Opportunities & Challenges of Using 3D Virtual Mockups

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Our Team

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Our Team

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Our Agenda

Introduction	What is a 3D mock-up? Why does it matter?
Materials & Methods	3D file design, preliminary interviews and in-depth interviews
Results & Discussion	The current state of package proofing
Conclusion & Next Steps	New markets and potential applications

We are exploring the current position of virtual mock-ups in the packaging workflow.

Physical Mock-Up vs. Virtual Mock-Up?

SGS Samplepak Physical Mock-ups

“Paradoxically, the more complex the package the more difficult it is to get a mockup that accurately represents it.”

Our 3D Virtual Mock-Ups

Why do 3D virtual mock ups matter?

WHY | SKU Proliferation

WHY | Package Complexity

1970

TODAY

WHY | Package Complexity

WHY | Time to Market

Methods

Overview of the Mixed-Methods Study

1

File prep: Creating 3D Virtual Mock-ups

2

Preliminary Interviews with Various Stakeholders

3

Semi-structured Interviews with Various Stakeholders

Methods - 3D Package Mock-up Design

- Esko Studio Illustrator plug-ins were selected to support the research
- Visited local stores to observe interesting product packaging categories
- Product categories selected
  - Personal care
  - Confectionary
  - Alcohol
- Product structures
  - Paperboard box
  - Flexible foil pouch
  - Paper label
- Used familiar design from big brands

ESKO

Methods - Preliminary Interviews

- Conducted semi-structured interviews & product testing
- All attendees were familiar with Esko products
- 15 experts were interviewed to identify how they use 3D software for package prototyping
- Product testing with experts interacting with the designed packages on an iPad

2016 Esko Roadshow

Methods - In-depth Interviews

- 24 industry professionals from a dozen companies
- Companies were established in their fields, with 2+ year of experience
- Stakeholders: brand owners, designers, prepress providers, retailers and printers
- Interviews were on site at company locations
- Interviews were recorded for analysis of how individuals interact with the software

Results

Current state of package proofing

- 46% of respondents consistently used 3D proofing in their workflow
- The number of stakeholders in packaging is large and growing
- There is no standardization in workflow systems around proofing

Choice of proofing is often determined by two factors

Product Category

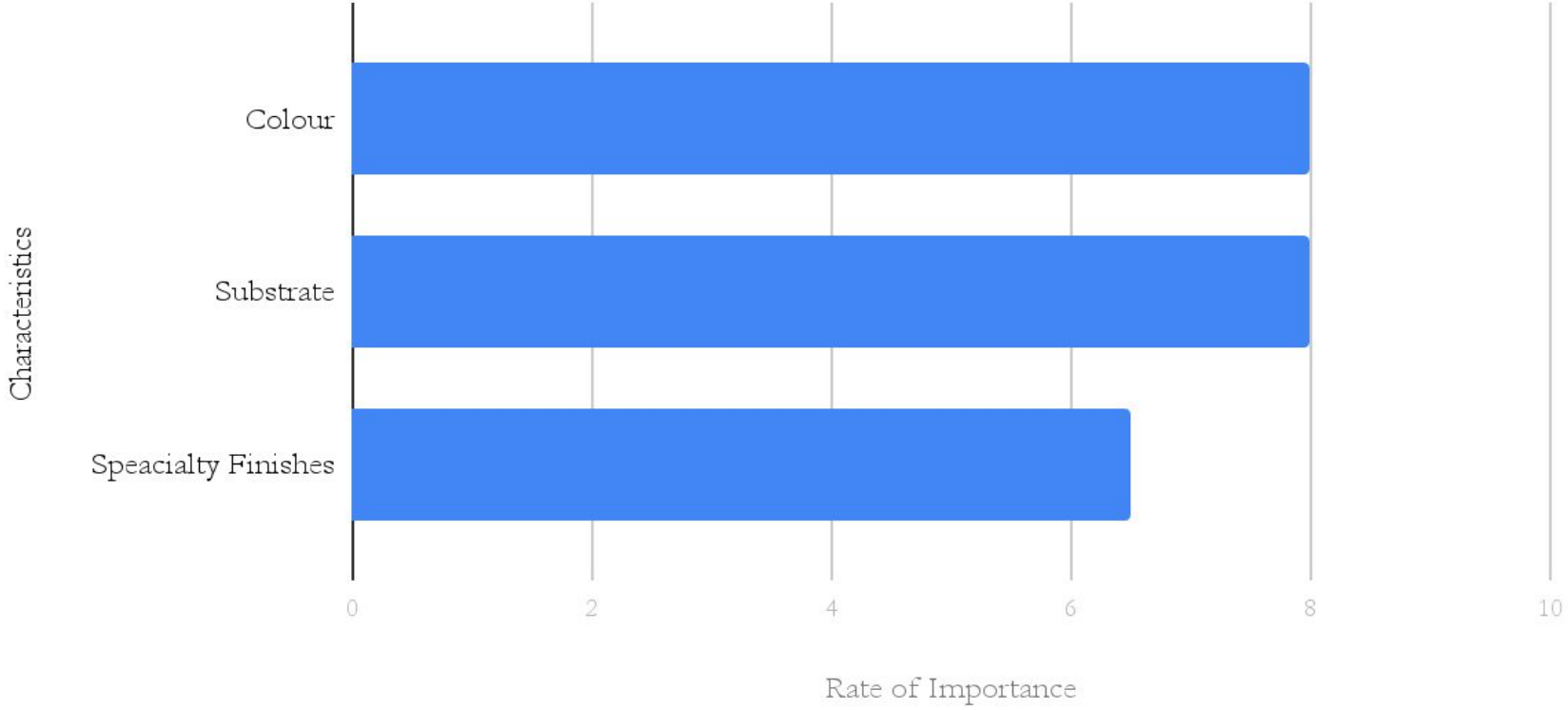
Product Lifecycle

Current state of package proofing

- Hardcopy proofs = colour
- Digital proofs = content
- Virtual proofs = presentation materials and/or complex dielines

What a Proof Proves

As noted by stakeholders interviewed



Current drawbacks in traditional proofing

- Time consuming process with inherent time pressure
- Difficult to track the changes
- Changes happen very last minute
- Initial concepting happens well in advance of final production

Current benefits in traditional proofing

- Where prepress systems that have implemented changes are easy to track and approval cycles are shorter
- Proofing for refreshes and/or reprints is far less complex
- It is easier to set colour expectations

A look at the app – Studio Visualizer on iPad

Identified benefits:

- Easy to use
- Uncluttered interface
- Interaction with the product
- Ability to view “on-the-go”
- Ability to see some substrate and finishing features

A look at the app| Studio Visualizer on iPad

Suggestions:

- Commenting and real-time viewing
- Spot colour breakdown or separations
- Ability to change the background and lighting conditions

A look at the app| Studio Visualizer on iPad

Suggestions Continued:

- Tutorial for gestures and navigation arrows for rotation
- Some finishes not seen by study participants
- Not all substrates and finishes represented in the program

Where do you see virtual mock ups being used?

Current Packaging Workflow

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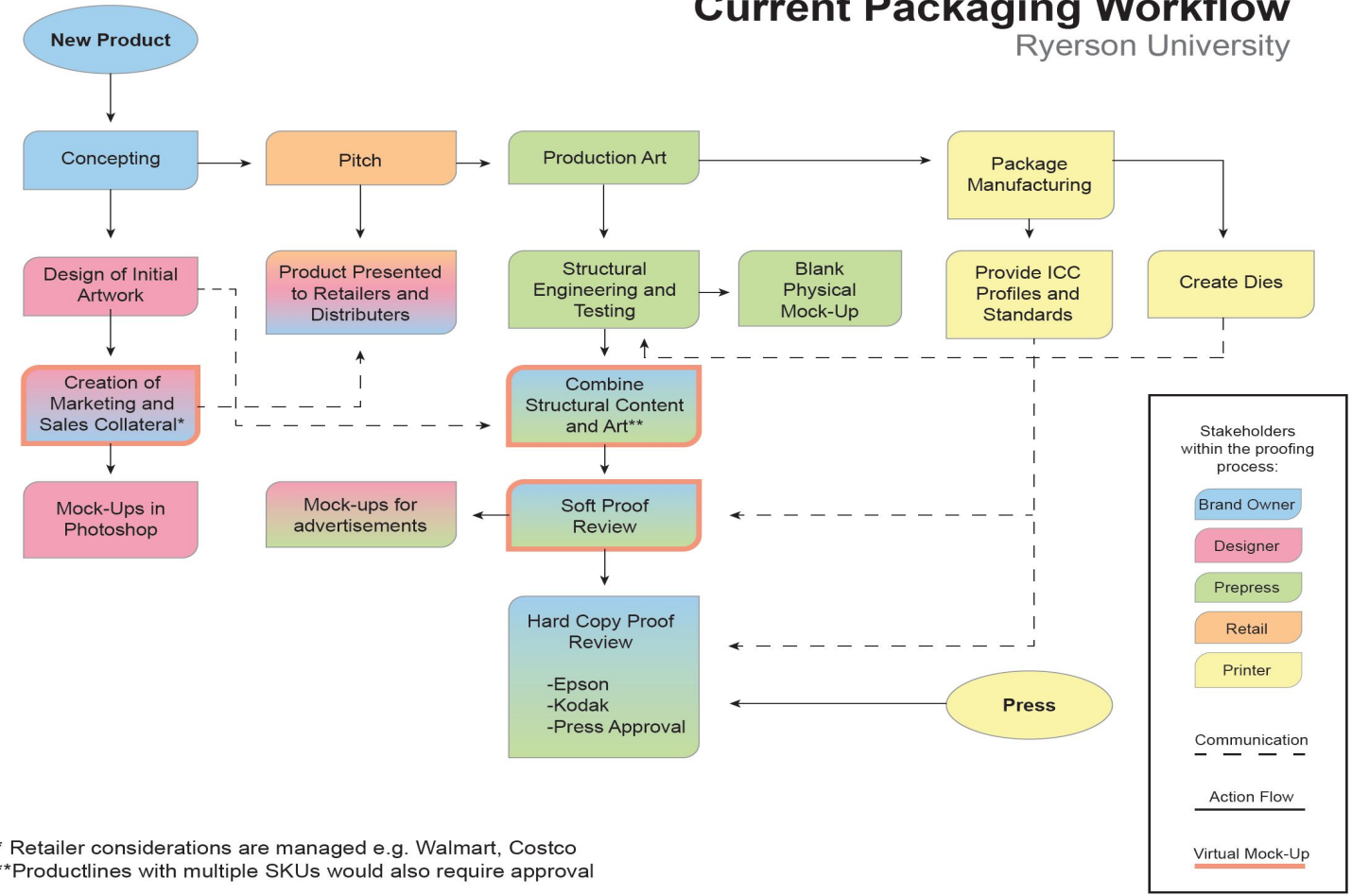

* Retailer considerations are managed e.g. Walmart, Costco

**Productlines with multiple SKUs would also require approval

New markets and potential applications

- Omnichannel retailing is today's reality
- Advertising like visuals for print, TV & online
- Sales presentations (internal and external to brand)
- Colour accuracy on tablet is coming!

Future for the studies

- Market analysis of current 3D products for the packaging industry
- Look at how people evaluate a physical proof (3D/2D) versus a virtual using eye tracking

Who will own the innovation?

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