

“Biodatarium is a startup that is active in Automated visual recognition systems for agricultural pests in traps.”

This case study shows the transformation of this start-up business model thanks to the CircularStart training materials.










Sector/Activity: ICT, Agriculture
Circular Business Model Category: Uphill / Tophill
Circular Business Model Strategy(ies): Maximising Production Efficiency / Circular sourcing / Life Extension Services / Results oriented services
Circular Start-up type: Design / Service / Nature-based

STARTING POINT:

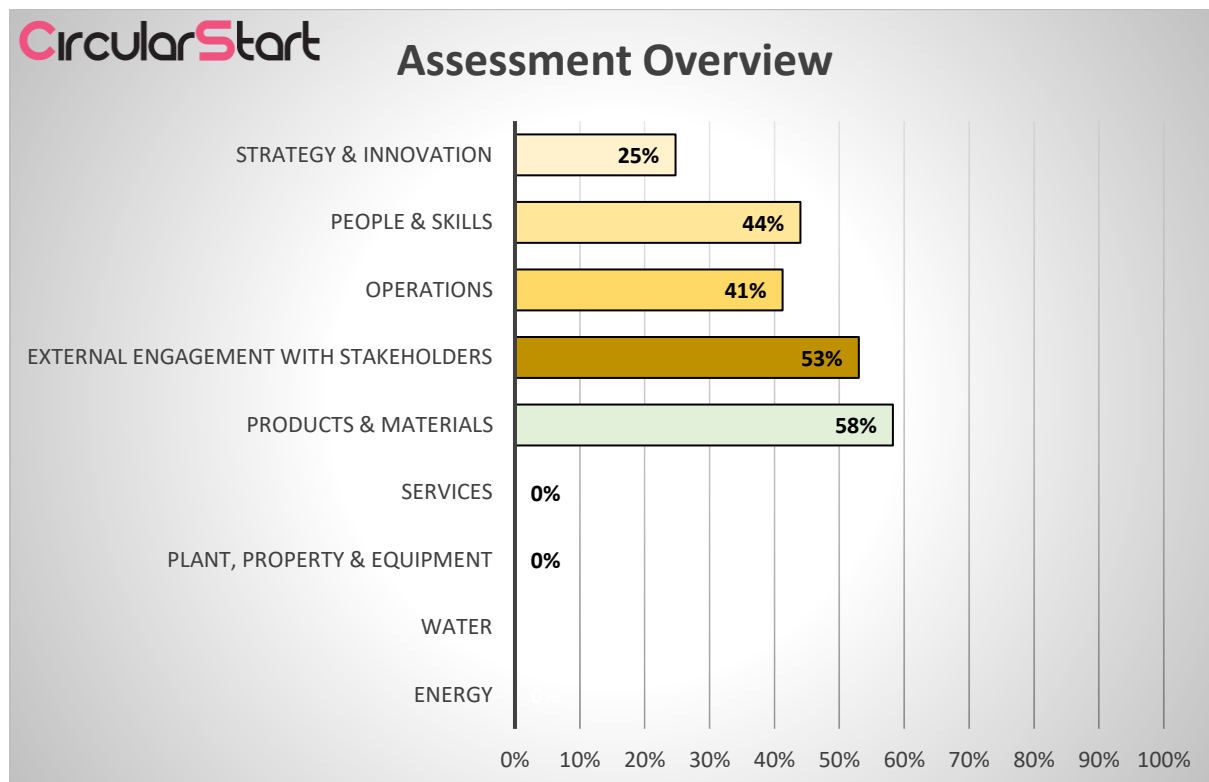
Mission: Agriculture pest monitoring accessible for and no experts independent from the place of the agriculture plant

Vision: We provide automated visual recognition systems for insect pests in agriculture (Contribution to SDG 2 – sustainable agriculture)

Values: automated visual recognition systems for agricultural pests in traps for easily, quickly, detect it by less hardware investment and detection time

 KEY PARTNERS	 KEY ACTIVITIES	 VALUE PROPOSITION	 CUSTOMER RELATIONSHIPS	 CUSTOMER SEGMENTS
	 KEY RESOURCES	automated visual recognition systems for agriculture pests in traps for easily, quickly, detect it by less hardware investment and detection time	 CHANNELS	<ul style="list-style-type: none"> - farmers, - governmental agency for health and food - co-operates plant treatment
 COSTS			 REVENUES	



Initial circularity profile – Results from the application of the Assessment Tool

FOLLOWED LEARNING PATH:

Units	IDEATION	INTEGRATION	VALIDATION	IMPLEMENTATION
Unit 1	x	x	x	
Unit 2	x	x		x
Unit 3	x	x		
Unit 4	x			
Unit 5				
Unit 6				
Unit 7	x			
Unit 8	x			
Unit 9				












FINAL CIRCULAR BUSINESS MODEL:

Mission: Agriculture pest monitoring and pot. treatment accessible for and no experts independent from the place of the agriculture plant

Vision: We automatically identify agricultural insect pests to facilitate monitoring in crops (Contribution to SDG 2 – sustainable agriculture, SDG 15 – sustainable use of ecosystems)

Values: automated visual recognition systems for agricultural pests in traps for easily, quickly detect, monitor and data generation for better treatment by less hardware investment and detection time

 KEY PARTNERS	 KEY ACTIVITIES	 VALUE PROPOSITION	 CUSTOMER RELATIONSHIPS	 CUSTOMER SEGMENTS
<ul style="list-style-type: none"> - Agencies, farmers 	<ul style="list-style-type: none"> - Data processing for automatically pest monitoring and treatment recommendation - RandD 	automated visual recognition systems for agriculture pests in traps for easily, quickly, detect it by less hardware investment and detection time		<ul style="list-style-type: none"> - farmers, - governmental agency for health and food - co-operates plant treatment - agencies prior as paying customers
 KEY RESOURCES		 CHANNELS <ul style="list-style-type: none"> - Web based app and data exchange 		
 COSTS <ul style="list-style-type: none"> - Lower costs for monitoring and sustainable plant growing 		 REVENUES <ul style="list-style-type: none"> - Licence (data, app,...) 		

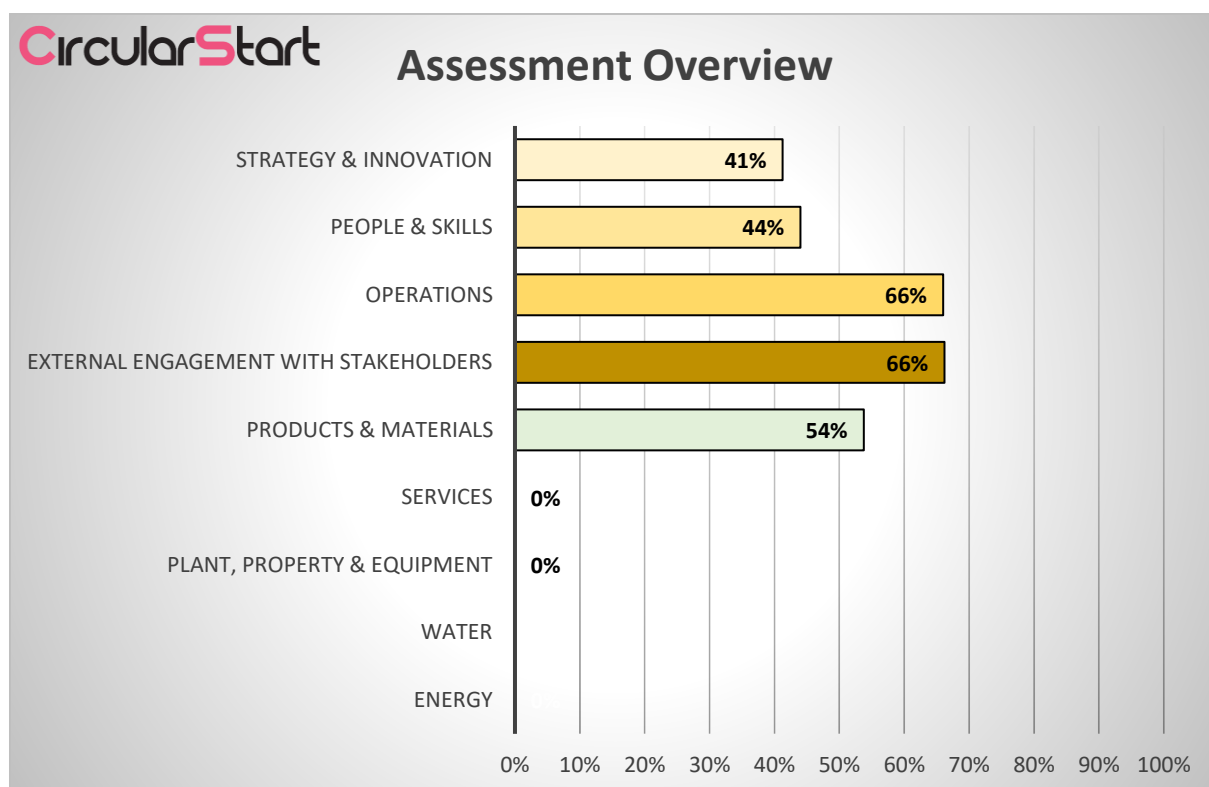
WHICH ELEMENTS/CHARACTERISTICS OF THE BUSINESS IDEA/MODEL WERE IMPROVED THANKS TO THE CIRCULARSTART MATERIALS?



- + **Vision:** + SDG 15 – sustainable use of ecosystems
- + **Mission:** + data generation for sustain treatment beside monitoring
- + **Key partners:** + including applied field research organisations

- + Customer value – de-crease use of not renewable plant growing agents

Resulting circularity profile – Results from the application of the Assessment Tool



NEXT STEPS

WHAT	WHEN	HOW (People, Resources needed)	POSSIBLE DIFFICULTIES?
Further stakeholder problem centered interviews and validate hypothesis regarding + impact	Till the end of summer 21	Founders	get them for an interview, no specific need
Payed pilot field demonstration with stakeholders	Till the end of summer 21	Founders	Amount of paying stakeholders for field demonstration, get relevant financed

KEY MESSAGES



- + *“Great overview and orientation in status and execution”*
- + *“Widening the stakeholder analyse”*
- + *“Get ideas for indicators and measures*
- + *“Get inspiration for further value possibilities”*
- + *“Understand better what is meant by sustainability/circular”*