

Product Data Capability Mapping Self-Assessment

[Product Data Capability and Maturity Assessment](#)

The Product Data Capability and Maturity Self-Assessment is an ongoing project within HS that facilitates discussion between the Data Strategy Team and HS Product Teams regarding a self-assessment of 8 data capabilities (listed below). This self-assessment is done on a scale of 0-5 where the Product Team decides on two numbers: a current assessment of where they are, and a future assessment of where they realistically would like to be at. This allows us to analyze gaps in present and future ratings, prioritize improvements, and provide recommendations.

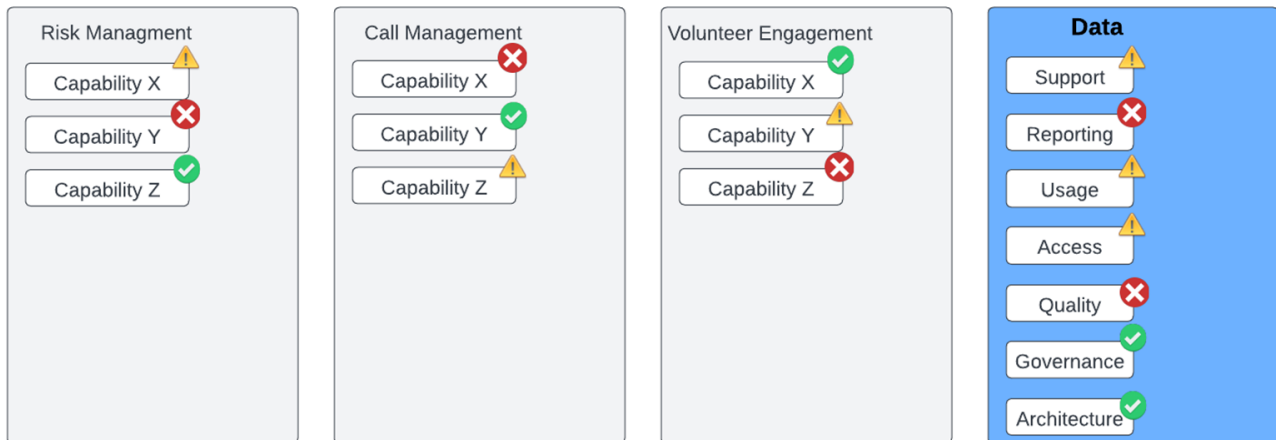
How Will It Be Used?

The Product Data Capability Self-Assessment will be used to:

- Standardize the way we discuss and assess data across products
- Drive prioritization of data capabilities in product roadmaps, and
- Provide a more holistic view of product value and identify opportunities for improvement

Example: Integrate into Existing Capability Map

Test Product Capability Map



Why is this Important?

Improving the data capabilities of our products will improve outcomes that contribute to our mission.

What Are the Data Capabilities That We Are Assessing?

Capability	Definition	Example
Data Architecture	How the data is stored, arranged and integrated.	VC data is stored in a MySQL Database
Data Access	How we gain privileges and connect to data sources.	There is a process to request access to azure security group in order to gain database credentials

Data Support	Who we can turn to with technical questions about the data.	Designated Subject matter experts (data analyst or scientist) work on product data
Data Governance	How we document roles, responsibilities, rules and definitions surrounding the data.	RC Care has a partial data dictionary
Data Quality	How we measure of the condition of data based on factors such as accuracy, completeness, consistency, reliability and whether it's up to date.	It takes the HFC team 80 hours a month to clean their data for reporting
Data Reporting	How we share data insights with our target audiences.	Power BI Dashboards are used to display key insights
Data Usage	How we are leveraging the data our systems/products generate to make business decisions.	We can leverage RC Respond data to allocate more duty officer resources
Data Collection	How we gather information on targeted variables in an established system or product, which then enables one to answer relevant questions and evaluate outcomes.	The RC Respond application allows users to enter data relevant to disasters, as reported by callers

How Are We Assessing?

	Data Architecture	Data Access	Data Support	Data Governance	Data Quality	Data Reporting	Data Usage	Data Collection
0	Either not identified or not applicable	Either not identified or not applicable	Either not identified or not applicable	Either not identified or not applicable	Either not identified or not applicable	Either not identified or not applicable	Either not identified or not applicable	Either not identified or not applicable
1	No data architecture (flat files, .xlsx, .csv)	No defined access request process. Stakeholders cannot access data	No designated resource	Limited to no data governance. Absence of data documentation, ownership and stewardship. Metadata is not in data catalog.	Data is very messy. Errors are frequently found. No standard processes for cleaning. Accuracy and reliability are very low	There are no reports built out	Data is not utilized for decision making	We are not currently collecting data
2	Some data is stored in a database (ex. SQL Server, MySQL, other relational DBs)	No defined access request process. Stakeholders access data using workarounds	External data support only	Some documentation on product data. Absence of ownership or stewardship. Metadata is not in data catalog.	Data is very messy. Errors are frequently found. Standard process in place for cleaning. Accuracy and reliability are low	Most reports are built using non-BI tools (i.e., excel).	Data occasionally informs decisions, though anecdotal evidence is still the main driver	We are collecting either too much data or the wrong data.
3	All data is stored in a database (ex. SQL Server, MySQL, other relational DBs)	Informal process for data access (i.e. email the data owner)	Internal ad-hoc data support (some external support as needed)	There is documentation of product data, including a schema and data dictionary outside of the data catalog. Ownership and stewardship are somewhat defined.	Data is somewhat clean. Standard process in place for cleaning. Accuracy and reliability are moderate.	Most reports are built using BI tools (i.e., Power BI). Reports are ad-hoc and not standardized	Data informs some business decisions	We have some key data points, but are collecting too much data that we do not plan to use OR not the right data
4	All data is stored in a Data Warehouse or Data Lake	There is a defined, documented process for data access requests.	Designated data analyst working part time on reporting and analytics	All metadata is in the data catalog, though it is incomplete or undefined. Roles and responsibilities surrounding the data are clearly defined. Schema is up to date.	Data is mostly clean. There are standardized processes in place to correct known errors. Accuracy and reliability are high	Standardized reports are built out using BI tools, though some manual maintenance is required and/or some data lag exists	Data informs most business decisions	We have most of the data we need, but could use some additional data points to inform business decisions
5	All data stored in Enterprise Data Warehouse, optimized for integration and analytics	There is a defined and managed process for data access within the IT portal	Designated data analyst working full time on reporting and analytics	All metadata is in the data catalog and is regularly updated by designated data steward. Ownership and stewardship surrounding the data are clearly defined. Schema is up to date.	Data is clean and ready to use for analysis	Standardized reports are built out using BI tools, scheduled to refresh regularly, and shared with key stakeholders. All data is real-time/no data lag exists.	Data informs nearly all business decisions	We are collecting all the data we need to successfully contribute to mission success

Sample of Results:

Capability	Average Score Gap	PT1 Current Score	PT1 Future Score	PT2 Current Score	PT2 Future Score	PT3 Current Score	PT3 Future Score	PT4 Current Score	PT4 Future Score	PT5 Current Score	PT5 Future Score	PT6 Current Score	PT6 Future Score	PT7 Current Score	PT7 Future Score
Data Architecture	1.93	1	5	3	5	3	3	2	5	4	5	3.5	5	1	3
Data Governance	1.79	1	5	2	4	2	4	2	4	3	3.5	3	3	2	4
Data Quality	1.36	2.5	4	2	3	2	4	2.5	4	2.5	4	3	4	4	5
Data Access	1.07	1	5	5	5	4	5	4	5	4	4	3.5	4	3	4
Data Collection	1.00	2	4	3	4	3	5	3	3.5	3.5	4	4	4	4	5
Data Support	0.79	4	4	5	5	4	4	3.5	4	3	4	2	5	3	4
Data Reporting	0.71	4	4	4	4	3	5	4.5	4.5	3.5	4	4.5	5	2	4
Data Usage	0.50	4.5	4.5	3	4	3	3	4	4	4.5	4.5	3	4	2	3.5

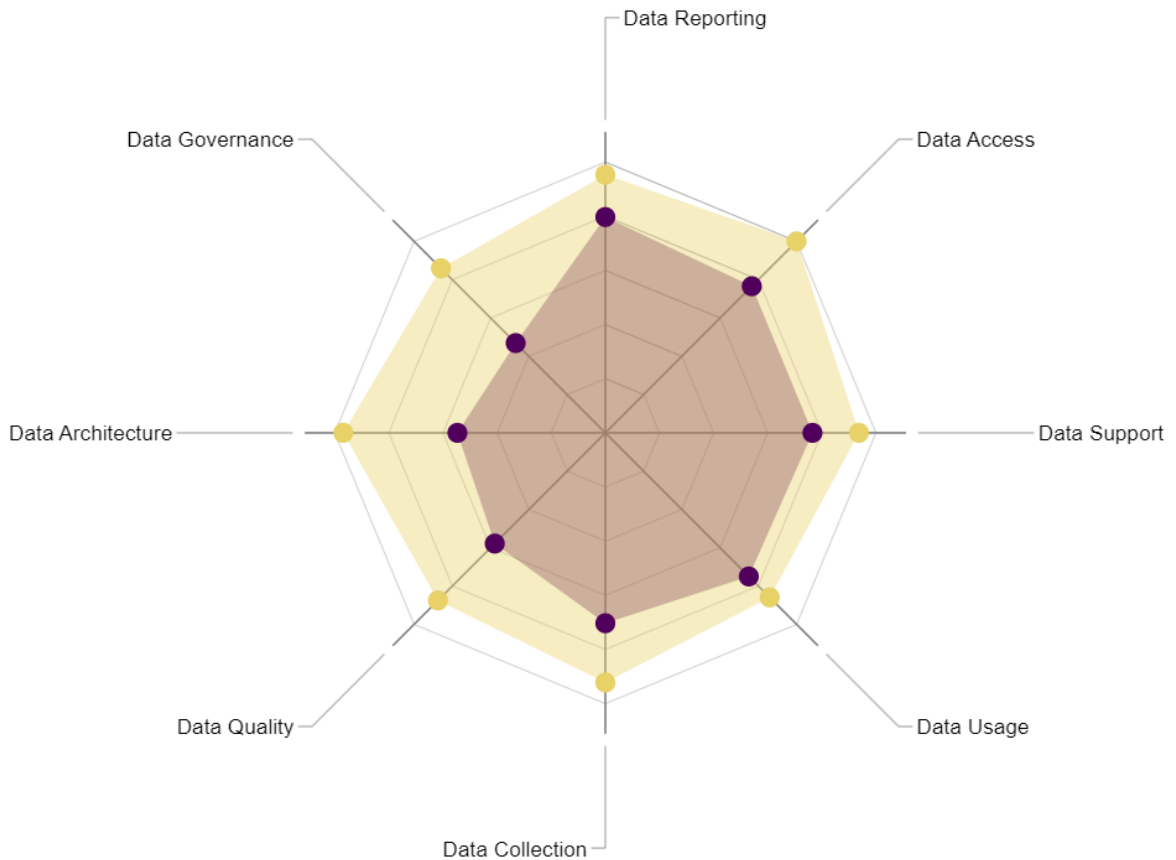
The above chart displays the results from performing the Data Capability Self-Assessment with seven different HS Product Teams (Product Teams have been anonymized).

Key findings:

- Data Architecture (how the data is stored, arranged and integrated) has the highest average score gap of 1.93. The majority of teams are aiming for a future score of 5.
- Data Usage (how we are leveraging the data our systems/products generate to make business decisions) has the lowest average score gap of 0.5. Most teams are satisfied with where they currently are and have little or no desire to increase their score in the future.

Comparison of Average Current and Future Scores Across Product Teams

● Average Current Score ● Average Future Score



Pictured above shows the average current and future data capability scores across all of the assessed HS Product Teams and displays the aforementioned average gap between current and future scores.

Summary

The Product Data Capability and Maturity Self-Assessment is a crucial piece to identifying where and how we can improve our data and products within HS. Improved data capabilities of our products will improve how we serve the Red Cross mission. With the results from the assessments, we are currently working to provide recommendations and guidance to the participating Product Teams to ensure we better serve the ARC mission.

Interested in Taking the Assessment for your Product Team?

If your team is interested in being a part of the Product Data Capability Self-Assessment Project and seeing where and how you can improve your data capabilities, please fill out our Data Strategy Team Project Inquiry Form [here](#). The information and data you share with us may be aggregated with other data points and used to gain an overall view of HS Product Teams; however, all of the information you share with us is **completely anonymous** and will not be shared with other teams.