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A vision for the future using Product Lifecycle Management (PLM) as a platform for operational excellence and business transformation

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Product Lifecycle Management (PLM) as a Platform for Business Change

Leveraging technology to meet industry challenges

University of
HUDDERSFIELD
Inspiring tomorrow's professionals



Business-friendly Solutions



Jo Conlon FHEA, MCMI, C.Text.ATI

- Textile Technology graduate with 18 years experience in the clothing industry
- Technical and Sourcing Manager
- Joined UoH 2009, Fellow of the Higher Education Academy, a member of the Chartered Management Institute and an Associate of the Textile Industry



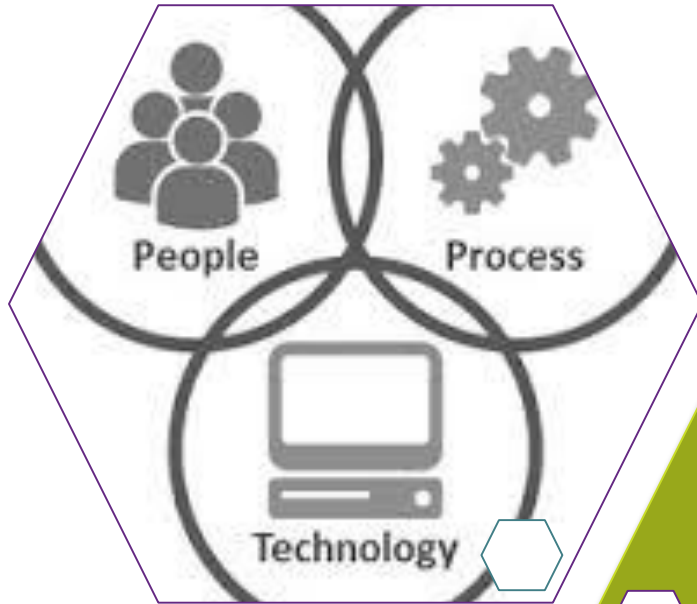
Lakshmi Narayanaswamy – Lead Consultant

- An Engineering graduate (Textile technology) with 12 years of Experience. Played various roles in Apparel Industry including sourcing & vendor management
- Key PLM Engagements : George-Asda (U.K), Lacoste(France), LCWaikiki(Turkey)

- Future professionals as **change-agents**
- **A transformational mind-set** is required for strategic organizational efforts like PLM that are more complex than just a technology implementation
- **People**, product and processes



What is product lifecycle management (PLM)?



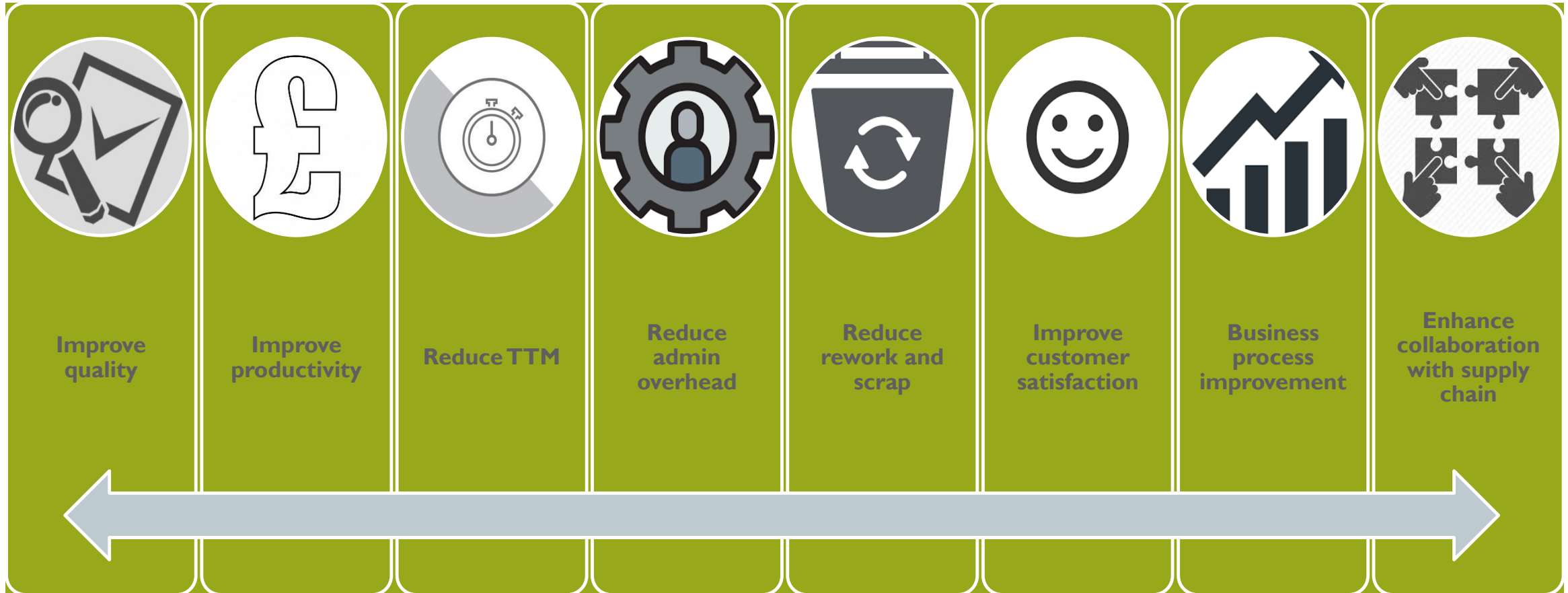
PLM 1.0
Operational Excellence

PLM 2.0
Digital Industry



<https://www.accenture.com/gb-en/insight-digital-product-lifecycle-management>

PLM 1.0 Driving Operational Excellence



PLM 2.0 LANDSCAPE

Enablement

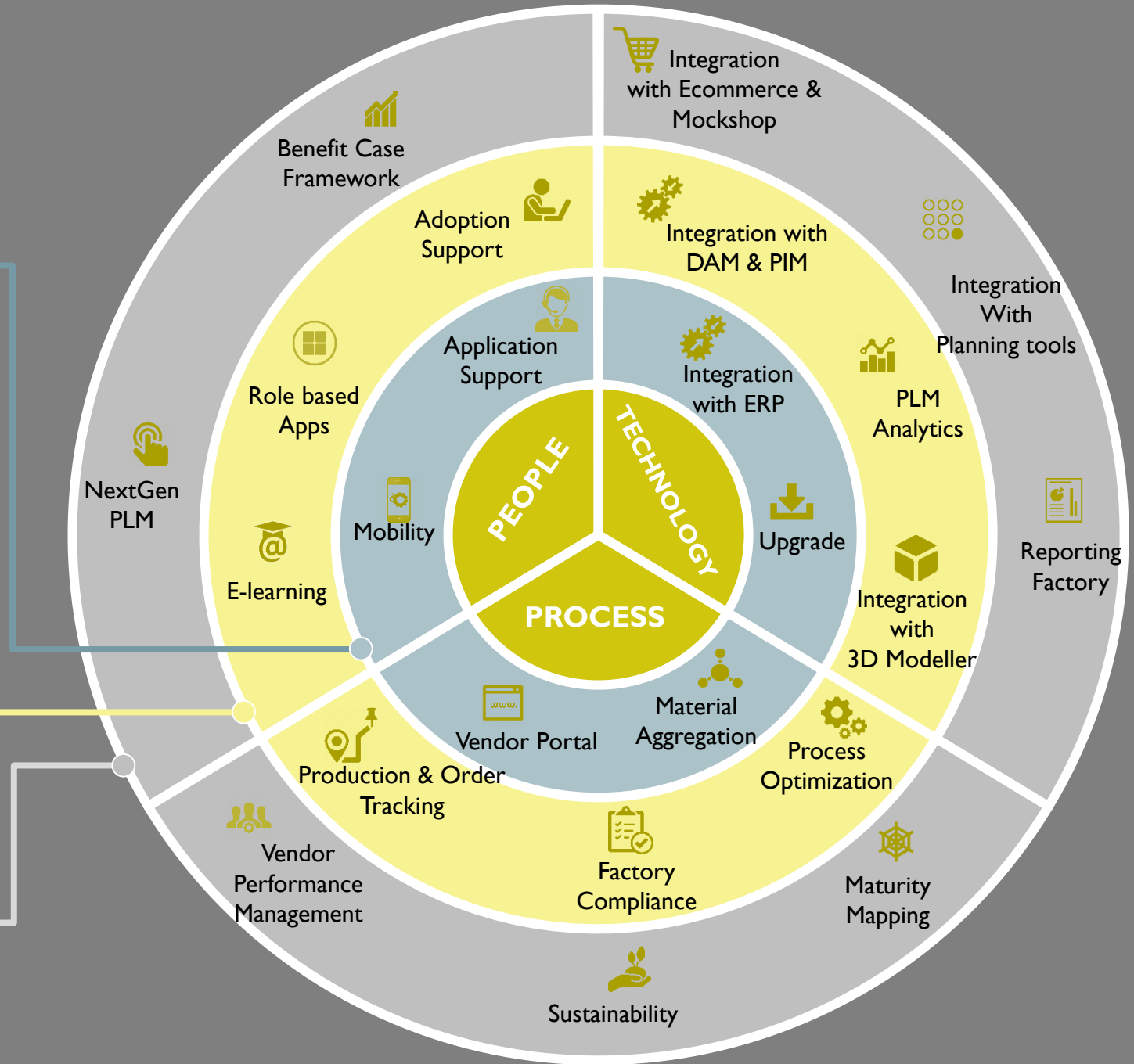
A strong PLM core is an enabling platform for change

Differentiation

Emerging technologies and Solutions can provide data and improve decision making

Transformation

PLM operates at cutting edge of information and technology, to transform enterprise's business model



What's being done today?



INNOVATION IN MATERIALS

Fly knit - produces 60% less waste than traditional cut-and-sew methods. Since 2012, the technology has reduced nearly 3.5M pounds of waste



RECYCLE

Used Tee shirts to new jeans

Plastic Bottles to Performance Products



RE WEAR & REUSE

Second hand clothes

Turn into Other Products, like industrial rag, insulation, running tracks etc.



RENEWABLE ENERGY

Move towards using renewable energy sources



REPAIR

Empowering customers by making quality products that can be repaired and encouraging the same

Sustainable Apparel coalition



Generates standardized performance **scores**



Measure Environmental and Social impacts on Sustainability



Online self-assessment tool for Apparel and Footwear Industry



Gives an overview of the **sustainability performance of a product** and a company



Walmart



KERING
ecco

H&M BROOKS



INDITEX



WILLIAMS-SONOMA

patagonia

BURBERRY



BRAND

- Allow Brands to benchmark their performance and discover where they stand compared to other Brands.
- Can share score with other SAC members, which can lead to sharing best practices and new partnerships



FACILITY

- Benchmarking by facility type allows facility managers to compare their performance against their peers.
- Can identify areas for improvement and outline the current best practices in the field

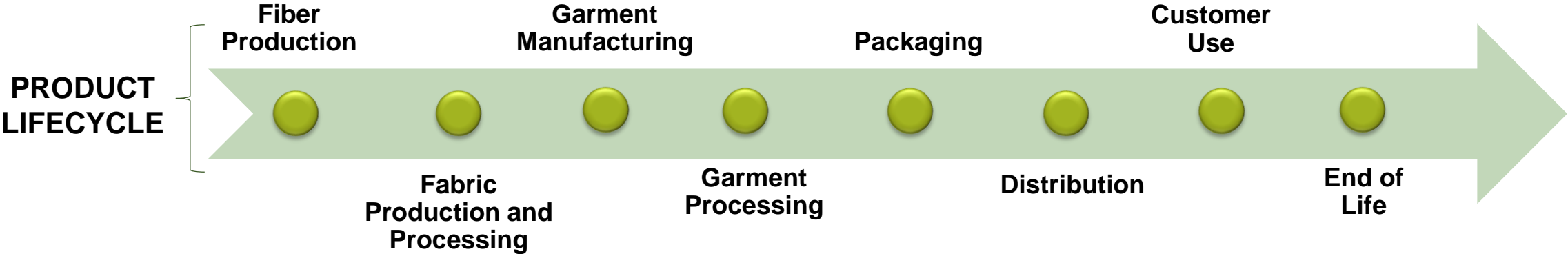






PRODUCT

- Helps to measure environmental impact of the product at different stages of Product Life Cycle
- Engage designers and developers in making sustainable choices at the very earliest stage of prototype design



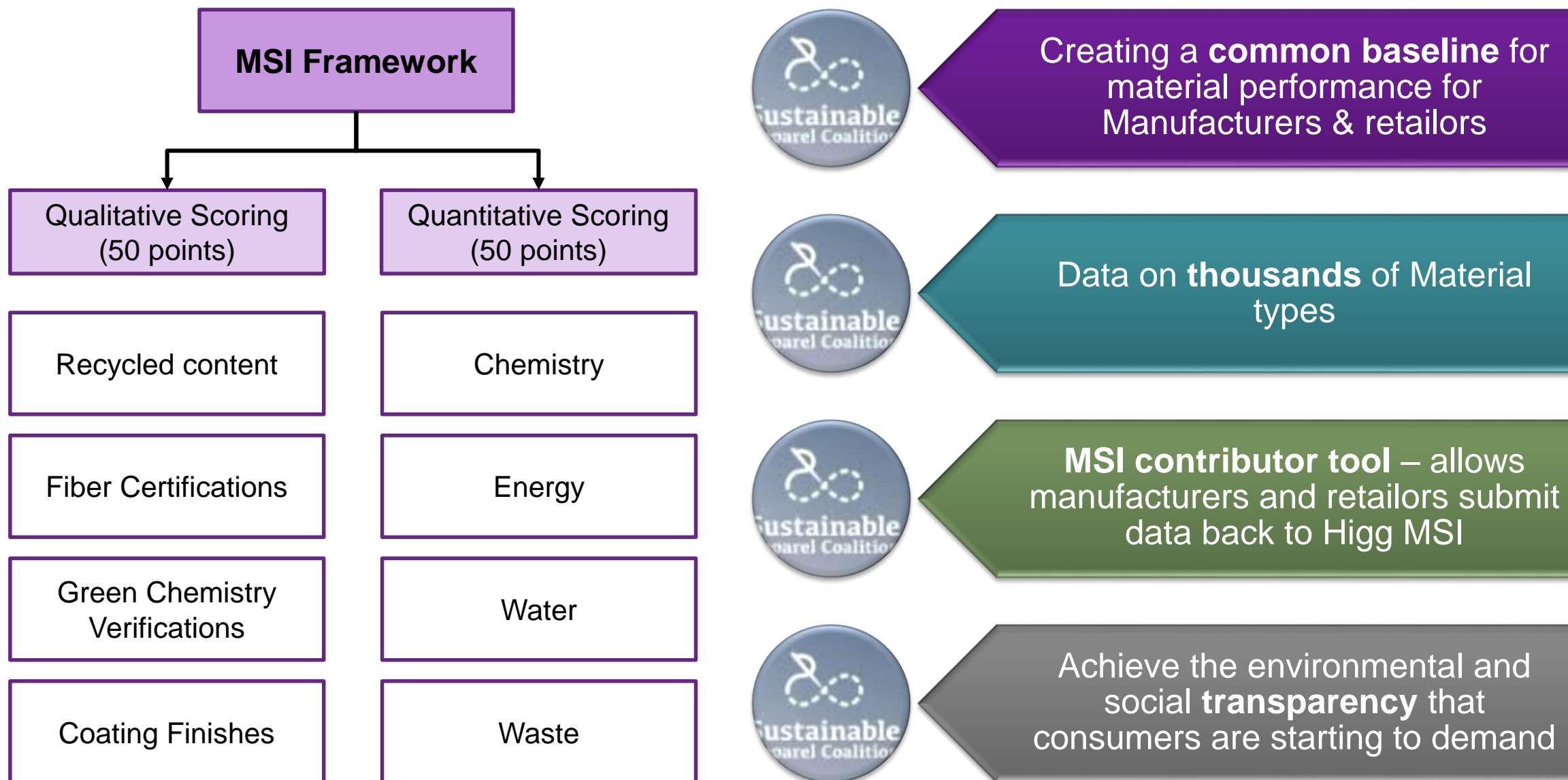
Environmental Impacts at every stage product lifecycle

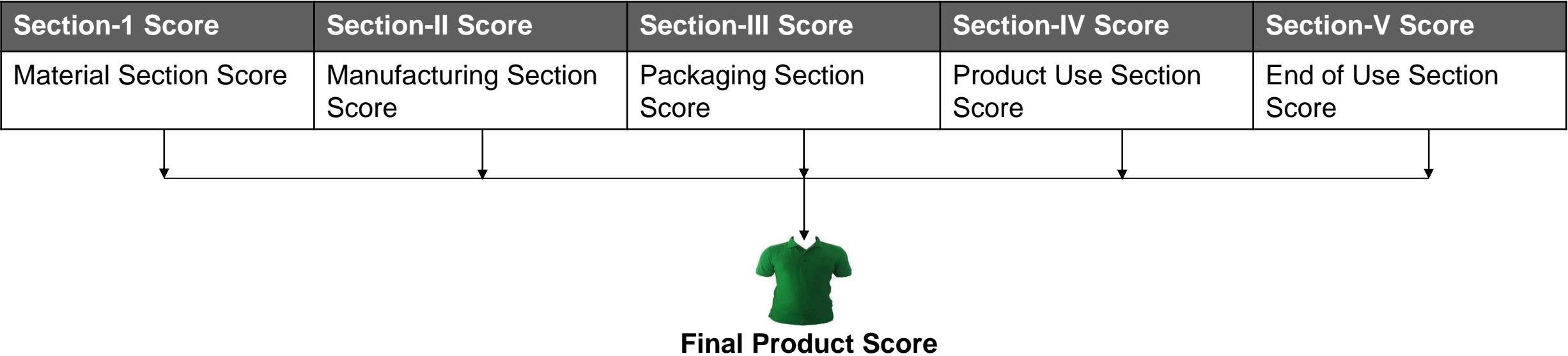
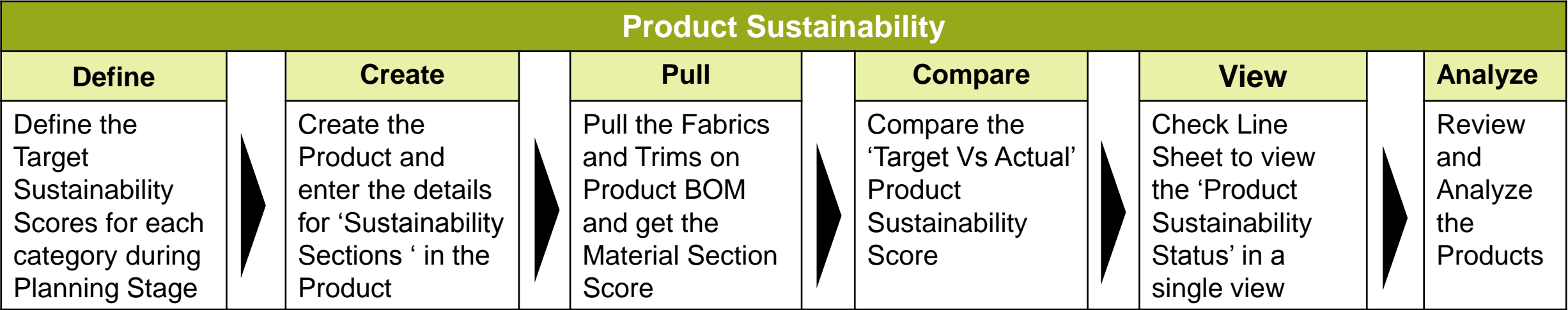


 Energy Used and Green Houses Gas Emissions	✓	✓	✓	✓	✓	✓	✓	✓
 Water Used	✓	✓		✓			✓	
 Chemicals Used	✓	✓		✓	✓		✓	
 Waste Generation	✓	✓	✓		✓		✓	✓

Lets set one common standard which can be used globally

MSI (Material Sustainability Index) Framework





Screenshots – Fabrics & Bill of Materials

Material Fabric:

Material:

Material Composition	Material Percent	Standard Material Name	Standard Material Score
Cotton	50	Cotton Fabric, Knit	26
Linen	50	Linen Fabric	22

Edit | View

BOM Details

Add New BOM

Bill of Materials: 001 : Wrapper Style Skirt BOM

Update

Header Attributes

Views:

Sustainability View

Pricing Date: 06/12/2017

Run

Material Sustainability Details:

Material

Fabric Content Score

41

Coating and Laminate Applied

No

Coating and Laminate Applied Value

4

Dyeing Method

Not Dyed

Dyeing Method Value

10

Reduced Chemical Impact

Yes

Reduced Chemical Impact Value

9

Material Score


64

Screenshots product score

Apparel 2017 Holiday Womens > 10341 Printed Blouse > Details

Summary Details Specifications Sourcing Product Planning Approvals

10341 Printed Blouse



Style ID 10341 Printed Blouse
Season Placeholder
Source 002: CAR
Specification 002: Print
Colorway Angel

(Change)

General Attributes:

Sustainability - Material Section:

Sustainability - Manufacturing Section:

Product

Garment Finishing Best in Class Garment Finish
Garment Finishing List High Efficiency Dye Treatment
Garment Finishing Value 30
Marker Efficiency 90
Marker Efficiency Value 40

Sustainability - Packaging Section:

Product

Does the Product Use Packaging?
Product Packaging Used Value
If the product uses packaging, is your organization pursuing efforts and strategies to reduce packaging?
If Yes, Please Specify:
Sustainable Packaging Value

Sustainability - Product Use Section:

Product

What is the level of care required for the garment? Low Impact Care
Level of Care Required For the Garment Value 40
Does garment have low impact care label instructions? No
Low Impact Care Label Instructions Value 0

Sustainability - End Use Section:

Product

Can the individual material types be accurately identified by end of use facilities or processes?
Material type be identified by end use process value
Is this product made of a single material type or can it be easily separated into individual material types?
Product made of single material type or easily separated value
Can these individual material types be recycled via existing infrastructure or processes?
Recycling individual material types via existing processes value
Can the materials be used in closed-loop recycling processes?
Closed loop material recycling value

Sustainability Group:

Product

Material Score 2
Manufacturing Score 18
Packaging Score 0
Product Use Score 8
End Use Score 9
Actual Sustainability Score 35
Target Sustainability Score 50

Apparel 2017 Holiday Womens > Development > Line Sheet

Planning Line Sheet Line Boards Calendar Dashboards

Apparel 2017 Holiday Womens : Line Sheet Viewer







Actions:
Views: Sustainability View

Results 1-10 of 10 in 0.047 Seconds

Hide Images

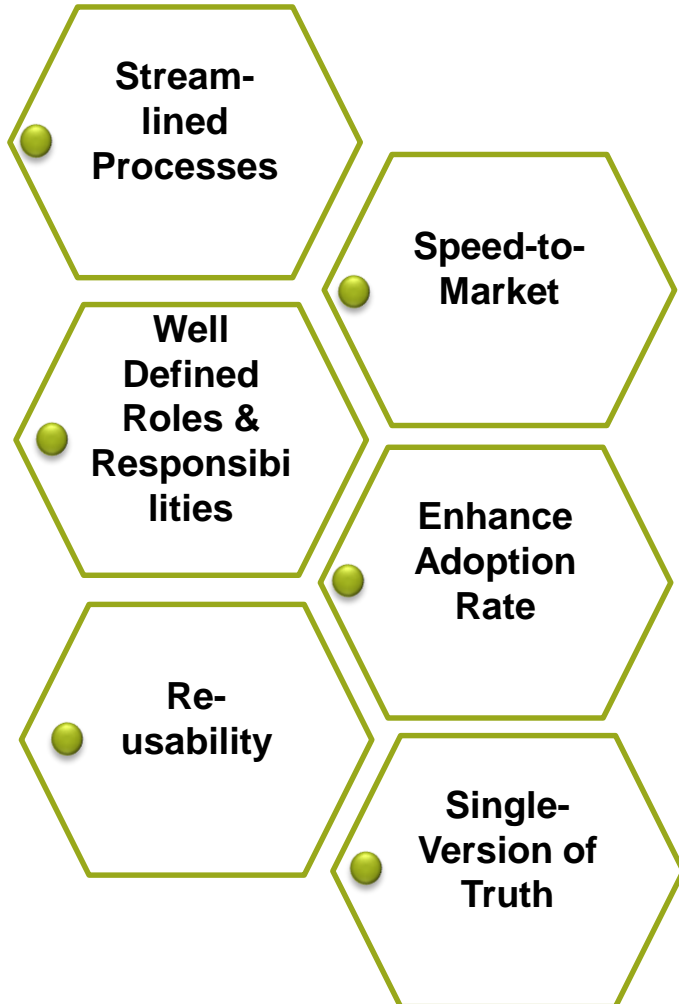
Filters Options Run Edit Line Sheet

Hide/Show columns Sort Options Expand Selected

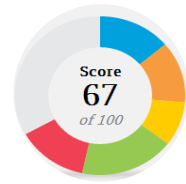
	Style ID	Style Category	Material Section Score	Manufacturing Score	Packaging Score	Product Use Score	End Use Score	Actual Sustainability Score	Target Sustainability Score	Product Sustainability Status
	10341 Printed Blouse	Tops	18	18	10	20	15	81	85	
	10342 Polo T-Shirt	Tops	16	15	9	14	15	69	50	
	10343 Flower Print T-Shirt	Tops	0	18	10	10	15	53	80	
	10344 Crew Neck Top	Tops	0	18	5	20	15	58	65	
	10345 V Neck knitted top	Tops	0	19	10	20	15	64	90	
	10346 Animal Print T-Shirt	Tops	0	19	9	18	15	61	80	

Product Sustainability Status

PLM



SUSTAINABILITY SOLUTION



Plan Collection with Sustainability Target

- Set a direction for the designers to plan collection accordingly
- Can export the data in excel/pdf format



Generate Reports

- Generate a consolidated report for each Season
- Can identify areas for improvement
- Can track how much % of Sustainability Target has been achieved



Dashboards

- Can get a Snapshot of Sustainability score for each Product in a Season

Thank you

Connect with us to understand how
ITC Infotech can help your business.

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Web: www.itcinfotech.com

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Business-friendly Solutions