



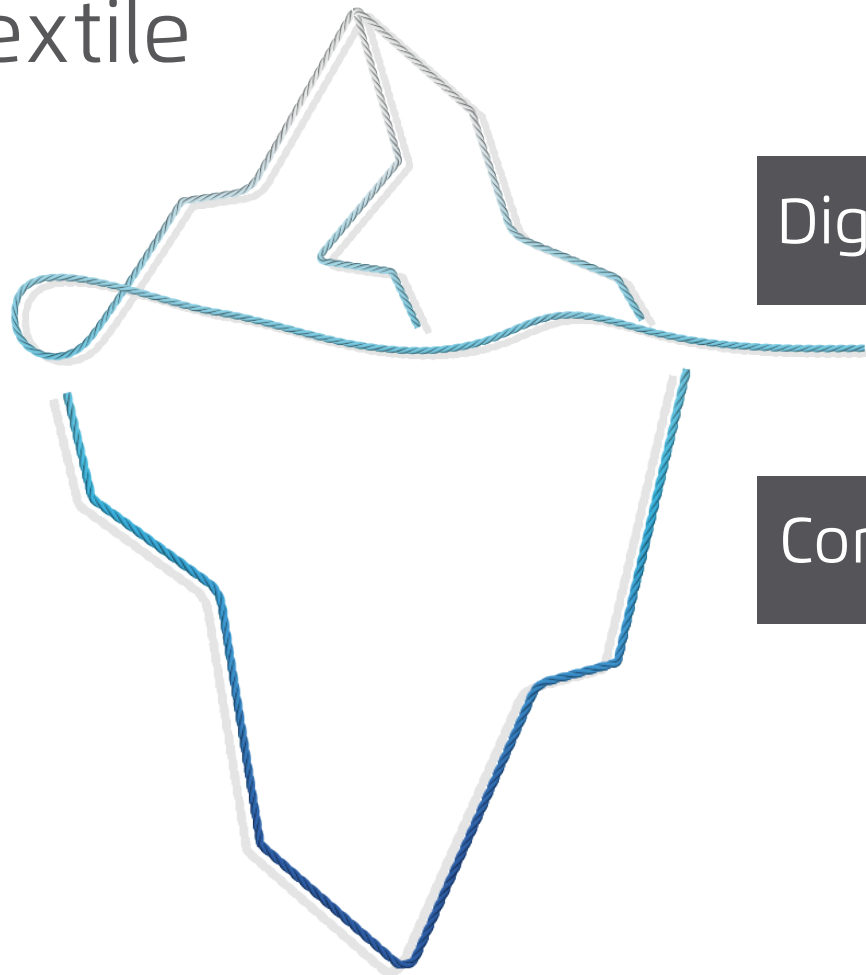
World with Digital Yarn Dyeing

Yariv Bustan

November 2020

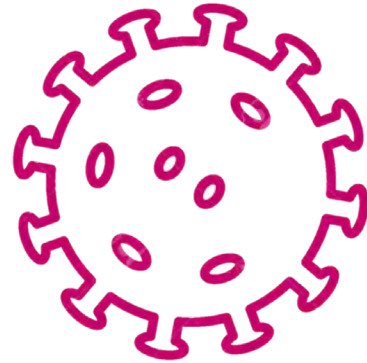


Digital in Textile



Digital

Conventional




E-Commerce is Growing Fast

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Online sales surge 41 per cent for Inditex

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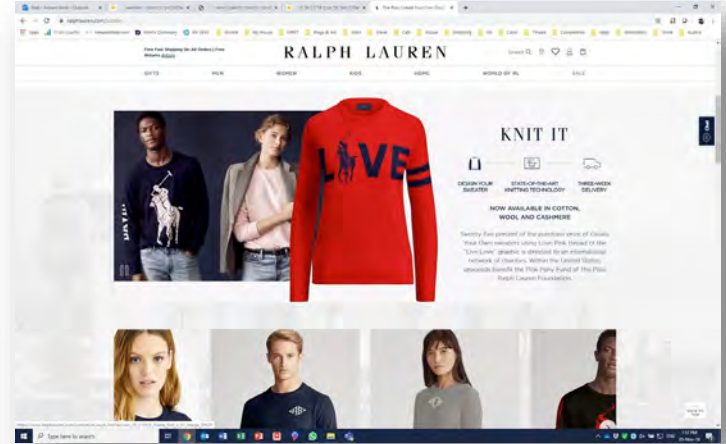
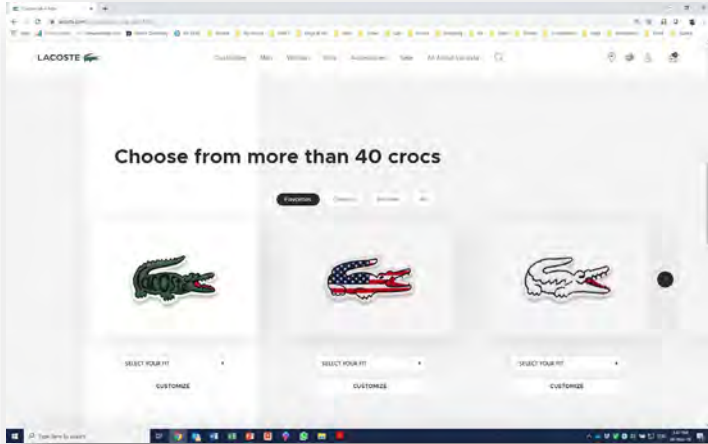
Technology Trends Marketing E-commerce Payments Mobile Logistics Corporate News



BRIEF

Adidas to open fewer stores and focus on e-commerce

Personalization is Everywhere





Dyeing is the **MOST** polluting process in one of the **MOST** polluting industries in the world

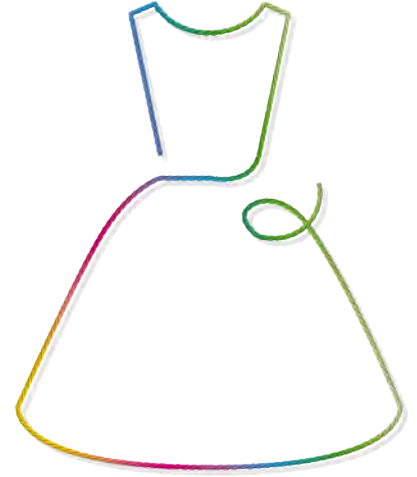
How do we address these challenges?



Sustainability

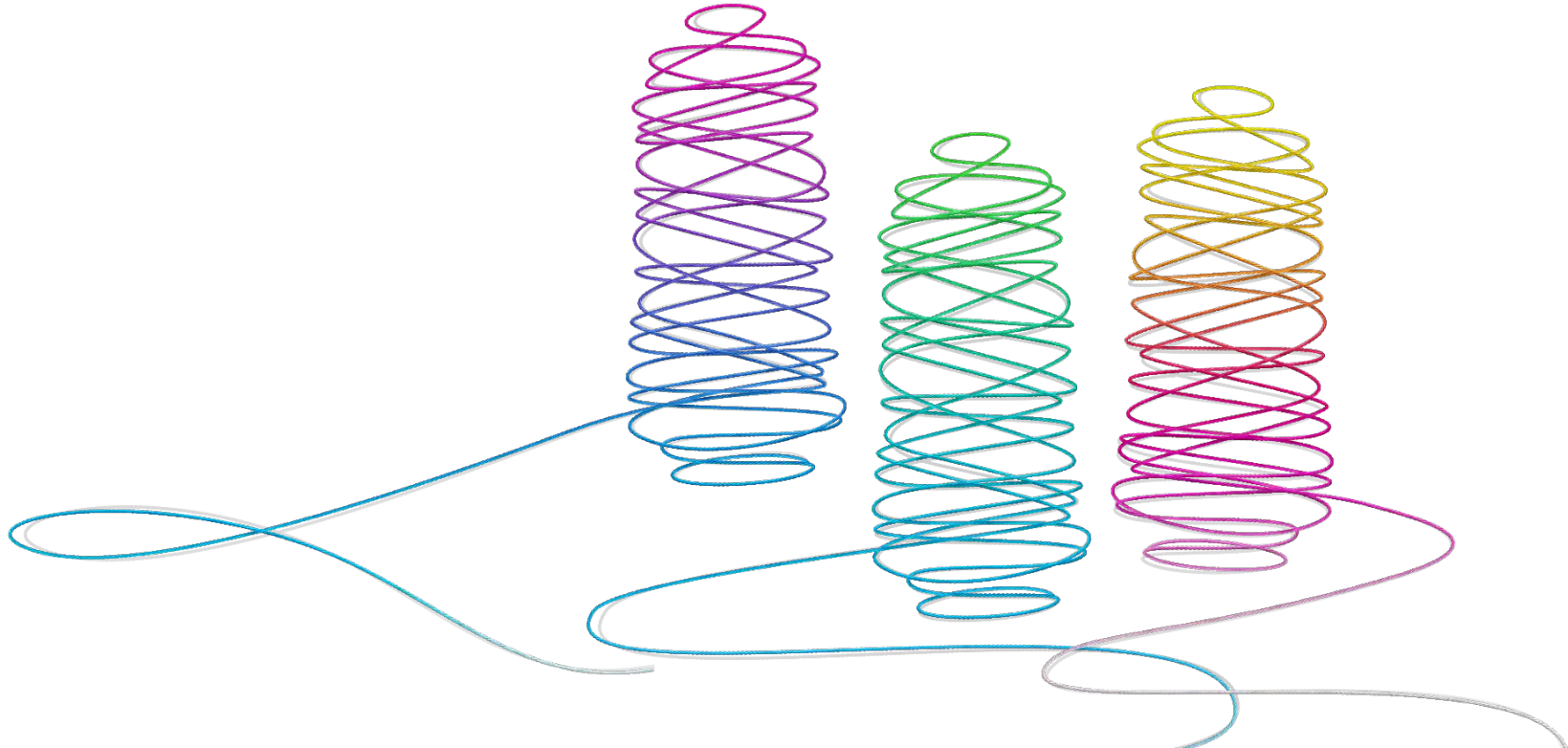


E-commerce



Personalization

Digital is the way to address the most complex industry there is!



Conventional Dyeing Process



Conventional Color Matching



Conventional Dyeing

Twine's **Digital** Dyeing Process



SnapMatch™
Digital Dye-to-Match



Conventional Dyeing

Twine's **Digital** Dyeing Process

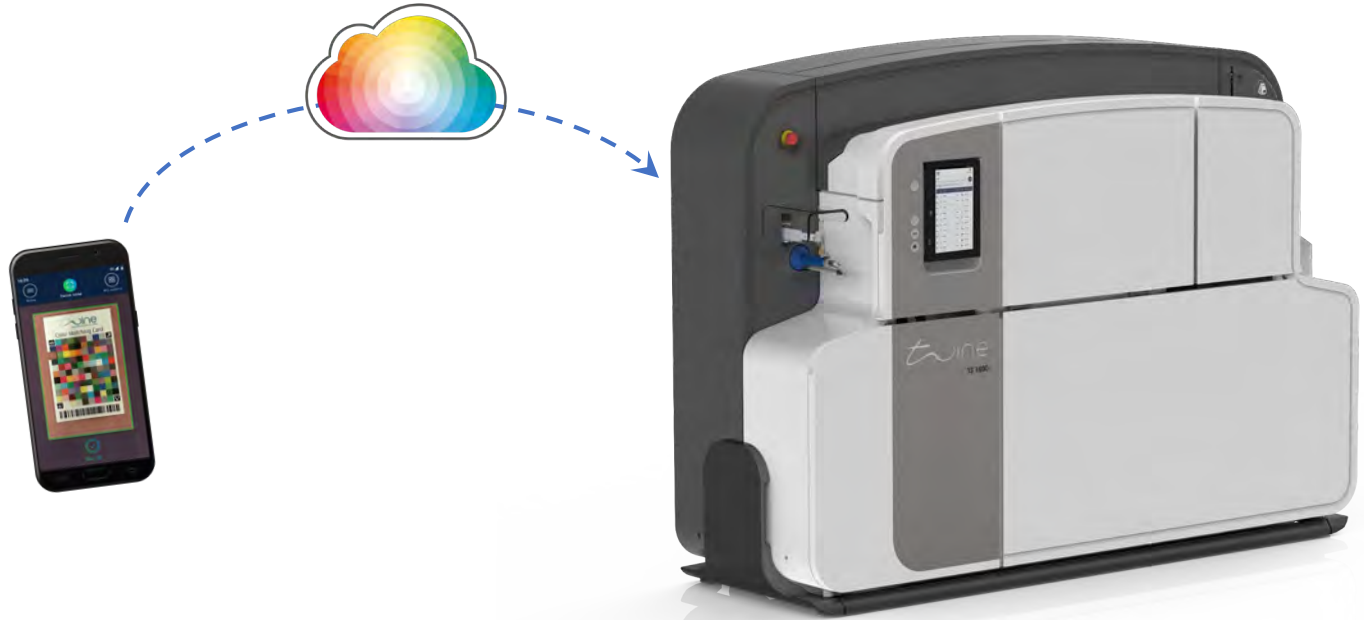


SnapMatch™
Digital Dye-to-Match



TS-1800
Digital Thread Dyeing System

Twine's **Digital** Dyeing Process



SnapMatch™
Digital Dye-to-Match

TS-1800
Digital Thread Dyeing System

DST™ - Digital Selective Treatment



DST™ - Digital Selective Treatment



DST™ - Digital Dyeing



Industry Situation **Appraisal**

We are here



Basic

- Traditional production
- 'Bricks & Mortar' Retailers

Computerized

- PLM
- Digital print
- Digital Front End / digital design

Augmented

- Virtualization & 3D
- Limited Personalization

Industry Situation **Appraisal**

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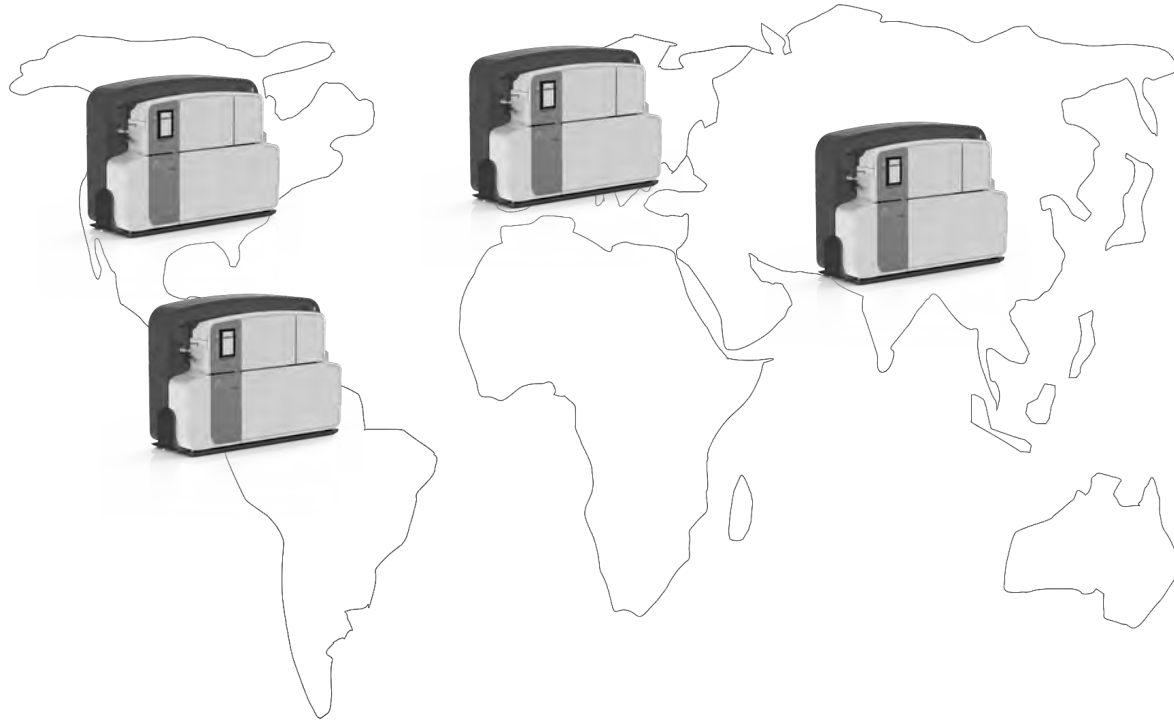
Paradigm Shift

- Micro factories
- Virtual Inventory
- Sell-then-manufacture
- True mass Personalized

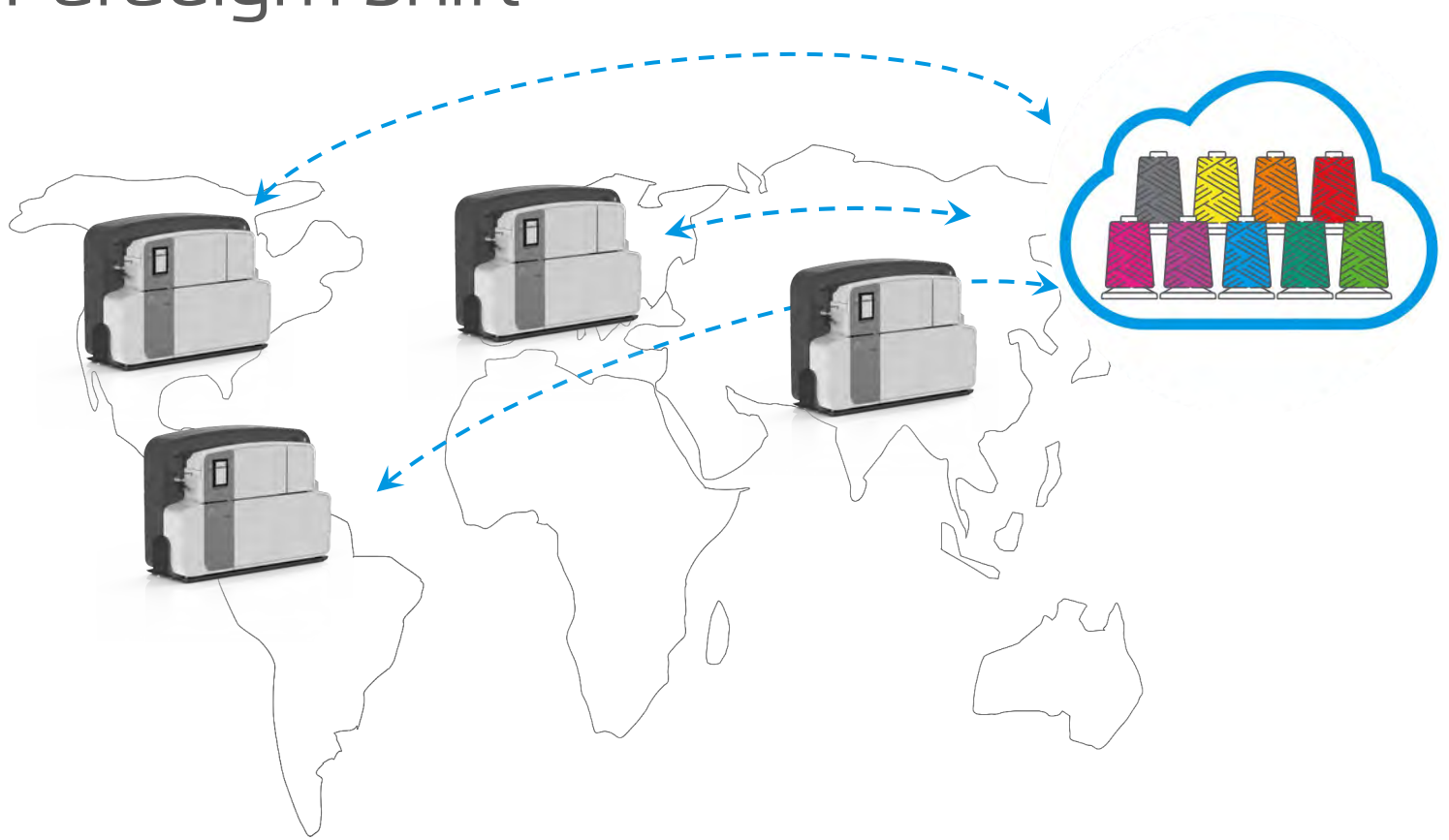
Digital Paradigm Shift



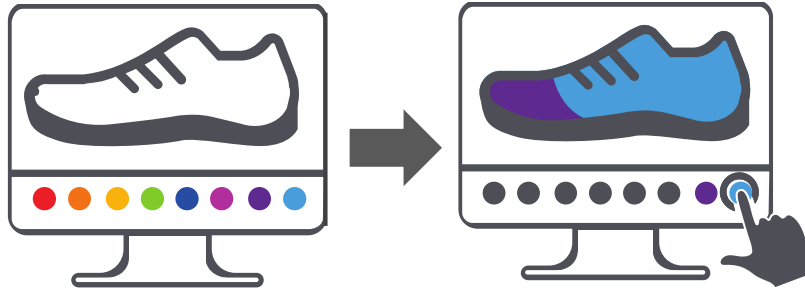
Digital Paradigm Shift



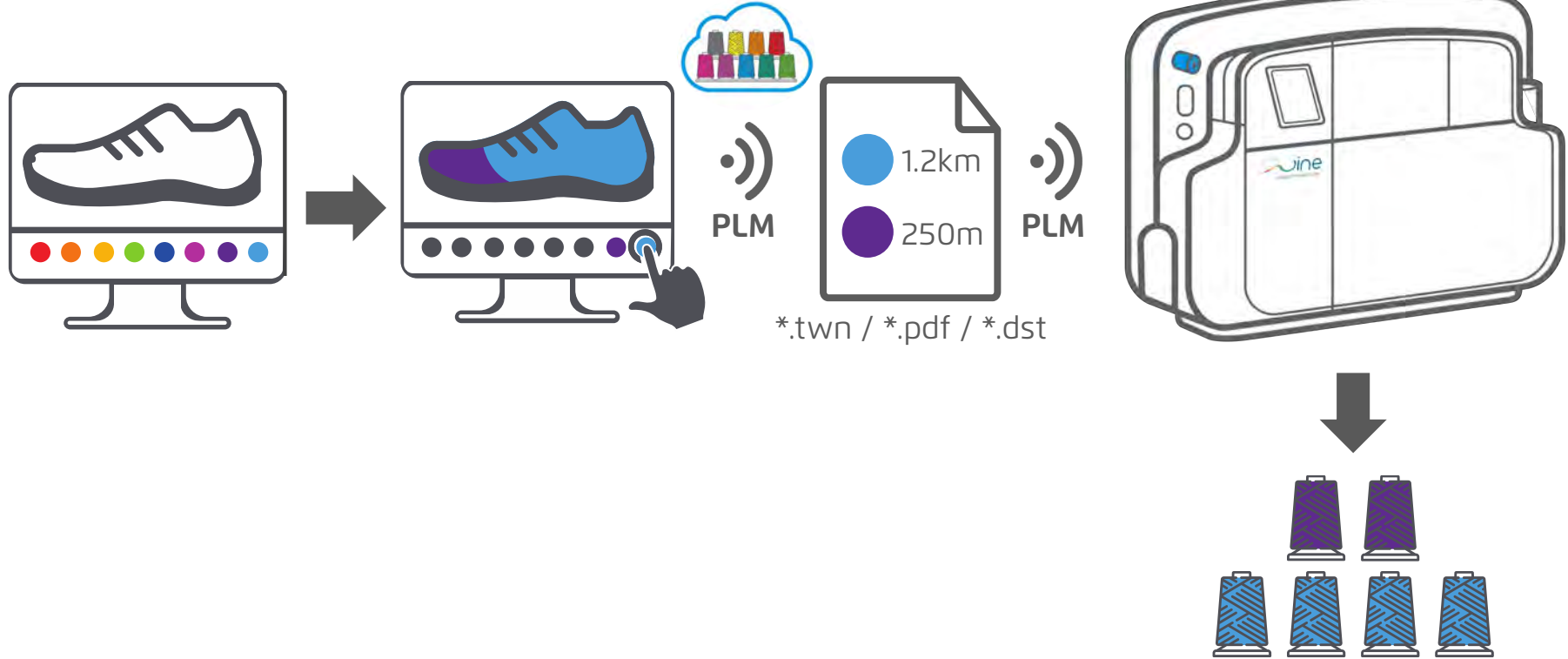
Digital Paradigm Shift



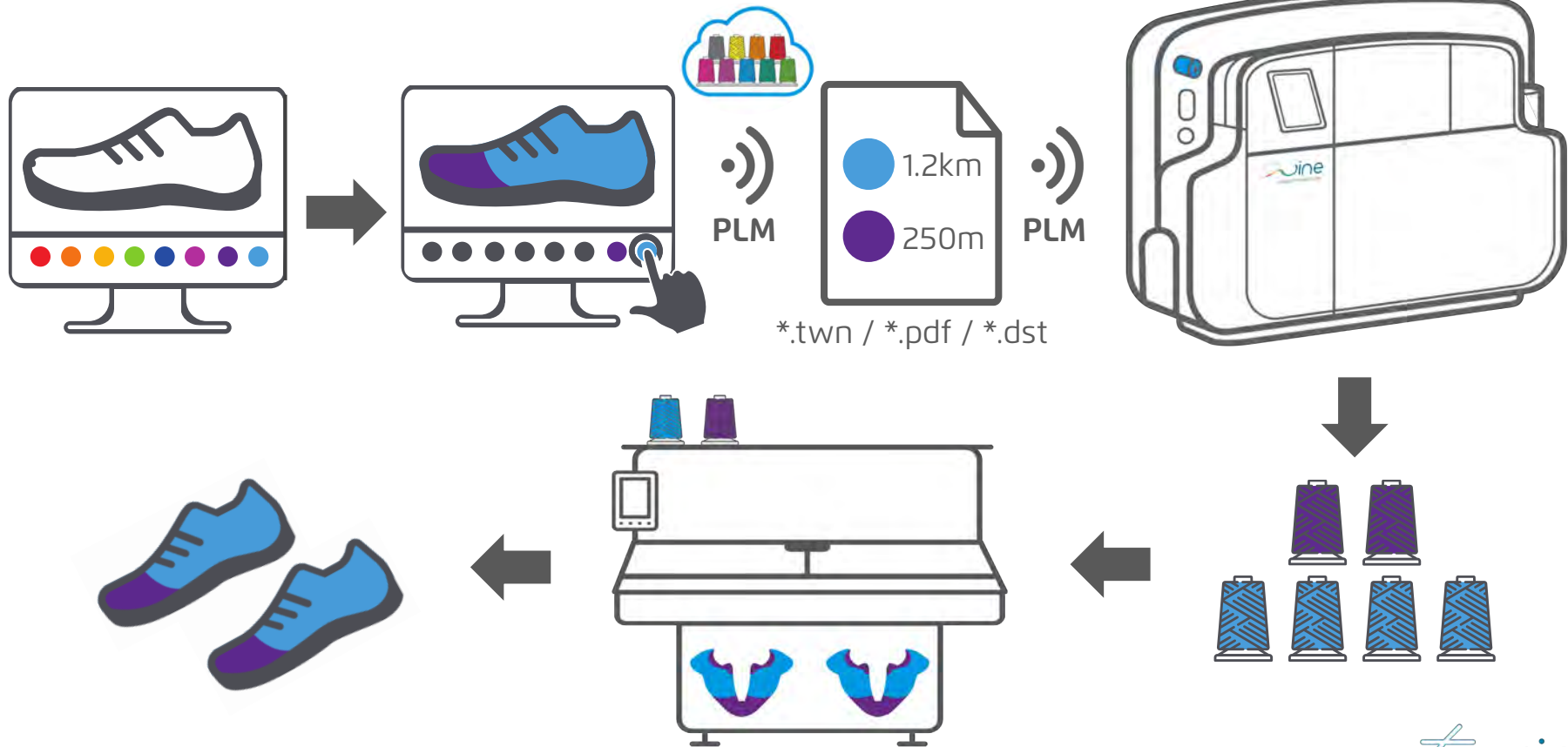
Online Sell **Then** Manufacture

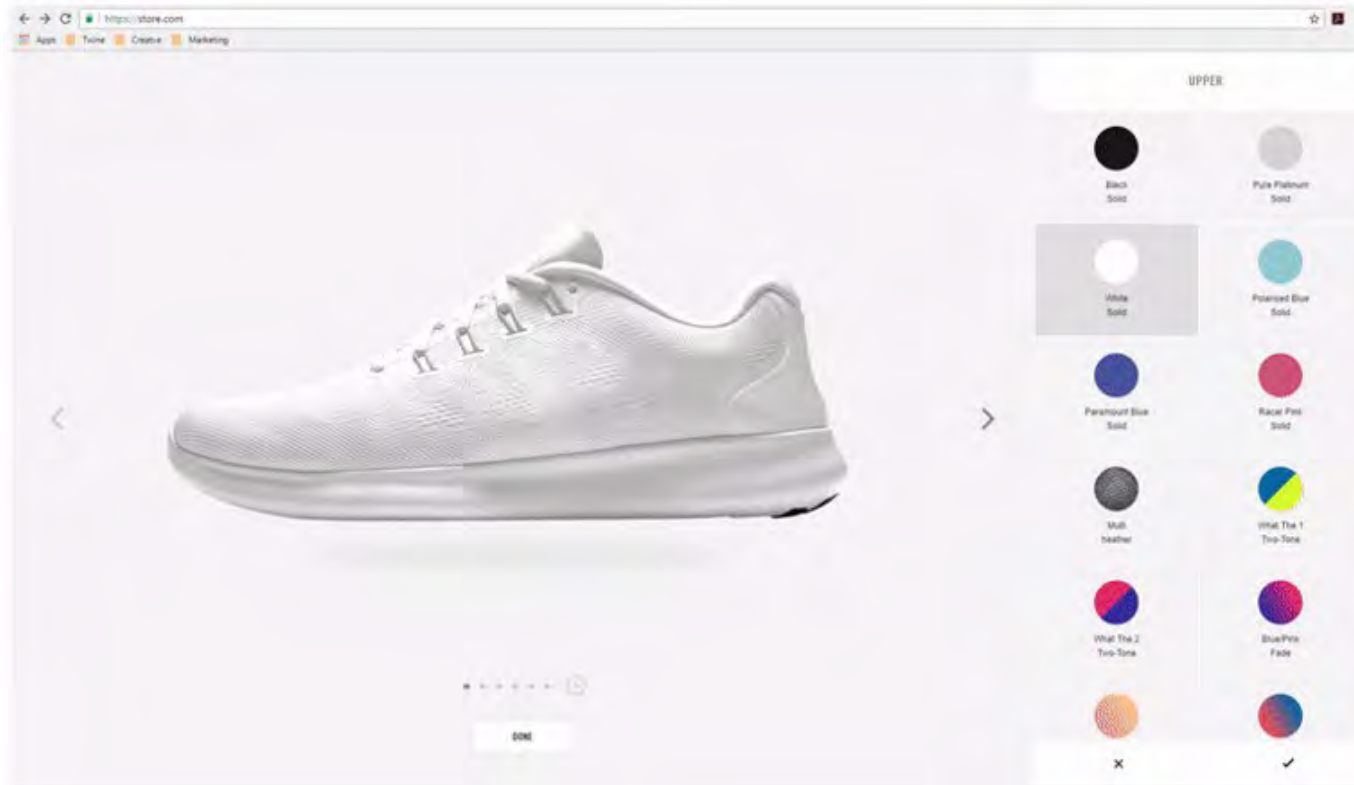


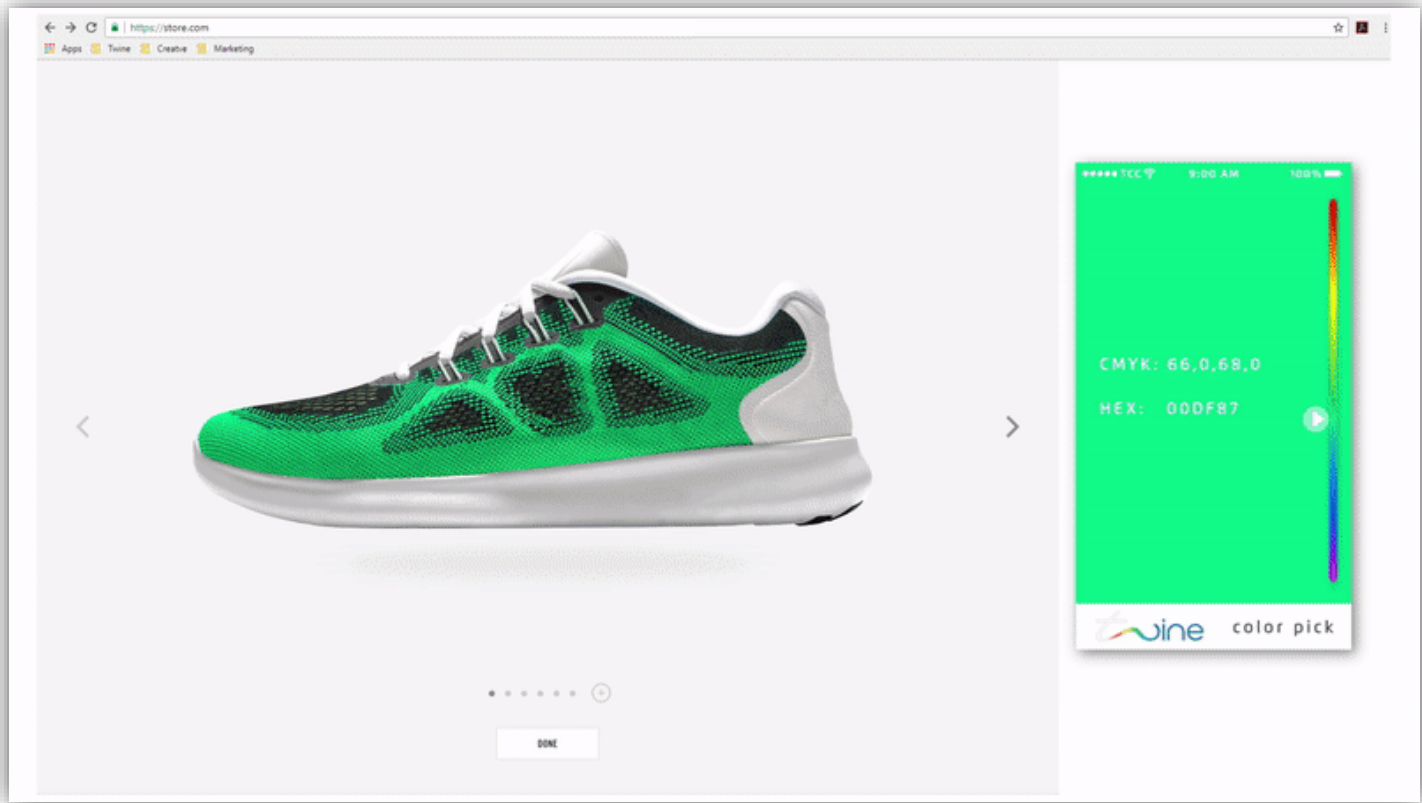
Online Sell **Then** Manufacture



Online Sell **Then** Manufacture







PERSONALIZED!



Embroidery



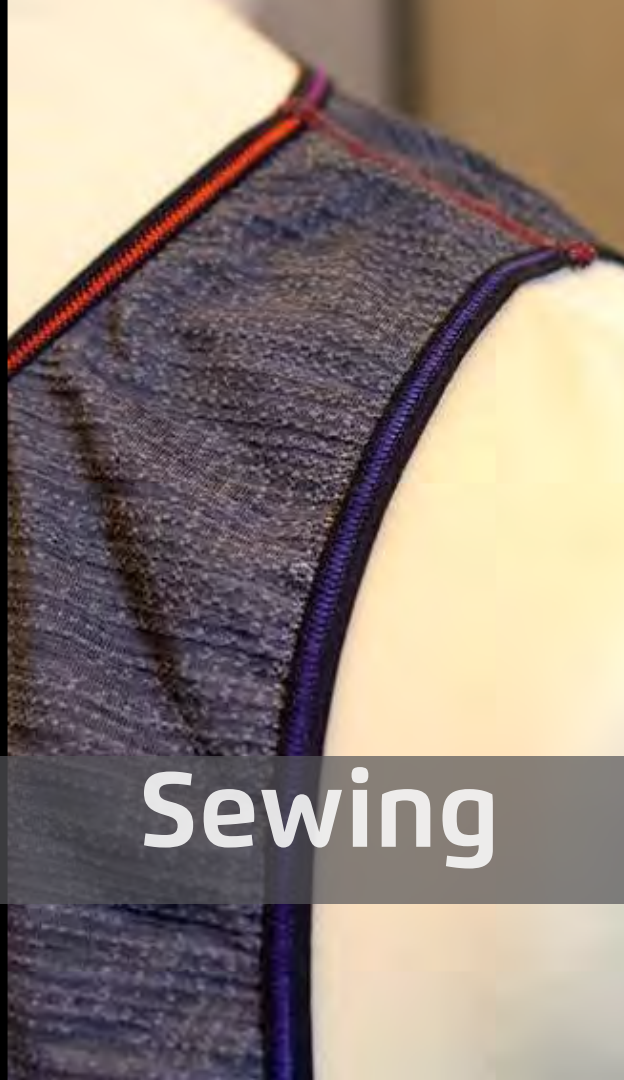
Sewing



Knitting



Embroidery



Sewing



Knitting



In the **past**, it would be impressive if an assembly line can produce 2,000 of the **same** garments in five minutes.

Today onward, making 2,000 **DIFFERENT** garments in five minutes will be more impressive



Jack Ma, Alibaba



THANK YOU