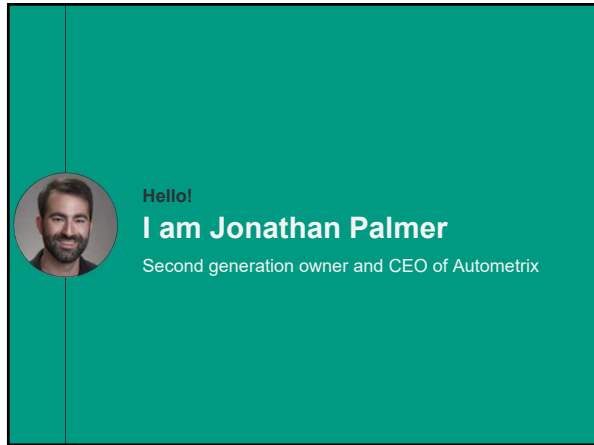
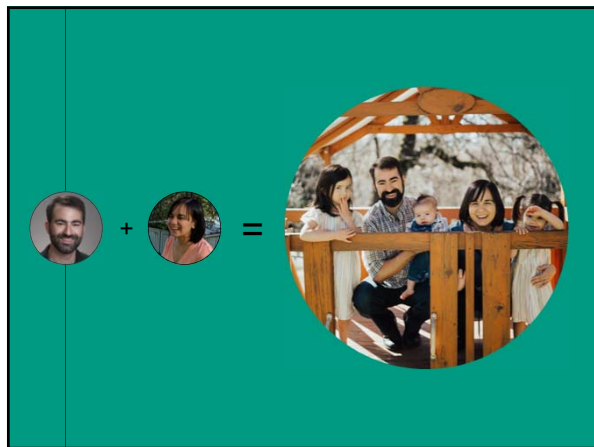




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1 **INDUSTRY 4.0**
The future is now.....but it's also the future

4

A BRIEF HISTORY


1760



Industry 1.0
Industrial Revolution begins as mechanized manufacturing is driven by water and steam power

5

Wikipedia.....





“

- Michael Scott

6

○ AND WHAT HAVE THE EXPERTS CONCLUDED?

 This article appears to **contain a large number of buzzwords.**

 This article possibly contains **unsourced predictions, speculative material, or accounts of events that might not occur.**
Please help improve it by removing unsourced speculative content. (June 2019) [Learn how and when to remove the template](#)

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 **INDUSTRY 4.0
IS A CONCEPT**
Or maybe a strategy

8

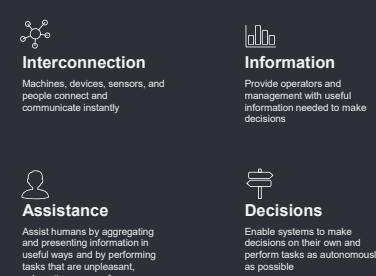
● UNDERSTANDING INDUSTRY 4.0

○ German Initiative - 2011

- "The strong customization of products under the conditions of highly flexible (mass-) production"
- "The required automation technology is improved by the introduction of methods of self-optimization, self-configuration, self-diagnosis, cognition and intelligent support of workers"

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● STILL UNDERSTANDING INDUSTRY 4.0



Interconnection
Machines, devices, sensors, and people connect and communicate instantly

Information
Provide operators and management with useful information needed to make decisions

Assistance
Assist humans by aggregating and presenting information in useful ways and by performing tasks that are unpleasant, exhausting, or unsafe

Decisions
Enable systems to make decisions on their own and perform tasks as autonomously as possible

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● IF THE FUTURE IS NOW, WHY ISN'T IT HERE?



High Cost
Up front investment for expensive new systems ends the conversation before it starts

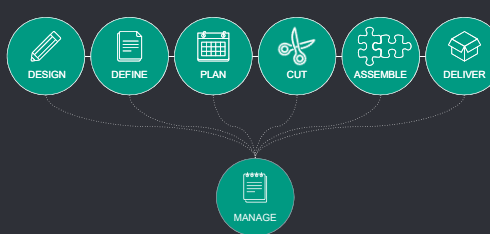
Business Model
Requires a new business model to be developed by business management that takes advantage of the available technology

Unclear ROI
How is the investment justified when trying to balance upfront cost with unknowns in the business model?

Buzzwords
Hard to break through the buzzwords to find the value that your industry can benefit from, much less your business

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● STANDARD PROCESS



DESIGN

DEFINE

PLAN

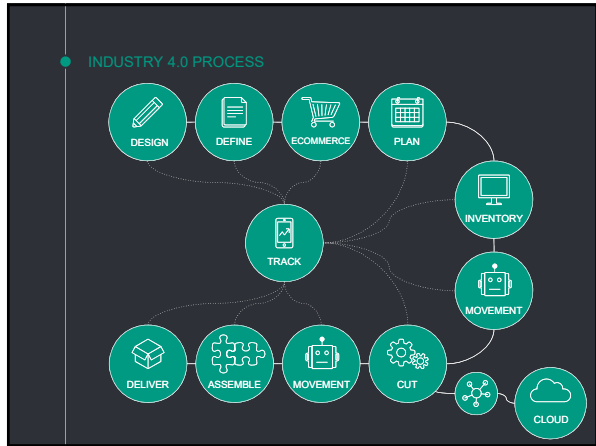
CUT

ASSEMBLE

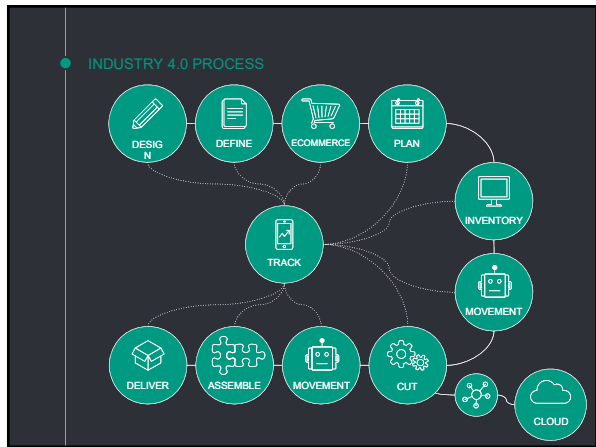
DELIVER

MANAGE

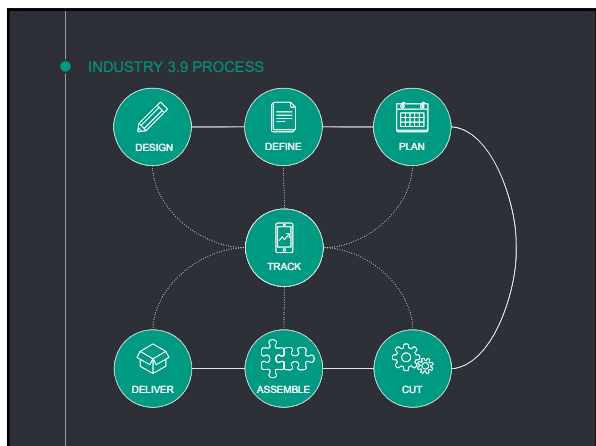
12



13





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● DESIGN & DEFINE

 DESIGN	 DEFINE
<ul style="list-style-type: none">Patterns to produce your products should be designed and stored in CADSource could still be physical designConsider <i>parameterized design</i>	<ul style="list-style-type: none">A product is made up of a group of patterns out of various material typesDefine the product digitally so that each time it is ordered there's no work required to figure out what to cut

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● PLAN & CUT


 PLAN	 CUT
<ul style="list-style-type: none">Take orders from a standard spreadsheet format and bring them into cut planning softwareProcess as many orders at once as makes sense for youAll cut file preparation is based on product definitions	<ul style="list-style-type: none">Load prepared files for machine cuttingEach cut file is based on material, not order or product, so efficient use of material and timeCollect patterns based on order information maintained by software definitions

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● PLAN & CUT


 ASSEMBLE	 DELIVER
<ul style="list-style-type: none">Complete kits of parts are delivered to next stage of productionNo mistakes or badly cut pieces causing issues with sewing	<ul style="list-style-type: none">High quality finished product ready to deliver to customersFast production, never slowed by repetitive tasks or mistakesJust in time process means no inventory on the shelf you can't deliver

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MANAGE
Flow of Information and Material in your production process from your Computer

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WHERE ARE WE?
Is industry 3.9 the present or the future?
What are we waiting for?

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● **WHERE WE ARE**

○ **Challenges to adopting Industry 3.9**

- Truly custom products - "mass customization" principle at work
- Truly integrated set of tools - lack of standardization
- Existing equipment and software already in use




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● WHERE WE ARE

○ Your next steps

- Identify principles to apply to your business
- Recognize that technology is here and will continue to get better
- Don't wait until Industry 4.0 is "here" to implement technology - too expensive anyways



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CHOOSE


Choose to partner with companies that demonstrate their ability to support you as you build your company for the future


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Thanks!
ANY QUESTIONS?

You can reach me at
jonathan@autometrix.com

 **EXPO**


Superior Patterns • Effortless Casting • World Class Solutions

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