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PROS Cons Accuracy Learning Curve • Time **Traditionalists** Physical **Added Expenses** Repeat work Lost/replacing parts or whole jobs **PROS AND** Less space to store patterns CONS • It's the future- Adapt or get left behind



- Technology helps increase the efficiency of systems, products and services.
- Computers allow you to store all your files in one digital central location
- If you want to be competitive in the modern workforce, you need to be familiar with the technology that is vital in your field
- Attractive to customers

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Types of Digitizing

- Photomodeler
- Prodim Proliner
- Leica 3D Laser
- 3D Scanning

Why start with 2D?

Easy transition from traditional method

Don't need advanced CAD knowledge

Entry level price much less than 3D setup

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Easy transition

01

Still use traditional patterns

02

Don't have to change anything about the way you pattern

03

Instead of hand tracing onto fabric you capture the image and trace pattern and clean up in CAD



CAD Knowledge

No 3D knowledge necessary

Basic lines and curves

Only a few commands (polyline, curve, group, offset, cut, split, etc).

Low Entry Level Price

To use PhotoModeler for 2D pattern and template capture you will need:

- A camera (DSLR, mirror-less, point & shoot, or mobile phone)
- PhotoModeler Standard (\$995)
- A flat area to lay down your patterns
- Occasional access to a printer
- A Windows 10/11 computer with 8GB memory (preferably 16GB) (\$200 and up)
- Rhino (or other CAD program). (\$995)
- Cutting capabilities

Photomodeler

- Uses image-based modeling and close range photogrammetry, producing 3D models and measurements from photography.
- Extracts Measurements and Models from photographs taken with an ordinary camera.
- Calibrate using either a moving camera or mounted

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The Technology

- Photogrammetry- the science and technology of obtaining reliable information about physical objects and the environment through the process of recording, measuring, and interpreting photographic images.
- Uses multiple photographs to compute the position of a point in 3D space by simple geometry by knowing: a) where the point is imaged on each photo, b) the parameters of the camera (focal length, lens distortion, etc.) from camera calibration, and c) the relative positions and angles of the camera when the photos were captured.
- · Matches locations of multiple points on two or more photos

How To Use

- 1. Take photos (from different angles if not using a mounted camera)
- 2. Load images into Photomodeler software
- 3. Choose the method
- 4. Review, measure, export
- 5. CAD
- 6. Cut!

