

# development of the data stewardship maturity questionnaire for assessing stewardship quality of NOAA datasets | Lessons Learned and Practical Applications

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## abstract.

The NOAA National Centers for Environmental Information has developed a Data Stewardship Maturity Questionnaire (DSMQ) in support of the NOAA OneStop Project as an intuitive way to quickly assess stewardship maturity of individual digital environmental datasets. Built on the Data Stewardship Maturity Matrix, the DSMQ presents data managers and domain subject matter experts with a novel way of assessing their datasets that fits uniquely into upcoming data and metadata archiving workflows. The development of this enterprise tool involved several prototypes and internal user testing. This poster will outline the evolution of the DSMQ from a binary yes/no survey to a sophisticated multiple-choice arrangement with several thousand individually-scored possible answer combinations and present some of the challenges that were implemented to solve them.

## the problem.

At the onset of the OneStop project, metadata specialists and Subject Matter Experts used the Data Stewardship Maturity Matrix (DSMM) to complete the data stewardship assessment. This template interface appeared somewhat threatening and broad-scoped to someone without extensive prior experience with completing the assessments. As a result of this complexity, the DSMM assessment process required a significant amount of time.

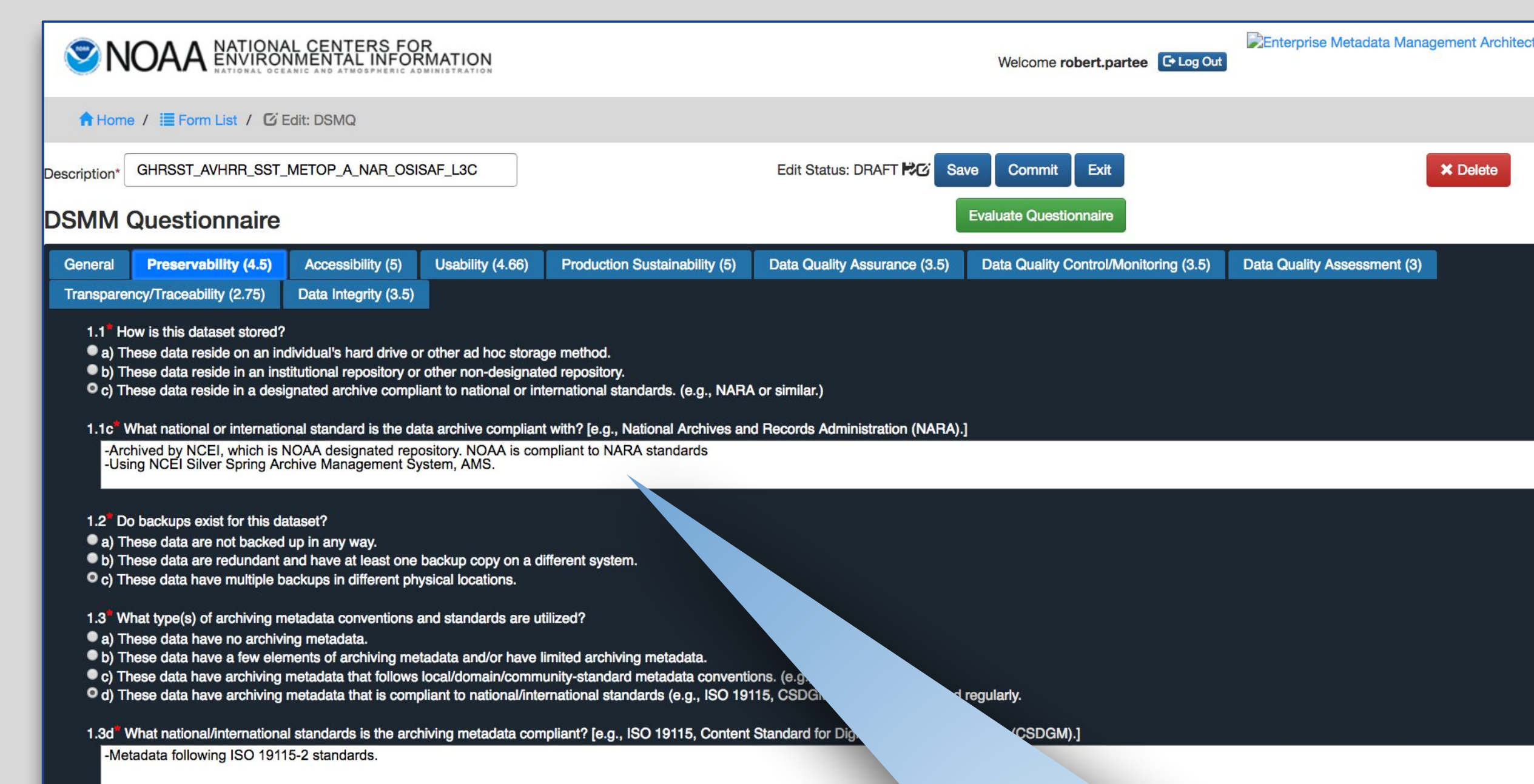
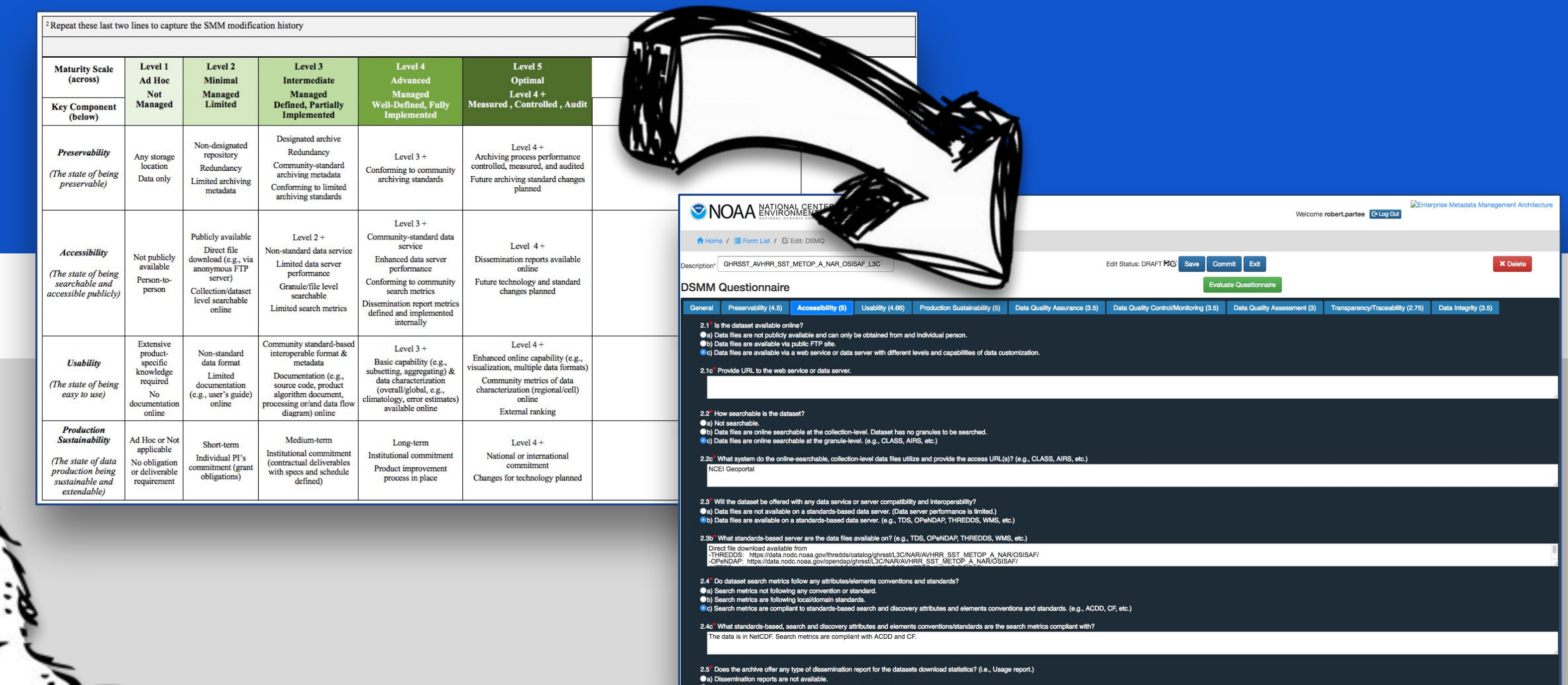
## the technology behind the DSMQ today.

The new questionnaire is based on the CoMET software platform, which provides a convenient user interface. Users can create new forms, delete, edit, change, and save them. The system automatically assigns the date when the form was last modified.

(Before CoMET, every time the form was updated, users had to create another version of the assessment, which involved creating a new MicroSoft Word template, as well as manually keeping track of the dates and version control). In addition, users can now also load the metadata information directly to CoMET forms by typing the web address of a data set. CoMET will import certain metadata information from the NCEI site directly, and some basic fields (e.g., data set title, data set landing page URL, etc.) will be filled automatically.

## from DSMM to DSMQ.

To address the threatening complex layout of the DSMM, the OneStop team has developed an alternative version of the DSMM referred to as the Data Stewardship Maturity Questionnaire (DSMQ). The DSMQ extracts all of the same information as the DSMM, but with a different interface. The DSMQ is a questionnaire as opposed to a matrix. By formatting the matrix as a questionnaire, OneStop was able to create a more intuitive response format with a convenient interface.



## what is new about the DSMQ?

While the original platform, the DSMM, required highly skilled content editors to complete the assessments, this new platform allows any data producer to complete the questionnaire and puts the responsibility for completing the assessment on the data managers/subject matter experts. This alteration reduced the amount of time it takes to complete the form; thus reducing the cost to NOAA for such a stewardship assessment process.

