

CUSTOMER SATISFACTION DATA PROGRAMME

Work sample, anonymised — Dominique Corradi

Architecture definition (22 July 2019) and 2021 continuity plan (25 November 2020)

Client: a global automotive manufacturer — IS, Quality & Customer Satisfaction, Marketing and Engineering directions

Role: lead data scientist (2018–2019), then Customer Satisfaction Data programme lead (2020)

Case summary on slides 2–4, then the two steering documents; client, partner, institute and people names removed

CASE SUMMARY — PROBLEM

A 360° VIEW OF CUSTOMER SATISFACTION WAS NEEDED — MARKETING AND QUALITY RAN 25+ SILOED SURVEYS

Corporate Strategy needed a 360-degree view across vehicle design, sales and after-sales, warranty and durability.

25+ siloed surveys with uneven country coverage, duplicated enrichment, incompatible questionnaires and no cross-survey comparison.

Legacy measurement was costly and missed channels such as social feedback; teams lacked tools to visualise and simulate CSAT.

Buyer-survey processing carried unresolved GDPR risks.

CASE SUMMARY — ACTION

A COMMON GOLD SURVEYS ZONE ON GOOGLE CLOUD, ADAPTED MARKET BY MARKET — AND A REFRAMED DECISION WHEN FUNDING WAS CUT

Designed and secured approval for the common zone: ingest and enrich once, map heterogeneous questions and scores to shared tags, extend the existing portal into the corporate tool; mappings proved on two survey pairs; shared IT/business governance.

Market by market: a separate German customer feed, central translation and NLP for a dozen languages, five complaint taxonomies mapped.

When funding was cut: P0/P1/P2 continuity framing, compliance, visible translation savings, three bounded scenarios with explicit closure costs, risks, surveillance protocols and SLAs.

Stack: Python, spaCy, RNN classification, XGBoost sentiment analysis, Power BI, MLOps.

CASE SUMMARY — RESULT

COMMON ZONE LIVE IN AUGUST 2020, TRANSLATION LIVE IN DECEMBER; A €650K CONTINUITY SCENARIO KEPT THE UNIFIED MODEL — NOT THE FULL ROLLOUT

Common zone live in August 2020 for buyer and quality surveys; satisfaction-driver model available in September; automatic translation live by December.

A €819k-a-year savings case (13-month payback), later near €2M a year, did not secure full funding; a structured €650k scenario preserved continuity for both quality surveys and a France-based core team while deferring broader migration.

The unified model survived; the build team and the full rollout closed.

Across the programme (2018–2020): 40+ surveys became 15, warranty budgets shifted toward high-CSAT-impact subjects, customer returns supported vehicle-cycle reduction and launch war rooms, and a global CSAT organisation was deployed.

Objectives for Today: Discuss and confirm 6 architecture directions for CS Data Program

Provide an update on data Architecture development progress

Share, discuss and confirm proposed directions on 6 structural elements:

- Creation of a Common Gold Surveys (CGS) to host the 25+ surveys from Quality and Marketing
- Common Gold Surveys governance model between Quality and Marketing / IS-Q and IS-C
- Data feed structure
- Leverage of SVIZ components
- GCP v. on-premise
- Roadmap (incl. Replication of SVIZ Gold)

Executive Summary

Scope reminder: Within CS Data program, **Use Case #2 (UC2) processes inputs from various customer expression sources**, (incl. surveys, SRC, web/socials and mythe Group) **to feed the resolution flows of métiers** (incl. Engineering, Manufacturing, Sales/After-Sales, Marketing and Product/Planning) **with Customer Satisfaction insights**.

Benefits for métiers: Proposed IT architecture will enable métiers to access and use the Group survey data that is already ingested and enriched. This will simplify, increase and accelerate inclusion of Customer Satisfaction insights into métiers' resolution flows

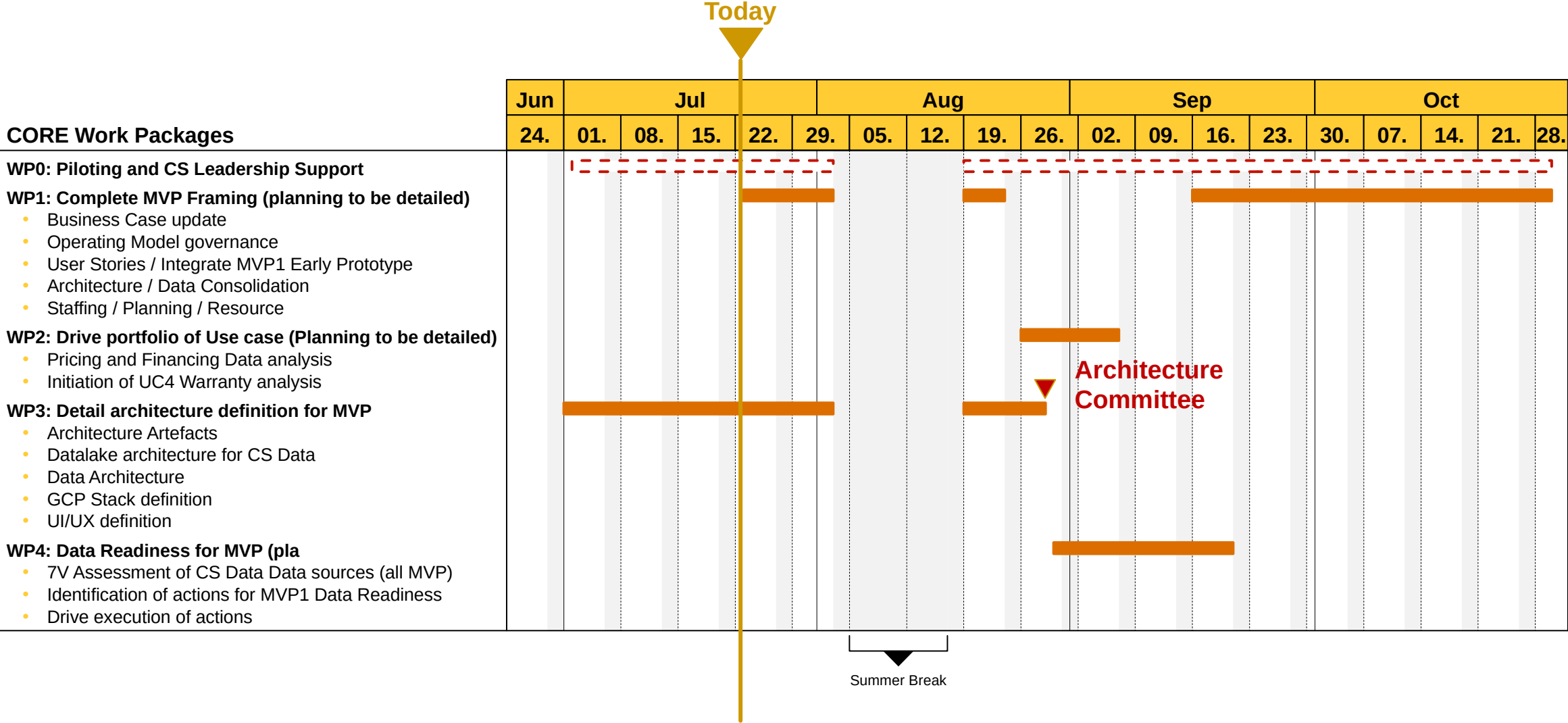
Timing: **Design of the program data architecture is on track** for Oct.'19 development kick-off.

Six directions have been identified for six structural elements:

1. **Create Common Gold Surveys (CGS) in datalake** to industrialize parsing, ingestion and enrichment of the Group 25+ surveys. shared corporate asset will foster the level of surveys data reuse across métiers and use cases (ingest once / use many times)
2. **Set-up CGS governance with single IT responsibility for implementation & shared governance for business.** This will allow flexibility, reusability and agility.
3. **Include additional data feeds** (incl. BVM and CMDM) **to enrich survey data** and enable to segment, discriminate and filter results
(NB: **Accessibility challenge identified in Germany:** client visibility rules are stricter and require different Customer feed (HAP))
4. **Leverage the scoring product's best practices for CS Data** (incl. privacy artefacts or data dictionary definitions). No reuse anticipated for other components of ecosystem (Marketing tool or Resolution tool), since no functional overlap was identified.
5. **Build CS Data from SVIZ and merge both projects** to accelerate and de-risk implementation. Indeed CS Data is a functional superset of SVIZ and many SVIZ functionality such as ingestion, enrichment or visualization can be enhanced and leveraged. Some restructuration and optimisation are necessary to embed data science and support Customer Satisfaction.
6. **Build CS Data as cloud-first project**, in accordance with the Group corporate guidelines. **Start from replicated gold zones** since ingestion technologies are not proven yet in the Group.

MVP-UC2 preparation planning

Preparation of MVP-UC2 is progressing on schedule for development kick-off in October 2019



Agenda



Context: CS and resolution flow

Data architecture target & governance: scenarios

CS Data IT Ecosystem – Synergies with Existing

- Scoring product
- Role of SVIZ

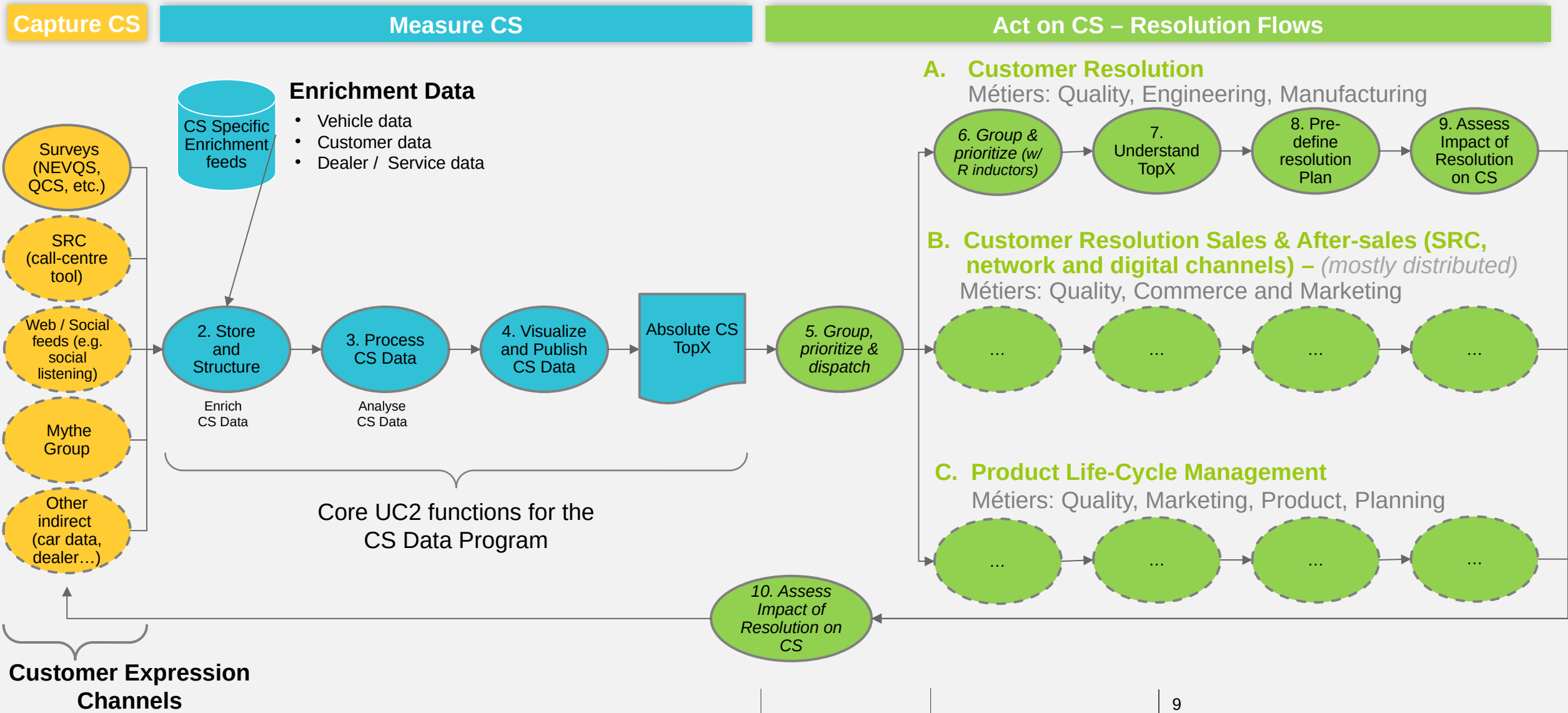
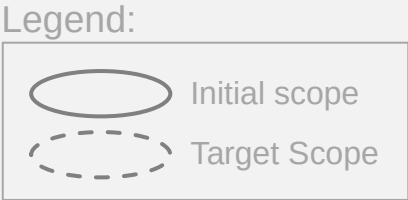
GCP vs. On-premise

Roadmap

Appendix

- Business Objects and their Data Sources
- CS Data Feeds Status Review (Work in Progress)
- Use-Case Definition (Reminder)

UC2 CS-Data processes surveys and other customer expression channels, to provide CS TopX to corporate resolution flows



UC2 CS Data Program will deliver the resolution flow over 5 Epochs through the next 18 months

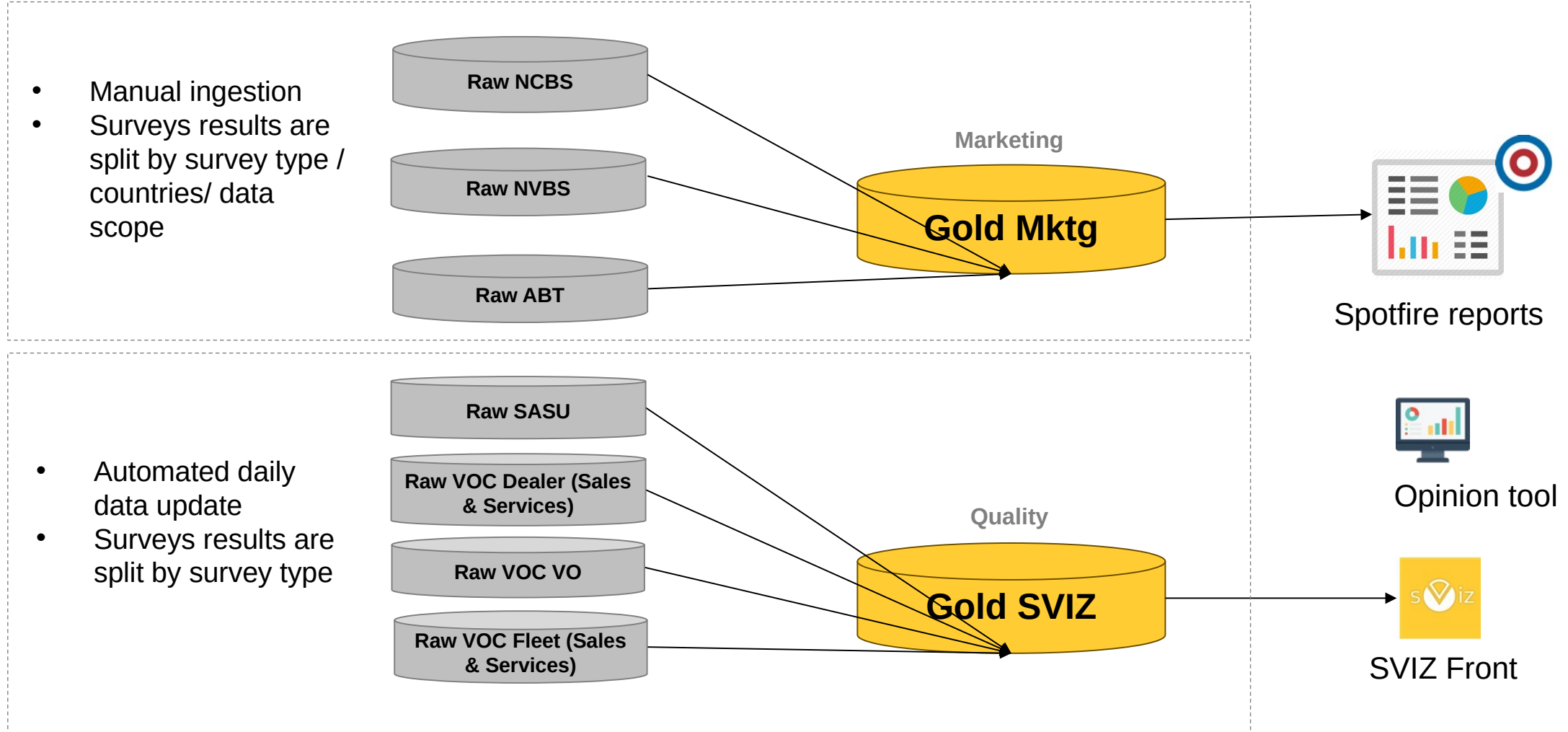
May '19

18 months plan

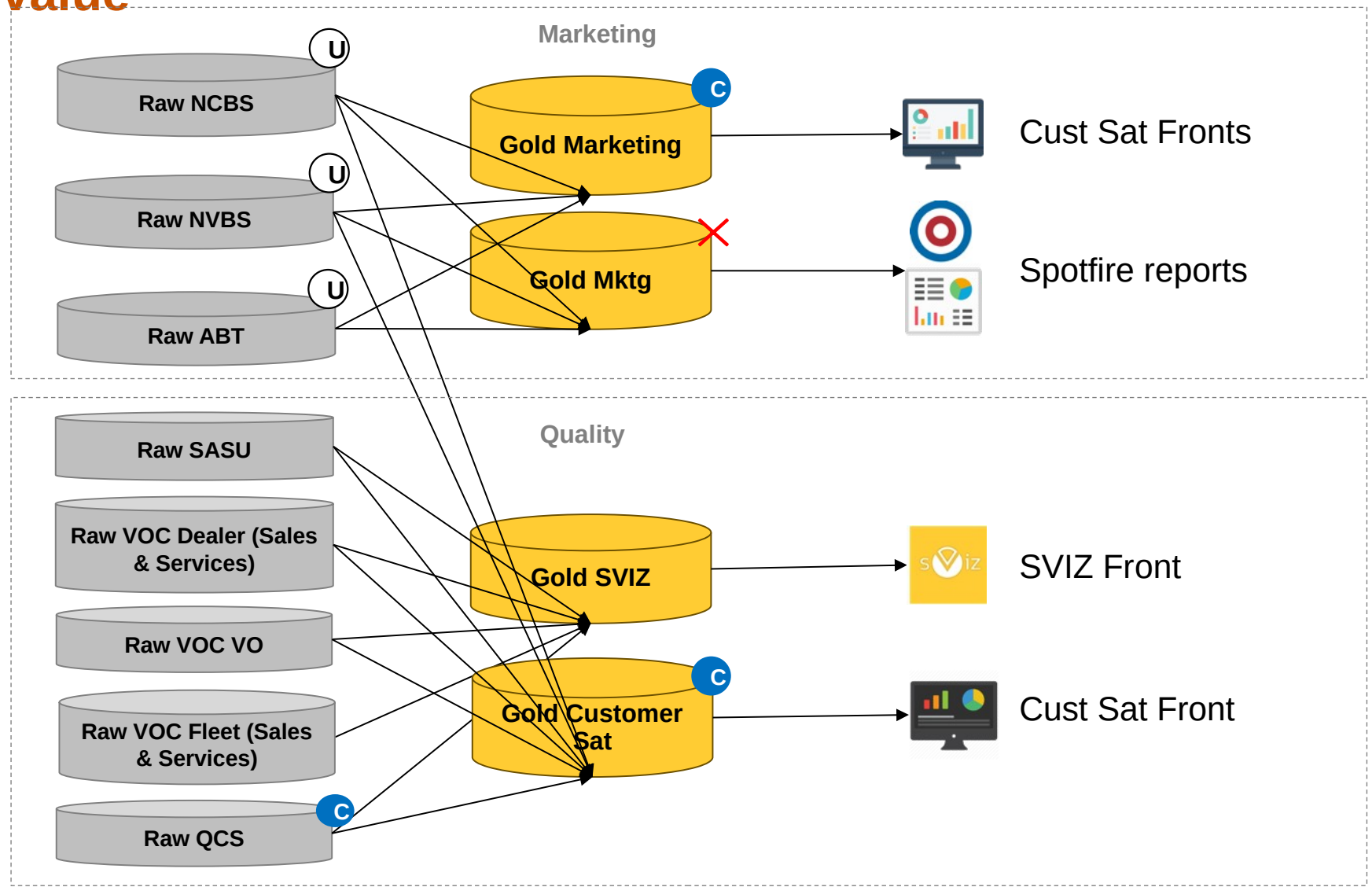
Timeline	Q1.'20	Q2.'20	Q3.'20	Q4.'20	2021
Target Populations	Quality and engineering (Resolution Flow A)	Previous + Quality and Marketing, Manufacturing (Resolution Flow C)	Previous + Quality and Network, Aftersales (Resolution Flow B)	All (All Resolution Flows)	All (All Resolution Flows)
Client Expression channels	CS Surveys on Vehicle	- CS Surveys on vehicles, - Internal verbatims - SRC	CS Surveys on customer service	- Additional CS Surveys - CS Expressions from Mythe Group - SRC Conversations	WEB/Social
UC2: 'Customer centricity 2019' 	Q1: What is the relationship btw defects/dissat. (product) and CS? - A: Matrix "#Complaints (pph=n/1000from QCS) vs. CS score" per defects/dissat for two vehicle projects Q2: What are top X defects/dissat. most affecting CS for two vehicle projects? - A: Definition of new CS indicator (Satis/1000) combining quality (pph=n/1000 from QCS) and CS - A: Top X defects/disSat ranked per new CS indicator for two vehicle projects + related internal verbatims (unqualified⁽¹⁾ at this stage) Q3: + ...by customer type? - A: Break down per customer segment the List of top X defects/disSat per new CS indicator for two vehicle projects	Q4: Enrich list of top X defects/dissat with related data for two vehicle projects A: CS ranking of defects/dissat. taking into account CS measured in warranty events, surveys and log of communication with customer (SRC) A: List of all relevant internal qualified⁽¹⁾ A: List of all relevant internal verbatims related to each defect/dissat.	Q5: What are the Top X product satis drivers? (for all new project + one old project) - for Engineering to continue doing what generates CS - for Marketing to understand what 'hits home' with customers A: List of top X car prestations that drive most CS	Q6: Top X satis drivers for product/vehicle and services? A: List of top X prestations and services that drive most CS related qualified verbatim Q7: Top X CS dealership issues? A: List + related qualified⁽¹⁾ verbatim ---- Q8: Further enrich with verbatims not in EDR	Q8: Further enrich CS with information about car usage Q9: How to verify data quality and explain (apparent) contradictions between different CS measures? A: Correction/verification of QCS data with Verbatims: flag and resolve (or set apart) [QX: Further enrich with external Verbatim]
Product Versions	CS MVP	CS Release 2	CS Release 3	CS Release 4	CS Release 5

(1) qualified=whose CS has been measured (2) Quality of Data to be checked during UC framing, then confirm MVP 1 scope

Current approach for managing Surveys: Marketing and Quality each work in silos



Pursuing current silo-ed approach would create additional work and destroy value



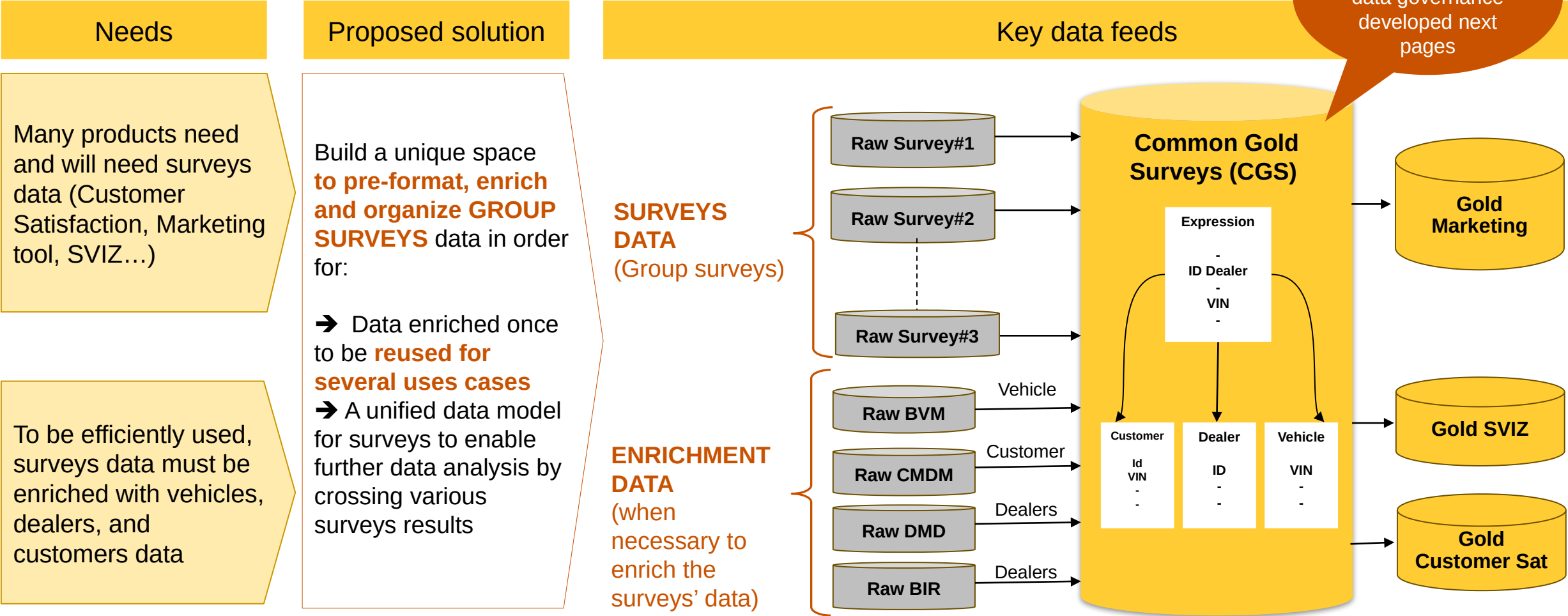
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- Simplified access management & governance**
- Duplicated enrichment processings (with vehicle/customer data) in Gold Zones**
- Missed value due to the various data structures of surveys and to the inability to match surveys results**

Proposed alternative: Common Gold Surveys = “One-stop shop” for Group surveys

Shared corporate asset → Create once, use many times



The risks involved in creating a Common Gold Survey (CGS) can be mitigated and are less impactful than not doing it

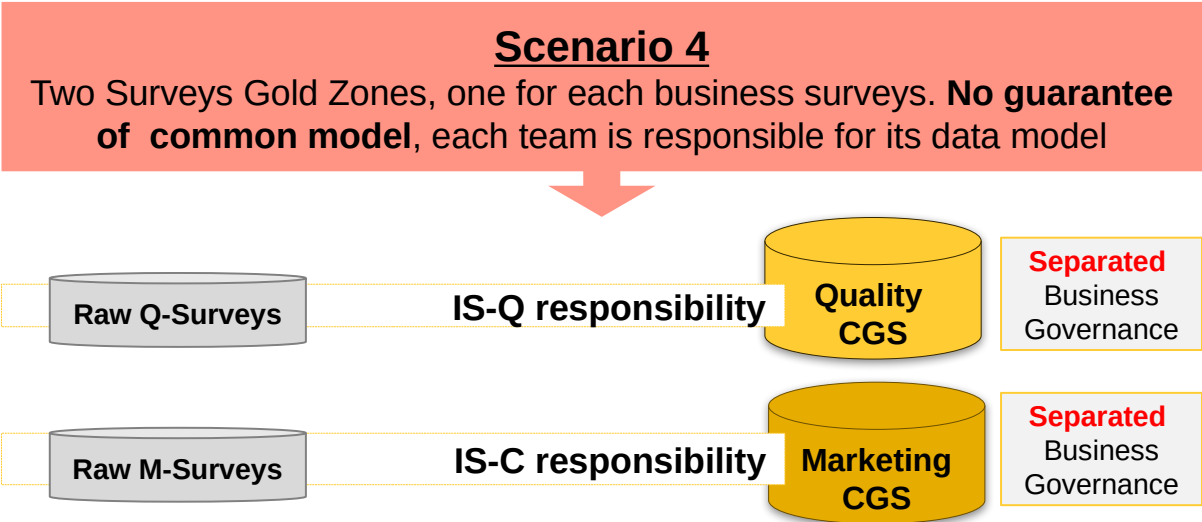
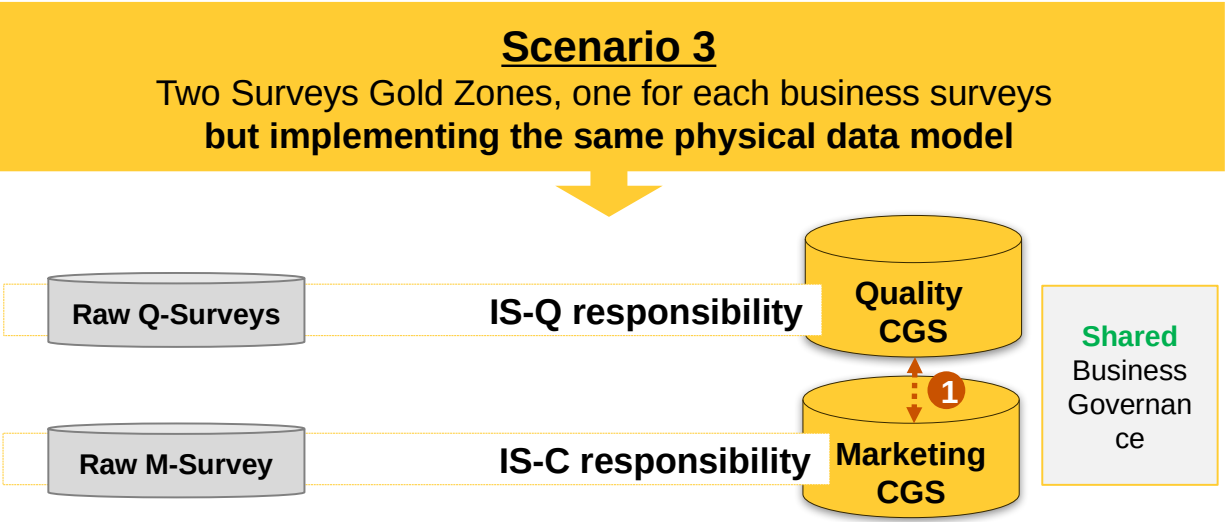
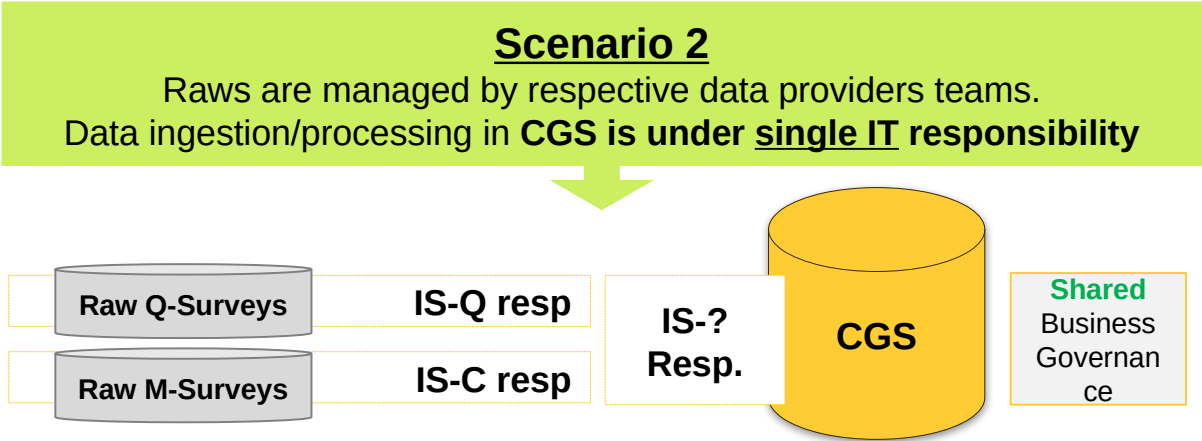
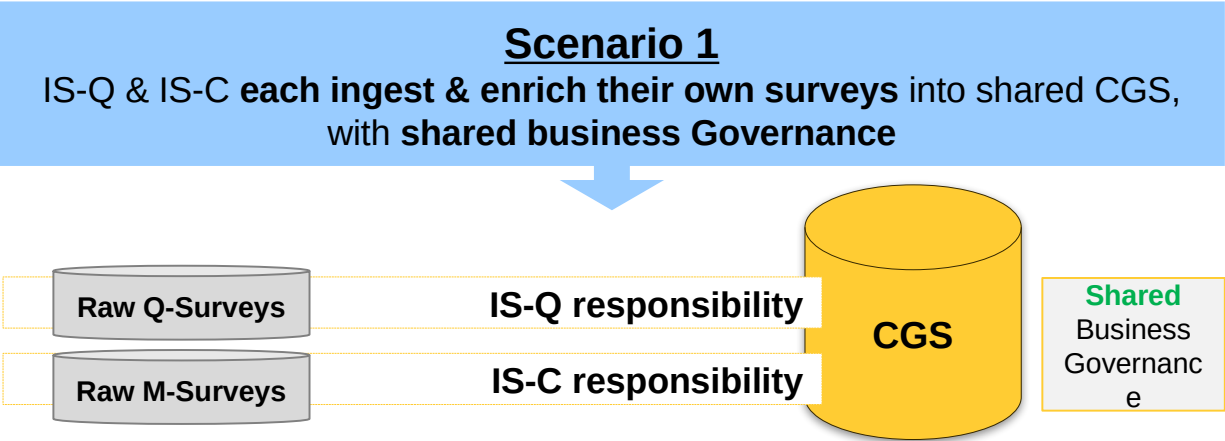
Risk profile for having a CGS

Key Risks	Mitigation Measures
• Asset development fails	• Detailed planning of IT infrastructure, anticipating development kick-off
• Asset is not used	• Involve métiers in design phase to detail needs and processes • Engineering (in progress) • Marketing (initiated) • Commerce (to be done)
• Governance model fails	• Favor simplicity • Separate IT responsibility, vs. business ownership (can be shared)

Risk profile for not having a CGS (current Siloed Approach)

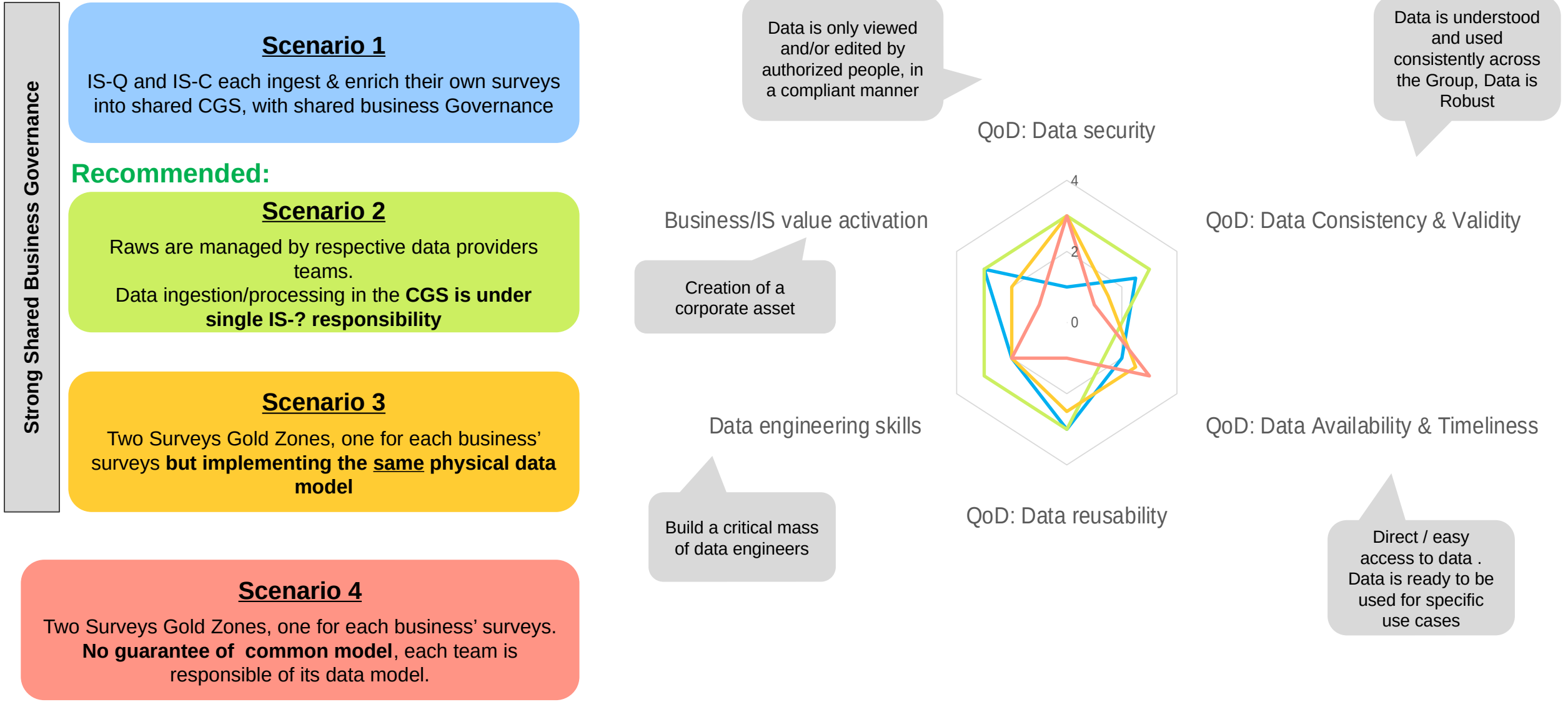
Key Risks
• Limited enrichment limits CS understanding • Limited CS understanding and measurement prevents CS focussed resolution • Duplicate IT work to ingest same data several times into various gold zones • Limited value extracted from Group surveys • Inconsistencies in data interpretation across métiers • Renouncing to customer centric vision for the Group

Implementation & governance scenarios for Common Gold Survey (CGS)



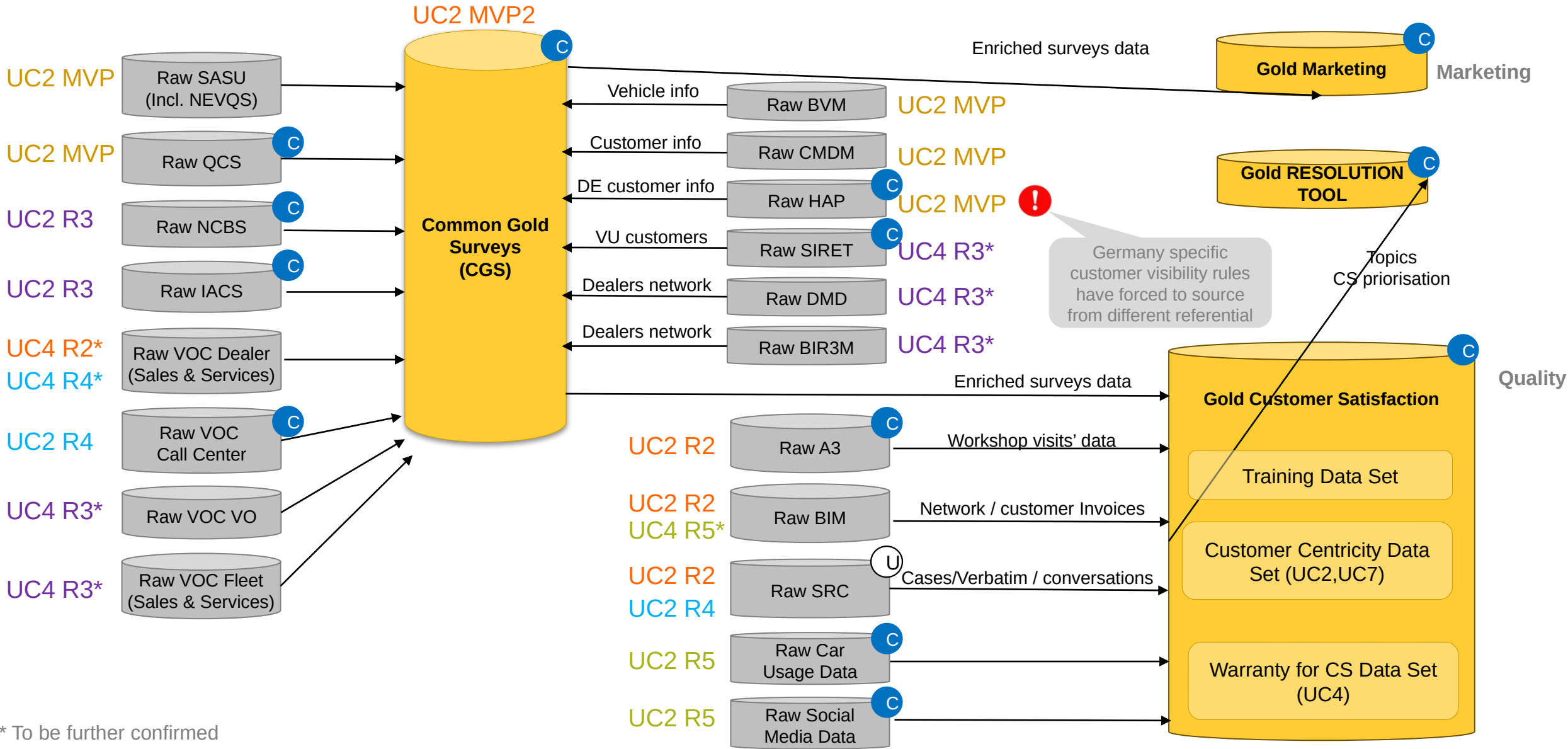
(1) Sharing and exchange of IT Best practices and standards

Evaluation of governance scenarios for Common Gold Surveys (CGS)

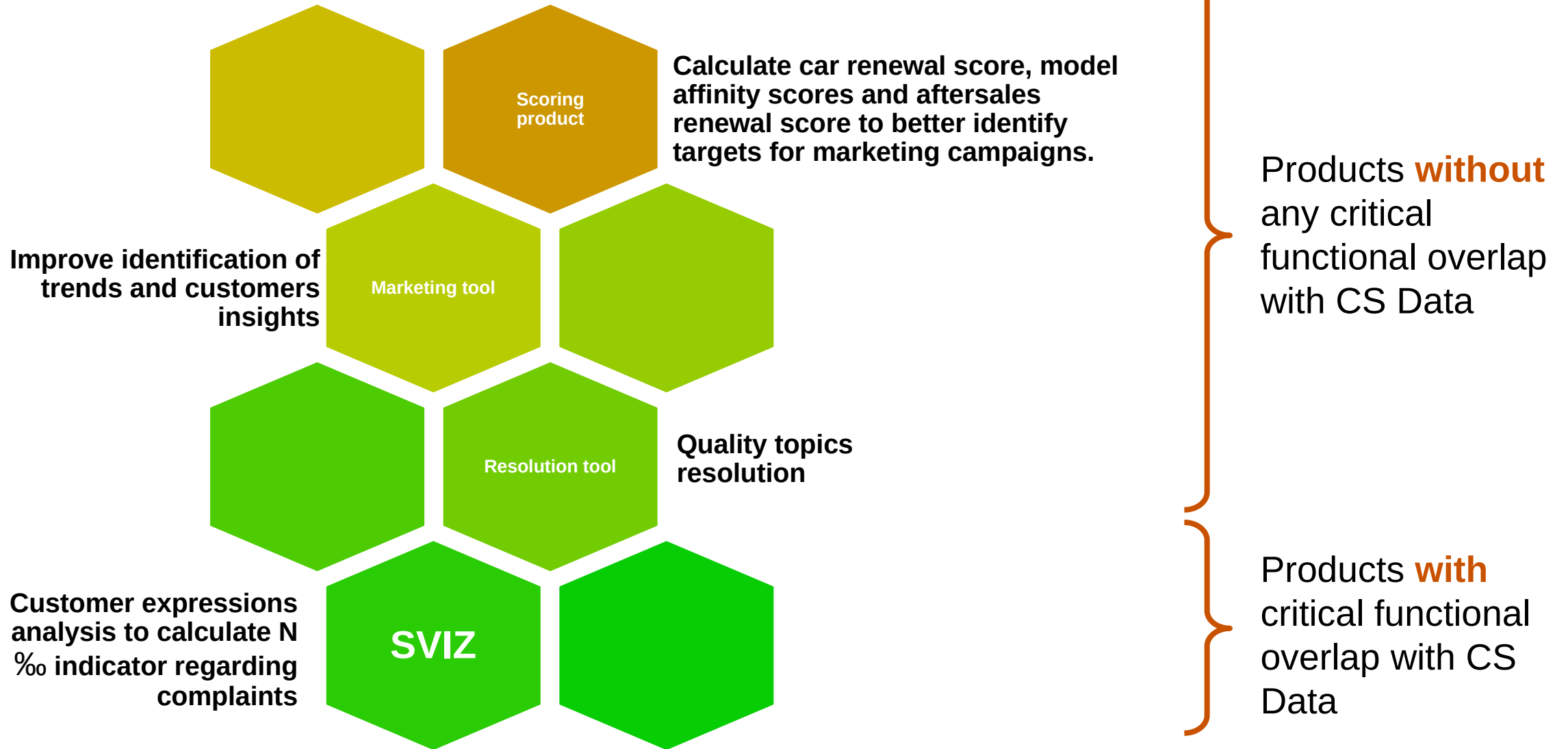


Recommended target architecture: Global view for CS Data

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C ⇒ To be created



Proposed target architecture fits into ecosystem & synergies

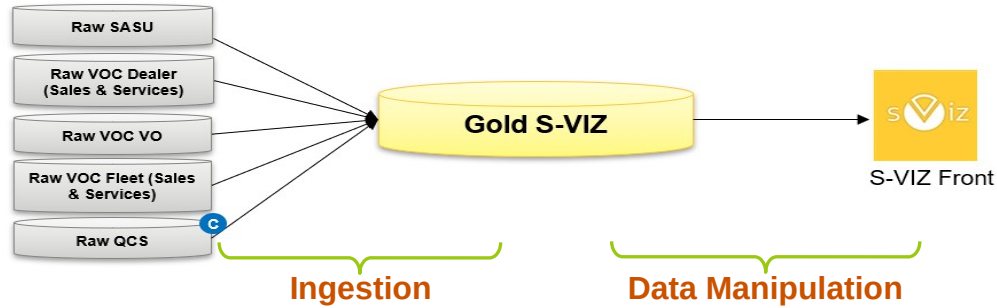


Synergies with the scoring product centered on Data protection and Taxonomy

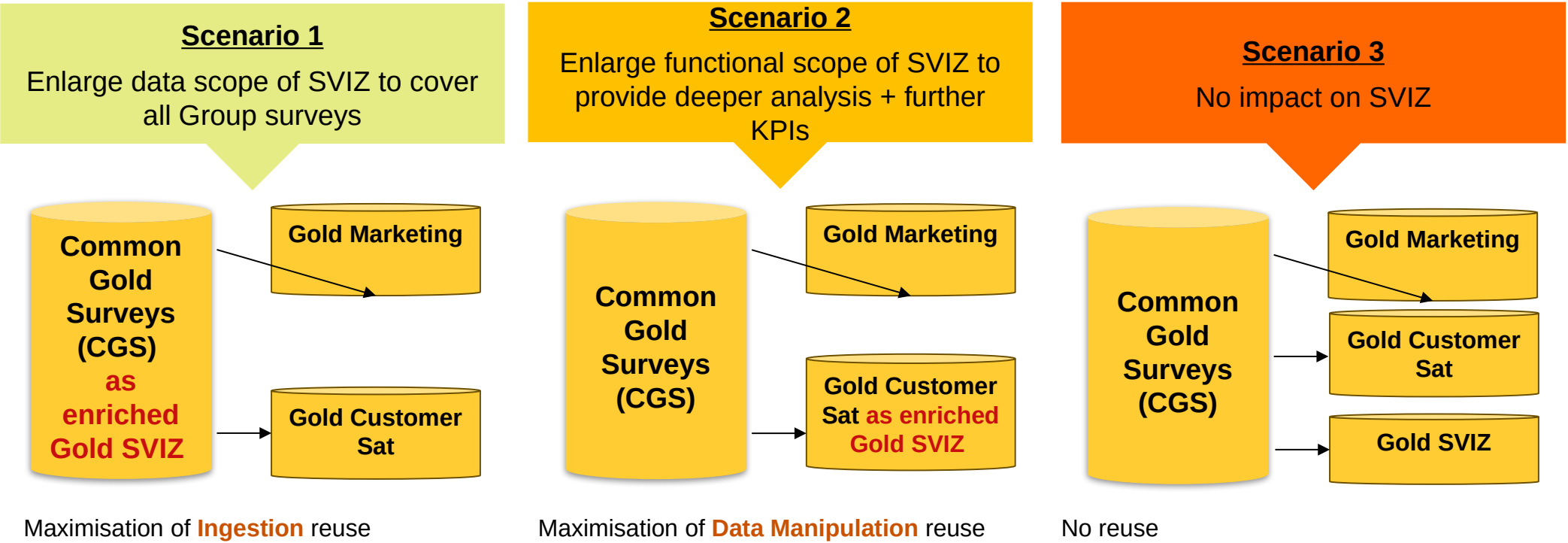
	Specificities		Potential Synergies
	Scoring product	CS Data	
Functional Scope	Calculate car renewal score, model affinity scores and aftersales renewal score to better identify targets for marketing campaigns	Customer expressions analysis to score satisfaction regarding the group products & services in order to prioritize quality topics resolutions	 Same master data used (BVM, CMDM, A3) but NO FUNCTIONAL OVERLAP
Data Reuse	Component renewal prediction by customer clusters based on loyalty	Satisfaction scores analyzed by clusters based on vehicle usage	 No value to use produced data at this moment
Data Protection	- Anonymization processings (already validated by Legal) - Privacy Impact Assessment & Data processing forms	Multiple data sources in common	 Reuse data privacy artefacts
Data Naming	Data taxonomy model & data preparation dictionaries Column naming: entity_field_datatype Ex: prty_birth_dt		 Reuse data taxonomy & dictionaries

Target architecture has clear synergies with SVIZ: three scenarios identified

Current



Future



Target architecture for customer satisfaction and SVIZ impact

Recommended:

Scenario 1

Enlarge data scope of SVIZ to cover all Group surveys

- Gold SVIZ will be enriched with other surveys and will become a shared enterprise asset.

Scenario 2

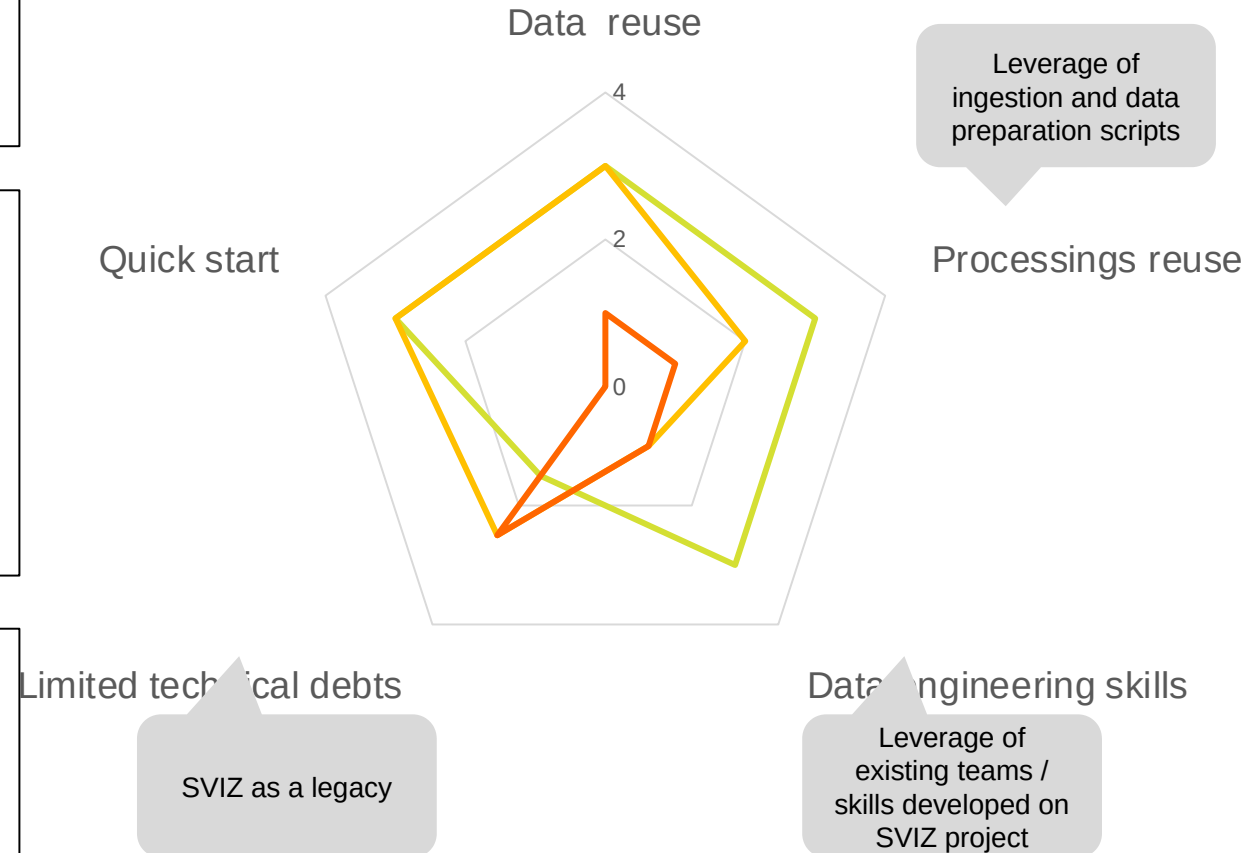
Enlarge functional scope of SVIZ to provide deeper analysis + further KPIs

- Gold SVIZ will be enriched only with identified data for Customer Satisfaction use cases and will host advanced data analysis.
- It will gather Surveys data for future needs from Common Gold Surveys (CGS)

Scenario 3

No impact on SVIZ

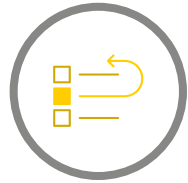
- No functional/data scope change.
- It will gather Surveys' data for future needs from Common Gold Surveys (CGS)



It is recommended to start the CS data as a cloud-first on GCP to get the full benefits of the cloud - some risks still need to get mitigated



DLK Situation with GCP



Mastered Raw/Gold **data replication** process

(on-premise => GCP)



Work is in progress to be able to use the **DataLake Loader** directly on GCP

(tool facilitating data ingestion)



Cloud first strategy with already "**success stories**" on GCP

(Scoring product, DAI, Track'n Trace)



Cloud-First CS Data DLK



Vertical and horizontal Scalability of the GCP Compute Platform

(GPUs, in-Memory, massively parallel processing, etc.)



Industrialization of the Compute Stack

(Big Query, Data Studio, DataFlow, TensorFlow, etc. see next page)



On-demand access to vast processing farms

(Pay-As-You-Use)



Scalability of the Storage Platform

(No physical upgrade of the SAN)



Standard approach for **data ingestion** still being defined



Data security and compliance under scrutiny

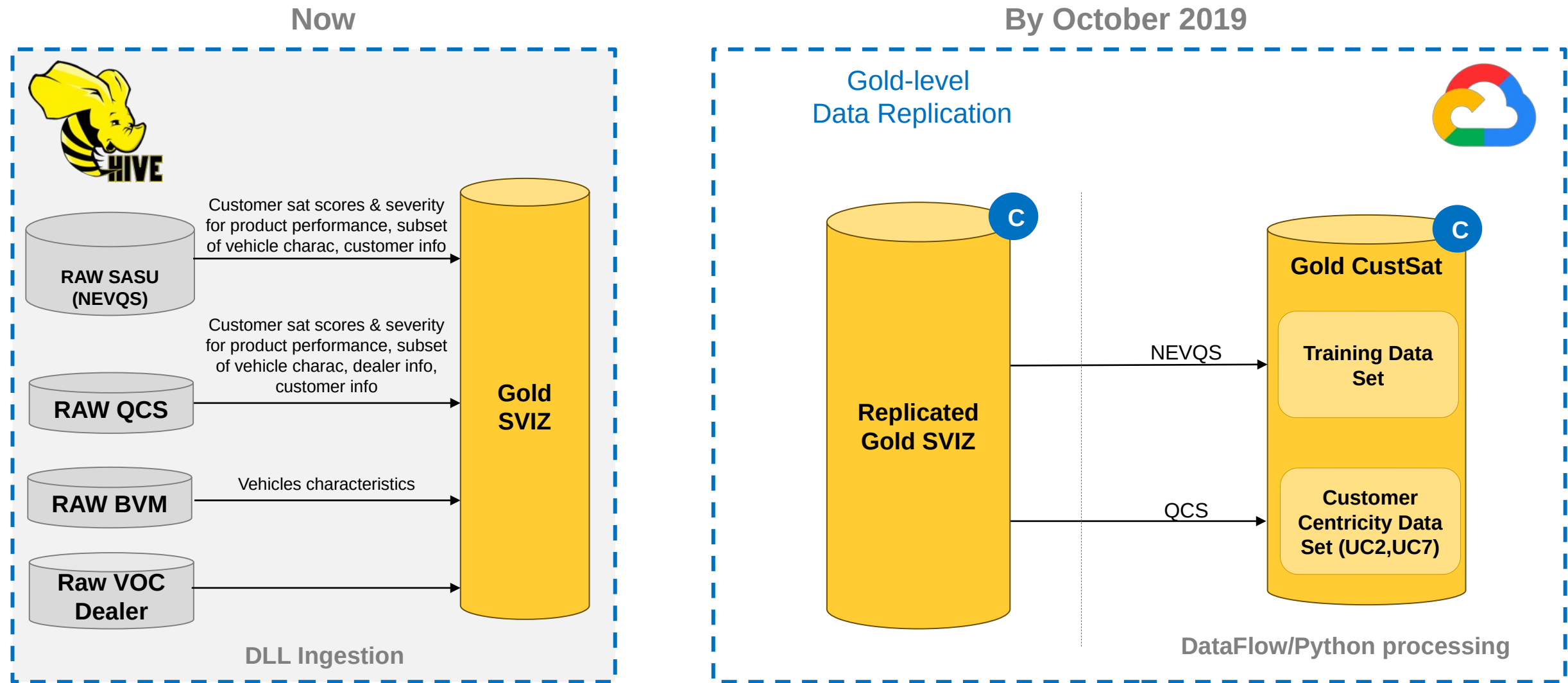
GCP Compute stack for CS Data Program is identified some technologies are not proven yet in the the Group context



	Current Stack on Premise	Future Stack on GCP	Maturity / Skills Risks	Data Team position / Mitigation (Quotes from Data Team)
Ingestion	DL Loader Framework (Spark/Scala)	- Migration of the DLL Framework on DataProc for simple ingestion (config. File driven) - Dataflow or Python programming for new / more complex ingestions	HIGH	<i>Migration of DLL undergo – not proven yet as standard solution recommended for all ingestions</i>
Data Storage	- Hive (Hadoop Horton Works) - Elastic Search, - Postgres - Bucket S3	- BigQuery - Google Storage (replacement of Bucket S3)	LOW	<i>Base component for all new projects</i>
Data Exploration	.Spark .Elastic Search	- Big Query - Elastic Search	MEDIUM	<i>Elastic usage is questioned for CS Data</i>
GUI for Queries	- Hue - DB Beaver	Data Studio	LOW	<i>Standard tool provided with GCP</i>
Data Visualization	- Native: Spotfire, - Within Swarm Docker: Shiny Server, Web (html/javascript)	- Spotfire (self service) - Other products upon user request (Tableau, Qlik, etc.)	MEDIUM / HIGH	<i>Spotfire already available on GCP, however native technologies such as Qlik or Tableau preferred. Decision required</i>
Data Manipulation	Available from the Datalake: - R Studio, - Jupyter Notebook (low usage – to consider for a migration) - Zeppelin (low usage – to consider for a migration)	Jupyter Notebooks (provided with GCP Stack)	LOW	<i>Already proven in the CS Data prototype</i>
ML / DL	Scikit Learn (ML library for Python) - does not leverage parallel processing capabilities	- Scikit Learn when there is no need of parallel processing (80% of the time) - Tensor Flow / Keras - TFX for the full support of the data pipeline for ML	LOW	<i>Technologies already proven in the Group and in use by the Quality Data scientists for the UC2 Prototype.</i>
API Platform	- Docker Swarm sur on-premise - APIGEE	- Docker AI Platform+ Kubernetes when other than Python - APIGEE	MEDIUM	<i>Apigee deja utilise comme API mgr), mais je pense que le sujet est ici plutôt le mode de serving par API des predictions : la preco sera d'utiliser Cloud ML engine sur GCP . lié au point precedent .</i>

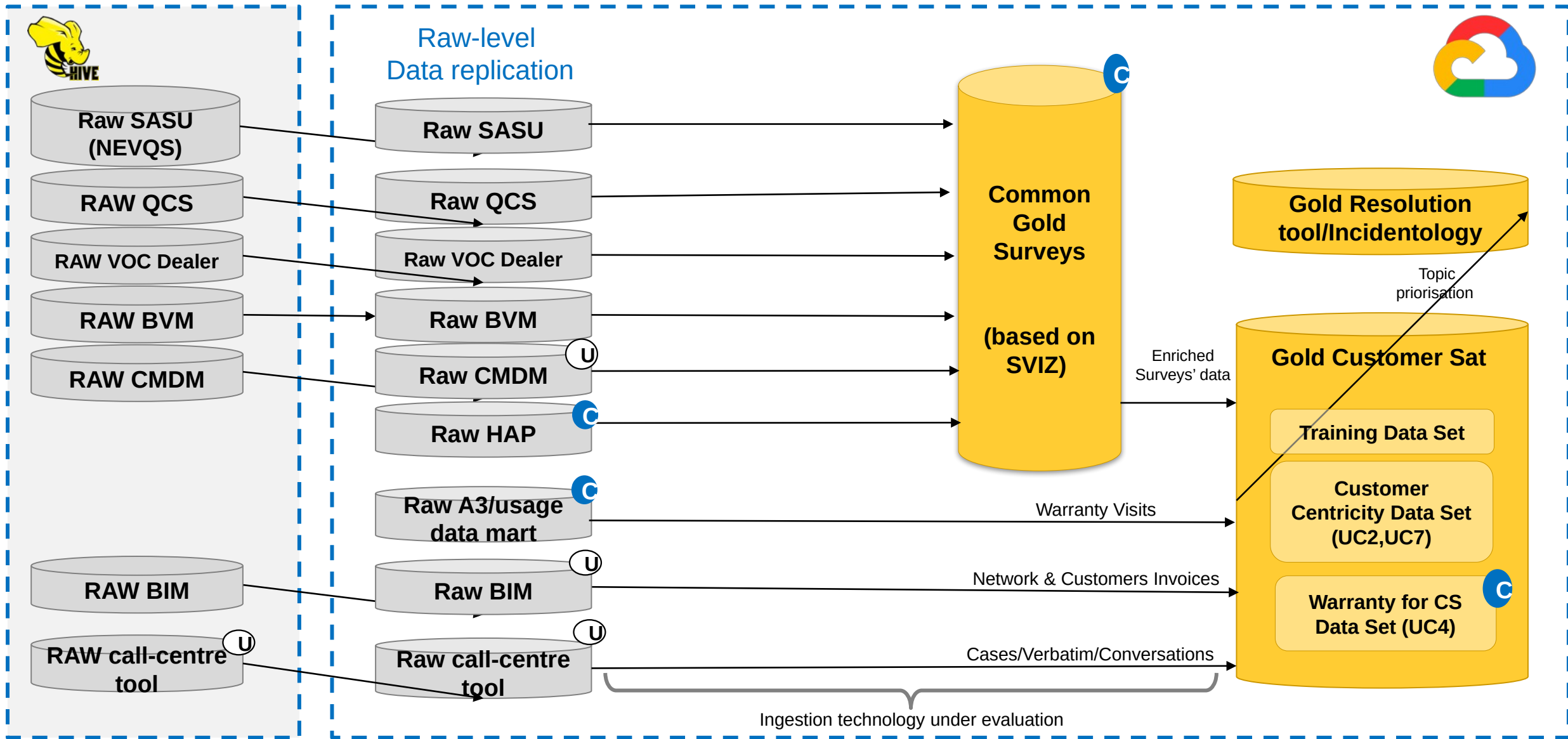
Quick start architecture for CS Data. UC2/MVP

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Ⓢ ⇒ To be created



Target architecture for CS Data. UC2-UC4 / Release 2

U ⇒ To be updated
C ⇒ To be created





APPENDIX — 2021 CONTINUITY PLAN STEERING COMMITTEE OF 25 NOVEMBER 2020 — SELECTED SLIDES

EXECUTIVE SUMMARY

➤ Background & Context

- The IT Quality budget reduction from 10M€ to 5M€, forces us to terminate or freeze several IT projects.
- It was decided that CGS / sViz must switch to MCO mode in 2021, meaning no further developments, only small changes and maintenance.
- The originally proposed budget of 600k€ + 800k€, must be reduced to the minimum toward Management request: 300k€.
- In this context we identified the requirements in order to secure sViz service continuity in 2021.

➤ Key messages

- For each survey family in sViz (VoC Dealer, NEVQS, QCS and NCBS) we defined 3 priority levels:
 - P0 → Mandatory for service continuity. Main requirements:
 - Adaptations for NEVQS & QCS major questionnaire evolution coming in 2021
 - Development work for New VoC to be done in 2021, to support the New VoC deployment in Jan 2022.
 - P1 → Important features for sViz functionality. Example:
 - VoC Dealer: Adding dealer satisfaction NPS (pressing matter if this KPI becomes a level-1 KPI)
 - P2 → important features requested by the users. Example:
 - Evolutions in issue categorization standards: Contrat Prestation, Squeak & Rattle allocation, Basics & Essentials

- 3 scenarios are proposed.

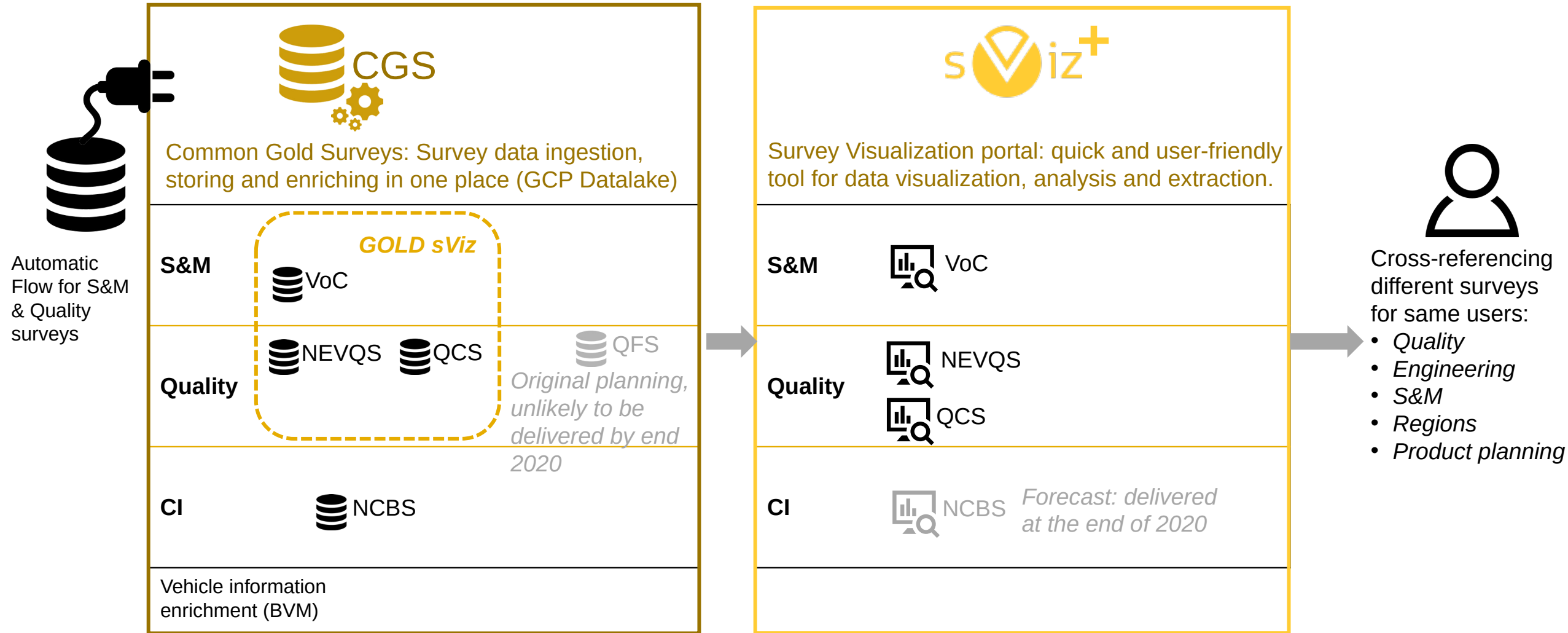
Common to all scenarios: CGS project is terminated – New VoC will not be supported.

- Scenario nr. 1: 300 k€ → **QCS secured**, NEVQS evolutions not supported
- Scenario nr. 2: 300 + 150 k€ → **QCS secured**, NEVQS secured only if switch to **NEVQS Online**
- Scenario nr. 3: 300 + 350 k€ → **QCS secured**, **NEVQS secured**, other developments also possible

➤ Next step and expected decision

- Agreement about which scenario to implement, or agreement about a new one.

IT STATUS – SITUATION END 2020



ACTION PLAN FOR THE END OF 2020



PL

PO
50%

2xData Eng



Data An.

BACKGROUND

Finalizing **QFS** ingestion by 2020 is **not feasible**, for external reasons: LATAM priorities and Survey provider delays.

ACTION PLAN

Stop all ongoing development work and switch the CGS team to support sViz:

1. Support the deployment of **NCBS**
2. Deploy the **automatic translation API** in the Gold sViz for **NEVQS** and **QCS** to suppress survey institute translation costs



PL



PO

Data
EngData
An.

3xDevs

UI/UX
25%

BACKGROUND

Risk of only partially deploying **NCBS** target functionality.
Risk of disruption brought about by the **changes in Quality reference standards** being studied.

ACTION PLAN

1. **Stop** all work on **Quality reference standards**: Contrat Prestation, Squeak & Rattle allocation and Basics & Essentials
2. Focus 100% of the Team to the **deployment of NCBS** by end of R12 at the latest. **Stop all other development work.**

SVIZ – SURVEY VISUALIZATION: REMINDER

■ Mission

- **Enrich** customer satisfaction survey data with vehicle and customer information
 - Provide **easy access** to data visualization
 - Thin client, no installation required
 - User-friendly, intuitive to understand and handle
 - Allow data drill-down from KPI to single data point
- ➔ Instigate **customer-centric** data-driven decision and action across the business

■ Users

- Quality
- Engineering
- S&M
- Regions
- Product planning
- Countries

■ Available surveys

- PRIVATE
- VoC Dealers
 - QCS (Quality Connect Survey)
- BENCHMARKED
- NEVQS (New European Vehicle Quality Survey)

■ Available surveys end of 2020

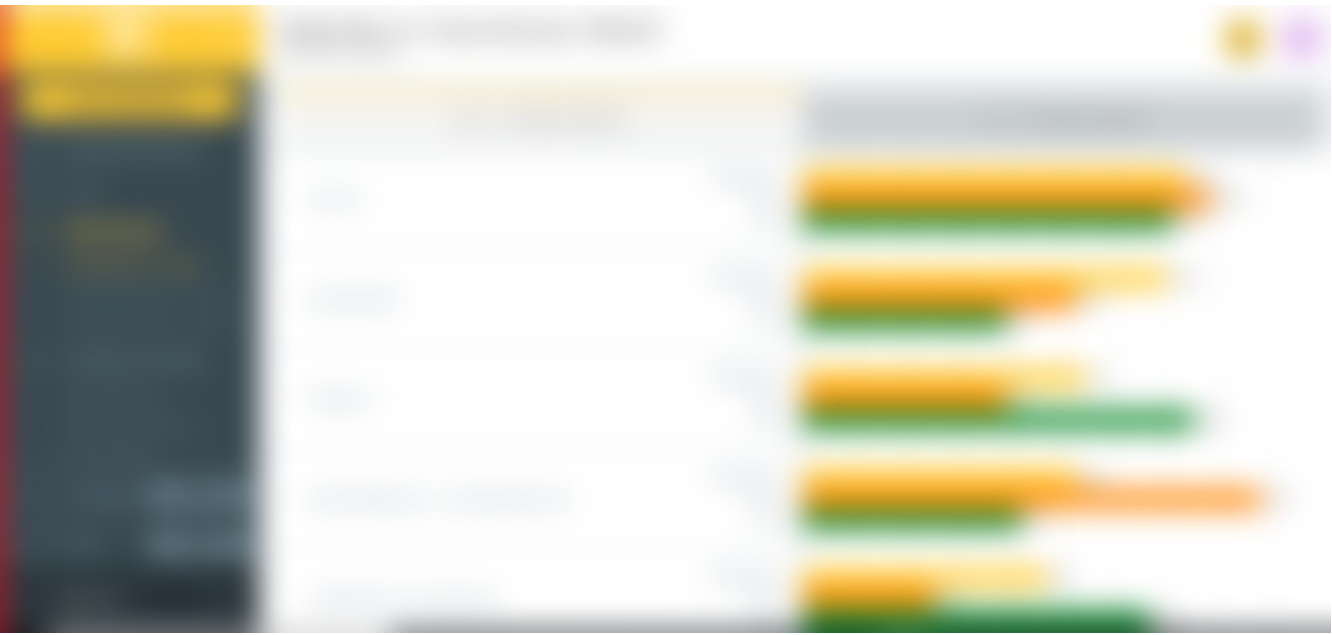
- BENCHMARKED
- *NCBS (New Car Buyer Survey)*

■ Measurements

- 794 accounts, including 65 VoC-only accounts
- 180 unique users each month

■ Target

- 1.800 accounts
- 500 unique users each month



VOC DEALER FAMILY (5 SURVEY TYPES)

■ Technical requirements

- **Mandatory for service continuity – P0:**
 - New VoC from Jan 2022 in sViz
 - Guarantee perfect data ingestion taking into account corrections or evolutions from survey institute
- **Important for functionality / usage – P1:**
 - Adding dealer satisfaction NPS (mandatory if it becomes a level-1 KPI)
- Features requested by users – bothersome feedback – P2:
 - Saving reports, same as NEVQS / QCS pages
 - Saving calculation exports, same as NEVQS / QCS pages

■ Users – KPIs used by the business / Business needs

Improve service quality and customer satisfaction with a focus on dealer dispersion

- Quality – CS (S&M Service Quality)
- Country CX Manager (+ Regions)

NSC Quality healthcheck based on sViz dispersion calculation

- New users: CS direction

Dealer Satisfaction NPS in 2021?

■ List of affected surveys

- 5 survey types: Private Sales, Private Service, Local Fleet Sales, Local Fleet Service, Used Cars Sales
- Countries (Private Sales & Service): 30+ worldwide

NEVQS FAMILY (2 SURVEY TYPES)

■ Technical requirements

- **Mandatory for service continuity – P0:**
 - Switch from NEVQS to NEVQS online and associated questionnaire evolution
 - Potential club switch from NEVQS format to QFS format. Impact: large-scale refactoring.
 - Identification of HEV/PHEV vehicles
- **Important for functionality / usage – P1:**
 - Implementation of revised issue categorization standards (Contrat Prestations update)
- Features requested by users – bothersome feedback – P2:
 - Verbatim automatic translation
 - Reallocation Squeak & Rattle and defects
 - Launch of Basics & Essentials issue category

■ Users – KPIs used by the business / Business needs

Improve product quality and customer satisfaction

- Quality (ISPC & IQM especially)
- Engineering (Business Engineer)

NPM based on sViz calculation and associated Pareto of complaints (performances and defects)

■ List of affected surveys

- 2 survey types: 3 months in service, 12 months in service
- Countries: FR, DE, RU, UK (FR & DE clustered as G2)

QCS FAMILY (3 SURVEY TYPES)

■ Technical requirements

- **Mandatory for service continuity – P0:**
 - Questionnaire evolution to be incorporated
 - Risk of change of provider in 2021. Impact: large-scale refactoring.
 - Identification of HEV/PHEV vehicles
- **Important for functionality / usage – P1:**
 - Implementation of revised issue categorization standards (Contrat Prestations update)
- Features requested by users – bothersome feedback – P2:
 - Reallocation Squeak & Rattle and defects
 - Launch of Basics & Essentials issue category
 - Pivot-table functionality, same as NCBS page

■ Users – KPIs used by the business / Business needs

improve product quality and customer satisfaction with reactivity

- Quality (ISPC & IQM especially)
- Engineering (Business Engineer)

PPH based on sViz calculation and associated Pareto of complaints (performances and defects)

■ List of affected surveys

- 3 survey types: 1 month in service (new launches & “post-lockdown restart” models only), 3 months in service, 12 months in service
- Countries: FR,DE,GB,RU,IN,CN (FR & DE clustered as G2)

NCBS

■ Technical requirements

- **Mandatory for service continuity – P0:**
 - Questionnaire evolutions
 - Identification of HEV/PHEV vehicles
- **Important for functionality / usage – P1:**
 - Implementation of potential revised categorization standards (vehicle or customer segmentation, etc.)
- Features requested by users – bothersome feedback – P2:
 - (TBA)

Note 1:

NCBS development is currently in progress.

We are assuming the planned NCBS developments will be completed at the end of R12 release.

Note 2:

In this assumption we are not taking into account any financial cost-sharing from CI, budget is 100% Quality, under discussion.

■ Users – KPIs used by the business / Business needs

Private customer profiling and car market insight

- S&M CI
- Countries and Regions
- Product planning
- Engineering
- Quality

Most used KPIs: NPS / Avg Satisfaction, Purchase / rejection reasons, fidelity conquest, recommendation

■ List of affected surveys

- NCBS
- Countries:20+ worldwide

BACKGROUND

- **NEVQS evolutions depend on the decision of the institute club meeting at the beginning of December:**
 1. Soft evolution to **NEVQS Online**: questionnaire structure basically the same, changes in some questions
 2. Hard evolution to **QFS format**: different family of survey with a different structure
- **Closing the project means transferring ownership to the MCO team in offshore IT centre.**
 - Handover from France to offshore IT centre has a cost from France side of about 150 k€, to take from the IS-Q budget of 300 k€
 - The total scope of the handover has to cover CGS and sViz sides

PROPOSED 2021 CGS / SVIZ SCENARIOS

Initial 2021 CGS+sViz budget: 1400k€

	Scénario 1 : 300k€	Scénario 2 : 300k€ + 150k€	Scénario 2Bis : 300k€ + 350k€
Evolution questionnaire NEVQS 2021	KO	OK seulement si switch vers NEVQS online (KO si switch vers format QFS)	OK si switch vers NEVQS online ou si switch vers format QFS
Evolution questionnaire QCS 2021	OK	OK	OK
Evolution questionnaire New VoC pour janv. 2022	KO	KO	KO
Evolution priorité P1 ou P2 (ex: S&R / defect reaffected)	KO	KO	Si NEVQS online P1 Ok Certains P2
IA / Data Science dans sViz	KO	KO	Si NEVQS online Possible en fonction des priorisations de P2
Poursuite de l'architecture CGS	KO	KO	KO
Closing et transfert offshore IT centre	Fait sur T1 2021	Fait sur T2 2021	Non
Equipe totale (ex CGS sViz)	Dissolution équipe CGS et maintien d'une équipe centrée sViz Staffing PL Staffing FR T1 2021 (197 k€) Staffing offshore IT centre T1-T4 2021 (hors scope des 300k€)	Dissolution équipe CGS et maintien d'une équipe centrée sViz Staffing PL (T1-T2 : 54k€ + T3-T4 : hors scope) Staffing FR T1-T2 2021 (394 k€) Staffing offshore IT centre T2-T4 2021 (hors scope des 300k€)	Dissolution équipe CGS et maintien d'une équipe centrée sViz réduite Staffing PL (95k€) Staffing réduit FR 2021 (550 k€)

2021 RISK & MITIGATION PLAN

TYPE	RISK	Ki	MITIGATION PLAN
Team discontinuation	Interruption of sViz service when there is a change in a survey + inertia to restart after 2021	K ₀	• <u>As a minimum</u>: implement survival plan 2bis (IT total budget of 650 k€) • <u>Ideally</u>: approve original IT budget request of 1.400 k€
	Loss of competencies and know-how in strategic roles	K ₁	
	DS platform IA/ML enablers not deployed in sViz	K ₂	
	New VoC not deployed in sViz	K ₃	<i>Situation in flow, final decision not taken and no visibility</i>
Data flow from survey providers	Slow detection and resolution of cases of poor data quality / availability (applies to all survey providers): • Data not transmitted timely • Data missing from tables (empty fields) • Data deleted on supplier's side, etc.		Deploy a data surveillance plan and protocol (similar to quality plans in the factories)
		K ₂	Include clear SLA and penalty fees, based on data quality, in the renewed contracts