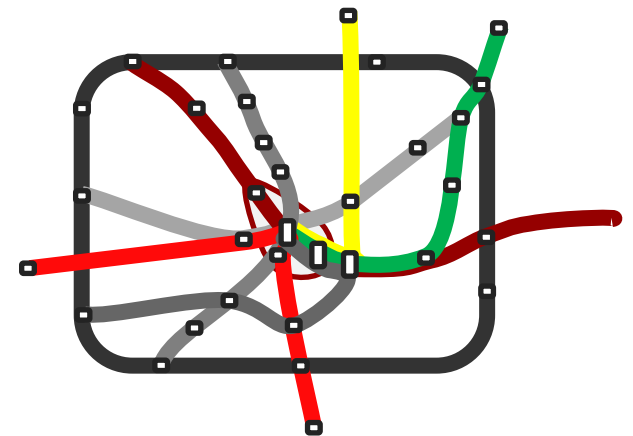


# Research Data Literacy

or: Take a ride on the RDL Line!

# 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

Provide

Identify

Scope

Plan

Store

Protect

Evaluate

Manage

# 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	*	*	*	*	*	*	*	*

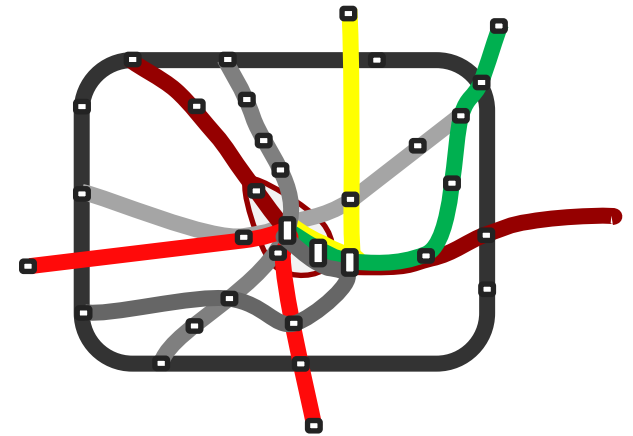
## Building a Flexible Curriculum for RDL

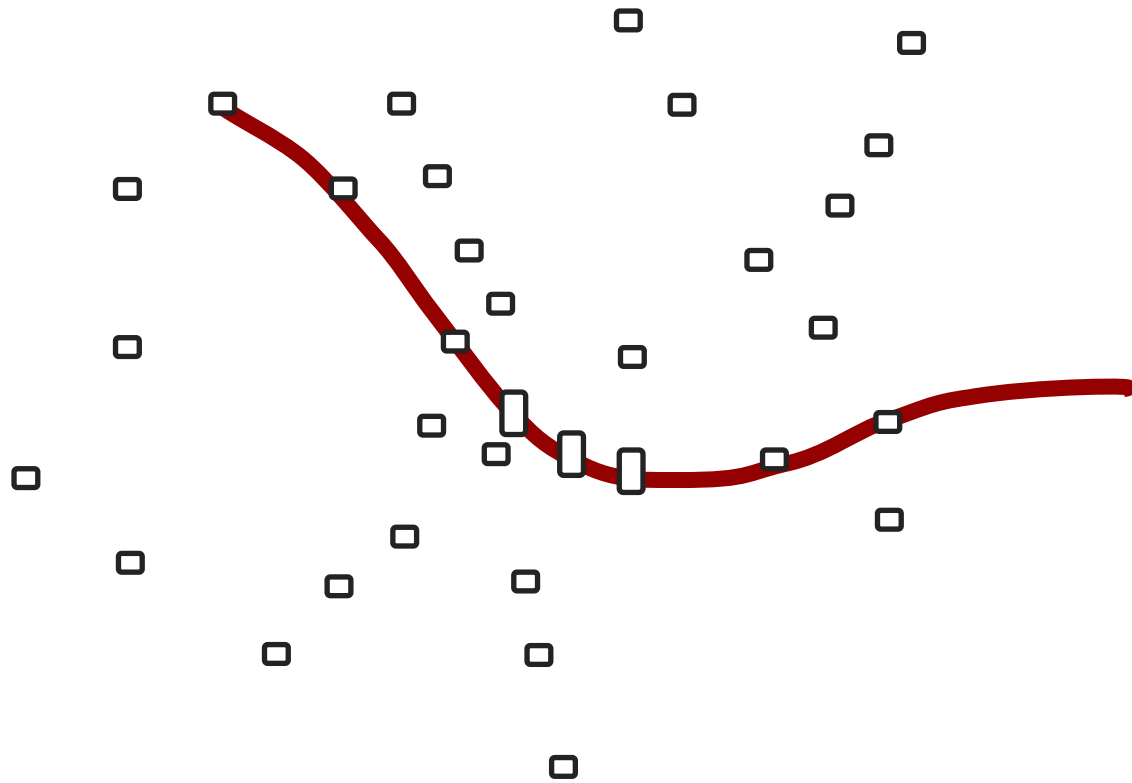
	2-hours unit	Full course	Full module	Specialization	Full program	Diploma
Any Bachelor student	+	*	-	-	-	-
Any Master student	-	+	*	-	-	-
LIS Bachelor Students	-	-	+	*	-	-
LIS Master Students	-	-	-	+	*	-
Data Creators	+	*	-	-	-	-
Data Scientists	+	*	-	-	-	*
Data Librarians	-	+	-	-	-	+
Data Managers	-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

# 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

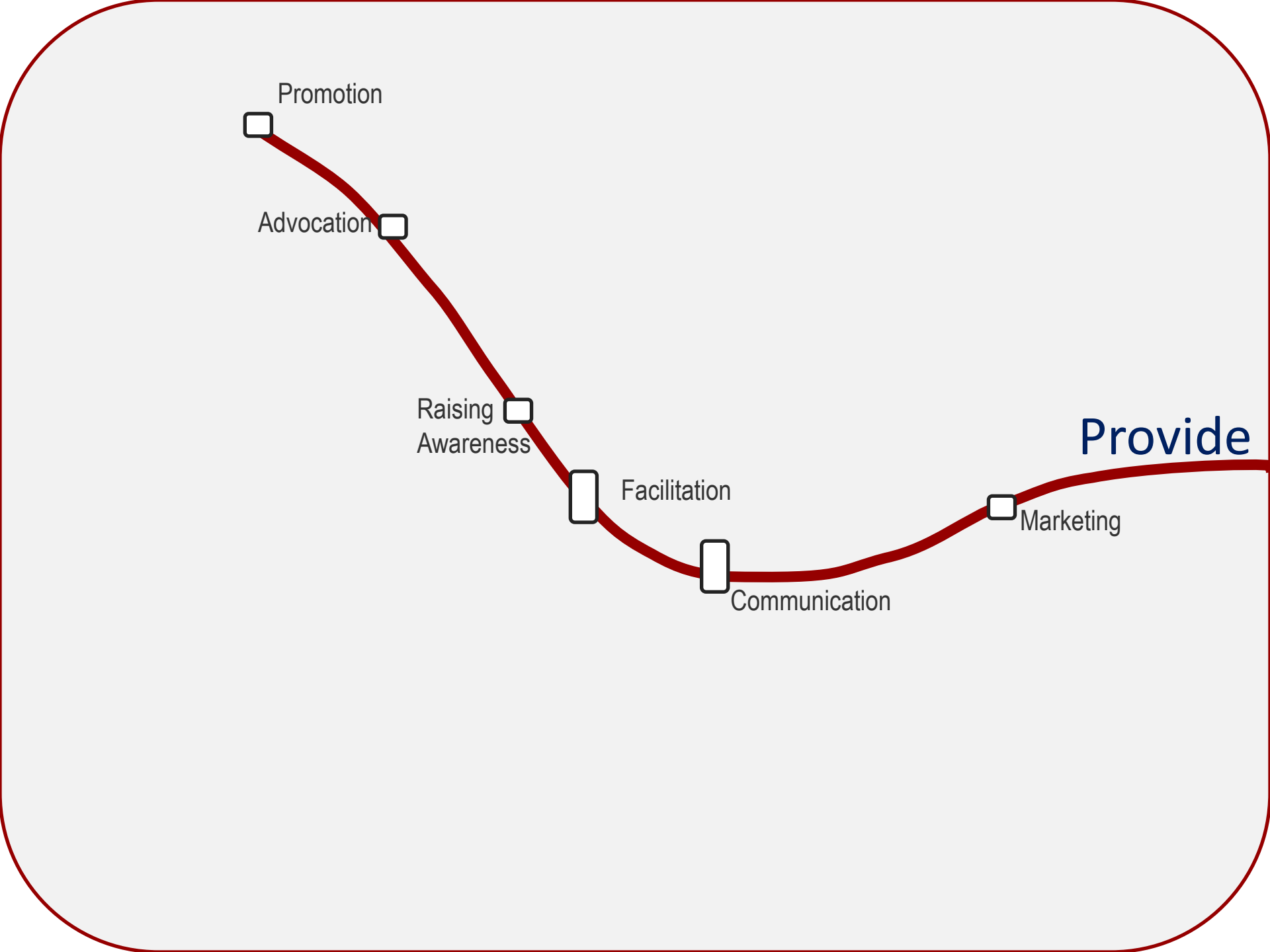


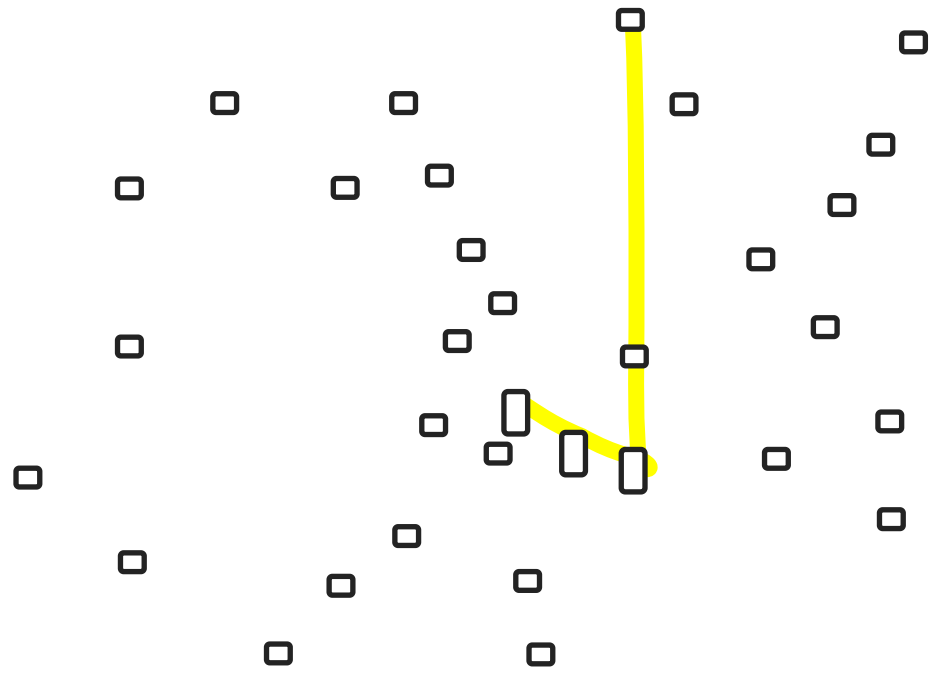
Communication



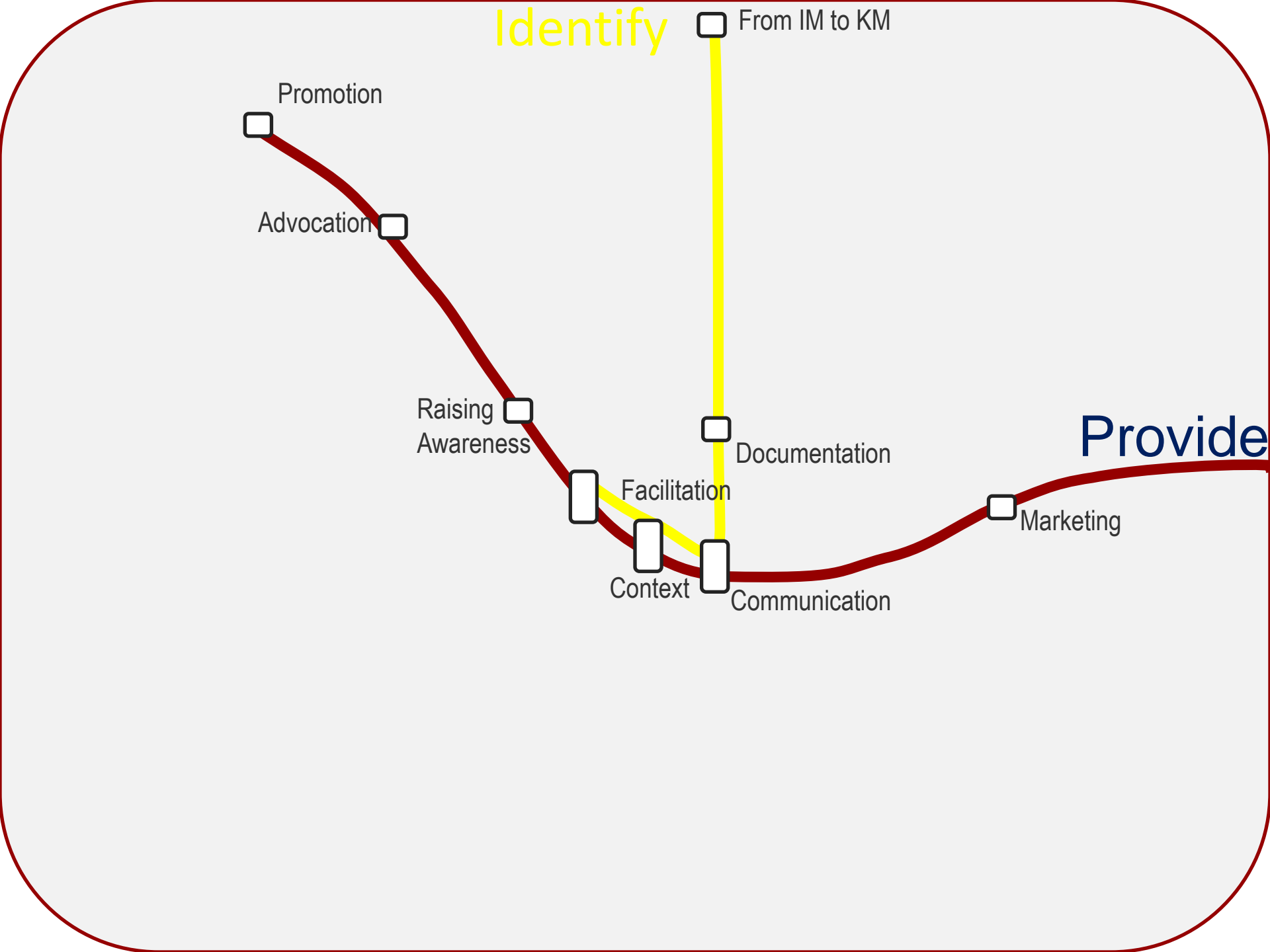
Marketing

**Provide**





□ Identification Line



Identify

From IM to KM

Promotion

Advocation

Raising Awareness

Facilitation

Documentation

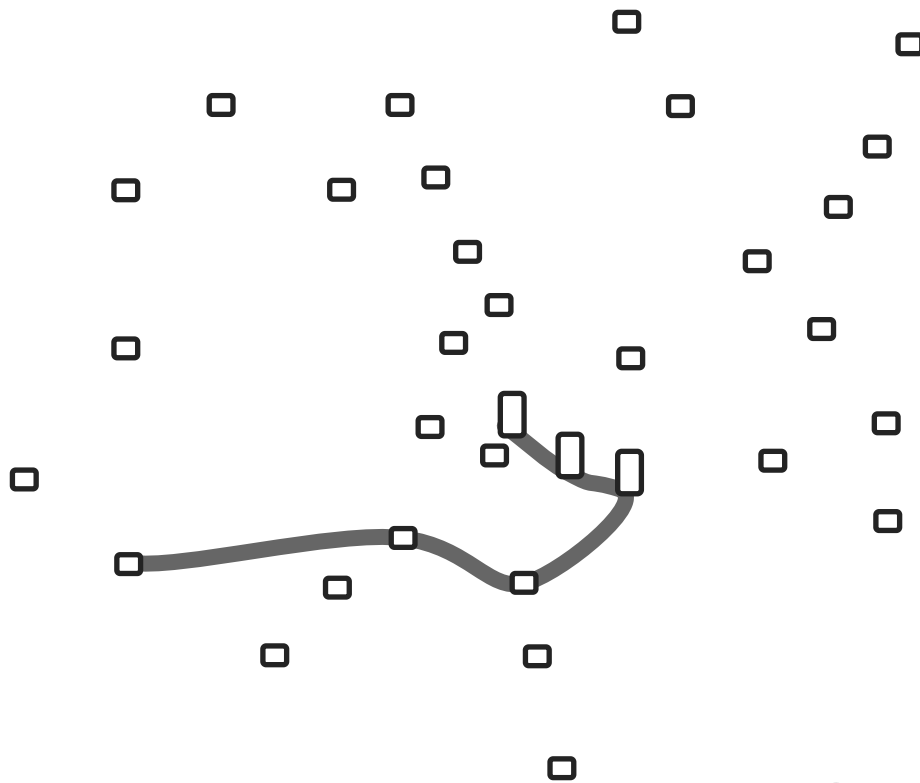
Context

Communication

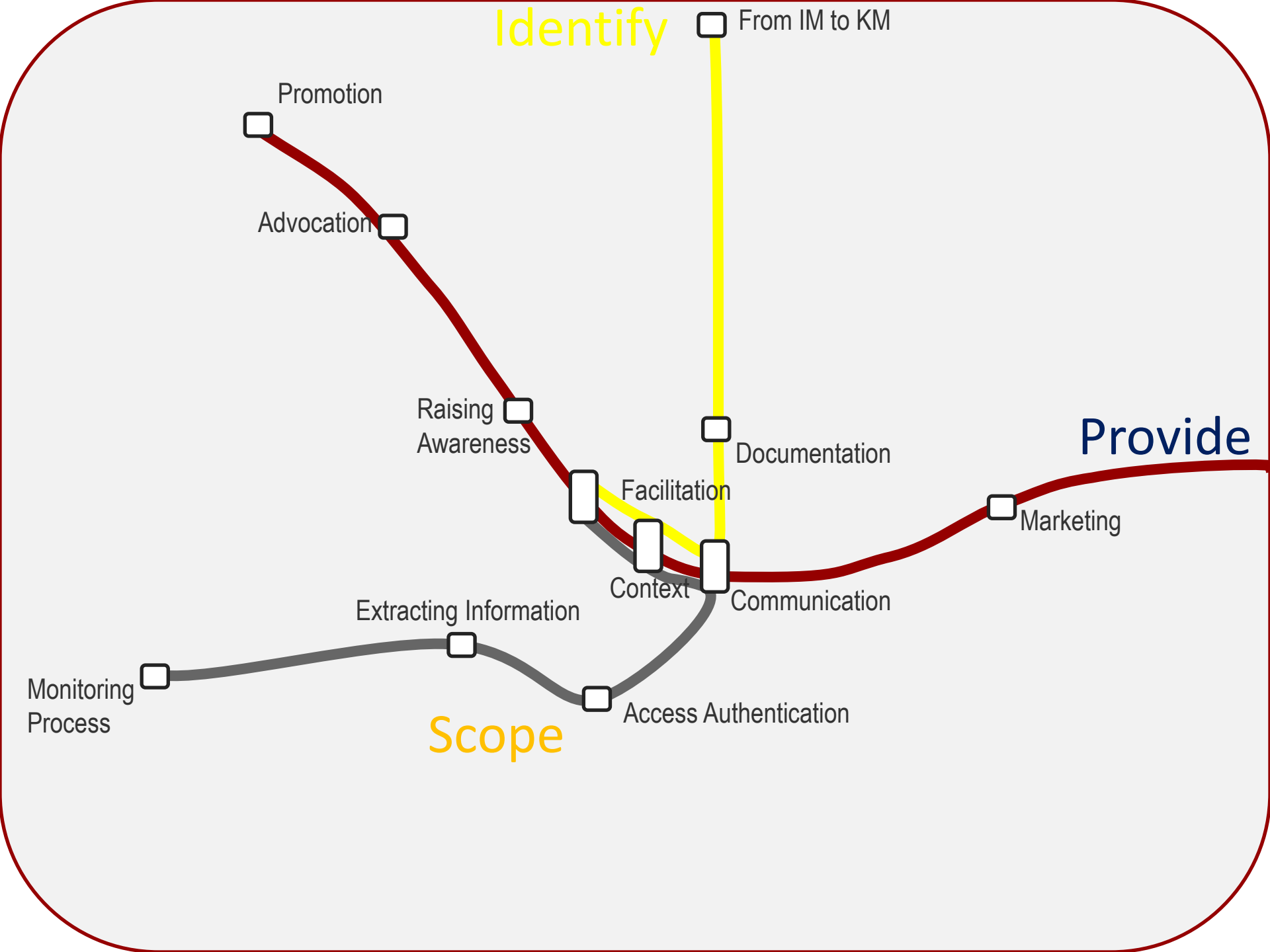
Marketing

Provide





Scope Line



Identify

From IM to KM

Promotion

Advocation

Raising Awareness

Documentation

Provide

Facilitation

Marketing

Context

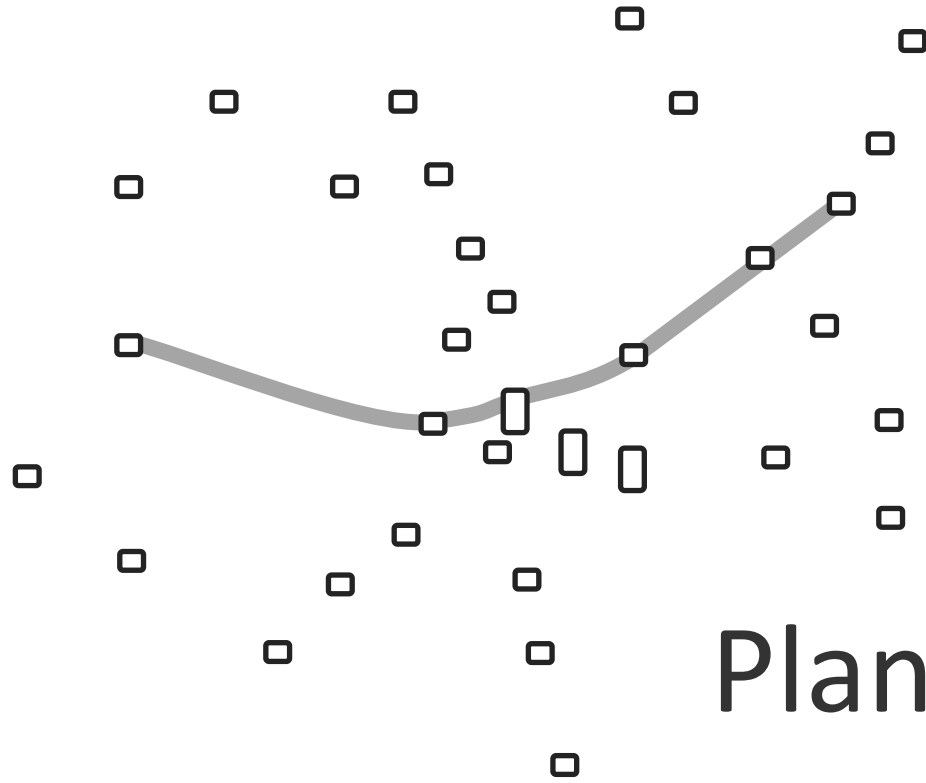
Communication

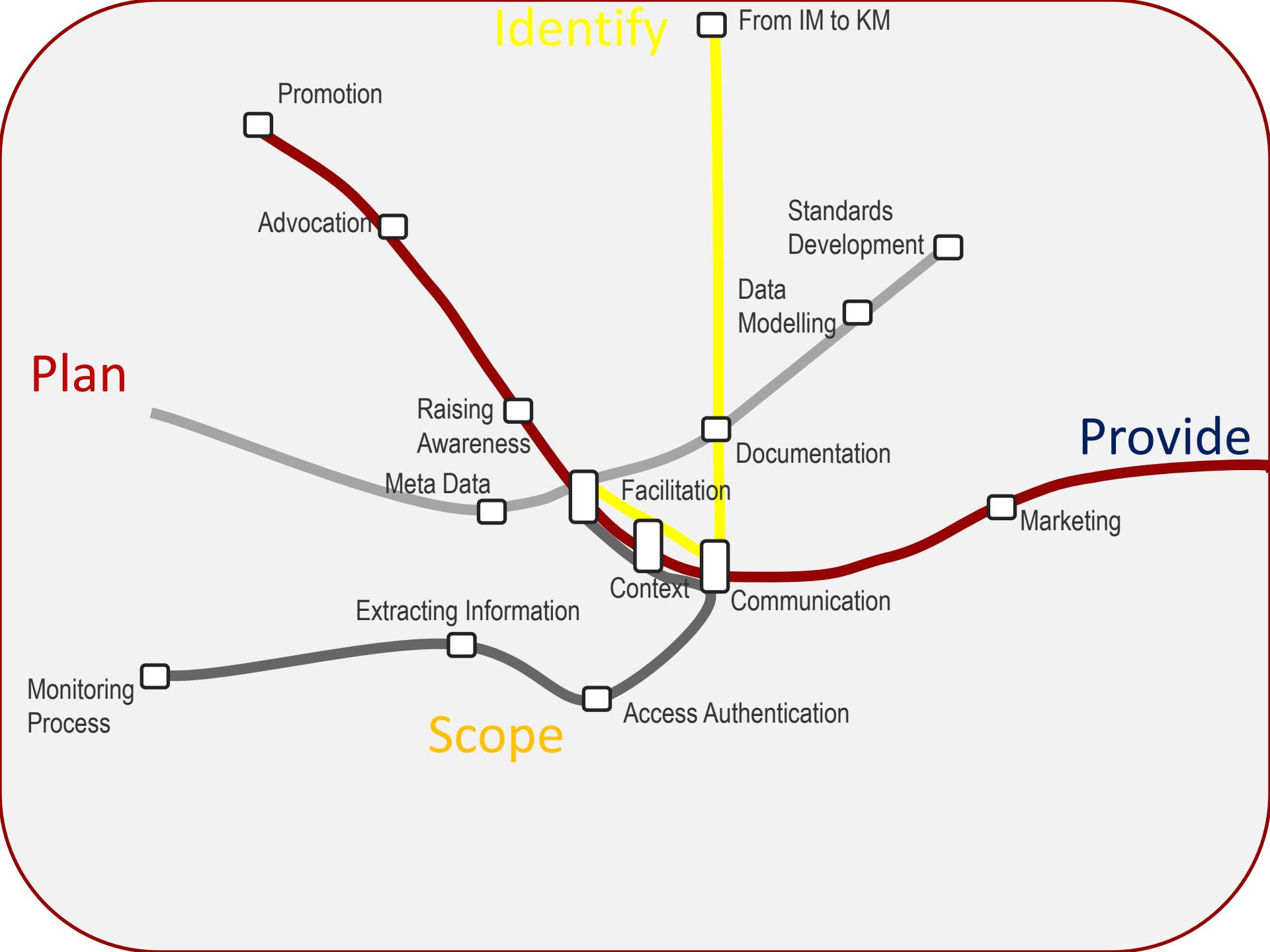
Extracting Information

Monitoring Process

Scope

Access Authentication





# Identify

From IM to KM

Promotion



Advocation



Standards Development



Data Modelling



# Plan

Raising Awareness



Documentation



# Provide

Meta Data



Facilitation



Marketing



Context



Communication



Extracting Information



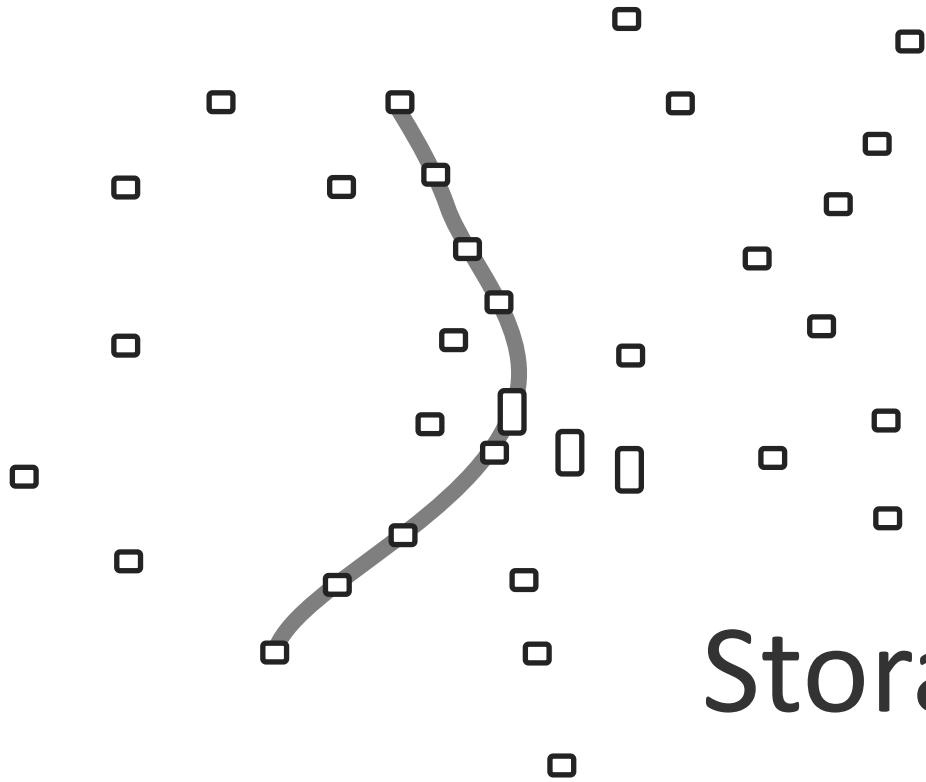
Access Authentication



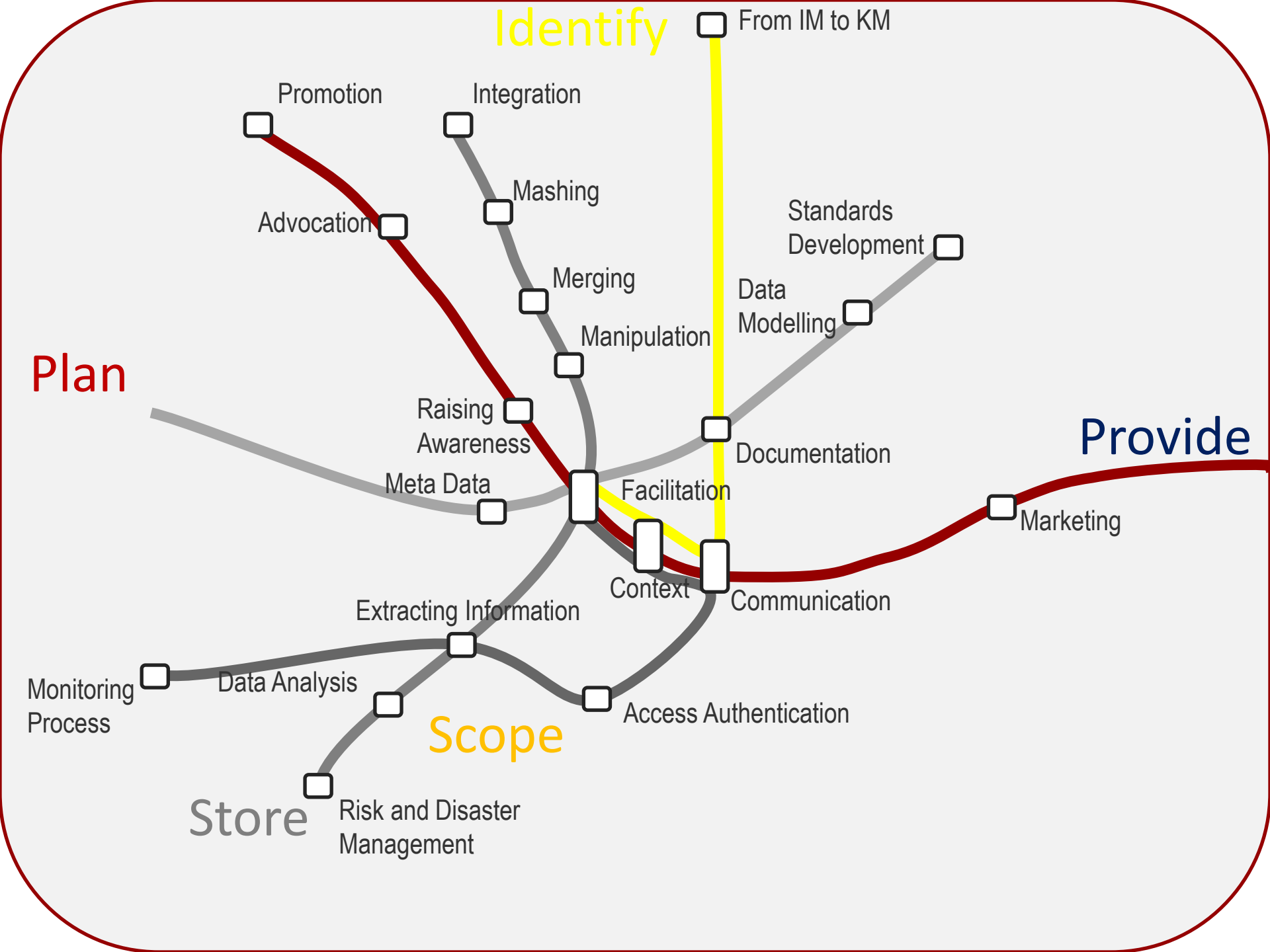
Monitoring Process

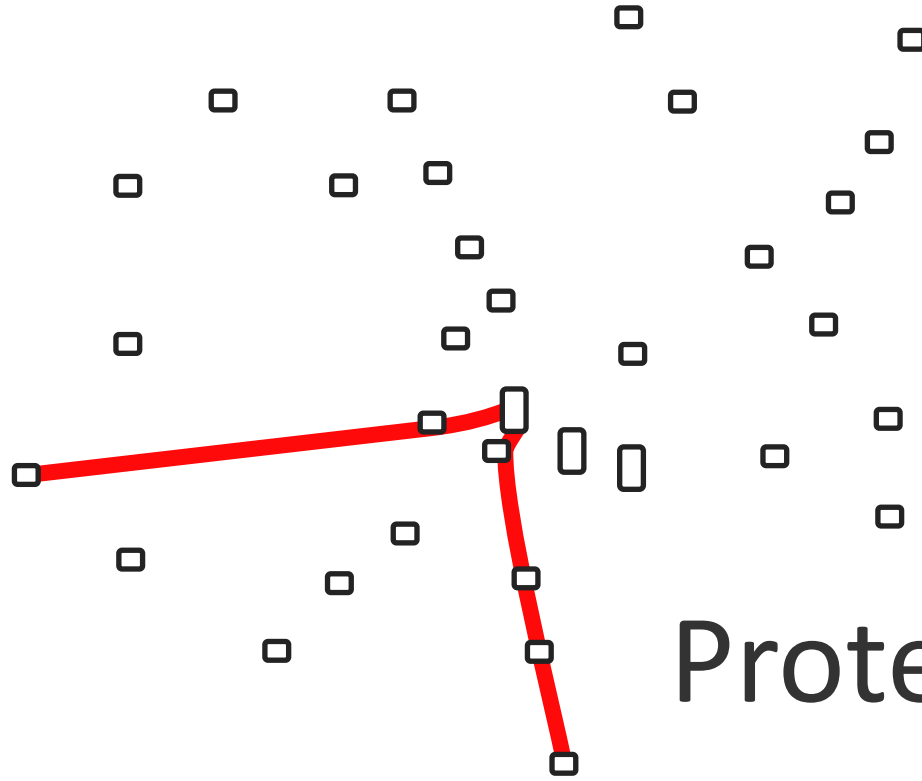


# Scope

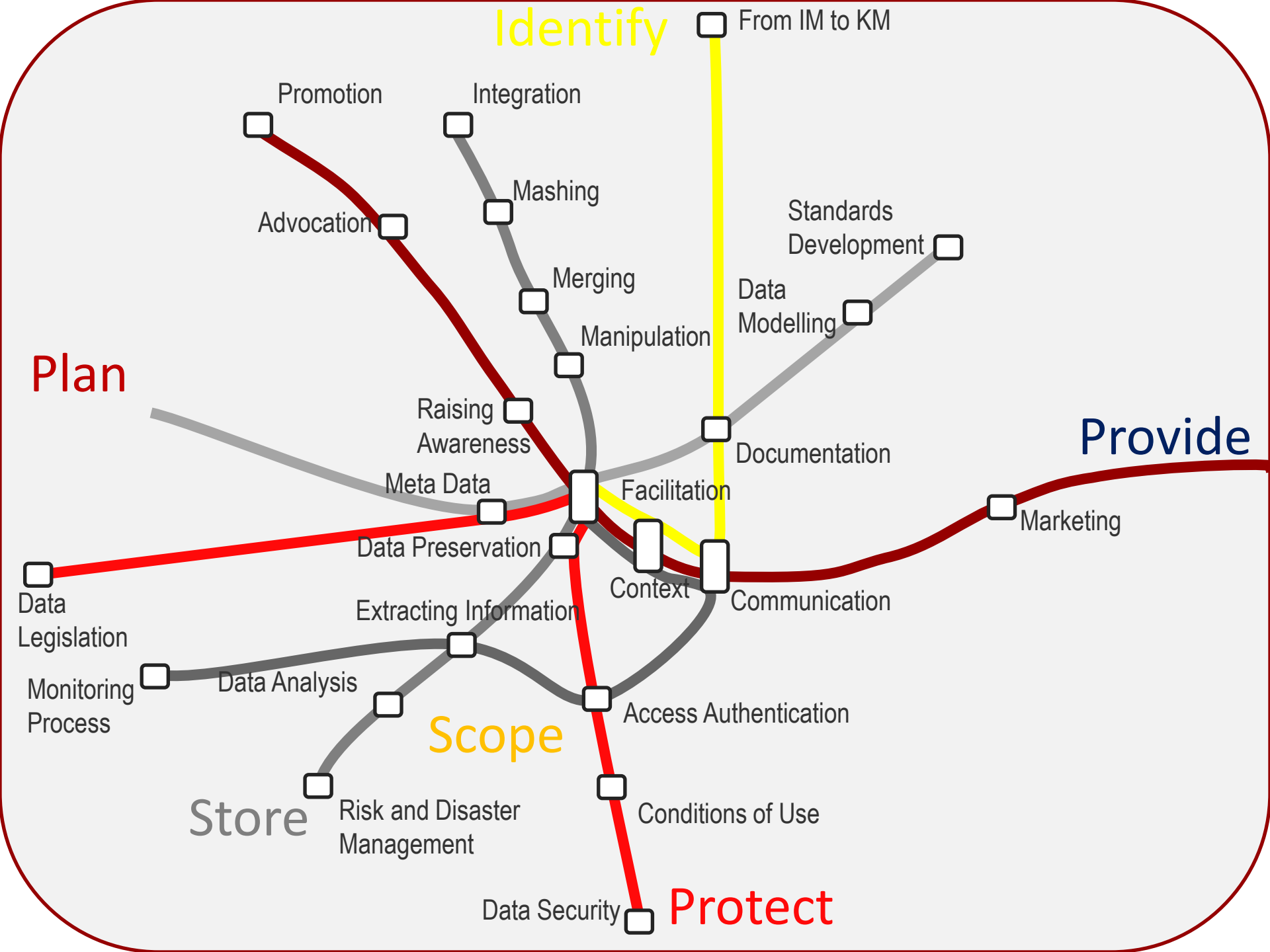


Storage Line





Protection Line



# Identify

From IM to KM

Promotion

Integration

Advocation

Mashing

Standards Development

Merging

Data Modelling

Manipulation

# Plan

Raising Awareness

Documentation

Meta Data

Facilitation

# Provide

Marketing

Data Preservation

Context

Communication

Data Legislation

Extracting Information

Access Authentication

Monitoring Process

Data Analysis

Access Authentication

# Scope

# Store

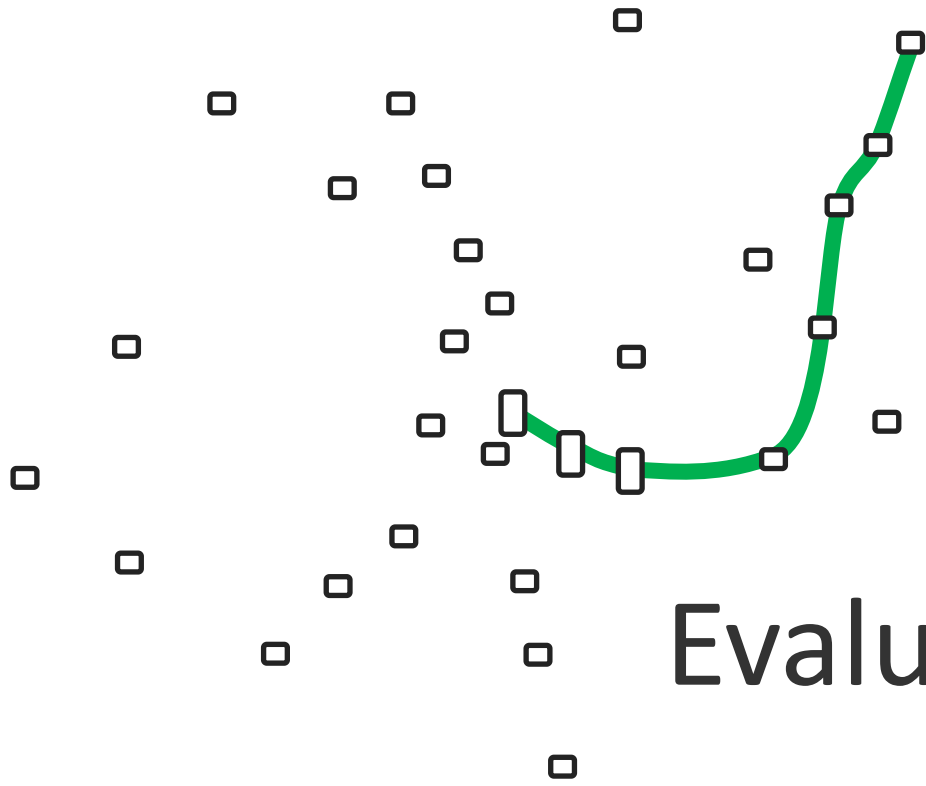
Risk and Disaster Management

Conditions of Use

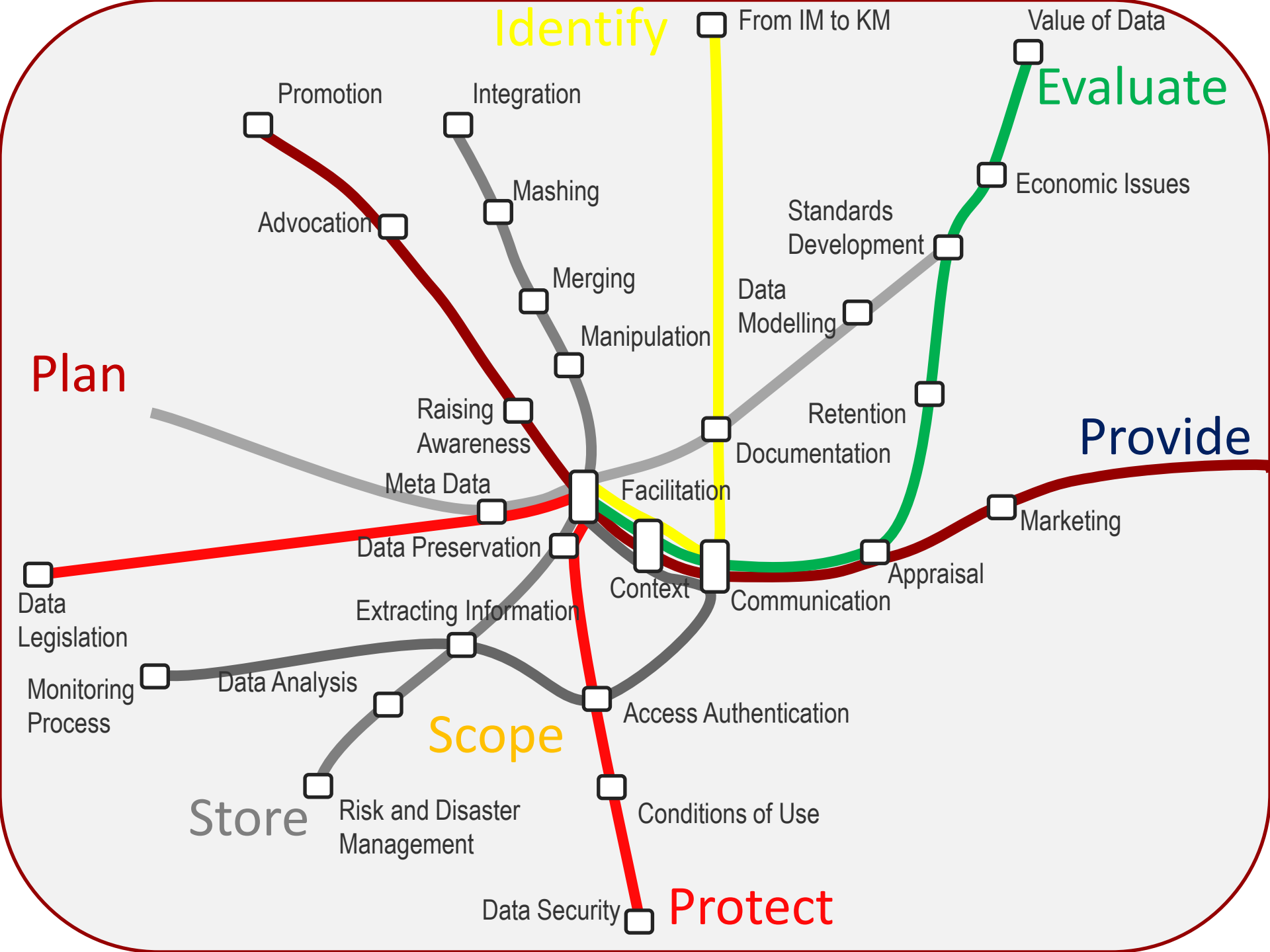
# Protect

Data Security





Evaluation Line



# Identify

# Evaluate

# Plan

# Provide

# Scope

# Store

# Protect

From IM to KM

Value of Data

Promotion

Integration

Advocation

Mashing

Standards Development

Economic Issues

Merging

Data Modelling

Manipulation

Retention

Raising Awareness

Documentation

Meta Data

Facilitation

Appraisal

Data Legislation

Data Preservation

Context

Communication

Marketing

Extracting Information

Access Authentication

Monitoring Process

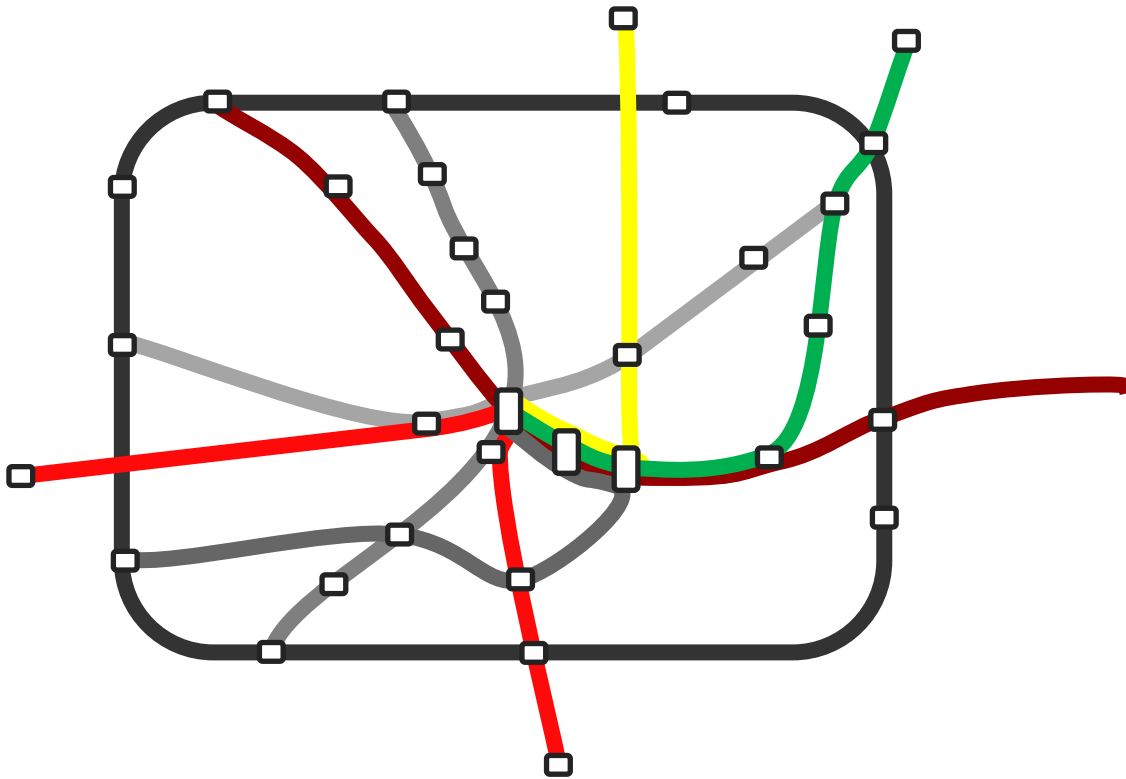
Data Analysis

Risk and Disaster Management

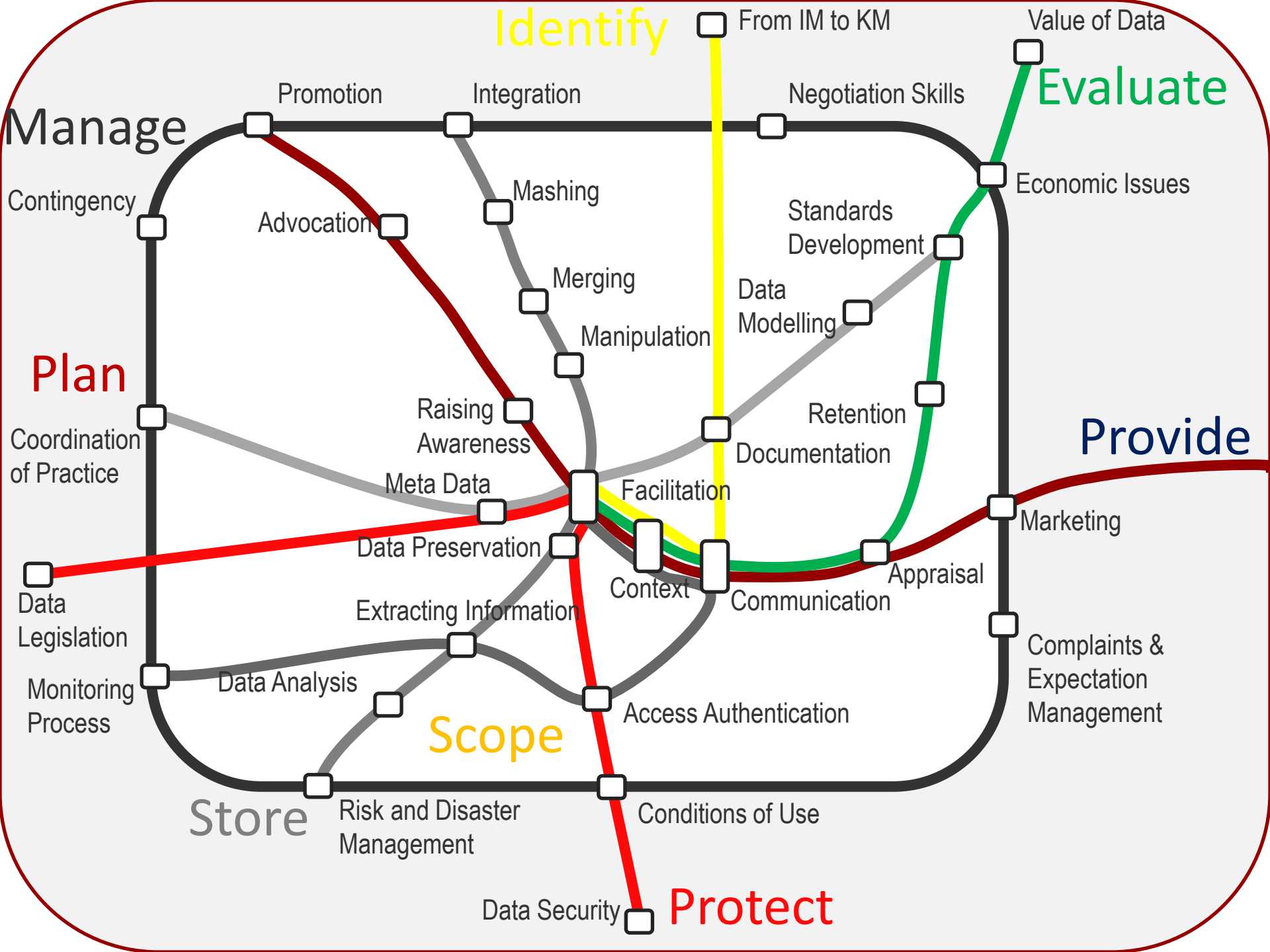
Conditions of Use

Data Security

Protect



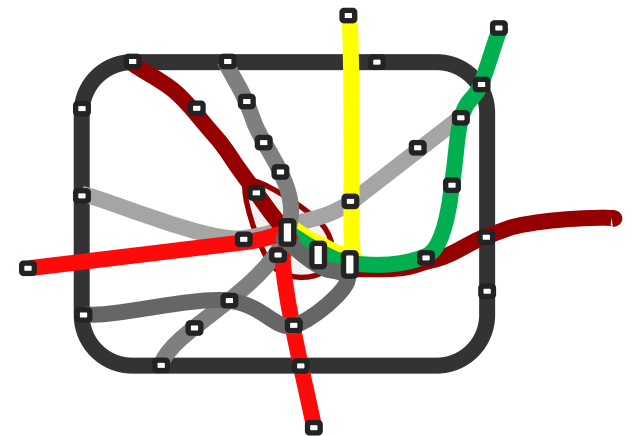
Management Line

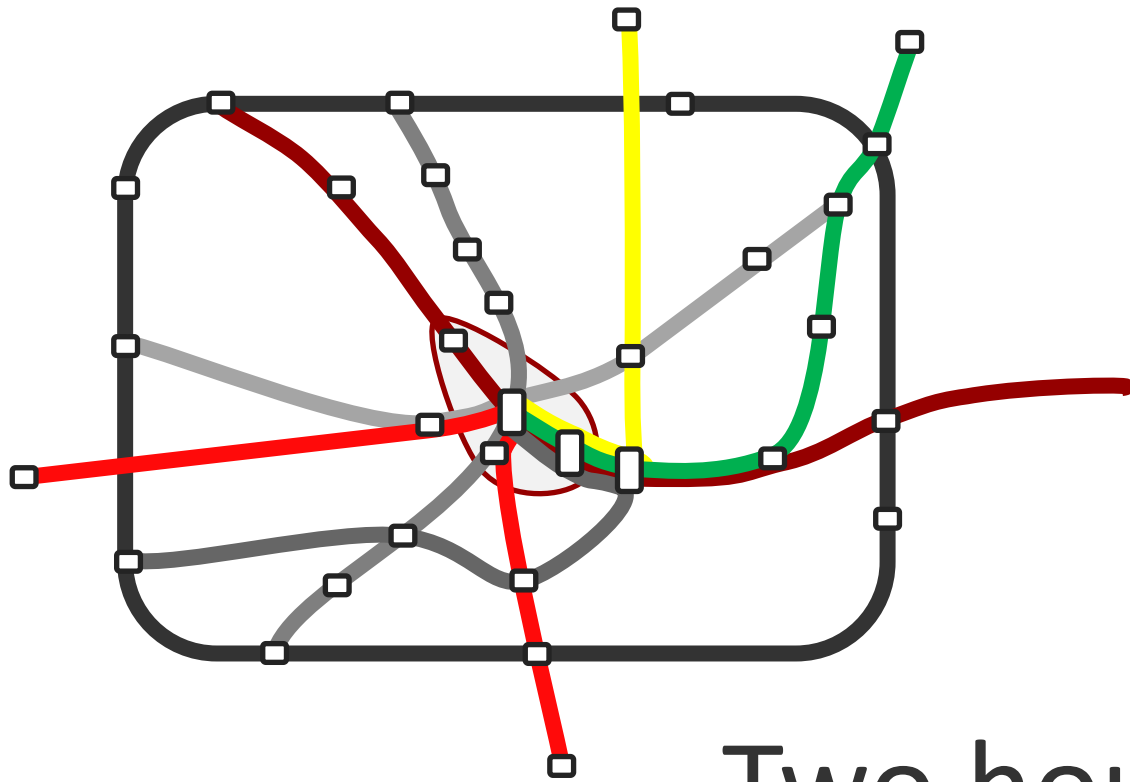


# Take a ride on the Research Literacy Line!

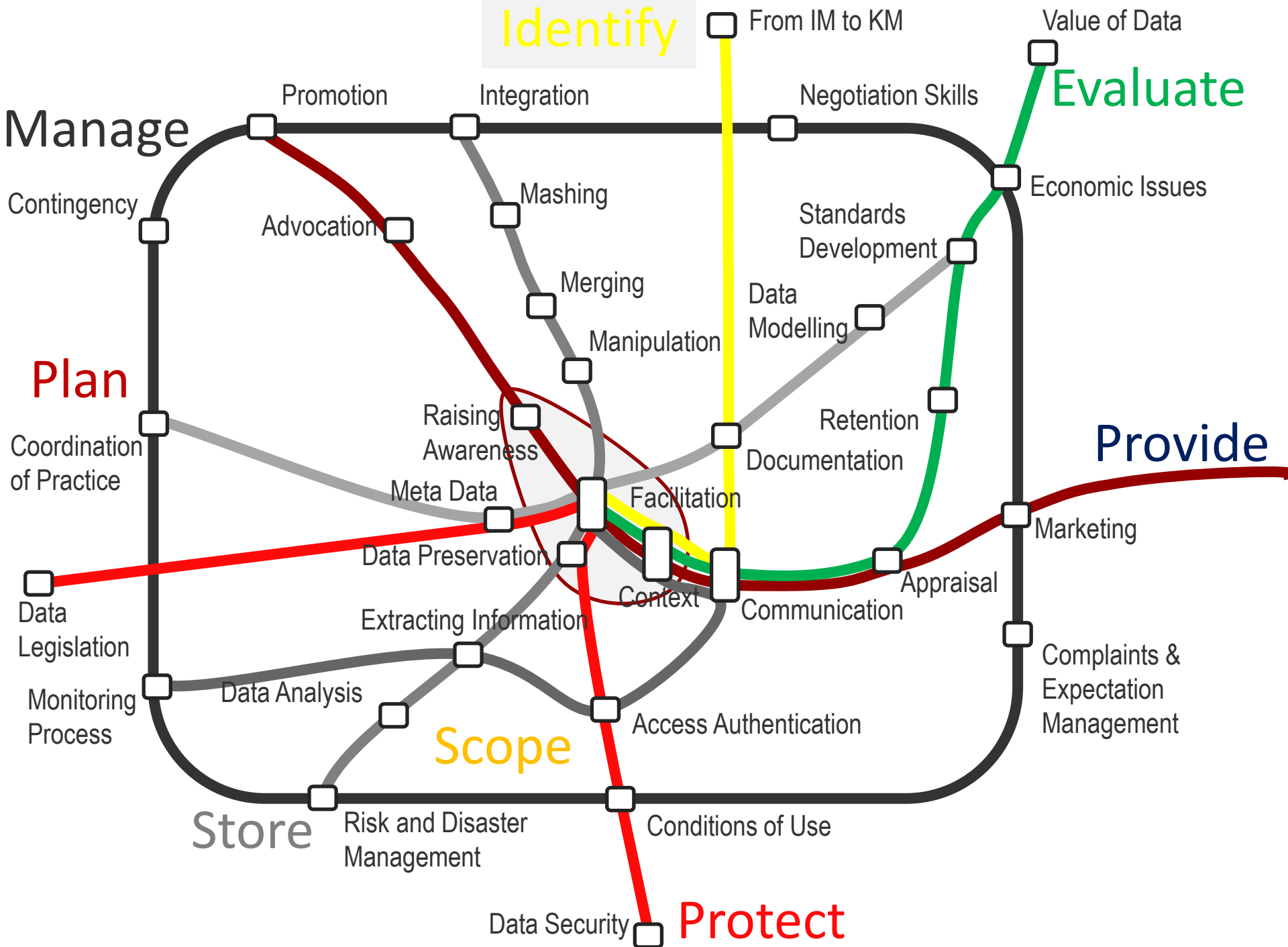
Let's say that:

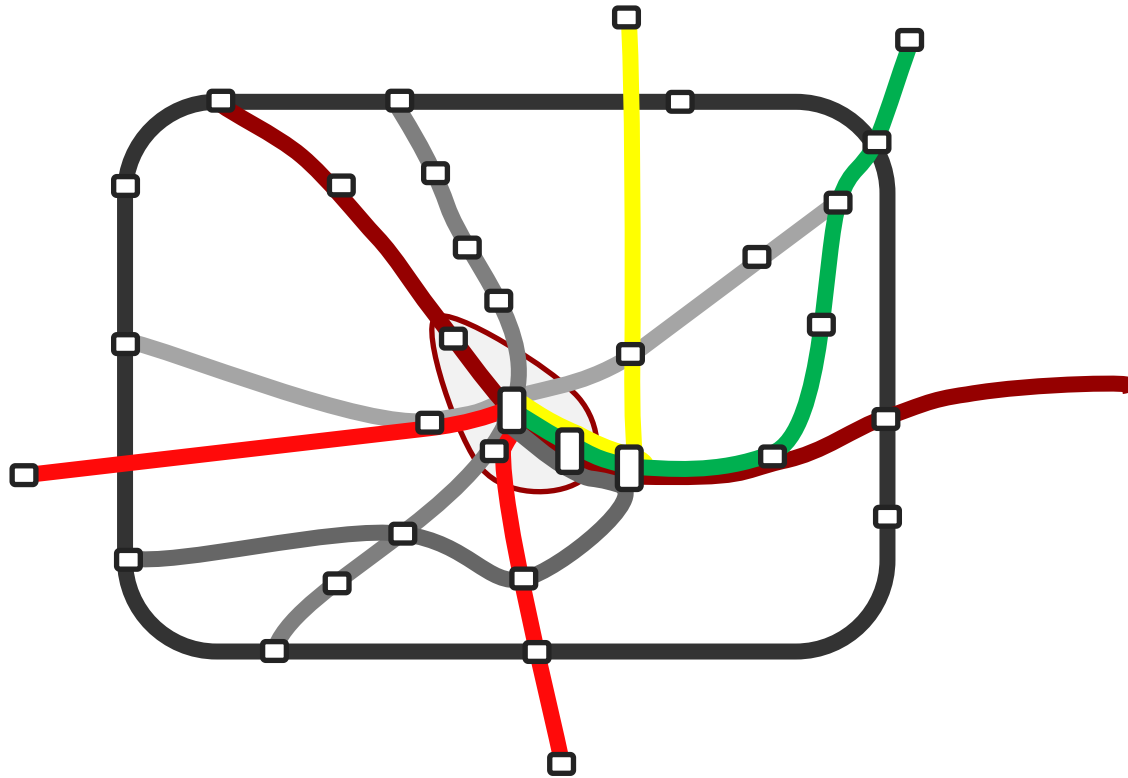
1. Literacy Skills are like Metro Lines.
2. Curation Skills are like Stops.
3. Teaching units are like zones.
4. Programs are like validity.





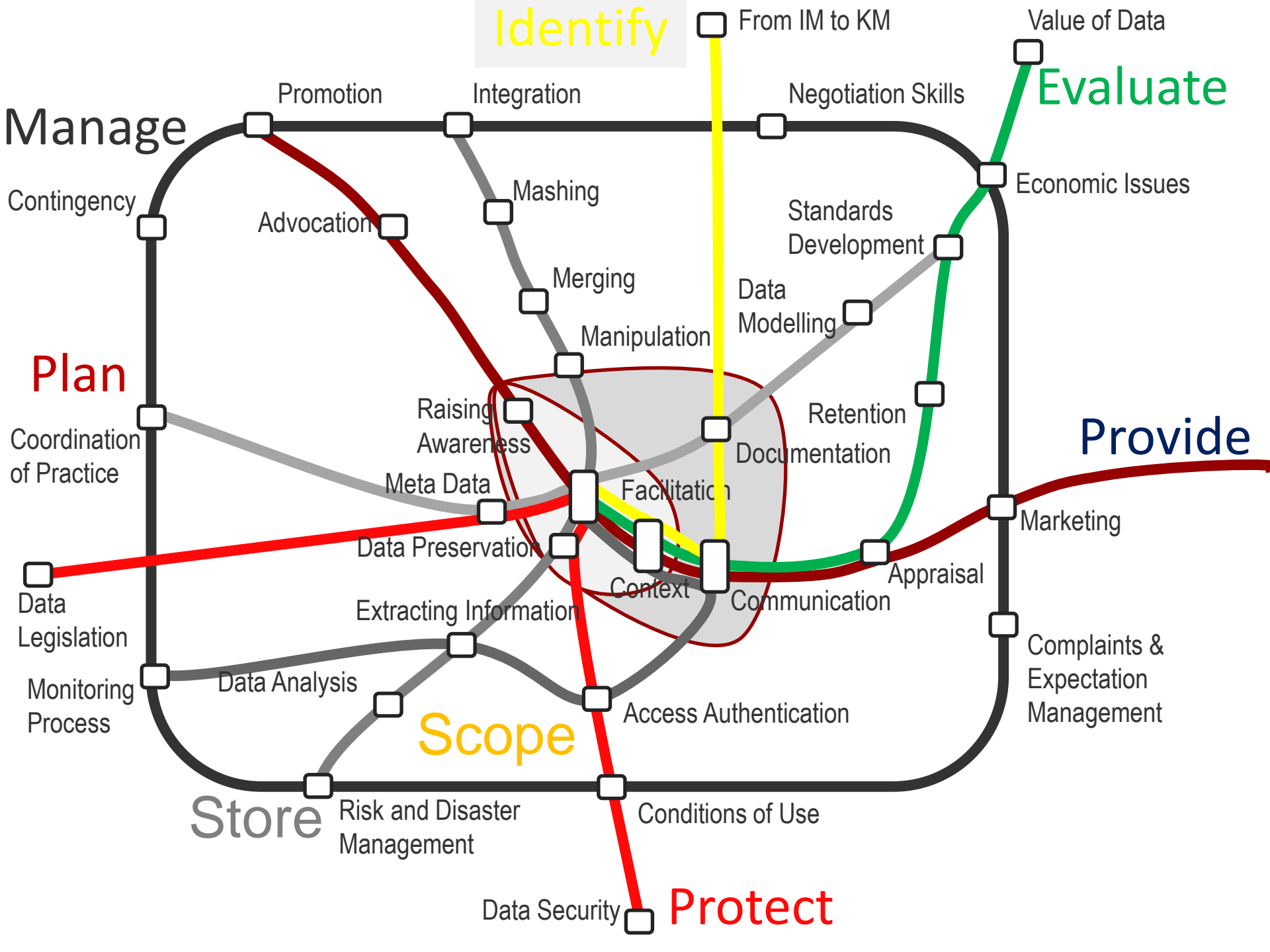
Two hours validity

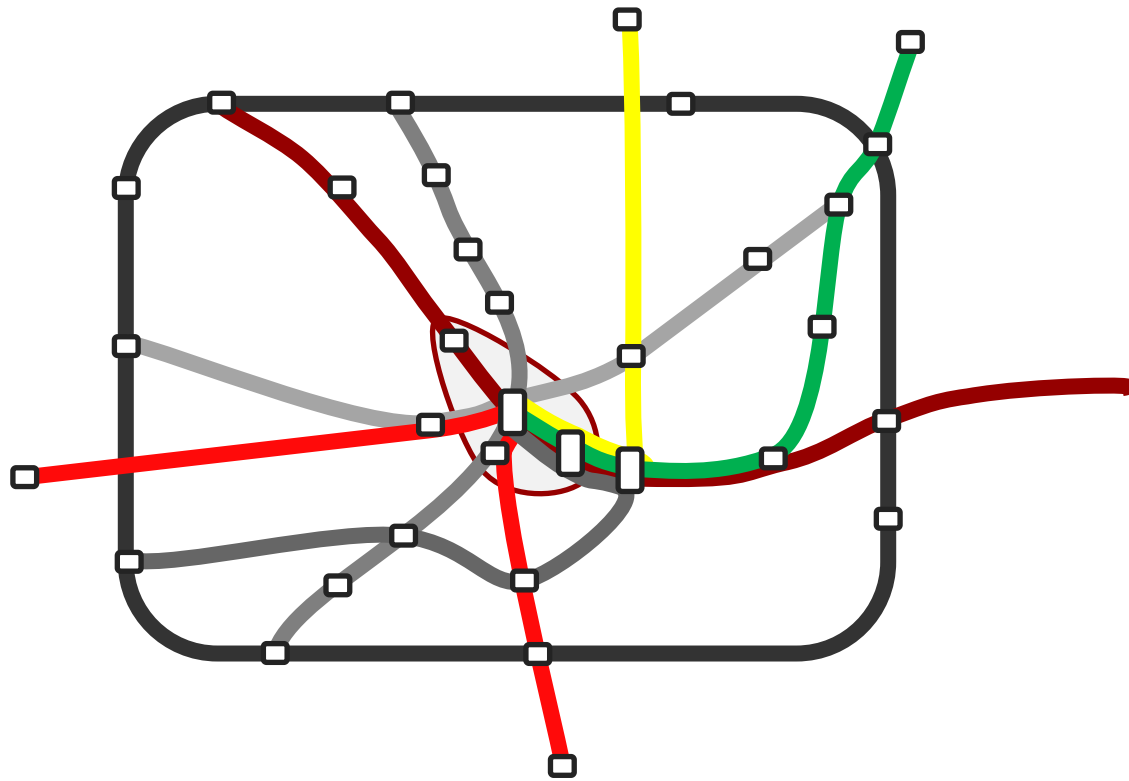




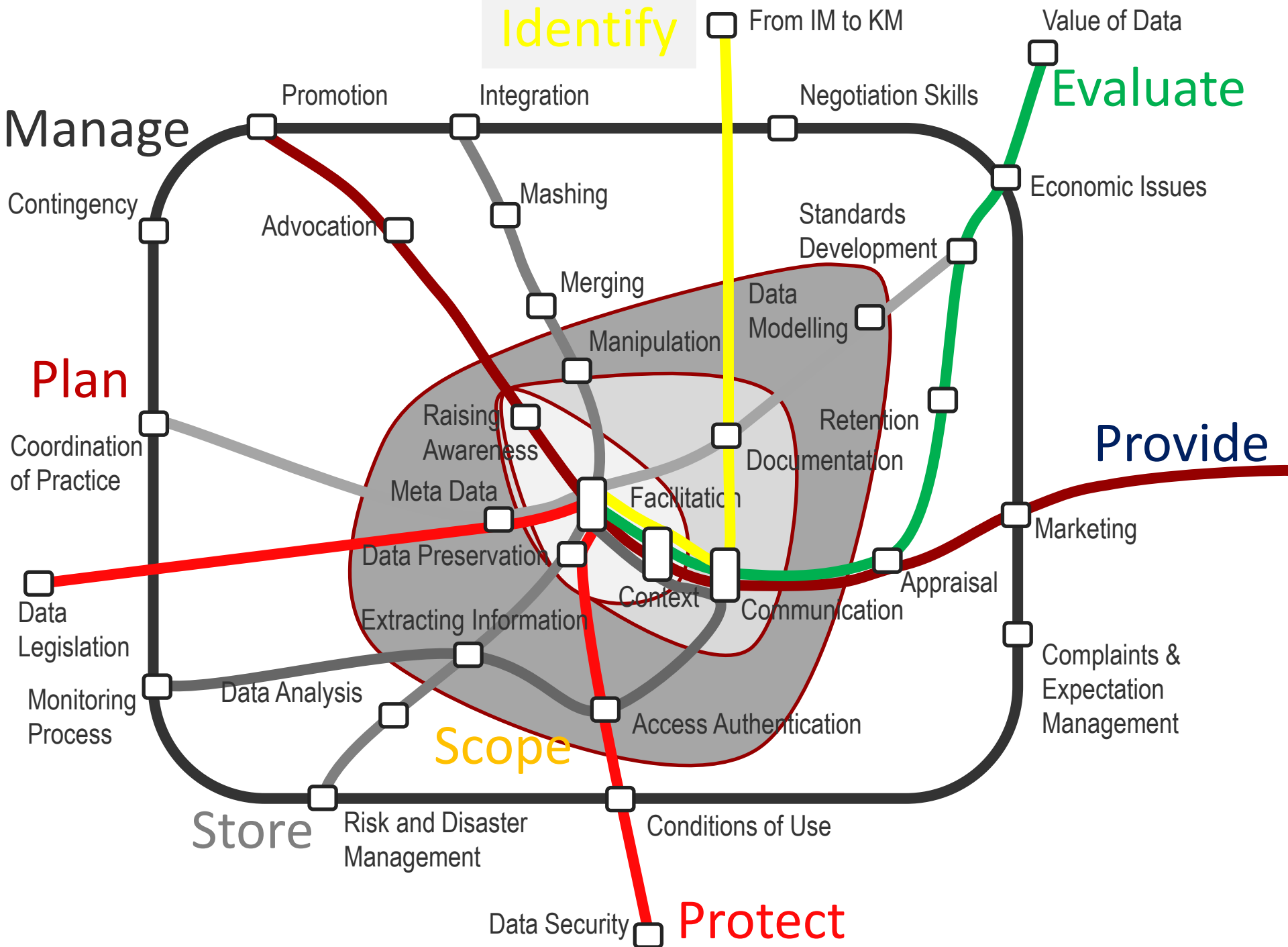
Full course / workshop Ticket

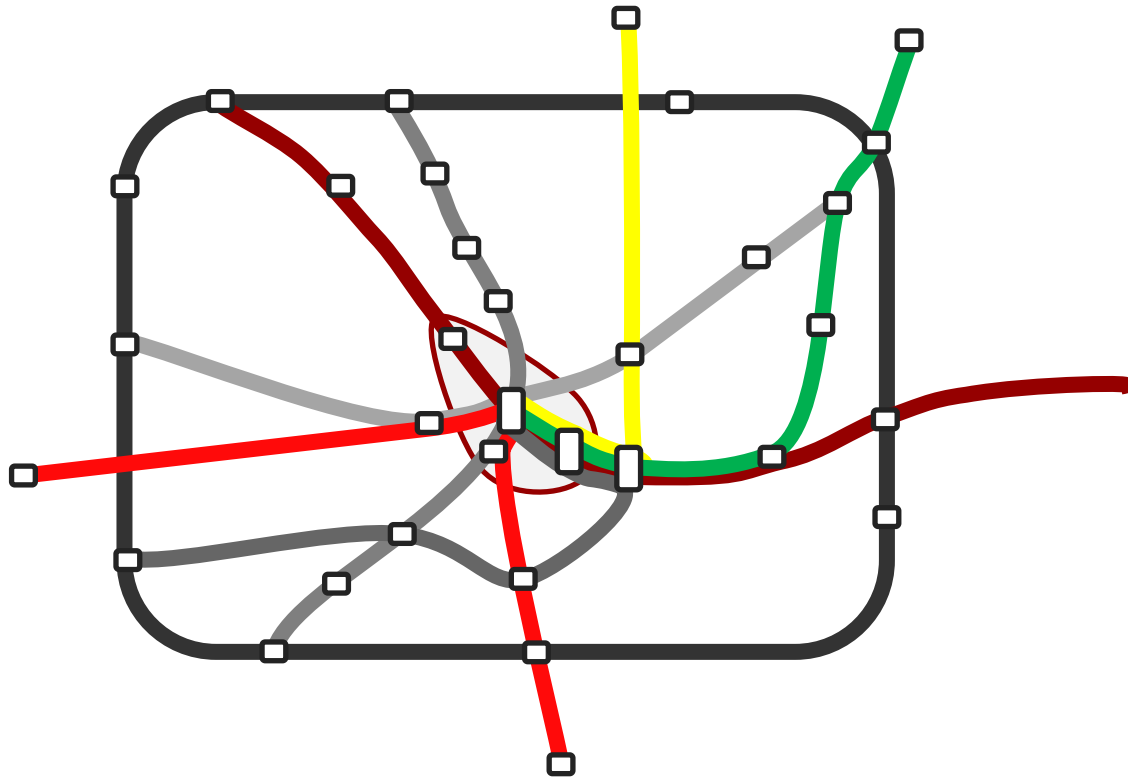




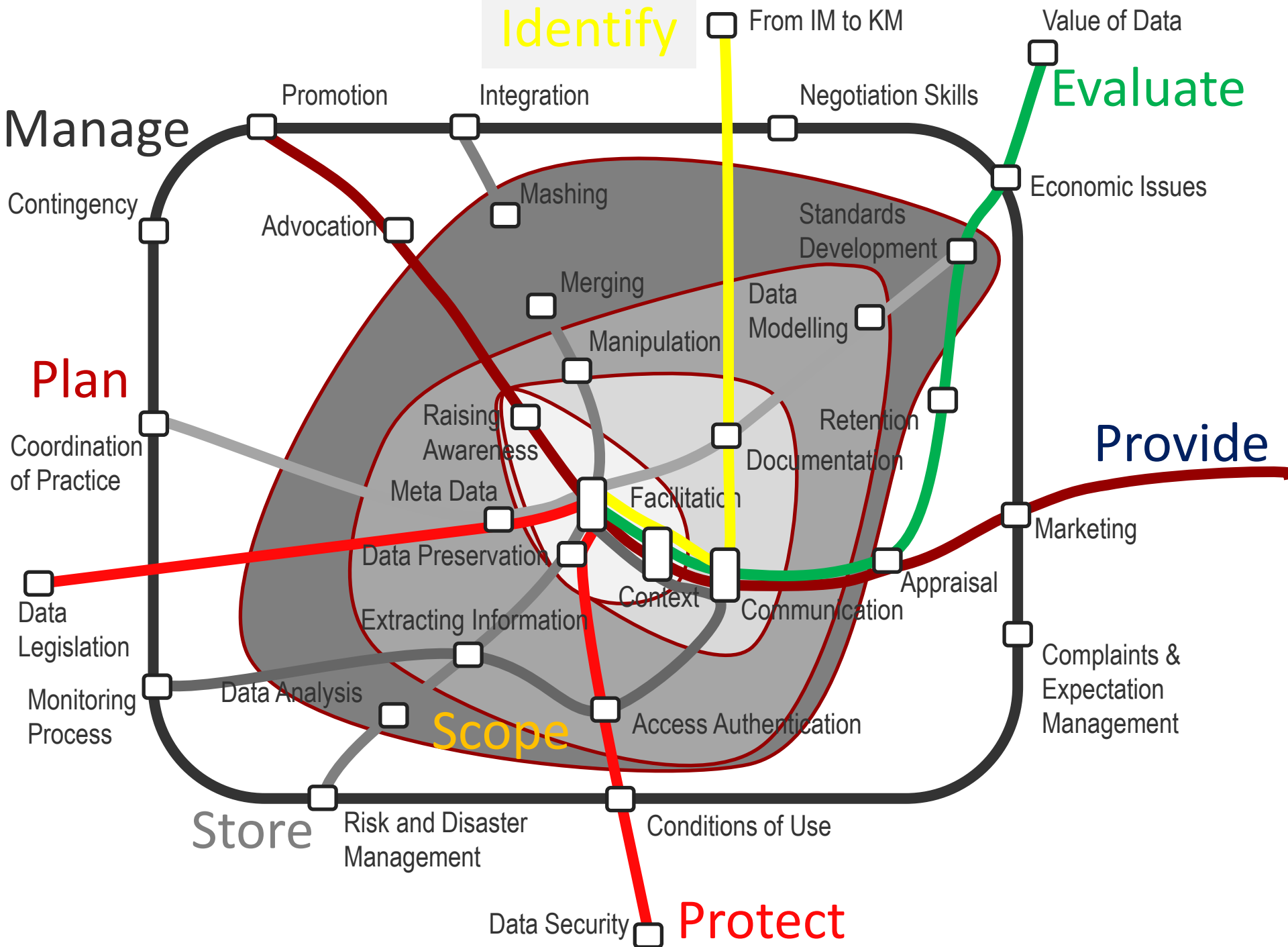


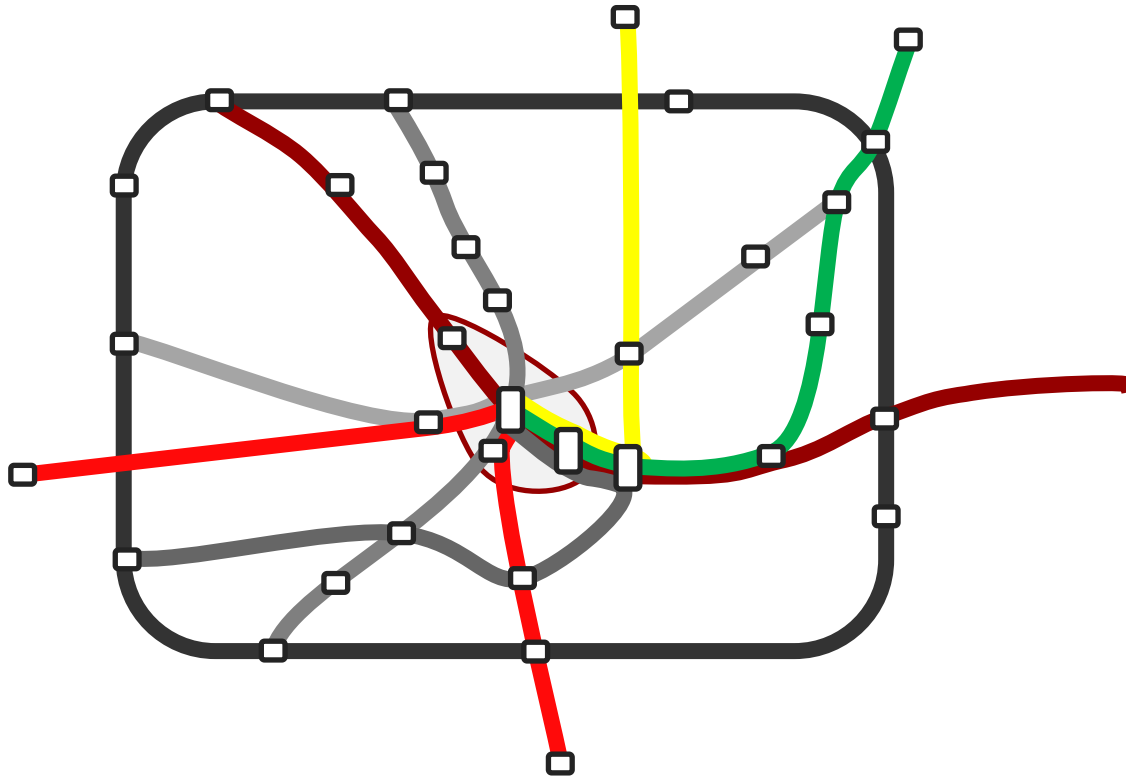
Full module Ticket



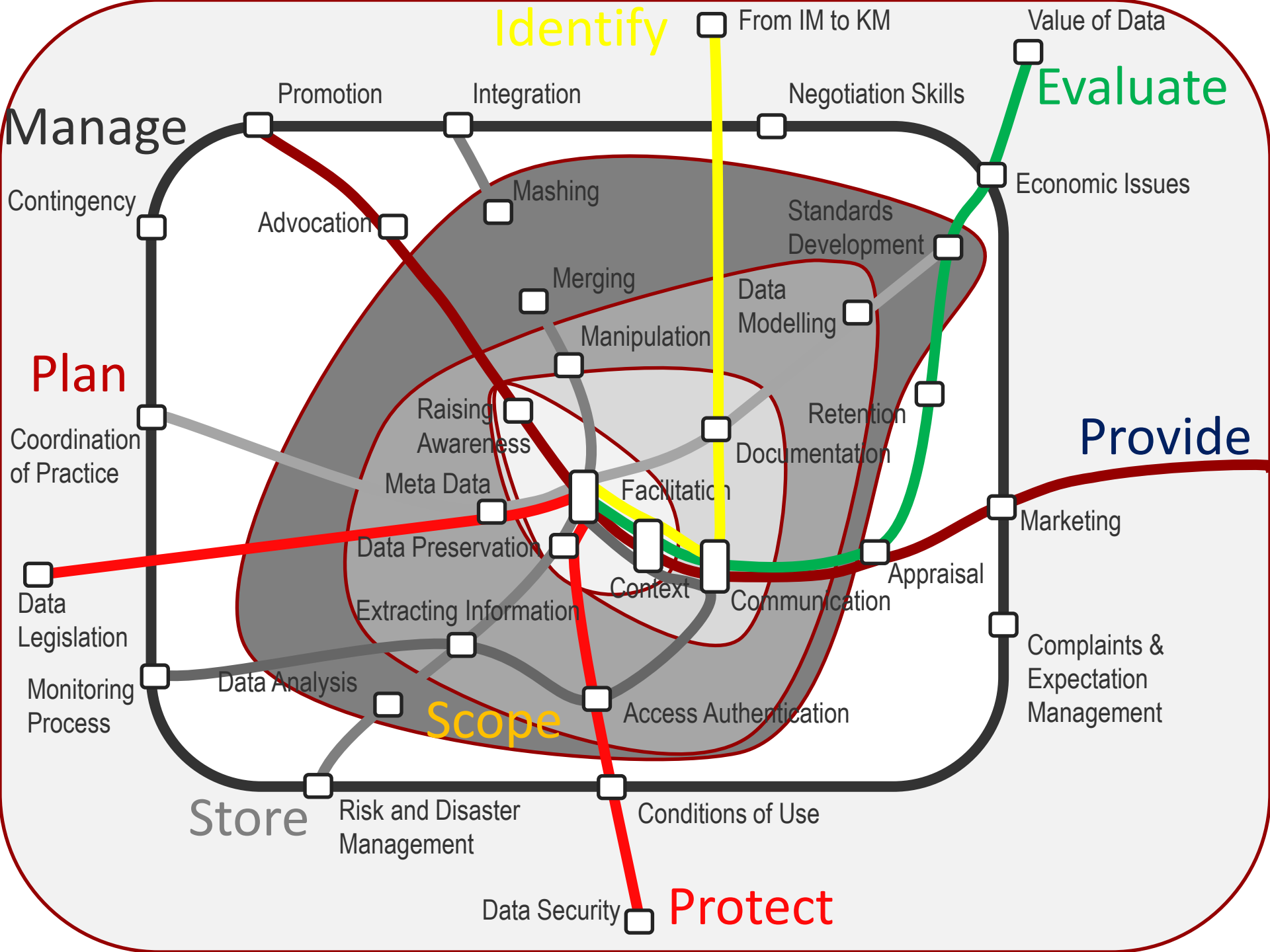


Specialization Ticket





Full ticket  
(two years validity)



Thank you for your attention!

Send questions to: [rene.schneider@hesge.ch](mailto:rene.schneider@hesge.ch)

