h e g
Haute école de gestion de Genève
Geneva School of Business Administration

Research Data Literacy

or: Take a ride on the RDL Line!

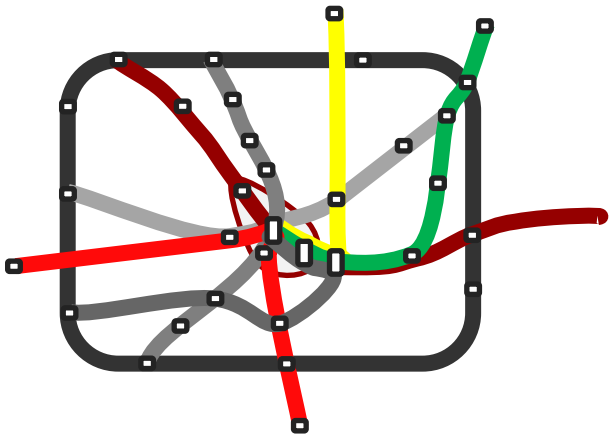
René Schneider

European conference on Information Literacy (ECIL), Istanbul, Turkey, 22-25 October 2013

Hes·so GENÈVE
Haute Ecole Spécialisée de Suisse occidentale

Overview

- Information Literacy and Research Data Management
- Information Literacy and Data Curation Skills
- Building a Flexible Curriculum
- The RDL line



Information Literacy and Research Data Management

Research data management

is a method that enables the integration, curation and interoperability of data created during the scientific process, i.e. the production, access, verification, persistent storage and reuse of this data with the help of adequate and easy-to-use tools in virtual research infrastructures.

Data or Information?

- Research data management is interested in raw data from creation until extinction or archiving;
- Information literacy has always been interested in the proper understanding and use of data that - only through the ability to use it - is converted into information.
- The argument to recognize research data as information was proposed in the 2011 report of the Research Information Network;
- Data management and data curation can be seen as a logical extension of information literacy concepts

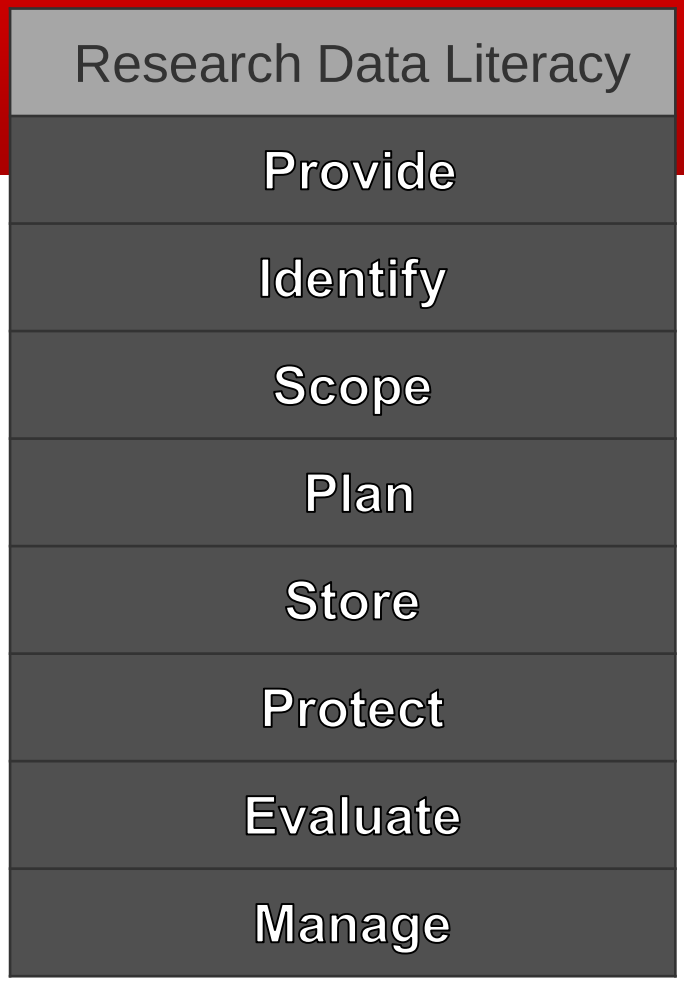
Data or Information?

- Both the data and the context create - due to their innate relationship - the famous “difference that makes a difference”.
- The problem of dissociation of data from its context is at the heart of the data management problem: if the context is lost, the reuse becomes difficult, if not impossible.

Information Literacy and Data Curation Skills

- Big 6 of Information Literacy as Essential Skills (Eisenberg)
- Seven Pillars of Information Literacy as a Core Model for Higher Education (SCONUL)
- DPOE curriculum: «Train the trainer program in Digital Curation» (established by the Library of Congress)

Essential Skills for Research Data Literacy



Information Literacy and Data Curation Skills

Big 6	Seven Pillars	DPOE curriculum
Clarify		
Locate	Identify	Identify
Select /Analyze	Scope	Select
Organize / Synthesize	Plan	
	Gather	Store
		Protect
Evaluate	Evaluate	
	Manage	Manage
Create / Present	Present	Provide

Allocation of Curation to Literacy Skills

RDL	Data Management Competences
Identify	Documentation (research environmental, temporal) / Context / From Information Management to Knowledge Management
Scope	Monitoring Process / Extracting Information from Data Models (and People)
Plan	Data Modeling / Meta Data / Standards Development
Store	Data Analysis and Manipulation / Merging, Mashing, Integration
Protect	Data Preservation / Data Security / Access Authentication / Conditions of Use / Data Legislation
Evaluate	Data Appraisal and Retention / Value of Data / Economic Issues
Manage	Complaints and Expectation Management / Coordination of Practice across Institution / Negotiation Skills / Risk & Disaster Management / Contingency / Advocacy, Promotion, Marketing
Provide	Facilitation, Communication / Raising Awareness

Building a Flexible Curriculum for RDL

	Provide	Identify	Scope	Plan	Store	Protect	Evaluate	Manage
2 hour unit	*	*						
Full course	*	*	*	*				
Full module	*	*	*	*	*	*		
Specialization	*	*	*	*	*	*	*	*
Full study	*	*	*	*	*	*	*	*

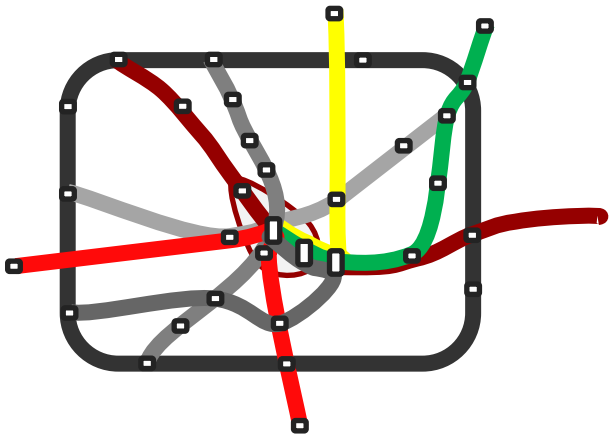
Building a Flexible Curriculum for RDL

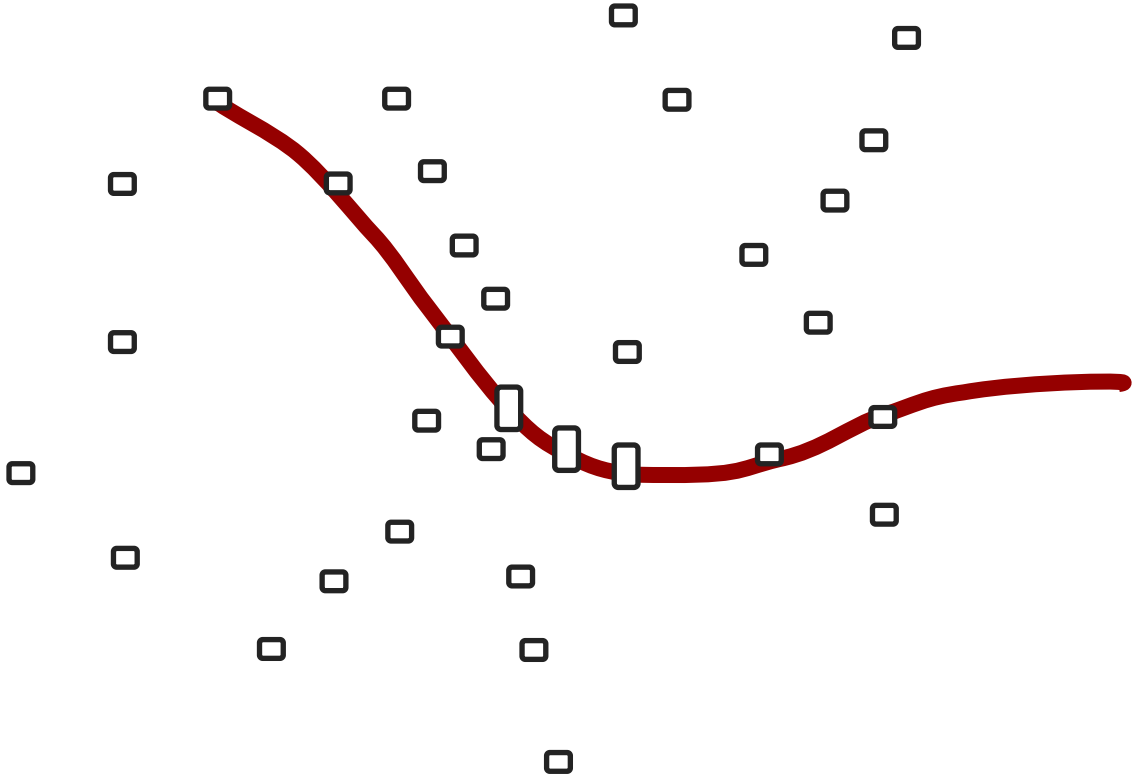
	2-hours unit	Full course	Full module	Speciali-zation	Full program	Diploma
Any Bachelor student	+	*	-	-	-	-
Any Master student	-	+	*	-	-	-
LIS Bachelor Students	-	-	+	*	-	-
LIS Master Students	-	-	-	+	*	-
Data Creators	+	*	-	-	-	-
Data Scientists	+	*	-	-	-	*
Data Librarians	-	+	-	-	-	+
Data Managers	-	+	-	-	-	+

Take a ride on the Research Literacy Line!

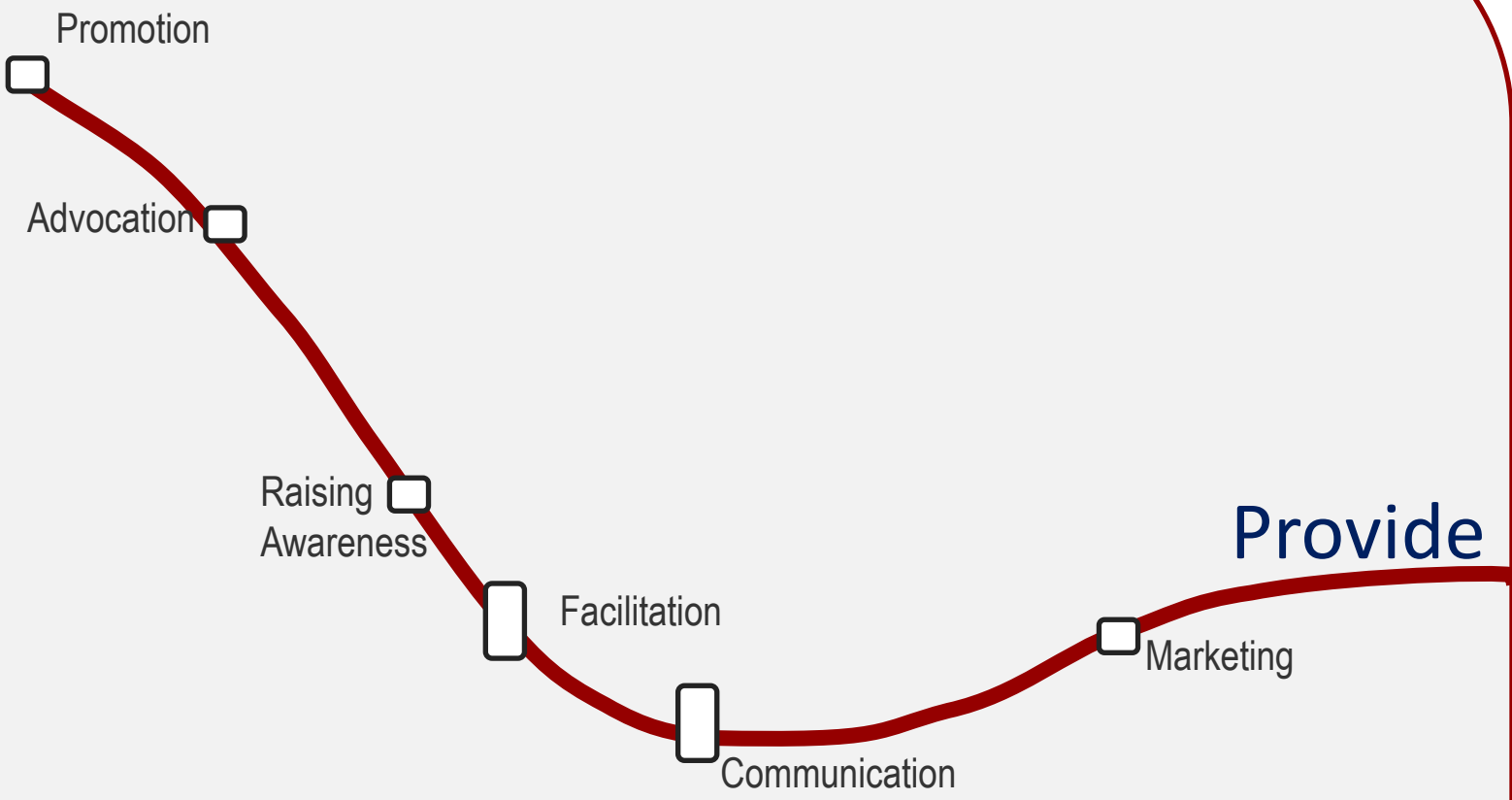
Let's say that:

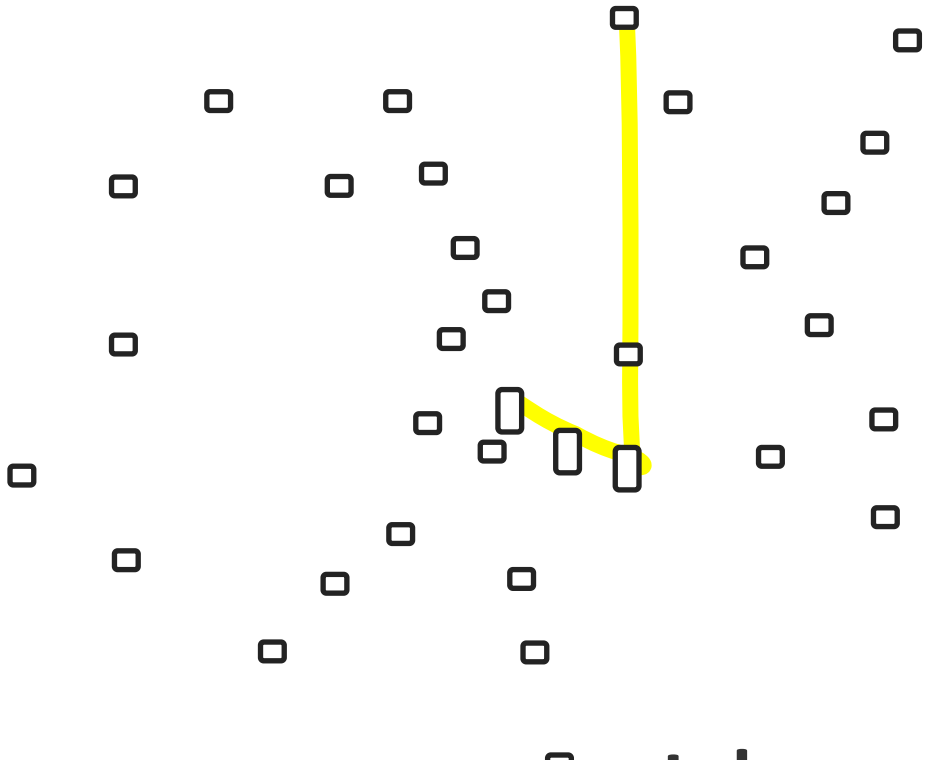
1. Literacy Skills are like Metro Lines
2. Curation Skills are like Stops



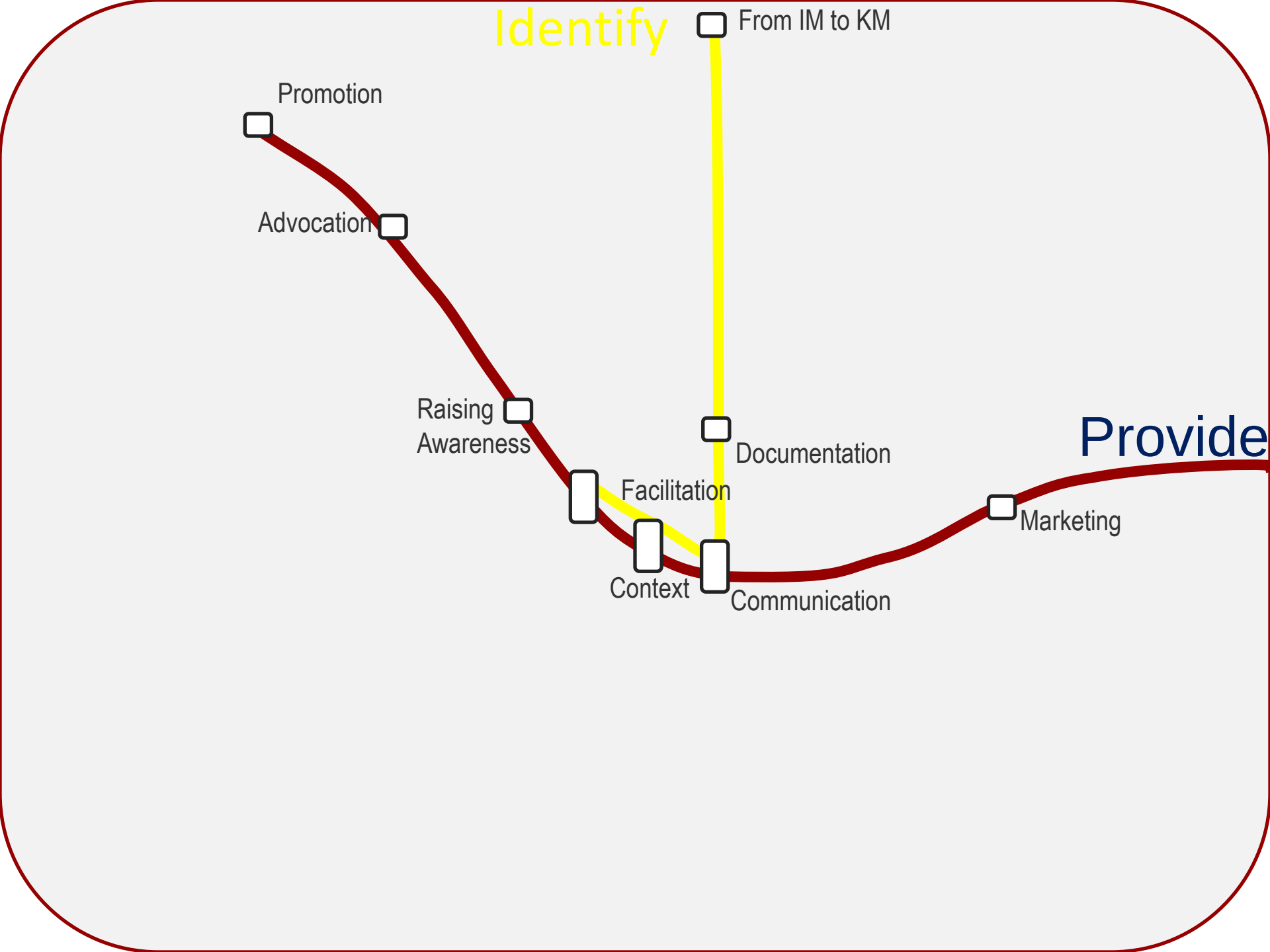


Provision Line


Promotion
Advocation
Raising
Awareness
Facilitation
Communication
Marketing
Provide



Identification Line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From IM to KM
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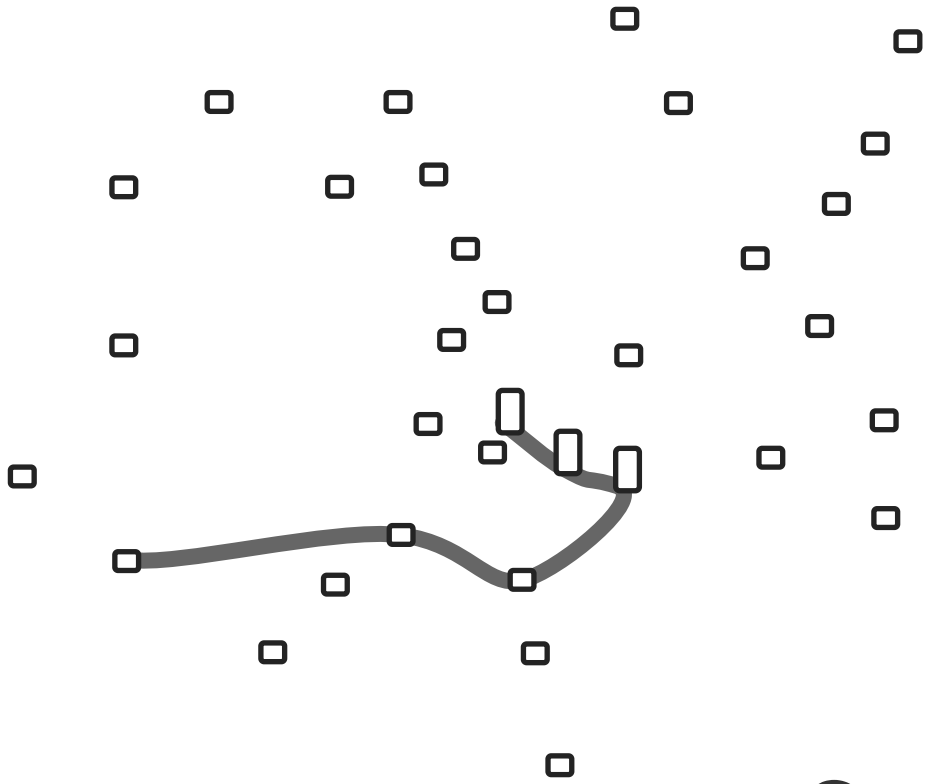
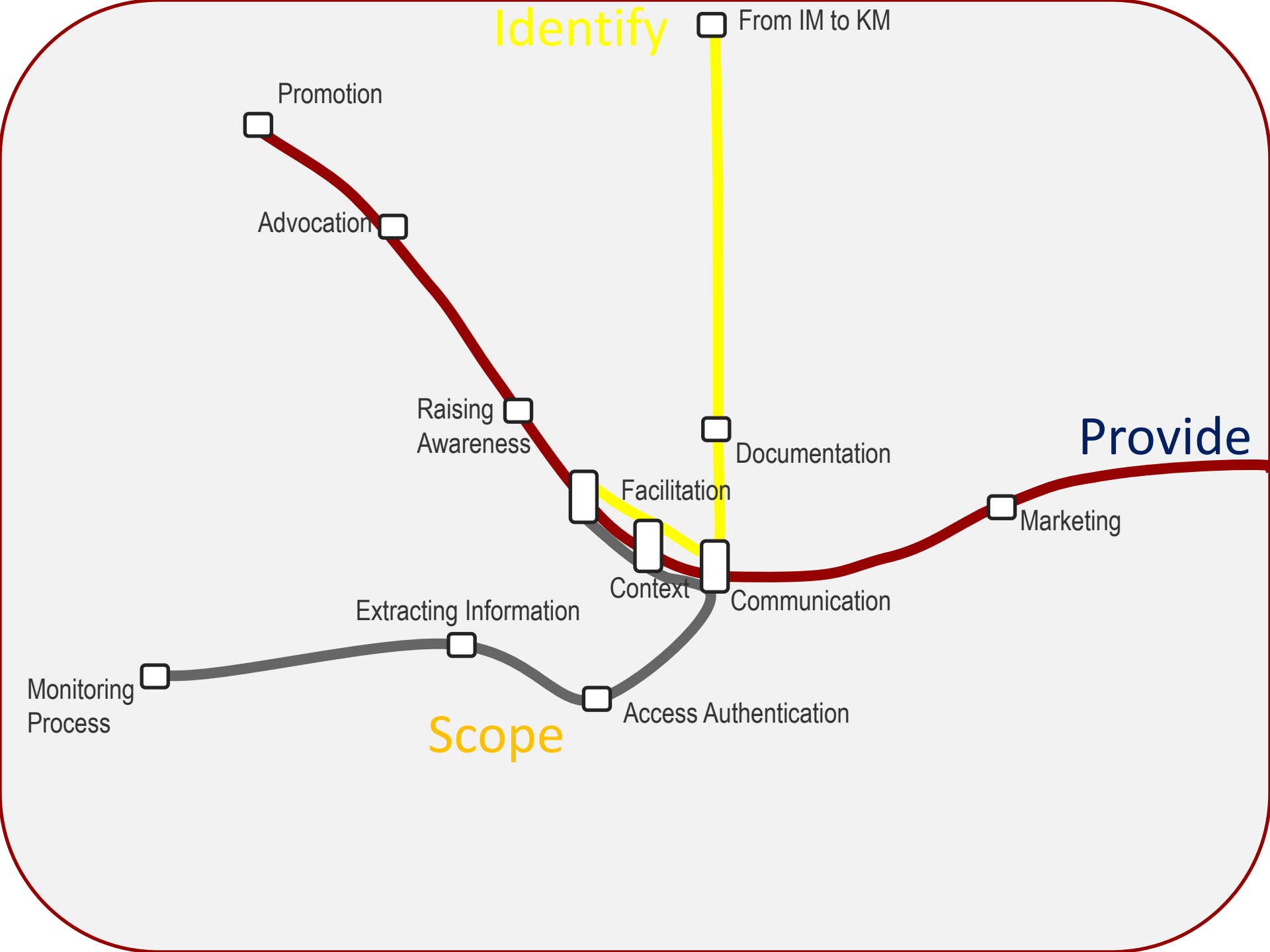
Facilitation
Provide
Marketing
Context
Communication



Scope Line


Identify
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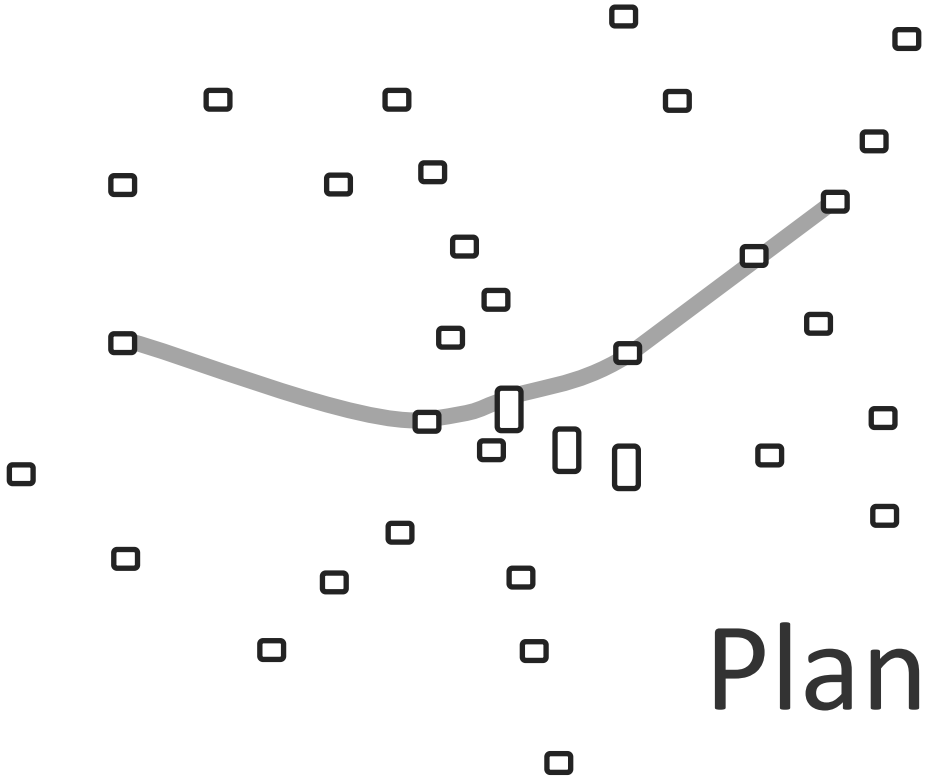
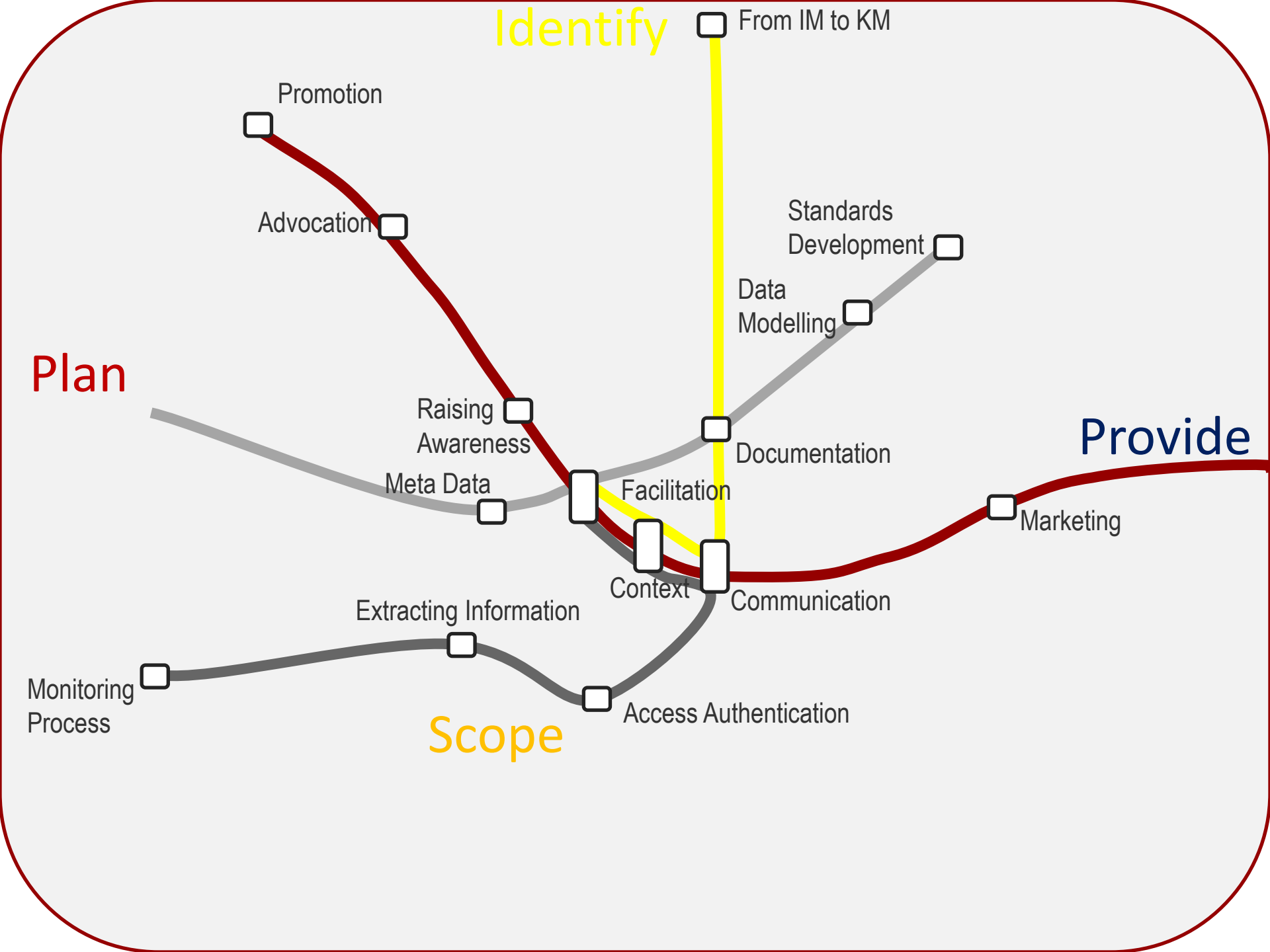
Provide
Marketing
Context
Communication
Extracting Information
Monitoring Process
Access Authentication
Scope



Planning Line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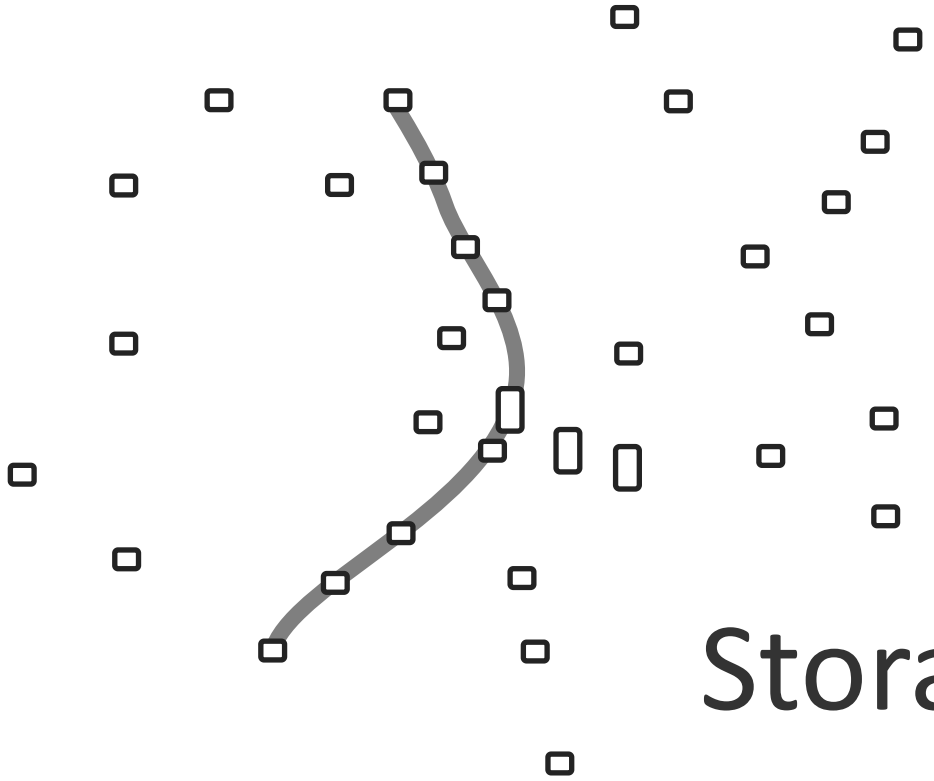
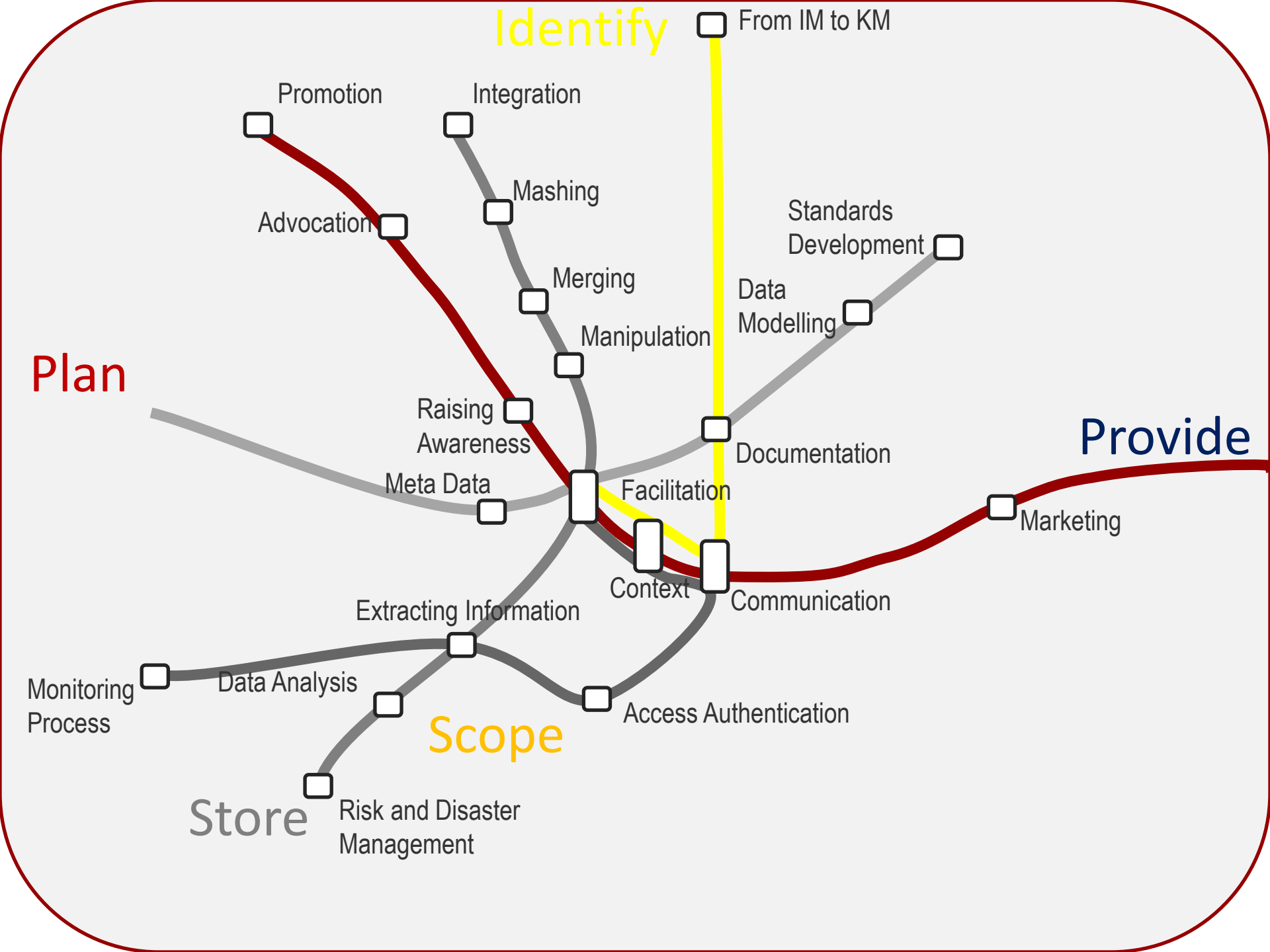


Storage Line


Identify
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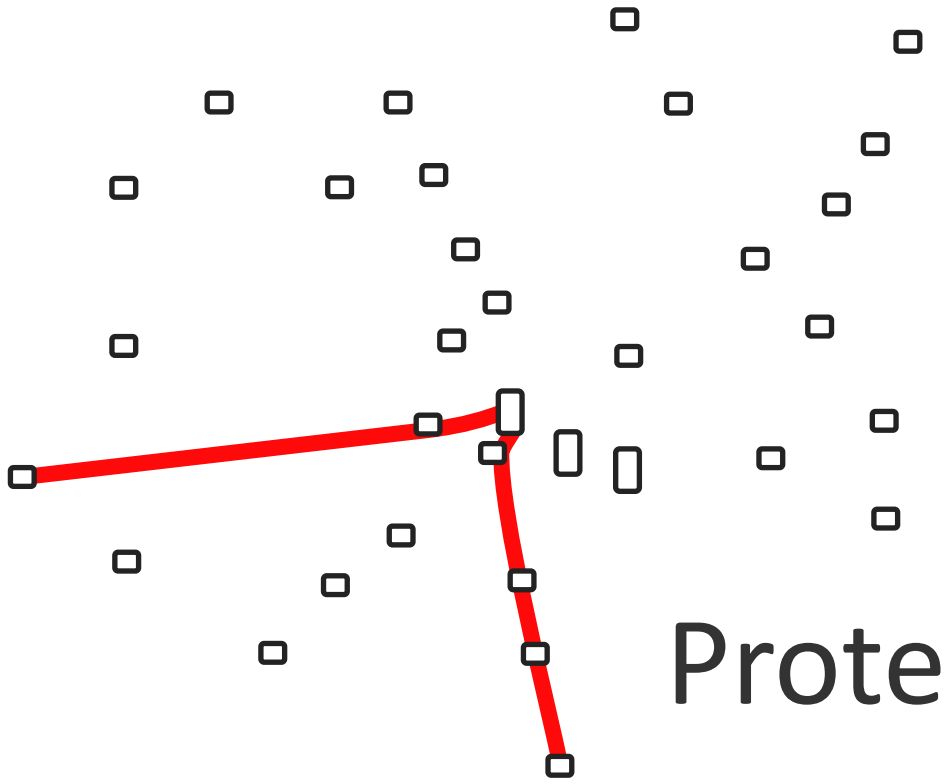
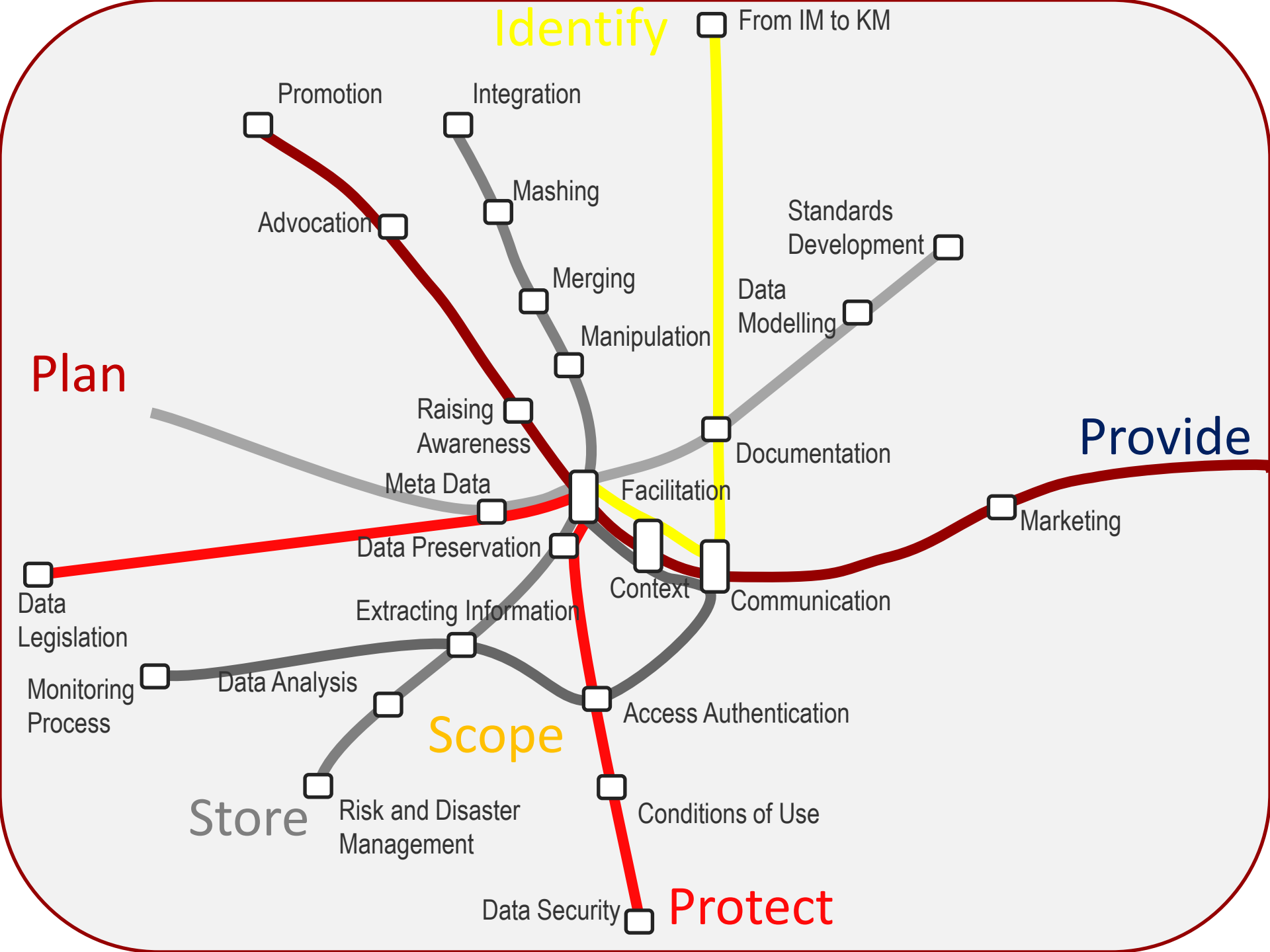
Monitoring
Process
Data Analysis
Access Authentication
Scope
Store
Risk and Disaster
Management



Protection Line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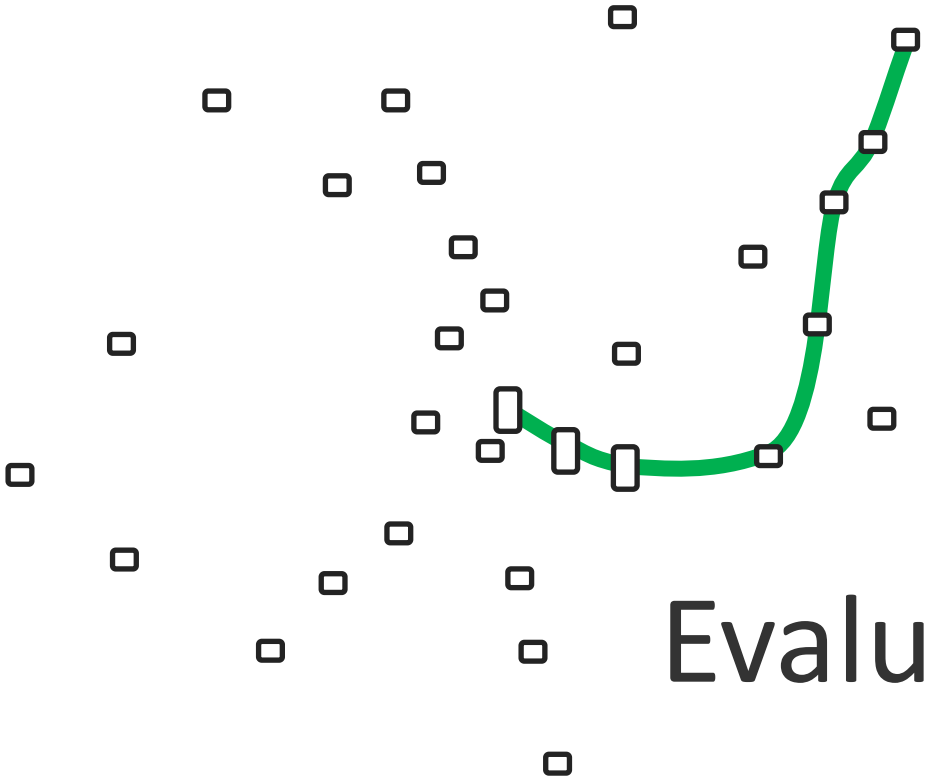
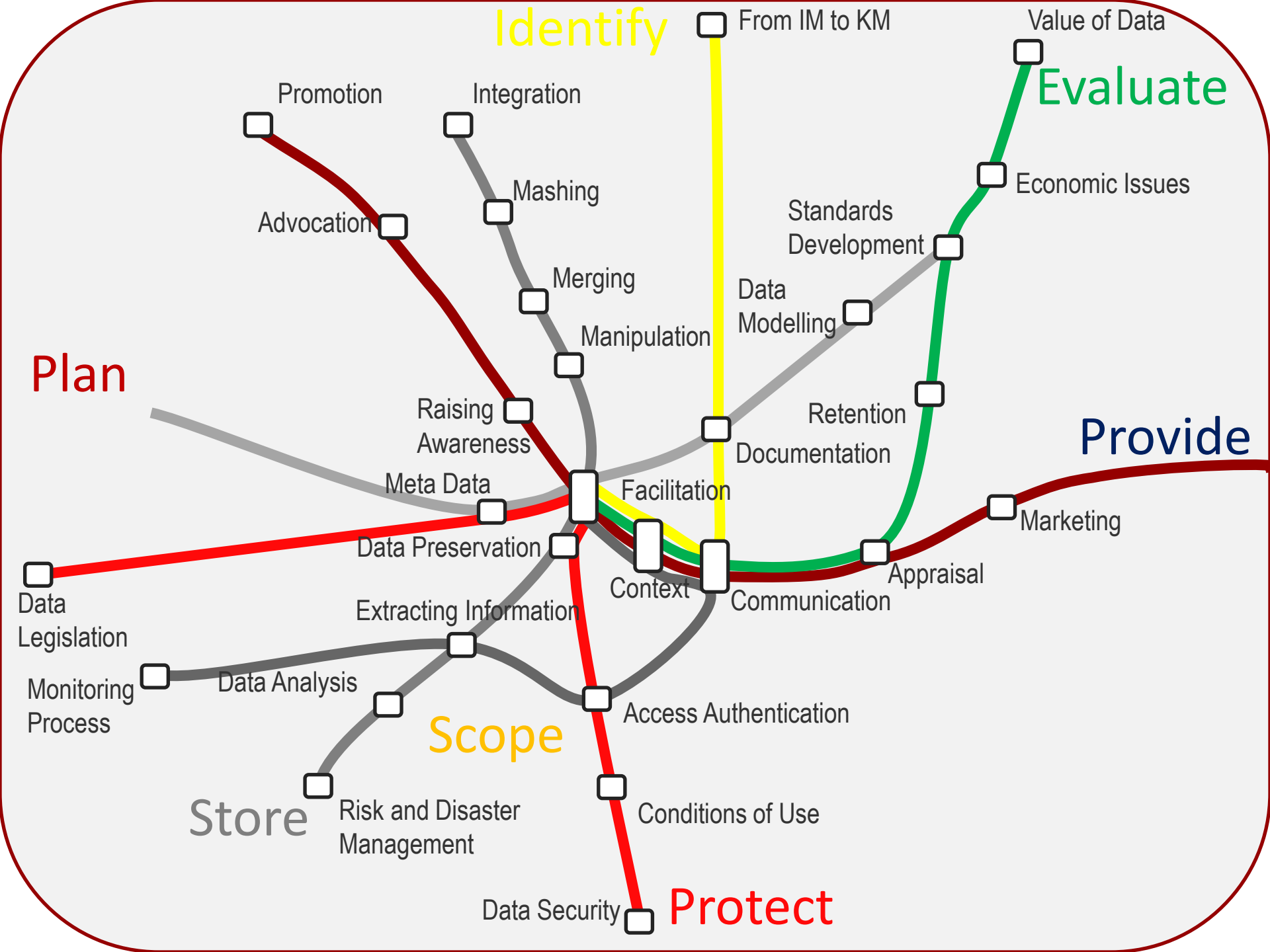


Evaluation Line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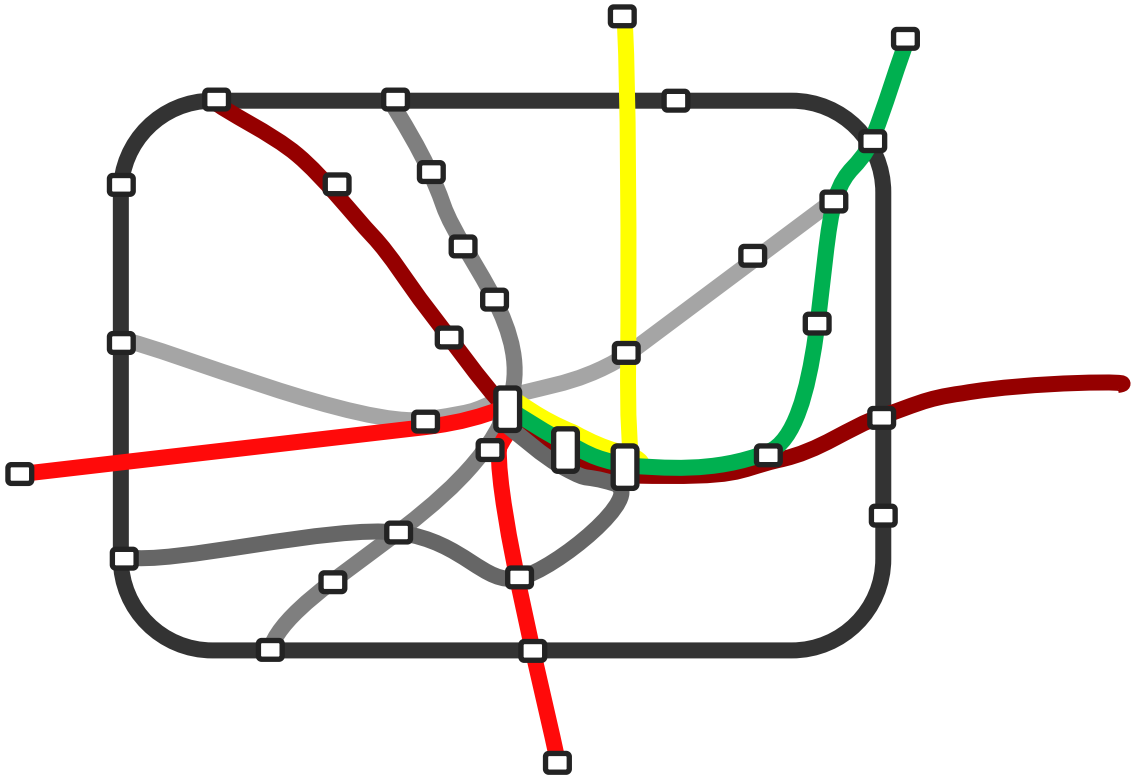
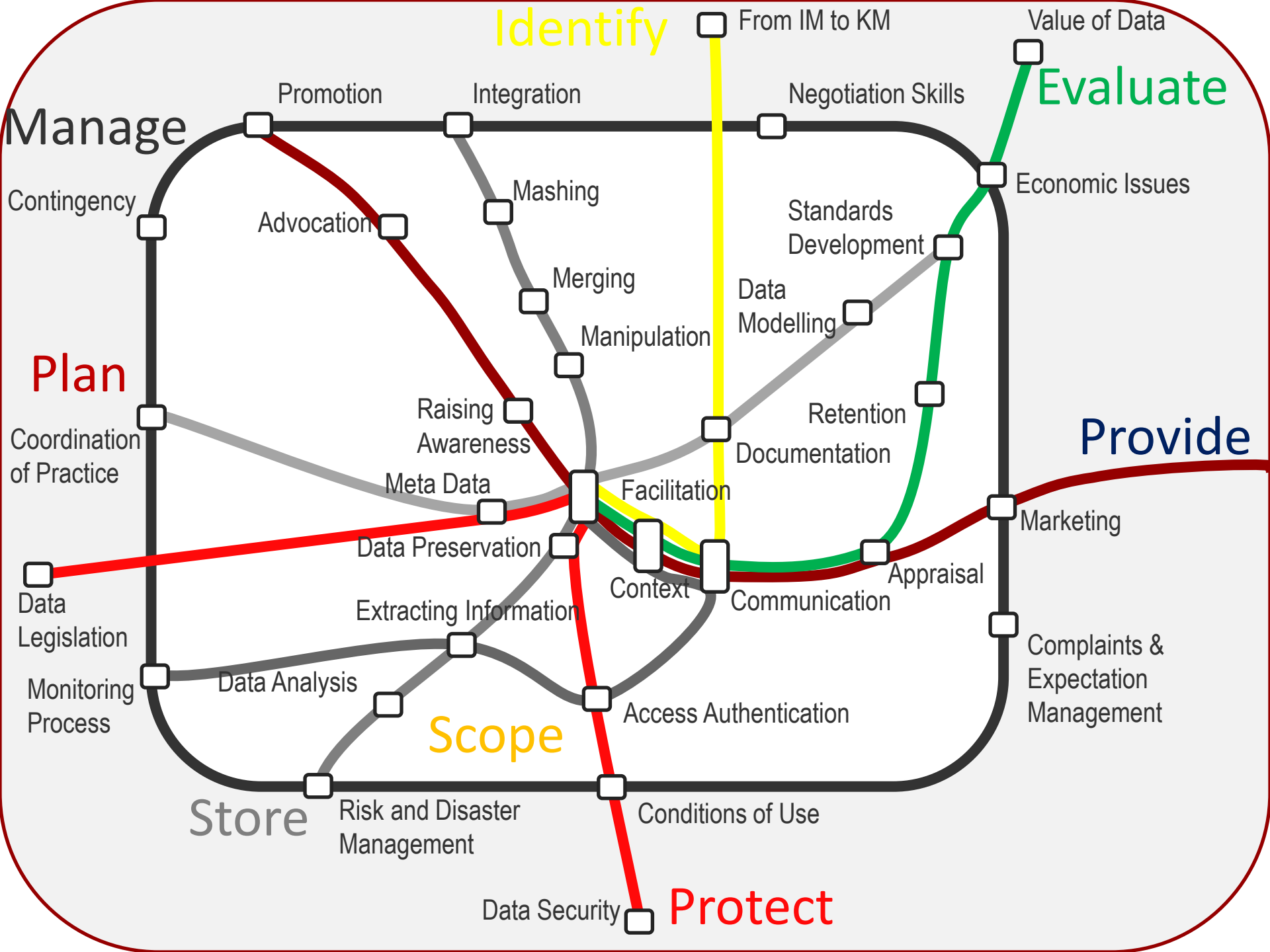


Management Line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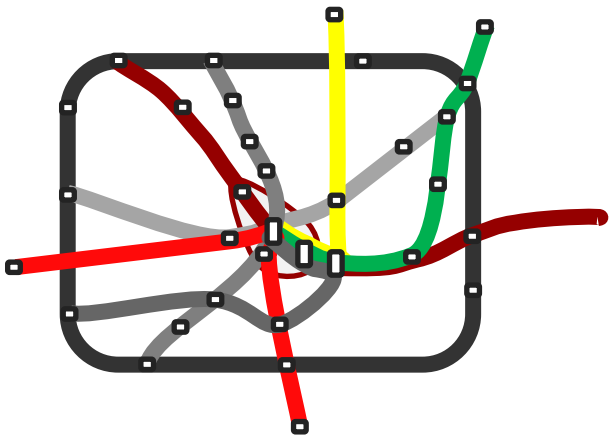
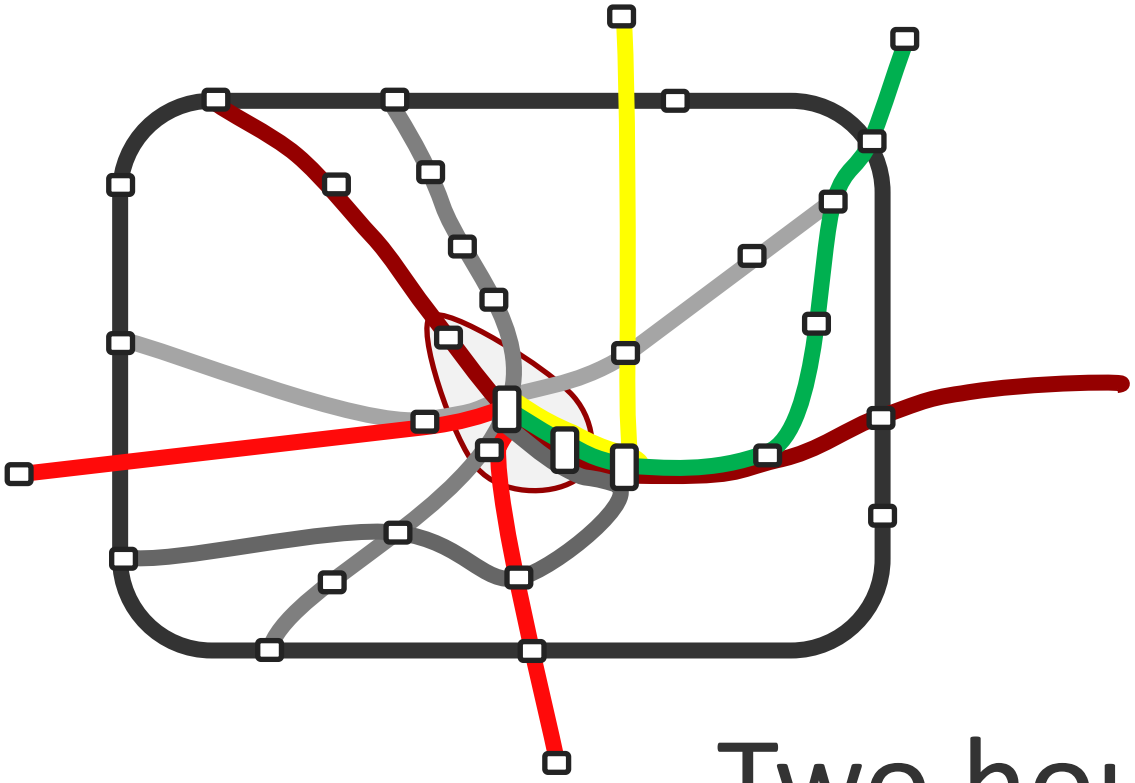
Take a ride on the Research Literacy Line!

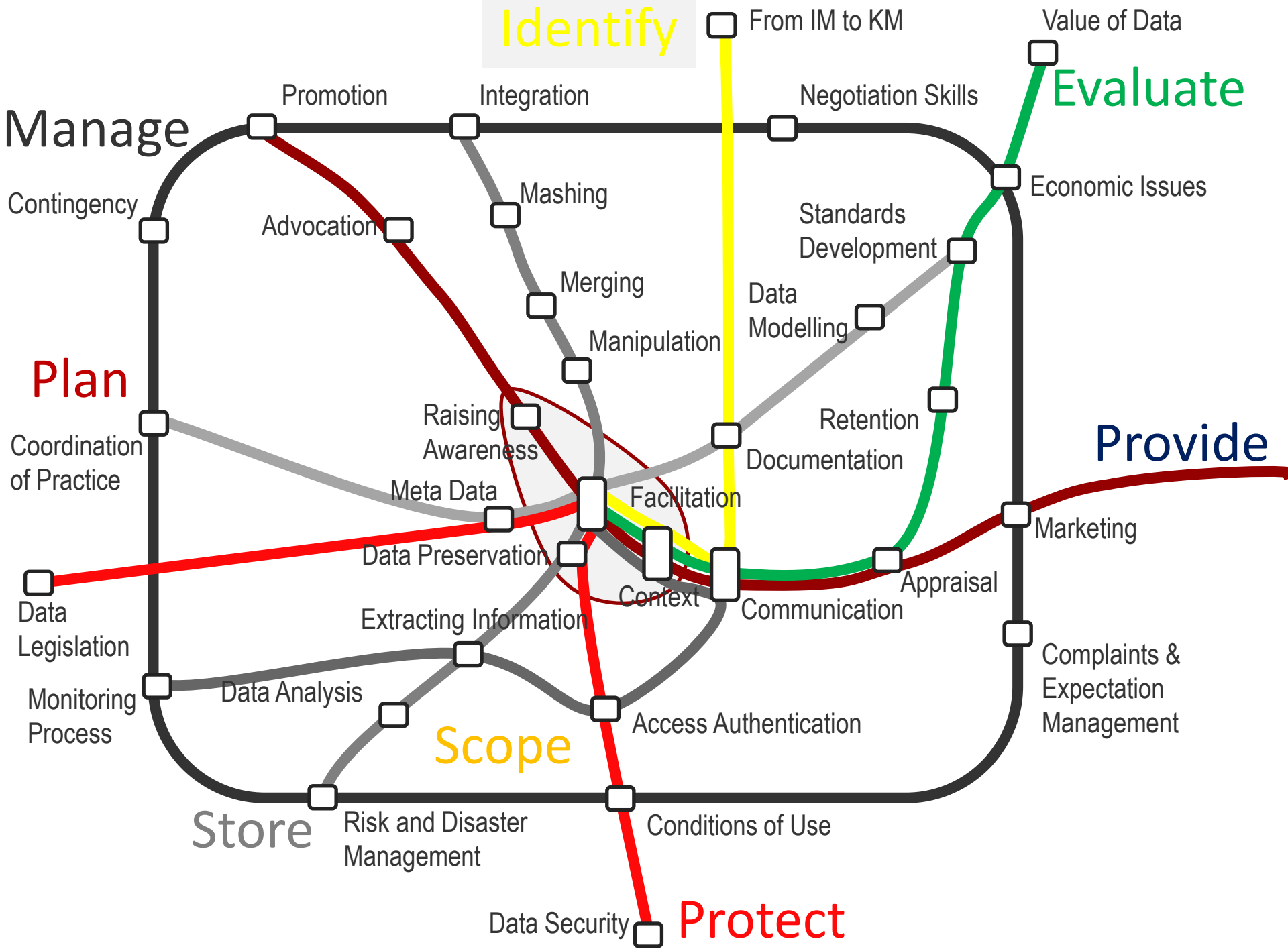
Let's say that:

1. Literacy Skills are like Metro Lines.
2. Curation Skills are like Stops.
3. Teaching units are like zones.
4. Programs are like validity.





Two hours validity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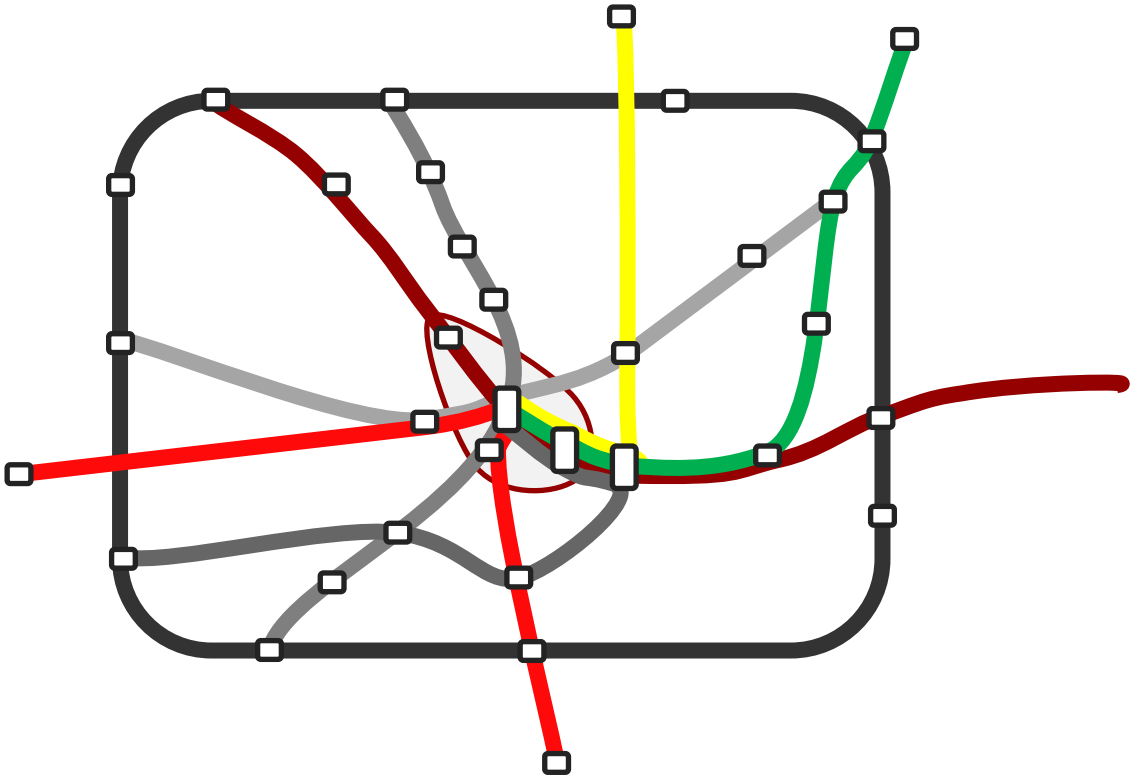
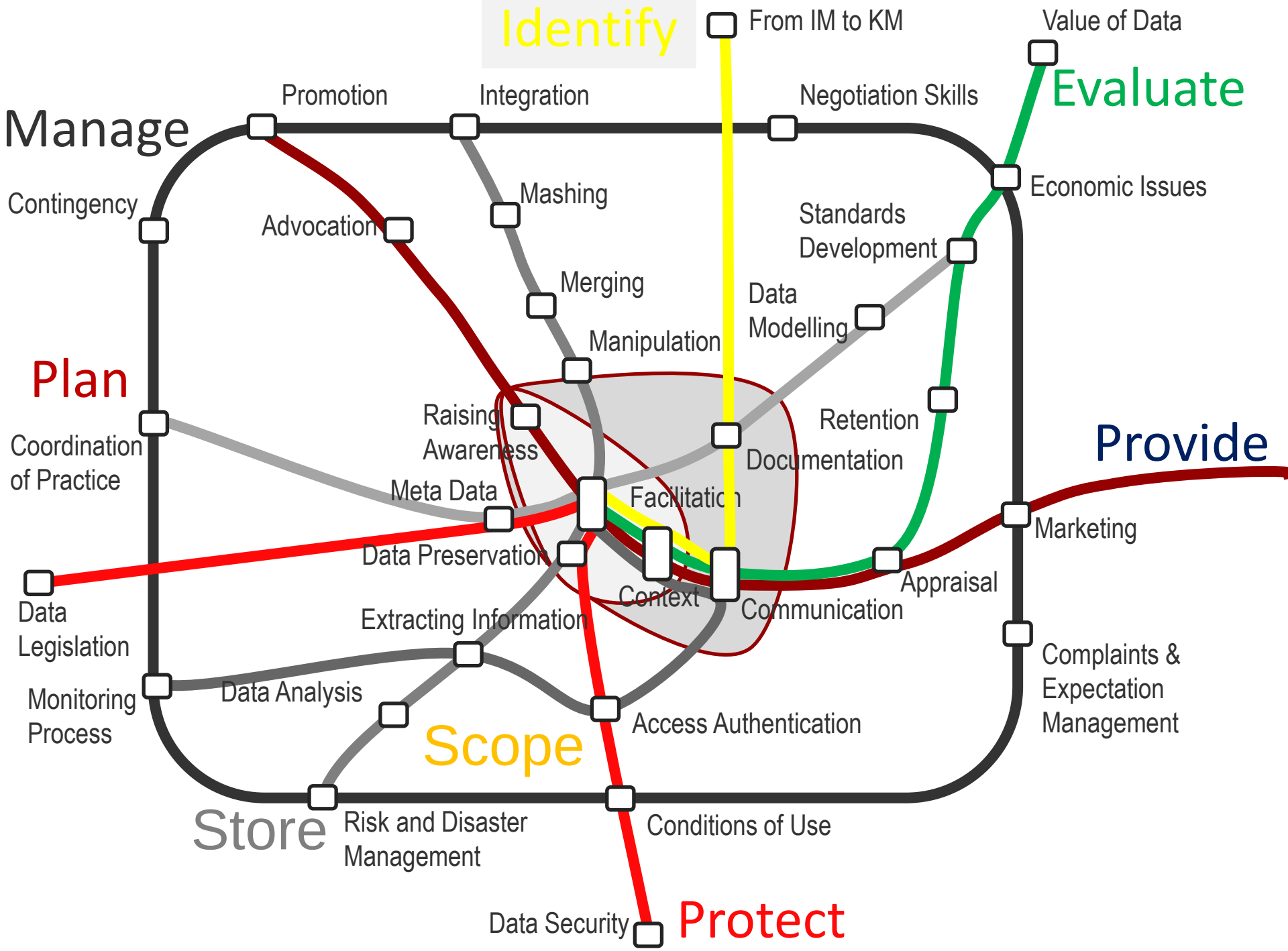


Full course / workshop Ticket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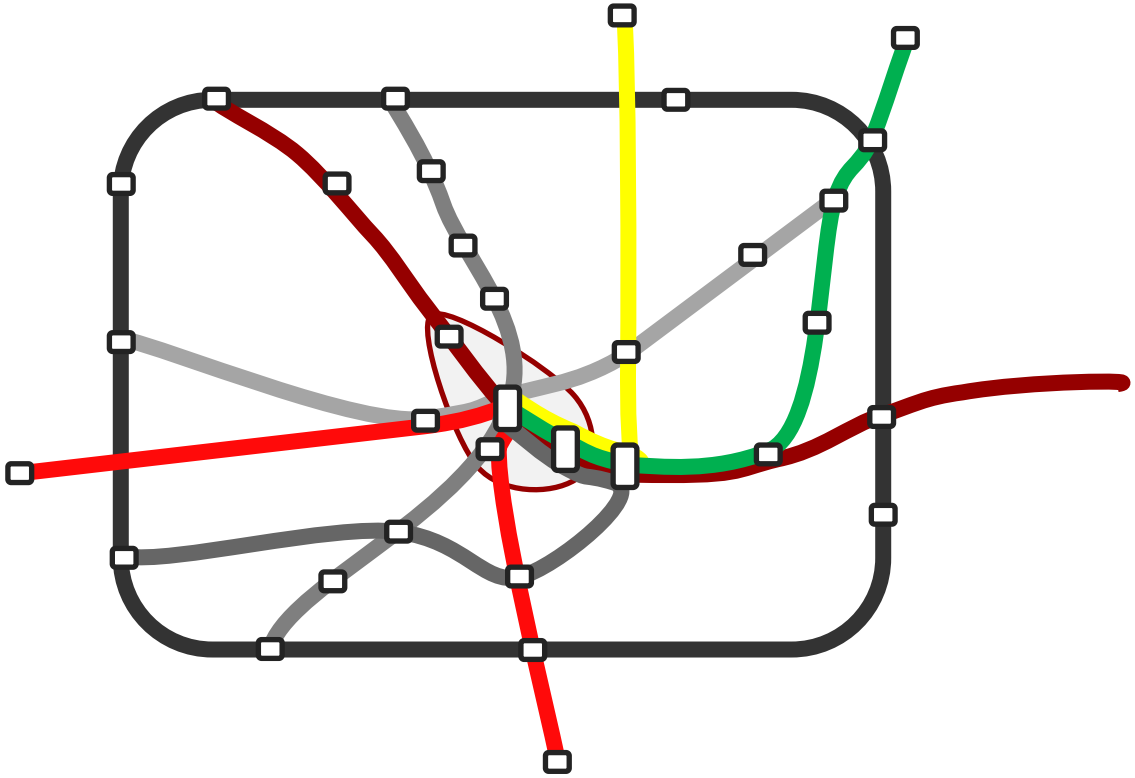
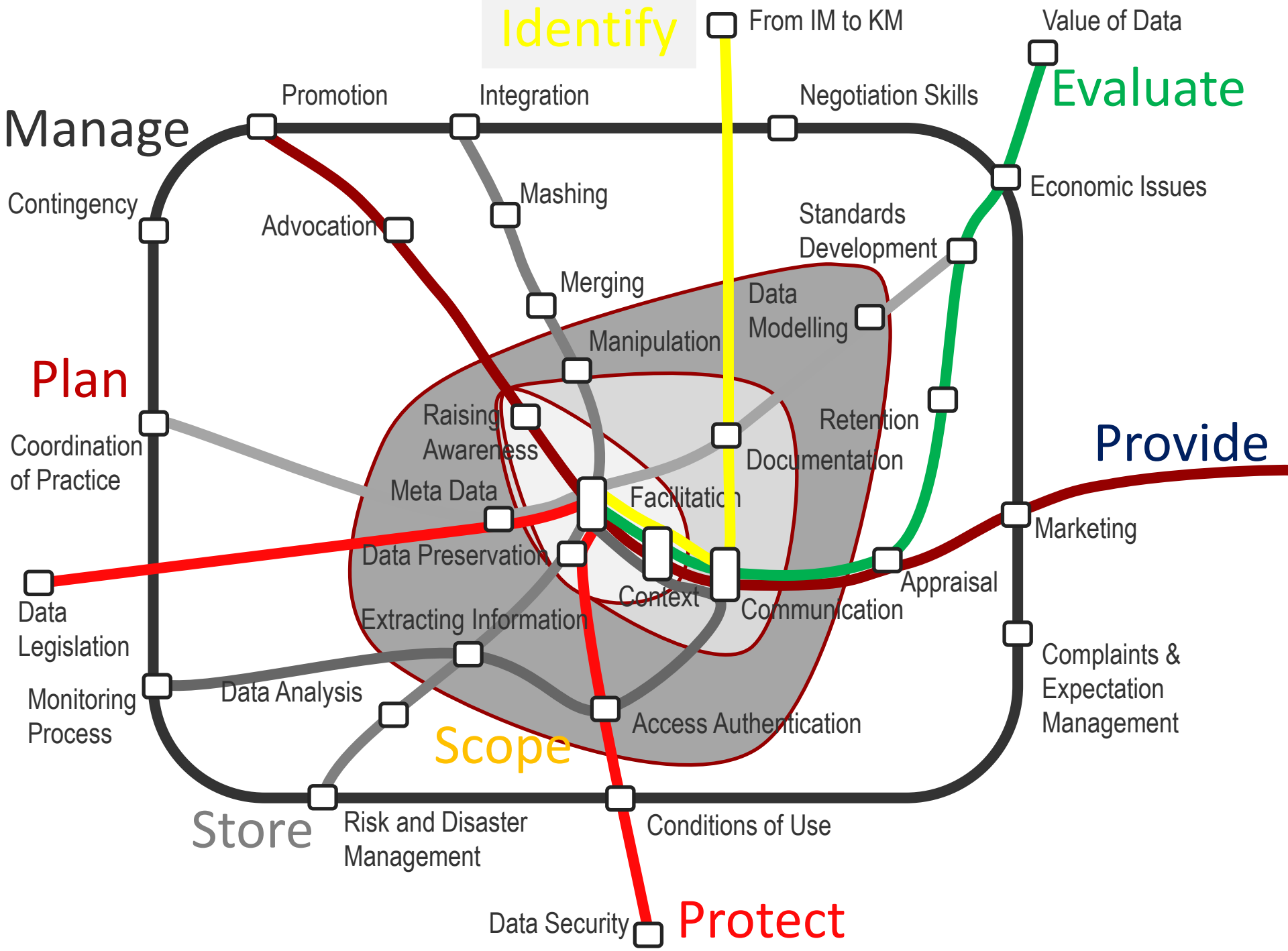


Full module Ticket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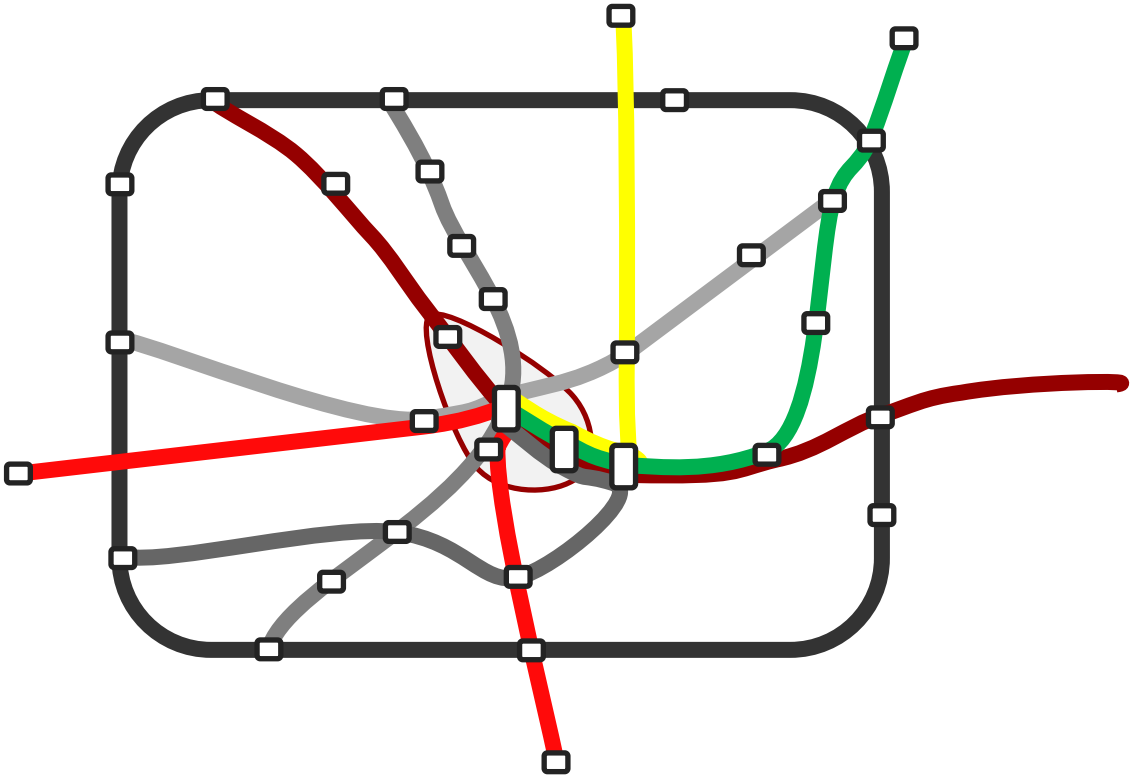
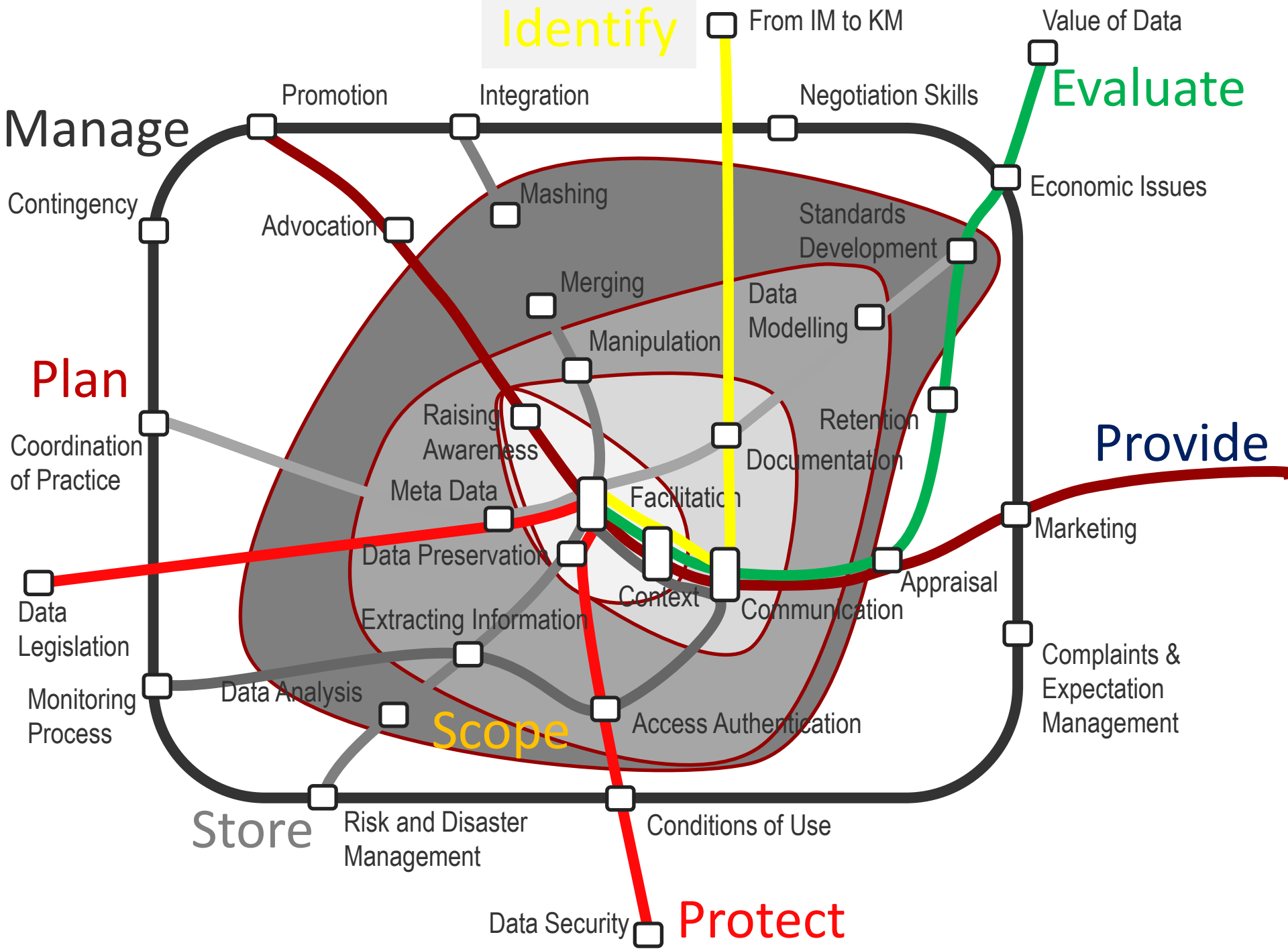


Specialization Ticket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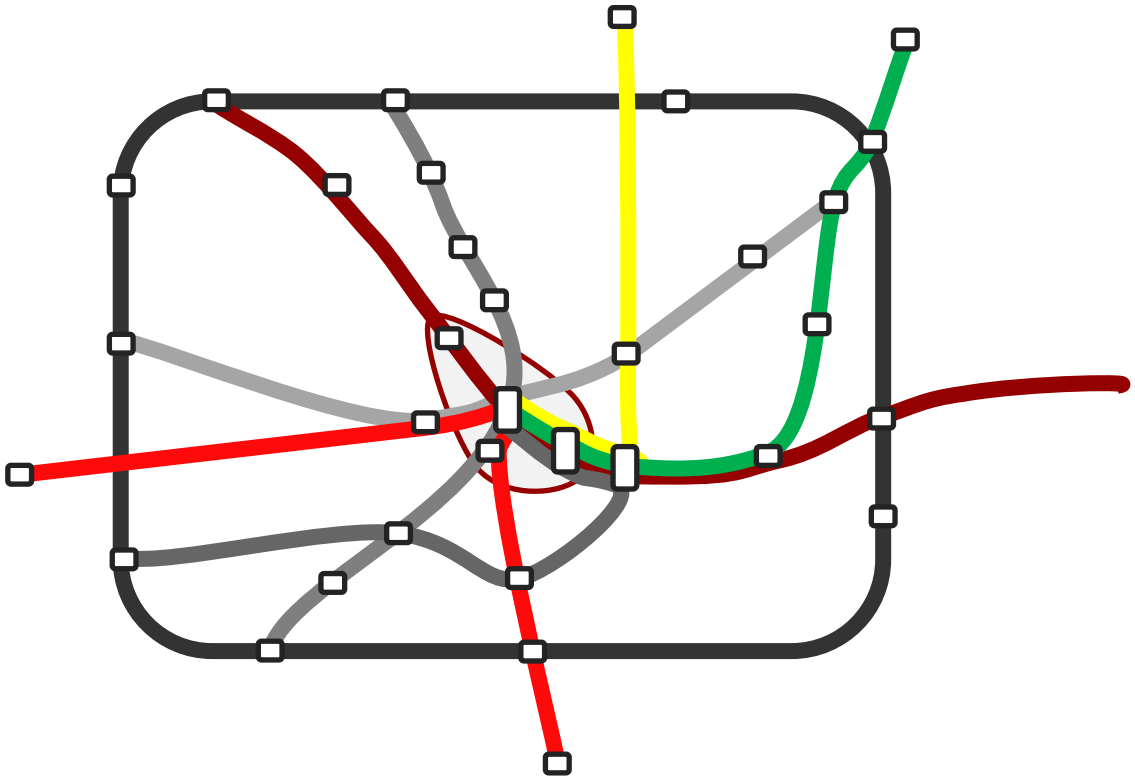
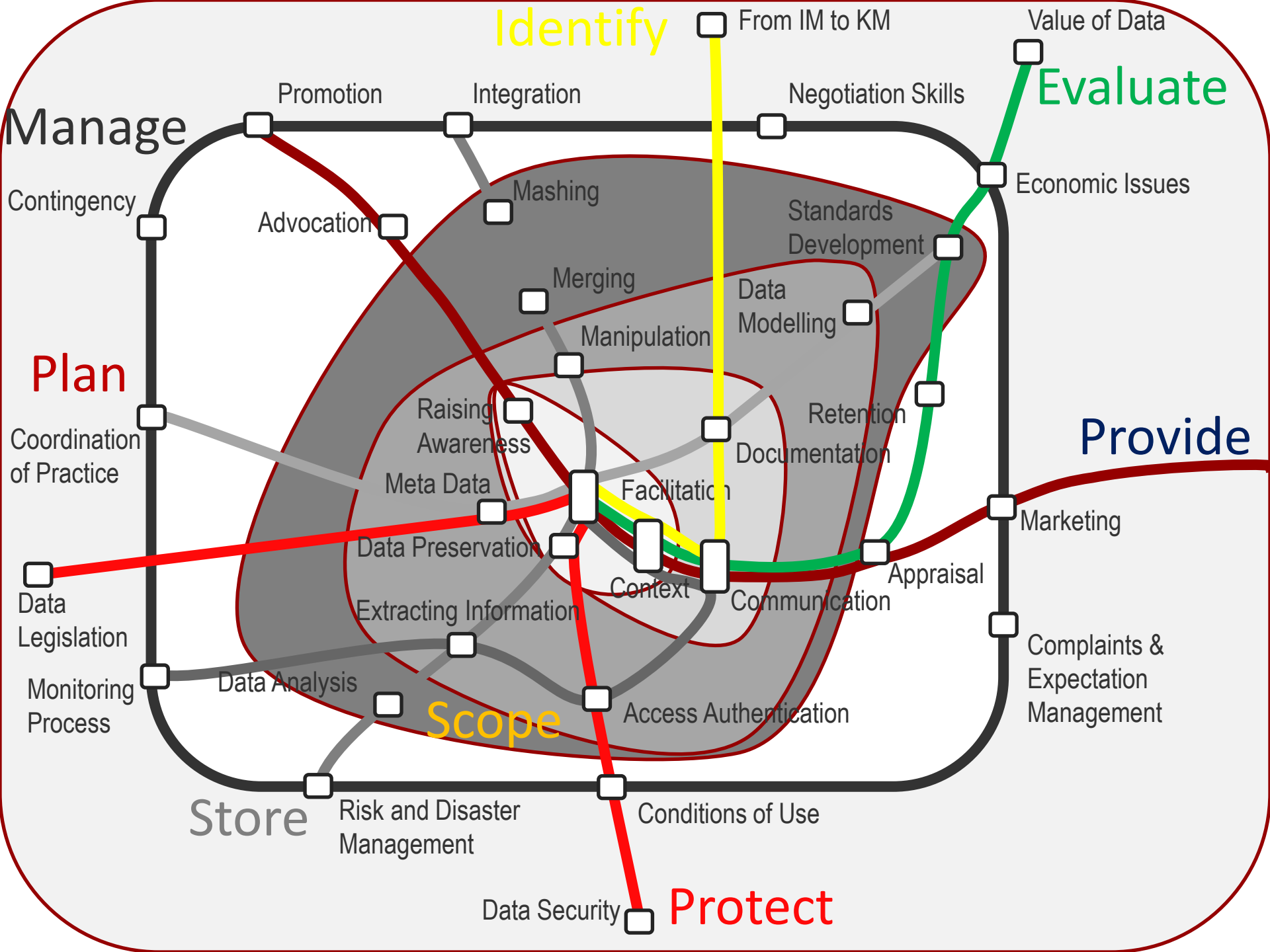


Full ticket
(two years validity)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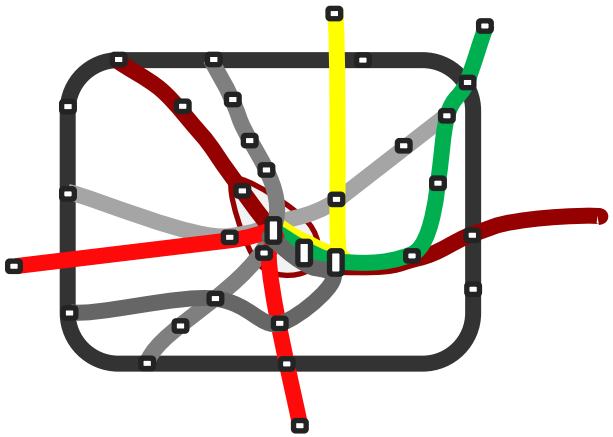
Thank you for your attention!

Send questions to: rene.schneider@hesge.ch