

FASHION-INSTA



PERSONAL STYLE ARTICLES RECOMMENDER

Executive Summary

- User problems

"*Searching* for articles is **tedious** and *filtering* excludes articles I **would have bought**."

"I end-up *returning* many articles because they **don't match my style**."

- **Solution** : *recommendations* based on *Profile informations* and *Personal Style photos*

BUILD	RUN
Budget : <i>100K€</i>	Costs : <i>6K€ / month</i>
Duration : <i>4 months</i>	Returns : <i>15K€ / month</i>
Main risk : <i>ML models accuracy</i>	Time to profitability : <i>1 year</i>
Considerations : <i>Ethics (AI biases)</i>	Obligations : <i>Legal (RGPD)</i>

Business Goals

Context	Target
<i>visited articles</i> before purchase : 26	21 (-20%)
<i>session duration</i> before purchase : 19 minutes	15 minutes (-20%)
<i>conversion rate</i> : 2.6%	3% (+15%)
<i>return rate</i> because "I don't like it." : 37%	31.5% (-15%)
<i>average sale Value</i> : 19.5€	22.5€ (+15%)
<i>average sale Margin</i> : 20%	22% (+10%)

Source : Website and CRM statistics

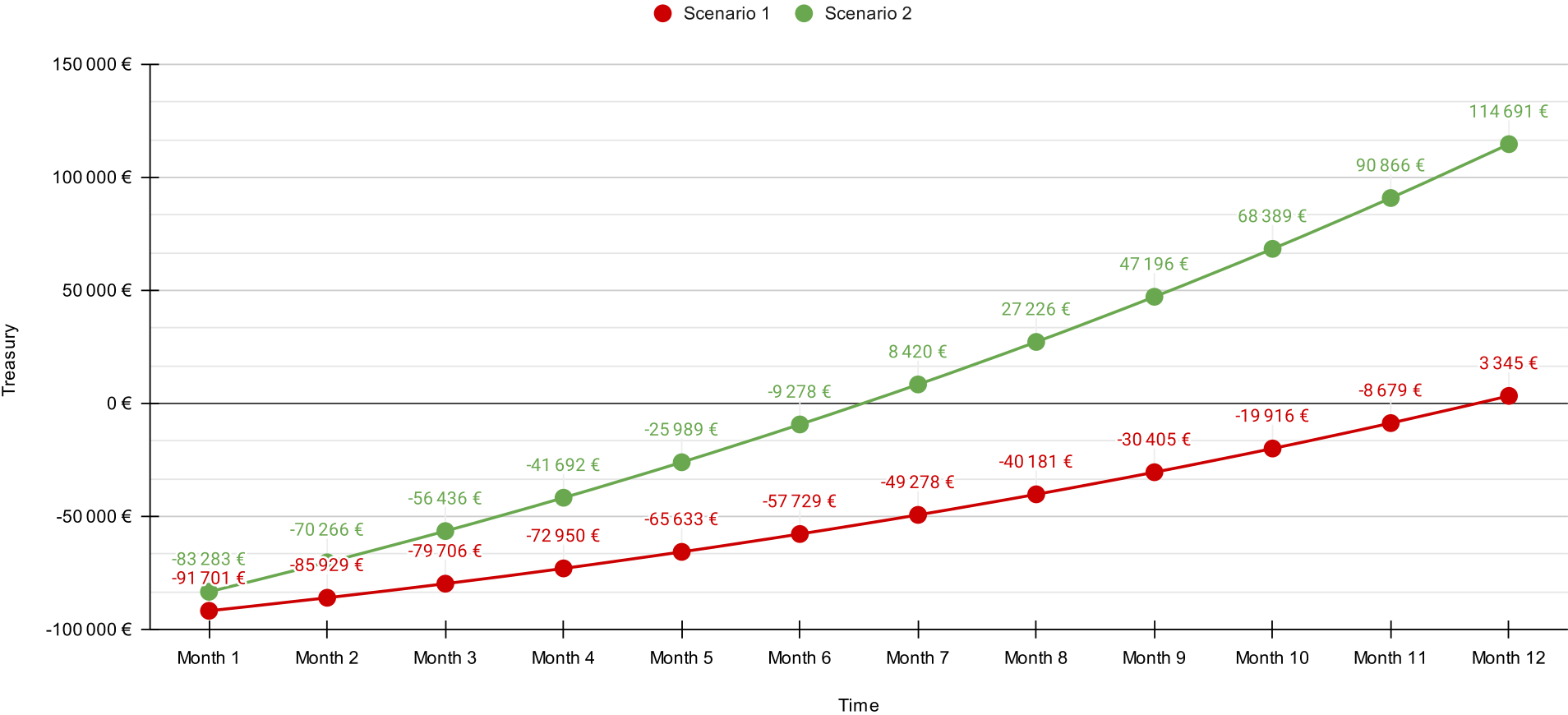
Expected Returns

	Scenario 1 (Target)	Scenario 2
Value increase (base = 20€)	22.5€ (+15%)	25€ (+25%)
Margin increase (base = 20%)	22% (+10%)	23% (+15%)
Returns	-----	-----
Monthly Profit after 1 year	18K€	30K€
ROI after 1 year	2%	70%
Time to profitability	1 year	7 months

RUN Treasury

RUN Treasury

Maintenance investments = 68 514€ // Added Profits Scenario 1 = 168 722€ // Added Profits Scenario 2 = 278 550€



Human Resources

Role (ADR)	BUILD (4 months)	RUN (1 year)
<i>Product Manager</i> (450€/d)	<i>5 K€</i> (11 d)	<i>2.7 K€</i> (6 d)
<i>Product Owner</i> (350€/d)	<i>9.8 K€</i> (28 d)	<i>2.1 K€</i> (6 d)
<i>SCRUM Master</i> (300€/d)	<i>10.2 K€</i> (34 d)	<i>3.6 K€</i> (12 d)
<i>Frontend developer</i> (300€/d)	<i>18.3 K€</i> (61 d)	<i>3.6 K€</i> (12 d)
<i>Backend developer</i> (350€/d)	<i>21.4 K€</i> (61 d)	<i>4.2 K€</i> (12 d)
<i>AI / ML / Data Engineer</i> (400€/d)	<i>22.8 K€</i> (57 d)	<i>19.2 K€</i> (48 d)
<i>QA Engineer</i> (300€/d)	<i>5.7 K€</i> (19 d)	<i>3.6 K€</i> (12 d)
<i>SRE</i> (400€/d)	<i>4.4 K€</i> (11 d)	<i>9.6 K€</i> (24 d)
TOTAL	97.5 K€ (282 d)	48.6 K€ (132 d)

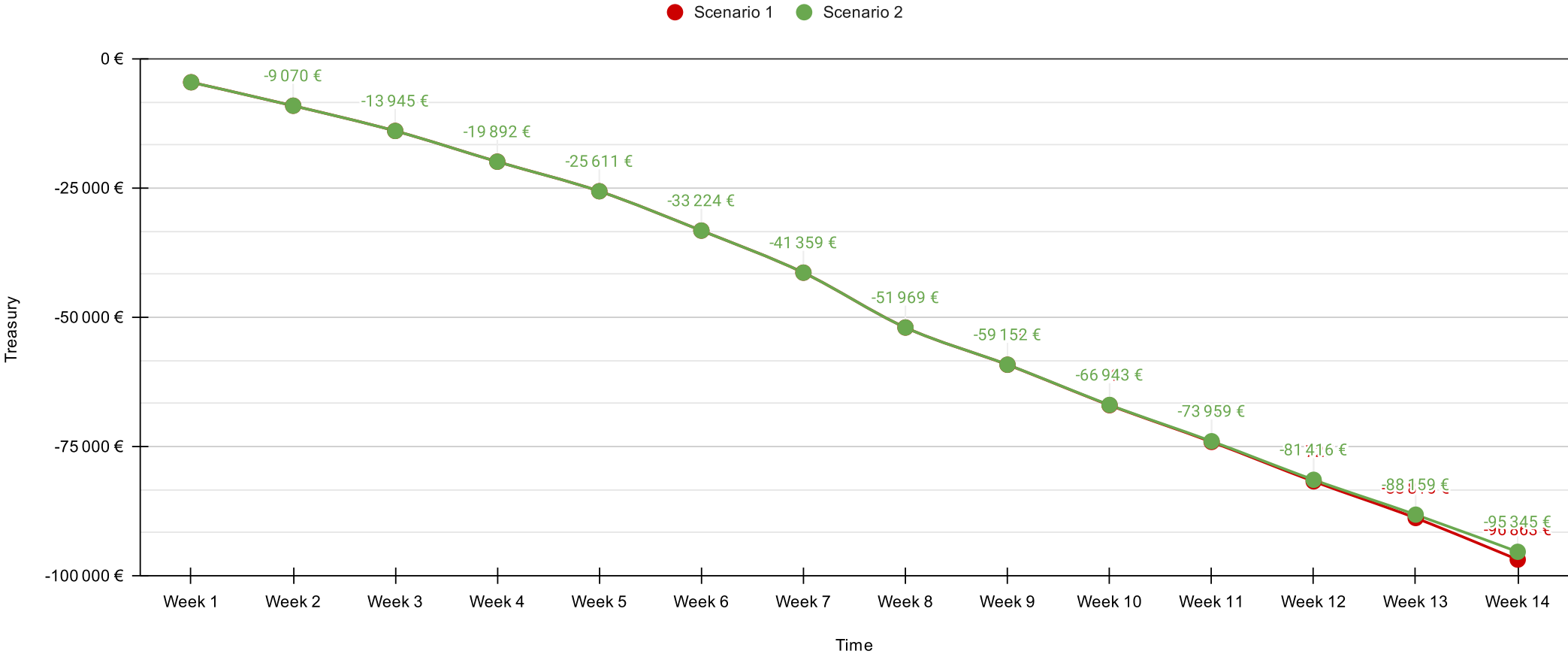
Technical Resources

Articles detection + Recommender	BUILD (4 months)	RUN (1 year)
<i>Blob Storage</i>	2 €	780 €
<i>Function</i>	0 €	0 €
<i>Machine Learning (GPU)</i>	1.4 K€	8 K€
<i>Machine Learning</i>	310 €	10.3 K€
<i>NoSQL Database</i>	2 €	780 €
TOTAL	1.7 K€	20 K€

BUILD Treasury


BUILD Treasury

Project investments = 99 195€ // Added Profits Scenario 1 = 2 332€ // Added Profits Scenario 2 = 3 850€

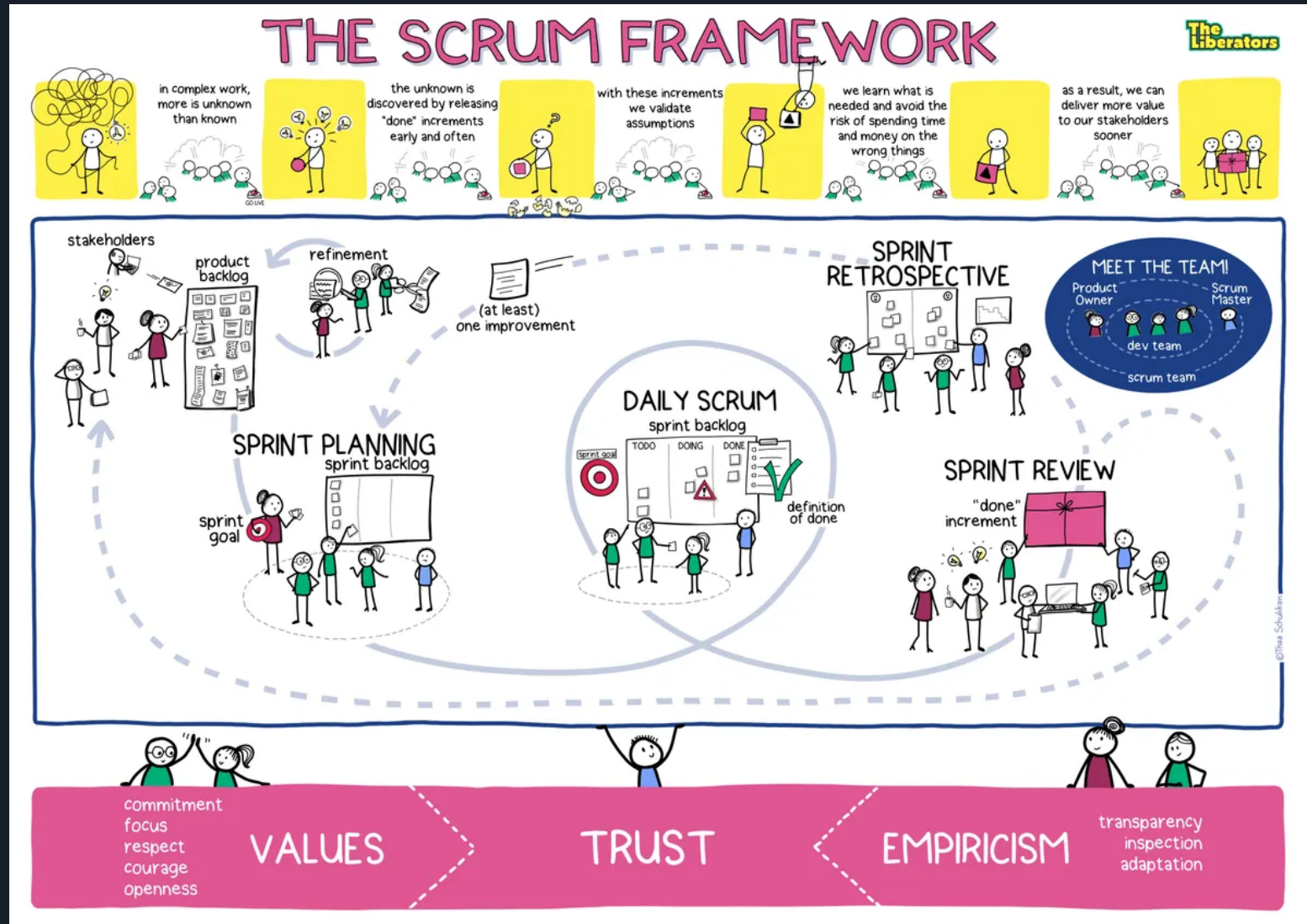


Being Agile (Manifesto)

AGILE VALUES AND PRINCIPLES

INDIVIDUALS & INTERACTIONS				WORKING FEATURES				CUSTOMER COLLABORATION				RESPONDING TO CHANGE			
#	Mnemonic	Picture	Meaning		#	Mnemonic	Picture	Meaning							
1	Done		SATISFY CUSTOMER DELIVER VALUABLE FEATURES	 Agile Product Engineering & Retail Technology Services dojo.target.com	7	MEASUREMENT		WORKING FEATURES ARE THE PRIMARY MEASURE							
2	New		WELCOME CHANGING REQUIREMENTS		8	RATE		SUSTAINABLE DEVELOPMENT PACE							
3	FREQUENTLY		DELIVER WORKING FEATURES FREQUENTLY		9	DESIGN		TECHNICAL EXCELLENCE, GOOD DESIGN							
4	DOOR		WORK TOGETHER DAILY		10	ZEN		SIMPLICITY: MAXIMIZE THE WORK NOT DONE							
5	ALIVE		MOTIVATED INDIVIDUALS; TRUSTED & SUPPORTED		11	ELEVEN		SELF-ORGANIZE							
6	PICS		FACE 2 FACE		12	DELVE		INSPECT & ADAPT							

Doing Agile (SCRUM)



Product Backlog : MVP

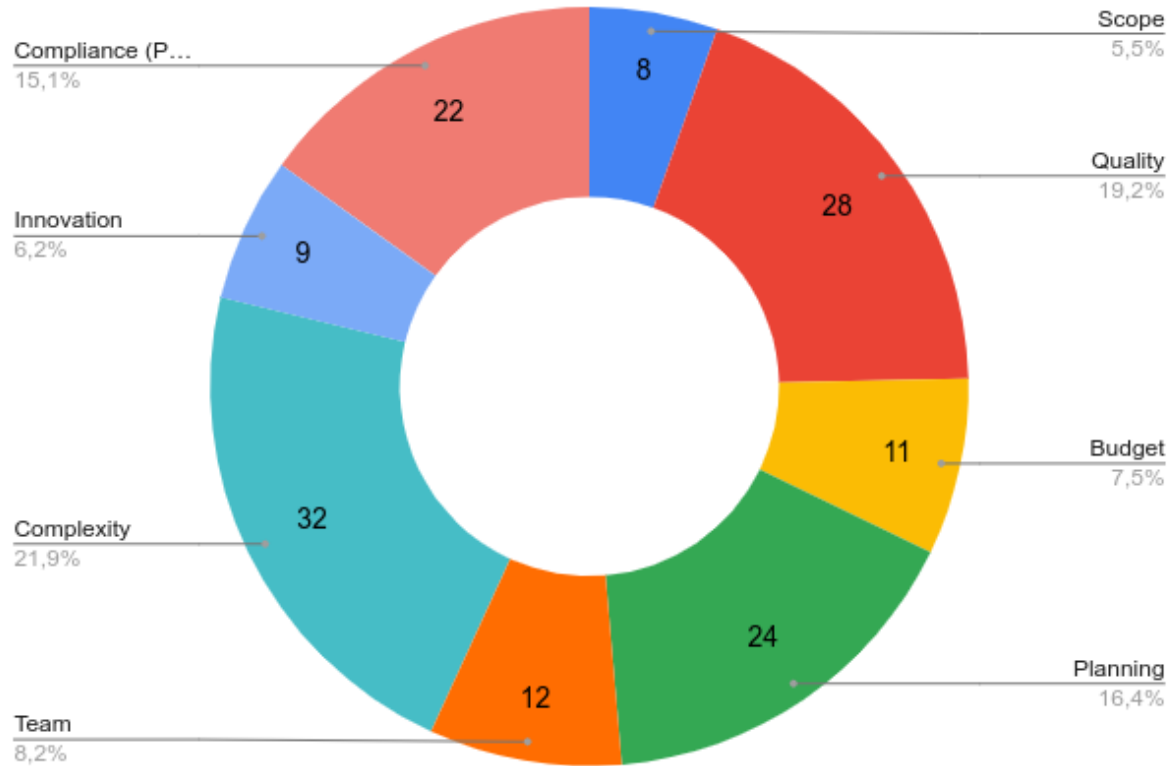
ID	Pred.	Milestone	Title	Value	Cost	Priority
1		MVP	Update privacy notice	8 - Must have	1 - S	8
2		MVP	Update privacy settings	8 - Must have	2 - M	4
3		MVP	Update profile settings	2 - Could have	4 - L	0.5
4		MVP	Submit a photo	8 - Must have	8 - XL	1
5	4	MVP	Delete a photo	4 - Should have	4 - L	1
6	3;4	MVP	Personal recommendations	8 - Must have	8 - XL	1

Product Backlog : V1

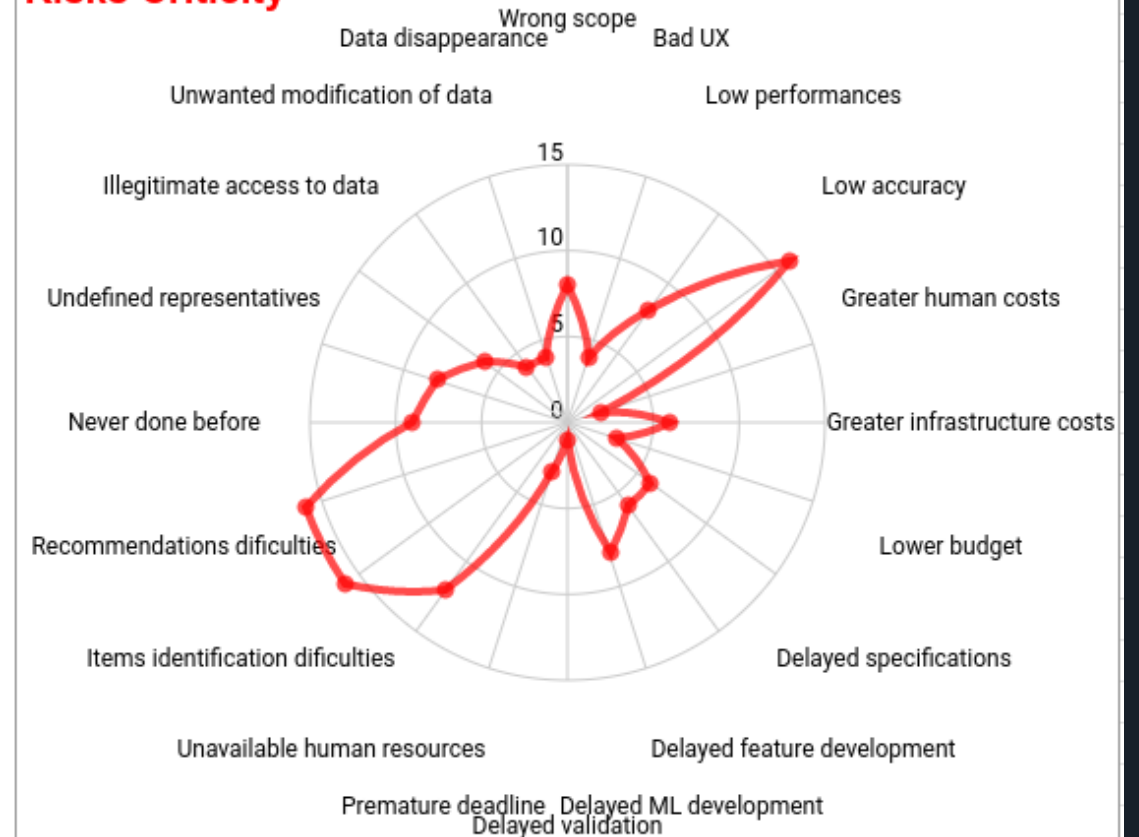
ID	Pred.	Milestone	Title	Value	Cost	Priority
7	4	V1	Create a style	4 - Should have	4 - L	1
8	7	V1	List my styles	4 - Should have	2 - M	2
9	7	V1	Edit a style	1 - Won't have	1 - S	1
10	7	V1	Delete a style	2 - Could have	2 - M	1
11	7	V1	Manage a style's photos	4 - Should have	2 - M	2
12	7;6	V1	Personal style recommendations	4 - Should have	2 - M	2

Project Risks

Risks Categories (cumulated Criticity)









Risks Criticity



Risks Prevention : Action Plan

Status	Owner	Action
TODO	<i>AI Engineer</i>	proof of concept during first Sprint
TODO	<i>AI Engineer</i>	recommendation system evaluation metric
TODO	<i>Product Manager</i>	book required resources in advance
TODO	<i>Product Owner</i>	user research during first Sprint
TODO	<i>Tech Lead</i>	performance testing
TODO	<i>Product Manager</i>	identify DPO and organisation representative

Legal Obligation : GDPR

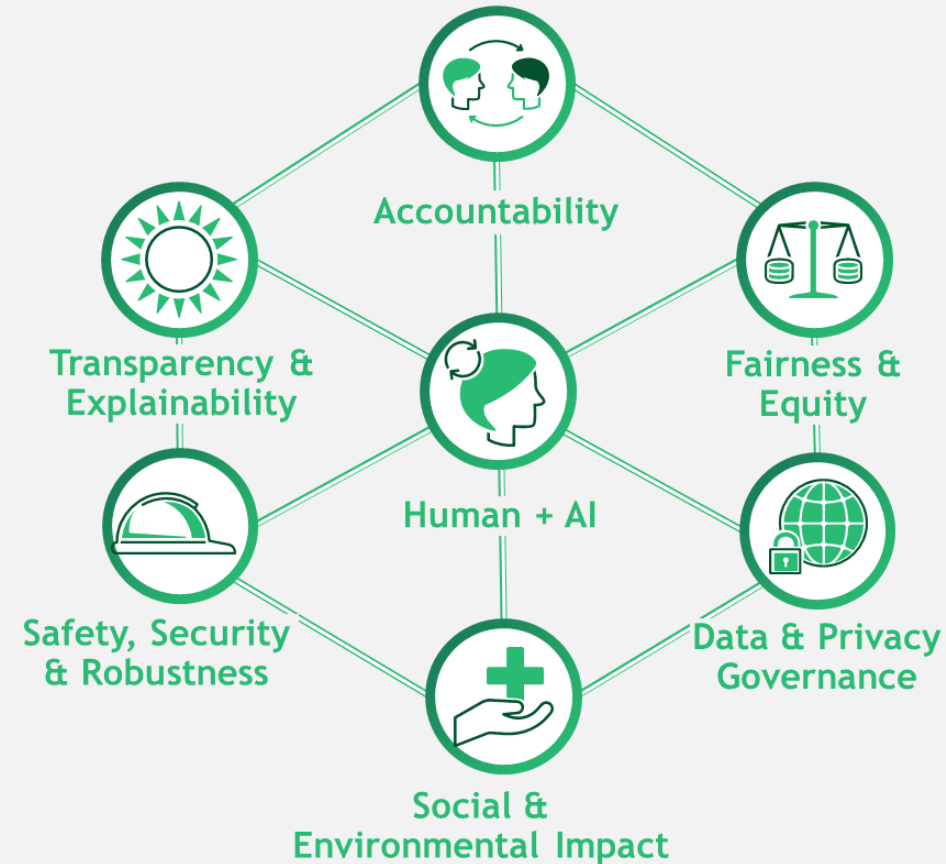
for CHECKLIST GDPR COMPLIANCE	
01	Action Plan  Lay out all the tasks that need to be completed to comply to the GDPR before enforcement on May 25, 2018.
02	Awareness & Communication  Educate stakeholders, employees, and end users to ensure that they handle personal data in accordance with the GDPR.
03	Accountability  Establish appropriate data protection policies to fulfill your privacy obligations and to demonstrate accountability.
04	Analysis of Personal Data  Document all sensitive & non-sensitive personal data you currently hold: Who, when, and where, and legal basis for processing.
05	Consent by Data Subject  Ensure that your data subjects have freely and clearly consent to you processing their data, and enable them to exercise their rights.
06	Privacy Impact Assessments (PIAs)  Minimize privacy risks to data subjects by carrying out PIAs, specifically where privacy breach risks are high.
07	Data Protection Officers (DPOs)  Determine whether you are required to have a DPO and if you're not, whether to voluntarily appoint one.
08	Access Rights  Determine policies and procedures for access rights and how changes should be handled.
09	Security Measures  Implement security measures to protect the personal data stored, and establish a procedure for handling data breaches.

Privacy Impact Assessment (PIA)



Ethical Consideration : Responsible AI

BCG “6+1” Responsible AI principles



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