

Furniture Is My Passion Ron Wanek with Bill Napier

Audience: Retail Salespeople, interior designers, consumers

-Help people understand what it takes to manufacture furniture, history of furniture since 16th century

RW Story: **1961** Started at Winona Industries, **1970** Arcadia Furn Corp started by RW and other investors: 35 employees making 11 occasional groups.

Ashley Story: **1945** founded in Chicago by Carlyle Weinberger. **1976** R. Wanek and group acquired Ashley. 2020: 400 acres under roof, 30 million pieces sold annually deliver to 95% of North America within a week.

"Business creates business" Mfg has ripple effect in billions of dollars of economic benefit.

US Ashley Facilities

Arcadia WI: 2.9 million sq ft *LARGEST Case Goods factory in the world

Advance NC: 3.4 million sq ft

Ecru MS: 2 million sq ft

Leesport PA: 1.72 million sq ft

Mesquite TX: 1 million sq ft

Ripley MS: 615 thousand sq ft

Saltillo MS: 834 thousand sq ft LARGEST and most automated mattress plant in US

Colton CA: 1.296 million sq ft

Whitehall WI: 160 thousand sq ft

Brandon FL: 295 thousand sq ft

Verone MS: 275 thousand sq ft

Statesville NC: 309 thousand sq ft

Seattle WA: under construction

Int'l Ashley Facilities

My Phuoc Vietnam: 631 thousand sq ft

Tan Uyen, Vietnam: 435 thousand sq ft

Bing Duoing, Vietnam: 500 thousand sq ft

Kushan, China: 1.548 million sq ft

WORLDWIDE 21 million square feet under roof.

Ashley Story

We design it. We build it. We stock it. We ship it. We deliver it. We improve it.

Logistics: Modern, clean cabs. Trucks have aluminum wheels, resistant tires, cruise control saves fuel, GPS allows cabs and drivers to be scored on idling, speed, braking, acceleration. Tractors have skirting for efficiency, APU reduces idle by 90%, trailers have auto-tire pressure for better carbon footprint

Smartway: Ashley's partner in making fleet more efficiency

Employs 30,000 people worldwide, Ripple effect: Manufacturing: each dollar generated turns 3.6 times. Ashley generates **\$7.5 BILLION** in economic activity.

Ashley: supports over 7,000 vendors and businesses

: generates over \$9 Billion in economic activity in US

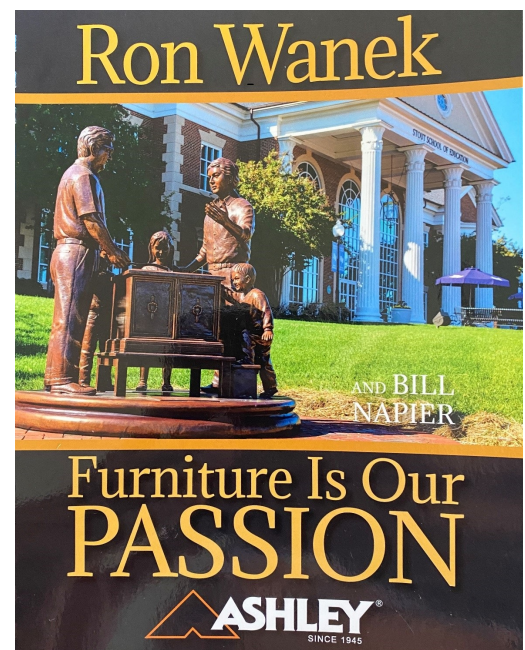
: each manufacturing job creates 3.4 jobs in US

:\$1 in mfg creates \$3.60 in economic activity.

Ashley Home Stores: 1997 1st AHS. 2020: Over 1,000 stores in 55 countries

R. Wanek story: Parents went from sharecroppers to farm owners teaching value of hardwork. **1970** R. Wanek starts own manufacturing firm with others, realizes speed + quality of delivery important to store owners, **1972** Ashley logistics company founded (today one of the largest private freight carriers; top 10 intermodal). **1976** and **1982** restructured ADS in AFI. Company reinvented 16 times since founding.

Study Notes



Philanthropy/ Personal: R. Wanek married Joyce in **1961**. **1998** Joyce and Ron Wanek Foundation: \$50 million donated towards Diabetes Type 1 research at City of Hope + Mayo Clinic, St Judes, and other med research.

Todd Wanek story: 1989 – 1993 Todd in Asia, **1994** TW oversees Ashly's entry in upholstery category; **1996** Named President and COO of AFI. **2002** Named CEO of AFI, develops "blended manufacturing strategy" TW: "We are a dirty fingernail company." Founded Wanek school of Business Leadership.

Philanthropy High Point U: RG Wanek Center, largest building on campus, RW rec'd honorary doctorate, HPU: Wanek School of Natural Science focusing on Biology, chemistry, Physics and neurosciences. **Superior Fresh** With Karen Wanek **Aquaponics** farm creates leafy greens and farms trout, Atlantic salmon, steelhead in Northfield WI; **Soldiers Walk** 54 acres chronicling America's wars in 500 meter walk; **Wanek Center, Arcadia** 71,500 sq ft community center. **Ashley for the Arts** Benefits 60 non-profits, Raised \$590,000 in 2019. **Hope to Dream** Since 2010, gifted over 100,000 kids bedding. **City of Hope** \$50MM to research cure for diabetes 1. **Mayo Clinic** in 2010 founded the Todd and Karen Wanek Family Program for HypoPLastic Left Heart System. **STEM scholarships** over \$2MM awarded to 2,000 students. **Ashley's Angels** raised \$2 MM benefitting 15,000 kids in PA, WI, MS

Eco-Ashley: Footprint leafy green: Using engineered wood, less virgin wood used. **Arbor day** tree planting. **White paint** inside facilities reflects light and given cleaner work environment; **Wetlands creation** and flood prevention in Arcadia WI. **Solar** power in Romeoville IL, adding solar to facilities \$29 million investment in 2019

Investments: OVER \$1 billion invested in advanced manufacturing technology since 2015. \$300 Million scheduled for 2020.

Industry 1.0 Mechanization and steam power, 1784

Industry 2.0 Mass Production, electricity, 1870

Industry 3.0 Electronics and IT systems, 1989

Industry 4.0 Cyber -Physical systems, 2020

Advanced Technology Maker Center (ATMC) (\$2Million investment) offers over 300 courses, education for employees, those seeking college credit, kids, students, campers

Ashley Mobile Skills Lab Lab for 4 school districts in WI., help with certification

Ashley Testing centers Domestic: Textiles abrasion and piling testing. Flammability, Cushion ISD. Int'l: Oscillatory Abrasion testing, dynamic seam fatigue testing, wood frame testing, anti-tipping, wood strength, fabric color fastness, spring foam tensility,

Case Goods Lab testing: Chemical Resistance Test (ketchup test), Environmental chambers (heat and humidity tester)

Ashley Motion testing: Adjustable Base Cycling test, Cycle testing, Electronic component testing, Force Profile test, Horizontal load cycle test, Mech cycle test

History of Furn Design 1st Evidence in Skara Brae Scotland, c 3,000 years ago, 16th C heavy wood, for the elite,

17th C Renaissance **influence** and Tudor style,

18th Chippendale, Sheraton, Hepplewhite, Americans Duncan, Phyfe, John Goddard. In England high-boy dresser, Windsor/ Bannister chairs, overstuffed chairs, sofas, settees using silk, leather. Oversized CG wardrobes, 4 poster beds.

Also gilding carvings classic (Greek and Roman) images --> use of mirrors. France Carvings. Long reign of Louis XIV had big influence.

Precious metal inlays, precious woods, reference to Antiquity. Golden era of cabinet making→ Cabriole leg: "knee" "ankle" "foot".

New power tools and steam engines allow mass production of furniture,

19th Revival Era,: Gothic Bierdorience (light airy furniture) English Regency, French provincial, Early North American austere. Penn Dutch bright colors with portraits of home life. American Federal/ NeoClassical. Contemporary / Modern begins with function and accessibility of designs

20th 1920s Massive changes in the way manufacturing. WWII more earthy natural most furniture manufacturing out of NC.

21st Cent. Technology, internet globalization, ease of furnishing a room, DIY collections

- mfg responds to consumer v Top down model

Lacey Act, 1900: Bans trafficking in illegal wildlife, Amended in **2018** to include plants , timber , paper > prevents illegal logging. Ashley in full compliance.

Engineered Wood Sue 95% of tree versus 63% of "harvested" hard wood. More reliable structurally. Resists warping, splitting and cracking. No knots or voids. Rubberwood is similar to maple. Tropical hardwoods durable but usually rare and protected. Softwood used in construction and MDF. Fiberboards: Wood broken down into fibers and then bonded together.

MDF composite panel synthetic resin created with heat and pressure used in flooring fixtures and millwork

OSB (Oriented Strand Board) 2x strength of plywood. Made by cross hatching wood pieces. Used roofing, cabinetry, stairways, joinery in furniture

Particle Board various sized composite, consistent and good for outwards facing laminates and veneers.

Plywood Thin sheet soft wood veneer produced at a 90° angle. Odd number of plies equal more stability. Soft and hard plywood – Load bearing (hard). Very popular in construction. Made in 3 elements: face, back core Cores are “plyed”

Particle Board plywood: Core is particle board face and back are veneered.

MDF core: stronger plies, best for veneers

Lumber core (thick or cut solid) is core plies and veneers.

Combo core plywood: irregular pressed veneer core, thinner and lighter

Veneers, Inlays: Thinly sliced wood with paper backs; patterned

Applied finishes: Ashley takes **14** steps to create a finished product.

Four kinds of “slicing” to make a veneer: 1: Rotary lathe turns on a blade. 2: Quarter slicing (most expensive) gains various grains, 90° angle 3: Rift slicing angled slicing through the wood to show grain 4: Plane slicing produces “cathedral” or “flame” slicing parallel cut to center line

8 kinds of veneer matching

1: Running match; asymmetrical veneer, multi widths

2: End Matching 4x match

3: Balance Match – symmetrical appearance

4: Center Matching, centered veneer, wasteful, radiates out

5: Book Match veneers matched, as if mirrored in book pages

6: Slip Match non-flipped veneers, matched and congruent

7: Piece match: Veneer matched by color not grain

8: Random match various veneers, unmatched

Veneer butt match spliced together veneers to extend length of veneer

Laminates 2 types at Ashley: paper and veneer. 1 Paper 2 Vinyl. Cost effective light-weight alternative to solid wood similar aesthetic, consistent finish.

TFL Thermally fused laminate: Fusing a resin impregnated sheet of décor paper directly to a substrate > MDF + particle board useful for evenness and lack of defects

Film overlays: Can wrap around thermoplastic can provide 3D grain and wrap around; 3D more steady used on commercial products.

-Decorative foil light weight. Light weight: acrylic, polyester. Top-coated polyester, PU or acrylic.

-High Pressure laminates: direct descendent of original plastic laminate; resistant. Best choices for surfaces (counter tops, chests).

Adhesive: Polyvinyl acetate- gives white glow or Alipahitic resin - yellow glow

Engineers consider use: temperature, pressure, bonding, dissimilar materials, interior v exterior use

Cast Polyurethane PUR polymer connected to organic units joined by carbonate – plastic is the most common. PU in case goods give great detail options; is durable and will not crack or split

P.U Parts/ components the Master unit is carved from wood or stone. A cast is made and then PU is poured in, parts made, sanded and stained to create a finished product.

English dovetail: crossed “fingers” at joint, strongest

French dovetail: tapered insert into a groove of wood; triangular tongue and groove method

Upholstery; late 1800s become popular. Started using lots of wood; solid wood frame. Sofa system then standardized with variety of fabrics.

Types of Fabric

Natural: Linen, Cotton, Vinyl, Leather, Wool, Silk

Synthetic: Acetate, Olefin, Acrylic, Nylon Polyester, Rayon

Five steps in building a sofa: 1: Framing 2: Webbing 3: Padding 4: Fabric 5: Finishing

Standardized components of a sofa: Deck, Ticking, 8 way hand -tie, filling, frames, plinth base, webbing

Sofa Arms: English or low profile, pleated arm, roll arm or squared arm

Sofa Backs: Attached back, loose cushioned back, pillows (scatter) back, curved back, tight back

Chair types: wingbacks, club chairs, bergere frames, barrel, Lawsons, rolled arm, slipper, chesterfield, wishbone, chair and a half

Sofa training guide: Loose back, Tight back, Tufted back, camel back, scatter back, Boxed back cushion, stress welting, welt

Legs / Feet: Bunfoot, Block foot, Turned foot Tapered leg, splay leg,

Seating Cushion: Box, T-cushion, Standard, Coil, Ultraplush, Feather Down,

Good: Standard Better: Coil Best: Ultraplush

Motion: Shows different modelssa and features)

Fabrics: Nuvela (features), PU (features), 100% leather: imperfections is a characteristic. In **Leather Match** PVC is used in place of using split leather. Polyester fiber; 2nd only to cotton, strong, easy to clean, nonabsorbent

Fabrics with polyester fiber: 1) **Chenille:** irregular shaped and twisted yarns together, 2) **Tweed** slubby yards woven together 3)

Microfiber: fine poly washable, breathable water repellent 4) **Leather look:** look of leather, feel of suede (frontier), Herringbone: zig zag pattern, 5) **Linen** simplest weave 6) **Velvet:** soft surface, threads stick up 6) **Slub** knots and wobbles, uneven textured looks

Additional upholstery details

Nailheads- size, color and shape vary; may be decorative or structural

Wood / Simulated wood trim: Traditional

Tufting dimple effect in backs. Can be in diamond or waffle pattern

Reclining (P1) power and manual

Adjustable headrests (P2)

Lumbar support (P3)

USB / 1 touch recliner

Cupholders: plastic or aluminum

Storage Consoles

LED Lighting

Stitching: welting, Jumbo welting, no welting

Bedroom Sets: Diagrams show all pieces available: Headboards dressers etc

Drawer construction: metal drawer glides, center drawer glides, drawer stops, ball bearings used

Headboard styles: Panel, Sleigh, Bookcase

Bed Framing Styles: Bookcase Headboard with storage, footboard w/ Bookcase headboard, Book case headboard with side storage, Twin-sized, bunk bed, sleigh bed, metal bed etc etc

RTA Furniture: standardized, customer can take home, everyone saves on shipping costs. More sustainable, lower freight = lower CO2, easy to take home (no delivery costs), can get into small spaces, Eco-friendly

Mattresses Firm, plush, pillowtop

CONSTRUCTION of Inner Spring:

- Bonnell Coils: traditional, hourglass shaped connected with cross wires
- Offset coils Flat top hinge like connection with cross wires
- Continuous coils: S Shaped and cheapest
- Wrapped coils Barrel shaped designs

Latex Foam: Rubber or another synthetic structure, limits motion

Memory Foam: conforms to body

Gel Mattress: counteracts body heat trappings of Latex and Memory foam

Hybrid mattress: combines coil, gel and foam for sleep benefits

Roll compressed method: lower cost due to lower freight and lower storage costs, Consumer can self-deliver. Ashley is one of the largest producers of rolled compressed mattresses

Dimensions of mattresses listed: Twin Twin XL, Full, Queen King and California King

Accessories

Textile terms, Designs, Pillows, TOB, Rugs, Lighting, Wall Art types, construction terms

Styles: Rustic, Casual, Industrial, BoHo, Minimalist, Urban Living

Merchandising and promotion page (Imagine)

Care of Materials Guide: Fabric, Laminate, Wood, Stone, Leather, PU and PVCS

How to Care and Clean: Natural products: Leather, wood, stone, FLAWED not identical, consistent

Ashley Warranty listed

Glossary of terms at end of book. Green leaf logo next to term means Eco-friendly. Illustrations of terms in many cases.