institute of Wood Science and Technology, *via* Yoga Village, Andhra University Post, Visakhapatnam-530 003

$ Institute of Wood Science and Technology, Malleswaram Post, Bengaluru-560 003

THE PREMISE

- ***The scenario***
- ***The legacy***
- ***The forge***
- ***The retreat***
- ***The crusade***
- ***The revival***
- ***The epithet***

THE DEXTERITY

- ***The commitment***
- ***The penchant***
- ***The creation***
- ***The pride***

Key chains, vermillion boxes etc

Tops, pen stands etc

Locomotives, religious items etc

Dolls, showcase items etc

Wall and roof hangings etc

Playing instruments etc

THE PRODUCE

The paraphernalia *The nucleus*

The processing *The sub-nucleus* *The finishing*

THE TRADE

- ***The outflow***
- ***The outspread***
- ***The outthrust***

THE CONUNDRUM

- ***Power supply***
- ***Timber source***

THE OPTIMISM

THE SALVAGE

THE REVELRY

Trials by IWST with various alternative timbers
(1.Cashew, 2.Chaplash, 3.Semul, 4.Ebony, 5.Red gum, 6.Rubber, 7.Subabul and 8. Bijasal)

Consumer Purchase Trends and Perceptions in the USA

Sudipta Dasmohapatra[10]

[10] Assistant Professor, North Carolina State University, (sdasmoh@ncsu.edu)

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Consumer Purchase Trends and Value Perceptions in the US

Sudipta Dasmohapatra

Assistant Professor of Marketing

Environmentally Desirable Products (EDP)

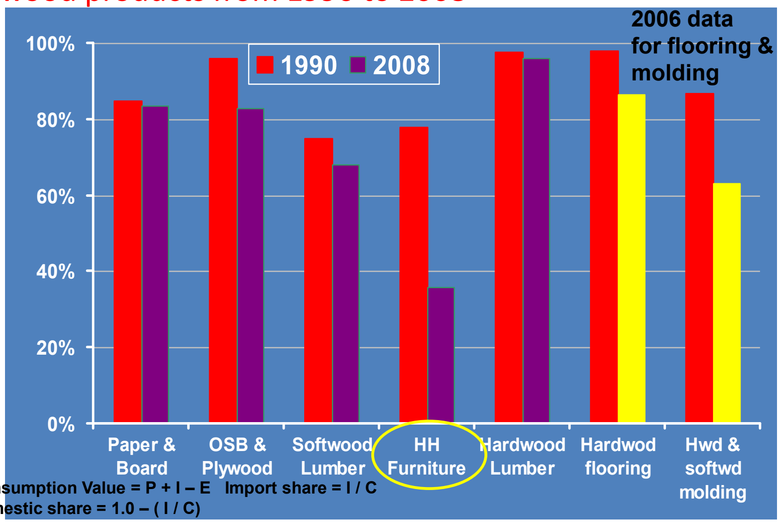
REDISCOVERING WOOD: THE KEY TO A SUSTAINABLE FUTURE
The International Conference and Exhibition on the Art and Joy of Wood
Bangalore, India, 19-22 October 2011

Dr. Phil Mitchell
Nate Irby

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Source: Buehlmann and Schular 2011

Domestically-produced shares* of U.S. consumption declined for many wood products from 1990 to 2008

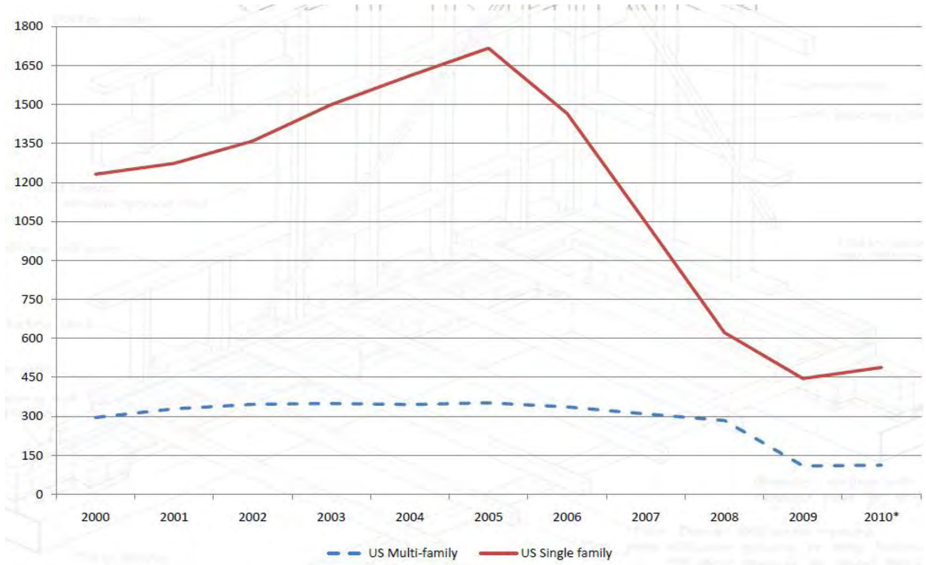


*Consumption Value = P + I – E   Import share = I / C
Domestic share = 1.0 – (I / C)

Sources: Shipments : Dept Commerce, Bureau Census , ASM
Imports & Exports : FAS, B. Luppold for hardwood lumber, P. Ince for paper & board

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

U.S. Housing Starts



Source: Alderman, 2010

*NAHB estimate

3

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Major Consumer Trends in the US

- Diversity
- Life expectancy: Increasing
- Globalization
- Going green:
  – 30% consumers want products to have green credentials (*American Express* 2011)
  – The value of green building construction in the US is estimated to be $60 billion by end of 2010
  – Buying local

Source: Trendwatching.com January 2011, Nielson 2011, Mintel 2011, hktdc.com

4

NC STATE UNIVERSITY
NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Major Consumer Trends in the US

- Customization
- Retail rebirth (creativity to lure consumers into stores)
- Technology revolution: Electronic
- Luxury is mainstream
- On-the move
- Living alone

Source: Trendwatching.com January 2011, Nielson 2011, Mintel 2011, hktdc.com

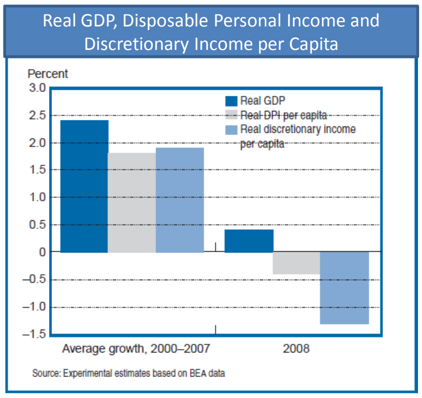
5

NC STATE UNIVERSITY
NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

What Drives Consumer Purchase in Wood Products?

- Discretionary income
  - Home improvement and home planning spending (62% planning at least one major home improvement or remodeling project in the next year)
- Key attributes

(Good, Cheap, Fast):
  - Price is a major driver
  - Product quality
  - On-time delivery



Source: Landefeld et al. 2010. (based on Bureau of Economic Administration data)

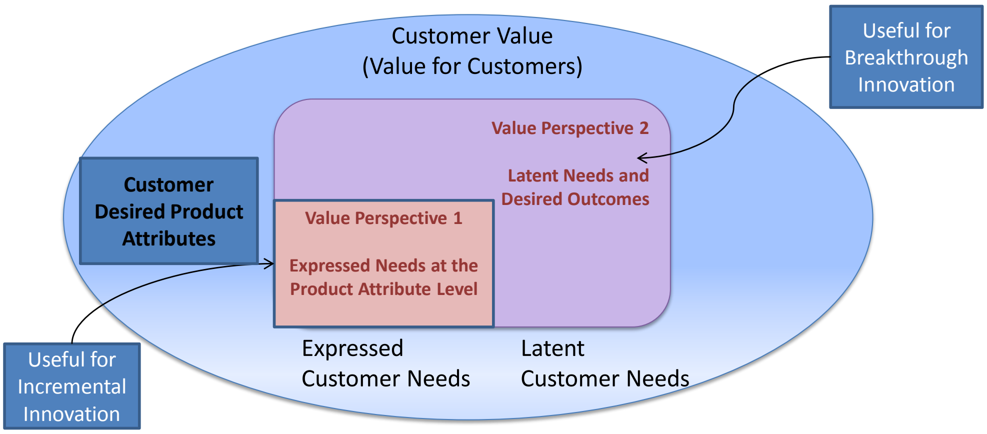
Riedel marketing group 13 may, 2011

6

NC STATE UNIVERSITY
College of NATURAL RESOURCES DEPARTMENT OF Forest Biomaterials

Consumer Perceptions / Value

Customer Value: Product + Service + Price

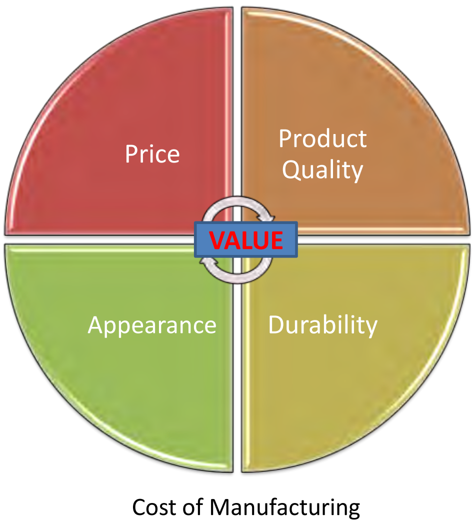


Source: Naumann,, E. (1995) Creating Customer Value: The Path to Sustainable Competitive Advantage. Thomson Executive Press, Cincinnati, OH; Roseno, A. (2005) Customer Value Driven Product Innovation, PhD Dissertation, Copenhagen Business School, UK
Roseno, A. (2008) Developing Radical Innovation Capabilities in Established Firms, Front End of Innovation Europe, Vienna (January 31, 2008)

7

NC STATE UNIVERSITY
College of NATURAL RESOURCES DEPARTMENT OF Forest Biomaterials

Wood Household Furniture: Customer Perceptions of 4 Concepts



Measure Four Concepts

- Branding (Origin)
- Local Sourcing
- Customization
- Environmental Friendly (Green)

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Competitive Attributes

Branding at the Source

State Campaign	Symbol
Minnesota Wood Campaign	TRUE NORTH WOODS
California Grown	CALIFORNIA CA GROWN Be Californian Buy California Grown
Vermont Quality Wood Products	VERMONT
Brand Oregon	OREGON BORN

Source: Tokarczyk and Hansen, 2006

WOOD FROM THE HOOD
Reclaiming Wood From Your Neighborhood
Source: woodfromthehood.com

Buying Locally in Wood Products

- Attitudes for buying local agricultural products will support WOOD PRODUCTS
  - Develop the importance of relationship between people and woodlands
  - Show heightened sense of stewardship

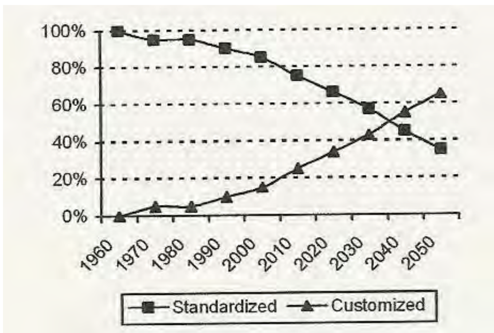
Source: Rand, Corroon , C.2011

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Competitive Attributes

Source: Howe, Bowyer and Bratkovich 2010

Market share of mass produced, standardized vs. customized products



Source: Buehlmann and Schuler 2002

10

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Methodology

- Data Collection: From Consumers at Home Shows
  - Home Shows
    - Raleigh, NC (Sept 2009)
      - 126 completes
    - Atlanta, GA (March 2010)
      - 125 completes
    - Norfolk, VA (April 2010)
      - 155 completes

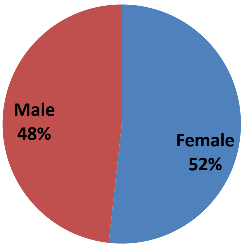
Consumers filling out survey at the Southern Ideal Home Show, Raleigh, NC September 2009 (Nate Irby overseeing)

Total Survey Completes: 406

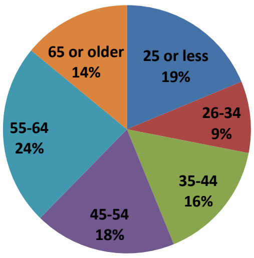
NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Respondent Type

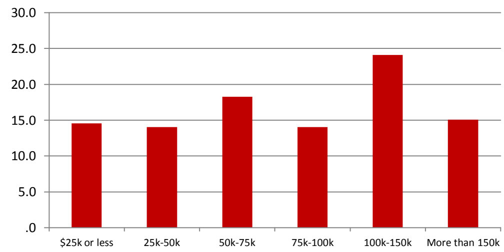
Gender



Age



Income



1. 12

NC STATE UNIVERSITY
College of NATURAL RESOURCES · DEPARTMENT OF Forest Biomaterials

Purchase Attributes of Wood Household Furniture

Relative Importance Rating (1=least important to 7=most important)		
	Mean	Standard Deviation
Durability	6.45	0.995
Appearance	6.41	0.926
Price	6.00	1.301
Finish	5.92	1.235
Ease of use	5.77	1.225
Color	5.73	1.241
Maintenance	5.60	1.351
Size	5.54	1.326
Service	5.47	1.422
Warranty	5.12	1.697
Already assembled	5.04	1.797
Customized	4.80	1.617
Environmentally-friendly	4.73	1.678
On-time Delivery	4.50	1.769
Local Sourcing	4.41	1.677
Brand	3.88	1.629

NC STATE UNIVERSITY
College of NATURAL RESOURCES · DEPARTMENT OF Forest Biomaterials

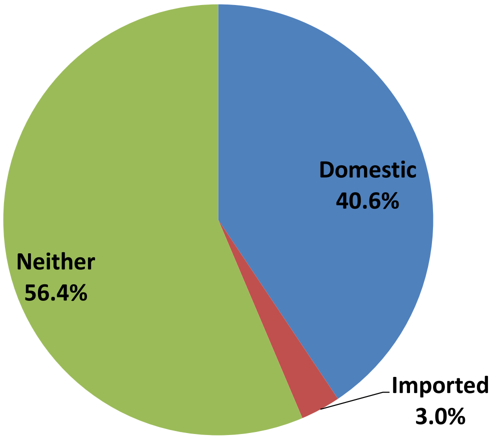
Relative Importance of the 4 Concepts in the Model

Attribute	% Importance (6-7)*
Customization	34.3%
Environmental Friendliness	36.1%
Local Sourcing	27.6%
Geographic Branding	17.2%

*based on a 7-point relative importance scale (1=least important to 7= most important)

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Respondent Preference for Origin of Furniture

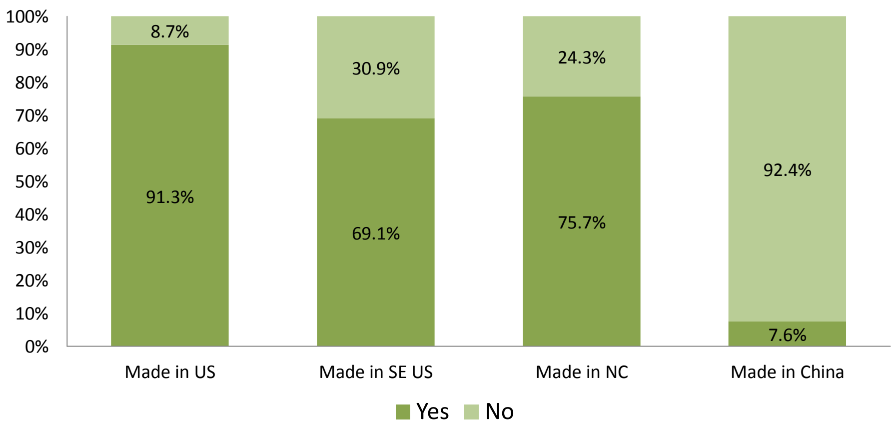


When purchasing your last piece of furniture, did you have a preference for:

15

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

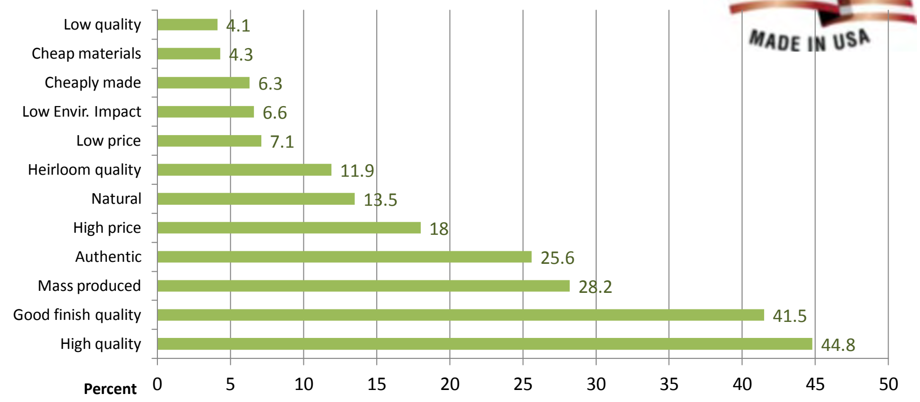
Would you Prefer HH Furniture labeled as "MADE IN US"?



1. 16

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Perception of “Made in US” Label in Wood HH Furniture



17

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

General Environmental Behavior

Activities	Percent of Respondents
Turned Off Electronic Products When Not in Use	84.4%
Used Recycled Products/ Used Products made of Recycled Packaging	77.3%
Made Homes More Energy Efficient	71.8%
Purchased Local Food Products	71.7%
Donated Money to an Environmental Cause	22.4%
Volunteered Time to an Environmental Cause	14.1%
Driven a Hybrid Vehicle/ Used Biofuels	8.8%

www.icims.com

18

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

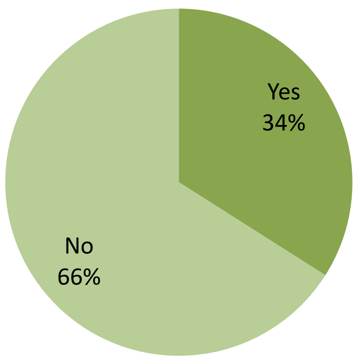
Importance of Environmental Attributes in Selecting Wood HH Furniture

Environmental Attributes	Mean	Std. Deviation
Low Toxic Emissions When Used Inside Home	5.70	1.46
Wood is Not Sourced from Illegally Logged Forests	5.40	1.76
Obtained from Wood that Came from Well Managed Forests	5.02	1.60
Can be Disposed with Low Environmental Impact	4.96	1.57
Has Natural Resins and Binders	4.74	1.58
Originates from a Renewable Resource	4.65	1.55
Packaged using Environmentally Friendly Materials	4.64	1.58
Reduces Transportation Costs in Distribution	4.59	1.61
Low Waste Generation during Manufacture	4.53	1.54
Manufactured Using Local Materials	4.48	1.57
Manufactured Using 100% Recycled Wood	4.26	1.65

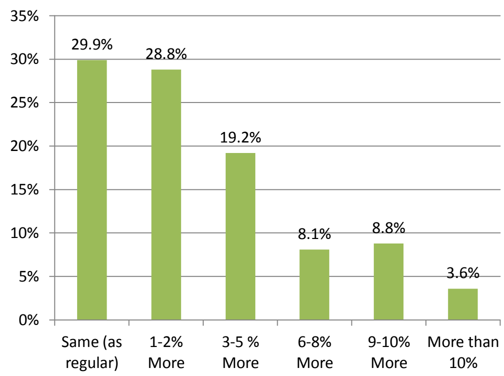
19

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Willingness to Purchase / Pay More for Environmentally Friendly HH Furniture



Environmental/ Green Labels Important?



How Much More Willing to Pay for Environmental Friendly Furniture Items?

20

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Purchase of Local Products

	Percent
Purchased Local Food Products	71.7%
Have Sought Locally-Made HH Furniture	15.3%
Furniture Made Using Local Materials (Respondents Mentioned 7= "Most Important" or 6= "Important" on an Importance Scale of 1-7)	27%

http://tapamerica.org/american-economy-why-you-should-buy-local/

21

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

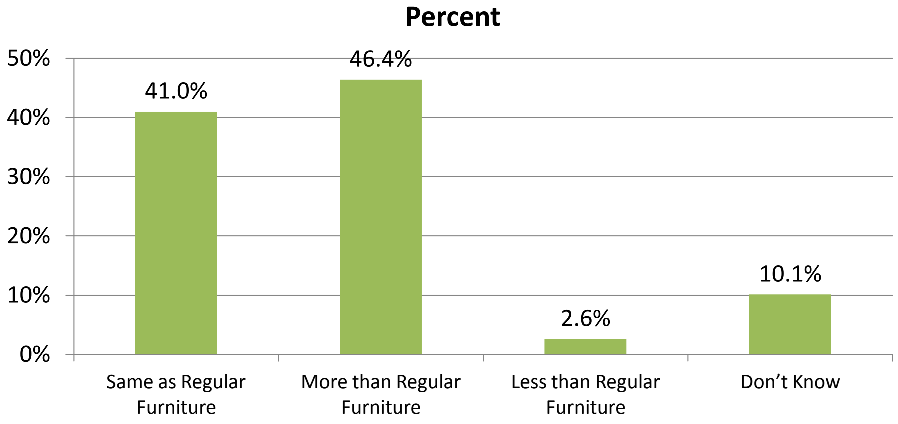
Purchasing Local Products Means:

- Respondents Indicated Purchasing Local equals:
  - Helping Community (76%)
  - Promoting Jobs (76%)
  - Better Service (59%)
  - High Quality (41%)
  - High Cost (8%); Low Cost (8%)
- Females more likely to buy local products than men

www.capmercer.com

NC STATE UNIVERSITY
NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Locally-Made Furniture Purchase Price

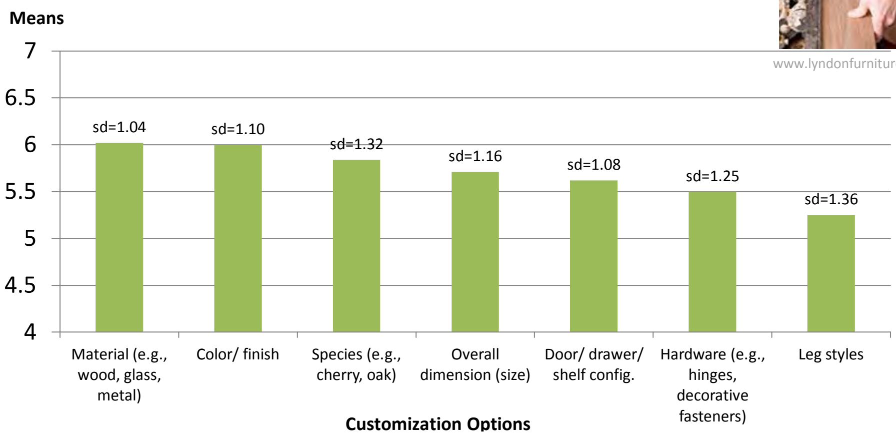


23

NC STATE UNIVERSITY
NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

What Customization Options are Important in Wood HH Furniture Purchase?

www.lyndonfurniture.com

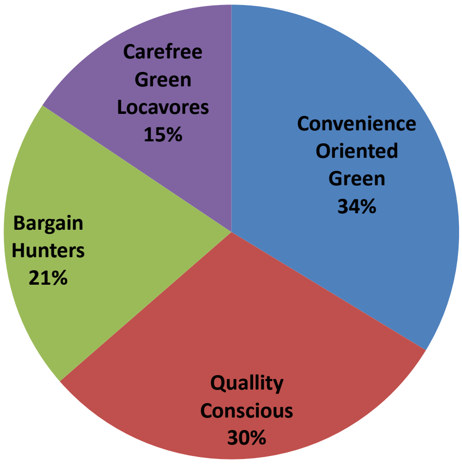


1-7 importance scale, 7= most important, 1= least important

24

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Consumer Segmentation: Segments for Wood Household Furniture Purchase



Cluster analysis was done using SPSS

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Consumer Segment 1: Bargain Hunters (21%)

Characteristics of the Segment

- Price is the most important factor in purchase of wood HH furniture
- Also care about ease of use but don't care about quality, service or durability
- Have no preference for origin of furniture or customization options
- Least environmentally conscious segment of consumers
- These consumers are impulsive and risk takers
- Indicate that wood hh furniture made in US is mass produced

Demographics:
- 60% males
- More than 1/3rd buyers less than 35 years old

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Consumer Segment 2: The Quality Conscious Buyer (30%)

Characteristics of the Segment

- These consumers care about quality, durability and appearance of products
- They do not care about convenience or service and are price neutral
- Prefer domestic made furniture more than other segments (more than 53%)
- Preference for green/environmental products and local purchasing is neutral
- Frequently purchase hh furniture (60% purchase every 0-5 years)

Demographics:
- 60% males
- More than 40% earn $100k
- About 40% 55 years and over

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Consumer Segment 3: The Convenience Oriented Green Buyers (37%)

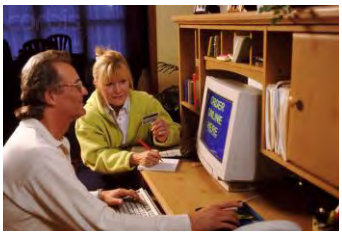
Characteristics of the Segment

- Customer service and Ease of Use is very important to this group
- Do not care about low price or custom made products but prefer/show highest environmentally friendly products/ behavior
- 70% indicated they prefer neither domestic nor imported furniture
- Prefer to purchase local products
- Very thoughtful in their purchases and are risk averse

Demographics:
- Split gender
- A quarter each belong to less than 25 years and 555-64 years age group
- 40% earn more than $100k

NC STATE UNIVERSITY
College of NATURAL RESOURCES DEPARTMENT OF Forest Biomaterials

Consumer Segment 4: The Carefree Green Locavores (15%)



Characteristics of the Segment

- No other attribute as important as local purchase and customization of products
- Prefer green products (second to segment 3)
- Prefer domestic wood HH furniture over imported (64%)
- Are risk averse group and do not care about cost

Demographics:
- More than 60% females
- Primarily 45-64 years of age (48%)

NC STATE UNIVERSITY
College of NATURAL RESOURCES DEPARTMENT OF Forest Biomaterials

Conclusions

- Segments of customers with different value perceptions
  - Segment 2 is more environmentally conscious
  - Segment 3 is more locally oriented and customization savvy
- Half of the respondents don't care about the origin of furniture (but are favorable to US-made Label)
- Environmental friendliness: Indoor emission, Legal sourcing
- Local sourcing as important
  - Promotion based on local sourcing should focus on helping communities and Jobs
- Almost all customization options perceived important by consumers; most important is the type of material (wood, metal) and color

Updating needs in advertising and promotion

- There is room for anyone to stand out from the crowd with ads that engage consumers
- All or any of the four concepts could be promoted to the appropriate audience (segments)
- Price, appearance and durability is still the most important (and need to be emphasized)

31

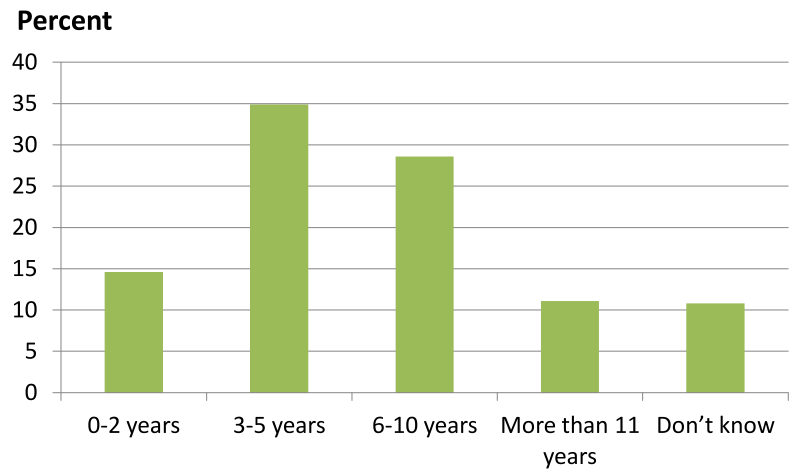
NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Questions

32

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

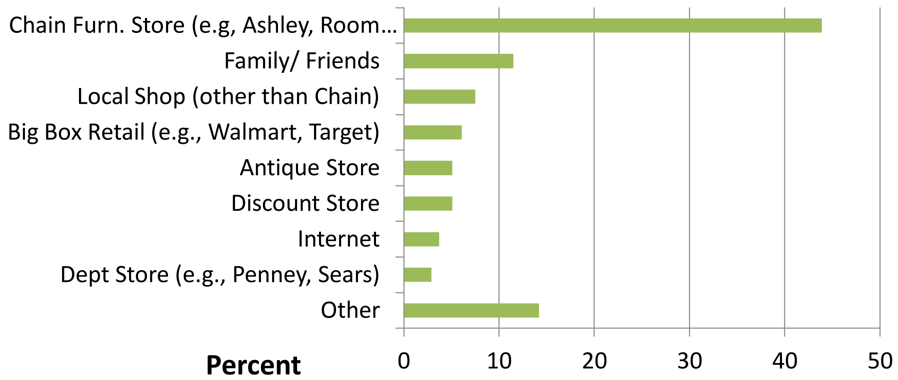
How Often Do (Would) You Acquire Furniture?



33

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Where Respondents Purchased their Last Piece of Furniture



Other includes: Thrift store, auctions, garage sales, etc.

34

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

- **Discretionary income drives furniture purchases**
- On average, a person's discretionary income generally peaks around $35K at age 45-54, and then tapers off sharply after the age of 55, hitting $18K at age 65-74. Similarly, people's furniture needs start off very high at age 18-34 as living spaces are being created. Those who are still trading up at age 45-54 tend to be the highest-spending group, and then those needs taper off for a number of reasons: kids leave, couples downsize, etc.

35

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Factor Analysis of Attributes

Variance explained: 66%

Importance of Purchase Attributes of Wood Household Furniture	Factors				
	Aesthetics	**Eco/Local Attributes**	**Service/Trust Attributes**	**Ease of Use**	**Cost to Consumer**
Color	**.818**				
Appearance	**.784**				
Size	**.684**				
Finish	**.648**				
Environmentally-Friendly		**.842**			
Locally-Sourced		**.837**			
Customized		**.562**			
Customer Service			**.738**		
Geographic Brand			**.732**		
Already Assembled				**.853**	
Ease of Use				**.636**	
Price					**.811**
Warranty					**.571**
Maintenance					**.476**

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Geographic Branding

- Recent marketing studies indicate that branding strategies focused on geographic origins of a product can provide opportunities for **differentiating products** (Agarwal and Barone 2005)
- Producers are able to generate **price premiums** especially if actual quality differences exist that are attributable to geographic origin
- Geographic brand identifiers also allow for a product offering to create an **"exotic" image** which enables the producers to gain a price advantage

Branding

1. 37

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Two Types of Branding

- **Company Branding (Examples)**

HICKORY CHAIR

Stanley FURNITURE

ASHLEY® FURNITURE INDUSTRIES, INC.

Thomasville®

- **Geographic Branding-Regional (Examples)**
  - Northern Forest Brand
  - *Vermont Quality WP*
  - *Maine Made-America's Best*
  - *The New Hampshire's Own*
  - *Appalachian Hardwood*
  - *Minnesota Wood Campaign*
  - *New Zealand Pine*

NC STATE UNIVERSITY
NATURAL RESOURCES — DEPARTMENT OF Forest Biomaterials

REAL CALIFORNIA MILK

The use of such geographic indications may involve unique quality characteristics of a product associated with a particular location or images that are based on history, tradition or folklore in a region

Branding 1. 39

NC STATE UNIVERSITY
NATURAL RESOURCES — DEPARTMENT OF Forest Biomaterials

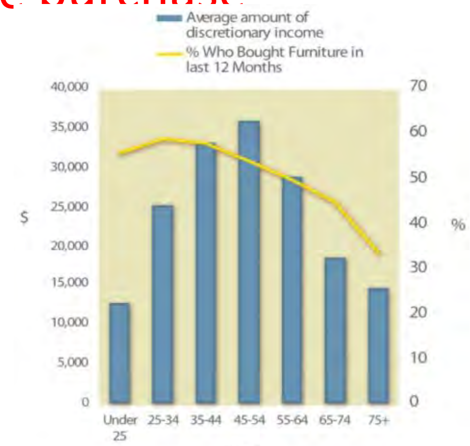
Key Trends in Furniture Industry

- Major drivers:
  - **Discretionary income** It peaks around $35K for the 45-54s, and then tapers off sharply after the age of 55, hitting $18K for the 65-74s.
  - **New home sales plummeted** 18% in 2006 and another 26% in 2007. If the average new home included $10,000 in furniture (a very conservative estimate), the amount of "lost" furniture sales would have been $1.3 billion in 2006 and another $2.8 billion in 2007. This accounts for much of the deceleration in growth during this period.
  - As consumer research shows, 18-34s are the most likely to buy any furniture, but the 45-54s spend the most. Young adults are willing to spend a larger percentage of their income on furniture as they start homes and build families.

40

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Households with discretionary income (2000) compared to incidence of furniture purchase



rce: Simmons NCS/Mintel/*American Income*, New Strategist Publications

41

NC STATE UNIVERSITY
College of NATURAL RESOURCES
DEPARTMENT OF Forest Biomaterials

Consumers not engaged for such large purchases

- Lifestage—consumers at various lifestages have varying furniture needs based on price, style, and type. The aspects of lifestage that are most important are gender, age, the presence of children, and income.
- Although their discretionary income is still low, young couples and young families are more likely to buy furniture than any other group—they are the highest-volume buyers due to frequent moves and/or starting a new home and family.
- Style—fully 30% of customers say that they don't do research before going furniture shopping, thus suggesting that their in-store experience will drive the sale.
- Of the many methods of research and sources of information that people have at their disposal prior to buying furniture, "family and friends" is by far the most frequently relied upon, at 35%. Accordingly, there is a need for marketing that makes an emotional connection with consumers, rather than simply providing information.
- People buy furniture in a wide variety of different retail channels—in the past two years, 43% bought from stand alone furniture stores, 28% from mass merchants, 22% from value or discount stores, and then ten other channels garnered between 7% and 15% of consumers. The average respondent (who bought any furniture at all) bought from 2.2 different channels.
- Income combines with age to act as the main influencers on where people buy furniture.
- Decision-making—most people take their time when making significant furniture purchasing decisions, but shopping styles vary. Roughly a quarter of respondents chose each of the following lengths of time that it took them to decide what to buy: little or no time; a week or less; two or three weeks; a month or more.
- Decision-makers—young people take less time than older people, men take less time than women, and wealthier people take much more time than those that are less affluent to make a furniture purchasing decisions.
- RTA furniture is popular among consumers, regardless of their income bracket.
- The older the consumer, the less willing they are to embrace RTA furniture.
- Hispanics are most likely to buy RTA furniture, followed by the black and white demographics, respectively.

42