

W3C TPAC, OCT. 26-30, 2015, SAPPORO, HOKKAIDO, JAPAN

WEB PAYMENT CAPABILITIES



- 1.WHY ARE CAPABILITIES IMPORTANT TO DISCUSS
- 2.WHAT HAS BEEN DONE SO FAR
- 3.KEY CONCEPTS RELATED TO CAPABILITIES
- 4.WHERE SHOULD THE WORK GO NEXT?

GOALS



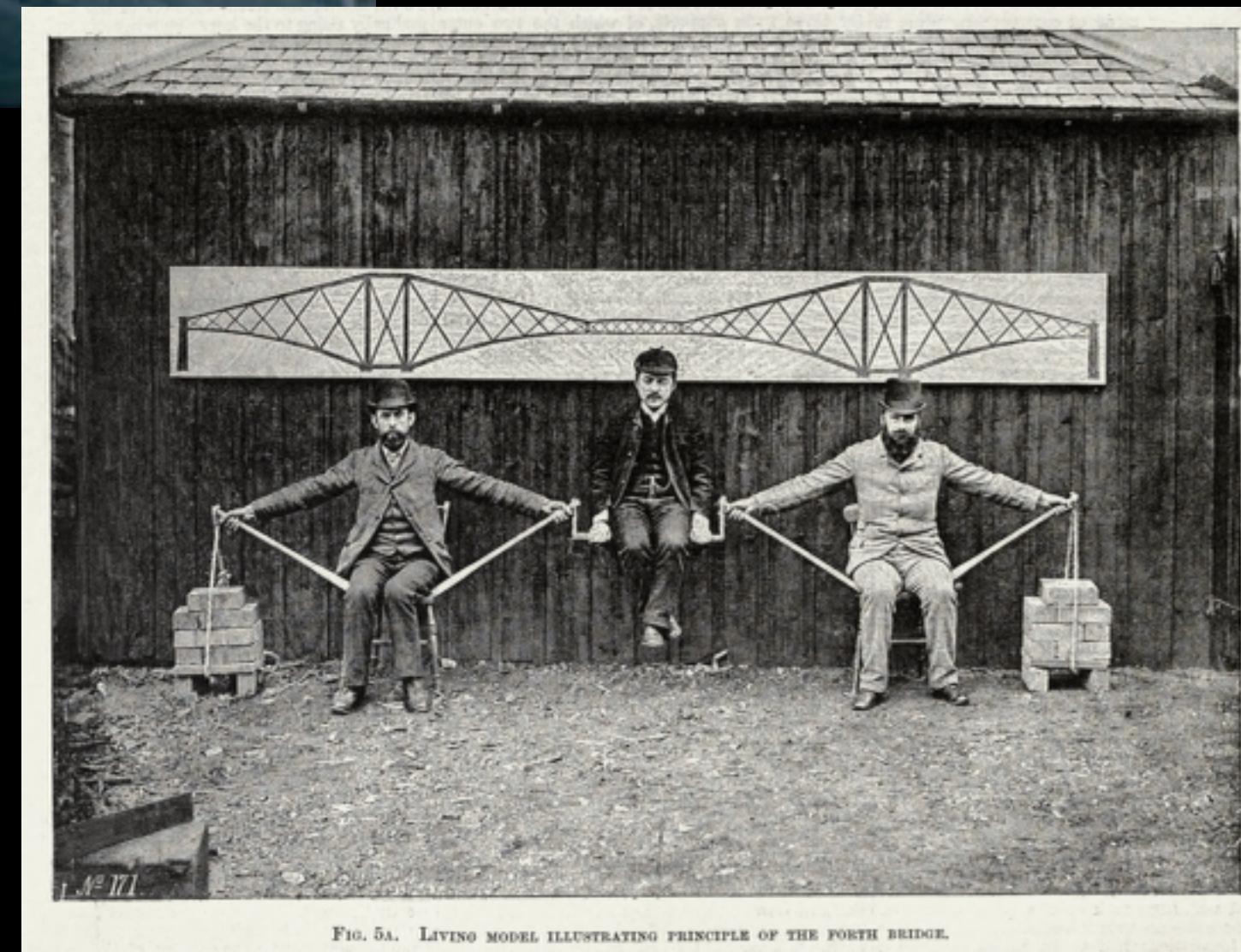
What's the best way to build a bridge? Make a payment?



WHY ARE CAPABILITIES IMPORTANT



- Improves communication across many teams involved
 - Ex (IG, WG, CG, Industry standards groups, etc)
- Helps provide key context and environmental conditions
- Illustrates key principles and concepts to help those responsible for creating standards and building
- Helps IG and broader W3C coordinate work related to payments standardization
- Similar to <http://www.w3.org/TR/2004/REC-webarch-20041215/>



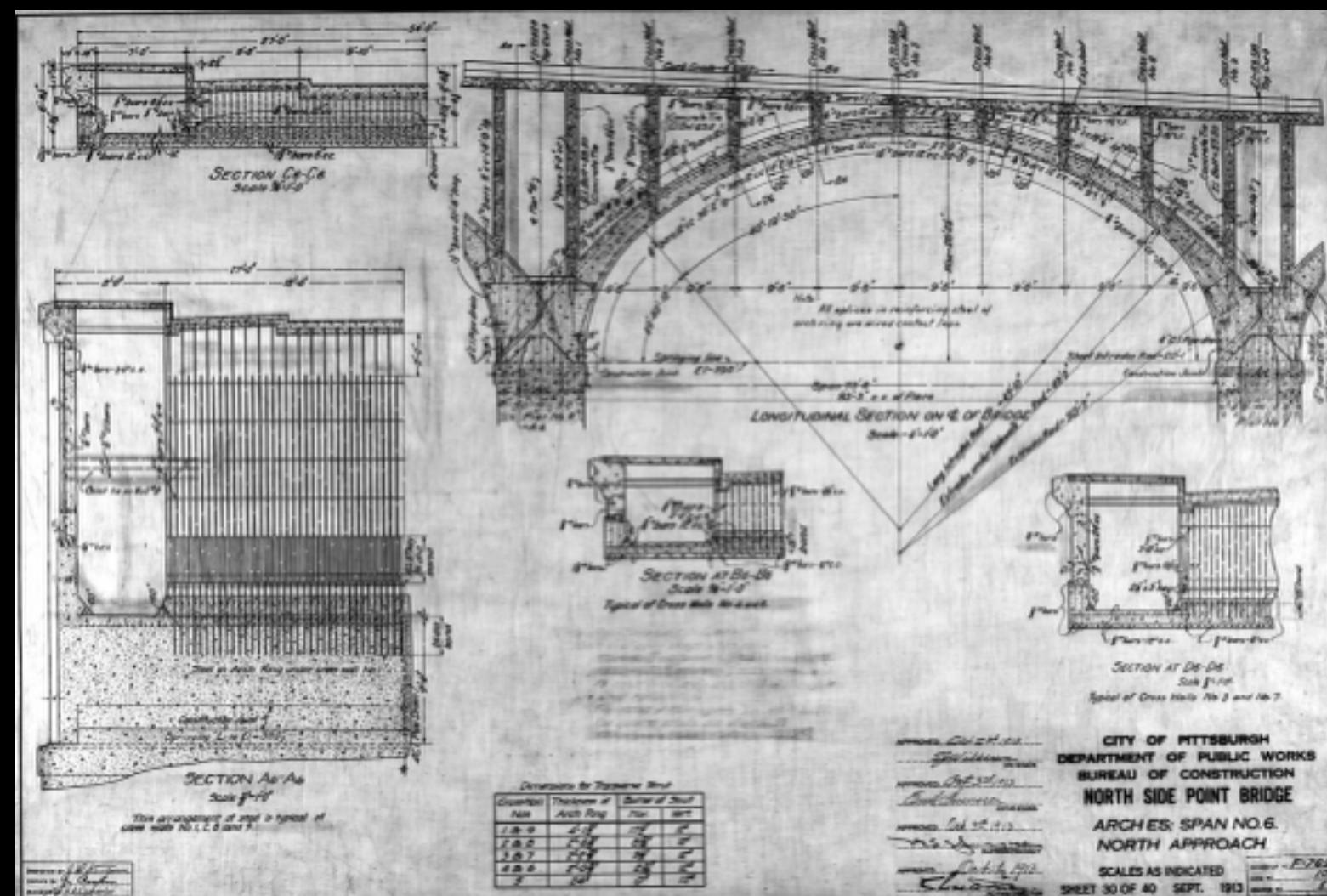
PROGRESS TO DATE

- IG began work earlier this year to capture and document capabilities required for web payments
- First draft of capabilities and related artifacts discussed at June IG meeting in NY
- Work began on formalizing capabilities document following June IG session but still requires substantial input to complete
- <http://htmlpreview.github.io/?https://github.com/w3c/webpayments-ig/blob/master/latest/capabilities/index.html>



Goals of the Capabilities Document

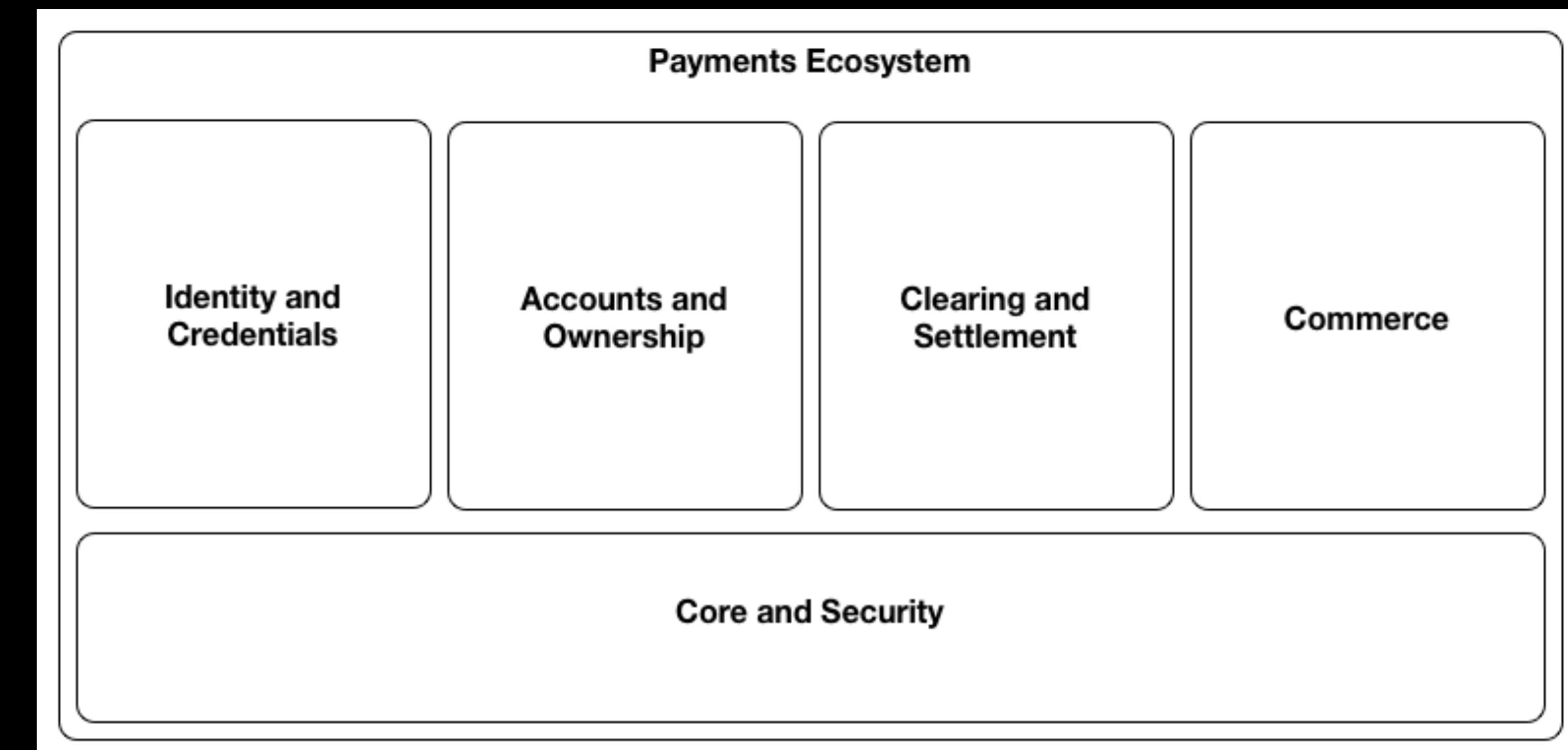
- Provide a common place to capture and document key capabilities that are necessary for payments on the web
- Communicate important architectural principles related to payments on the web and how they relate to other standards such as identity and commerce
- Increasing visibility and improving coordination of various payments and related standardization efforts within the W3C Interest, Working, and Community groups and other standards bodies



What types of capabilities are we concerned about as an IG?

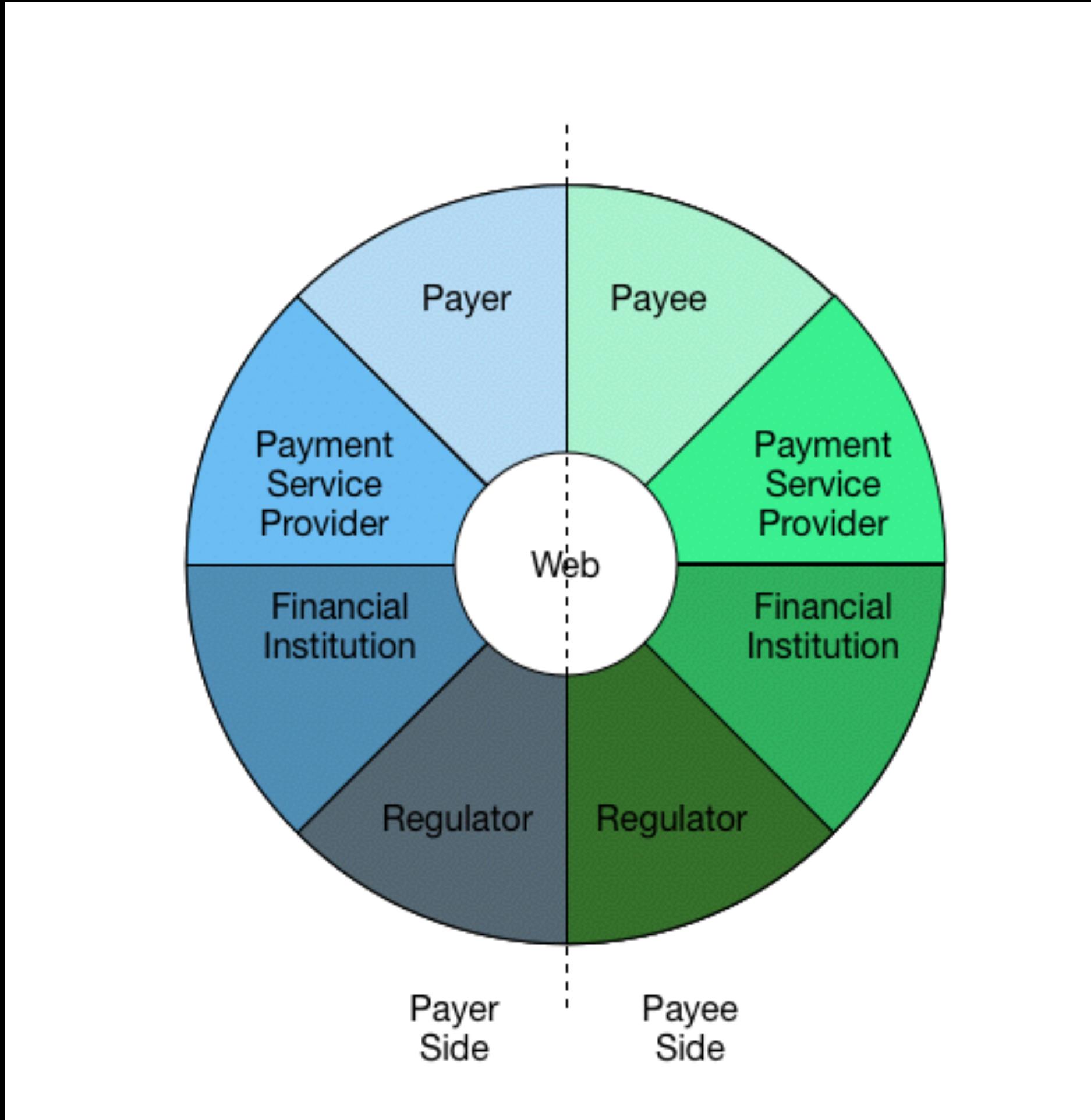
FIVE COURSE GRAINED CAPABILITY DOMAINS

1. **Core and Security** - Includes: Key Creation and Management, Cryptographic Signatures, Encryption
2. **Identity and Credentials** - Includes: Identity, Credentials, Rights, Authentication, Authorization, Privacy, Discovery, Registration, Enrollment, and Legal/Regulatory concerns
3. **Accounts and Ownership** - Includes: Accounts, Account Management and Legal/Regulatory concerns related to accounts and recorded ownership (ex. PSD2)
4. **Clearing and Settlement** - Includes: Messaging, Clearing, Markets, Foreign/Currency Exchange, and Legal/regulatory concerns specific to payment clearing, settlement and Exchange of Value (ex. ILP, SCAI, etc)
5. **Commerce** - Includes: Offers, Invoicing, Receipts, Rewards, Contracts, Lending, Insurance, Taxation, Legal/Regulatory concerns related to aspects of commercial and economic interactions



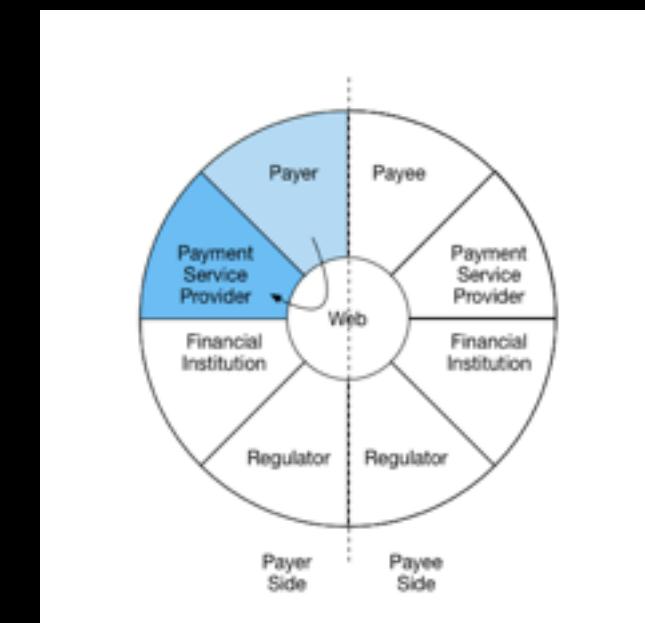
Interactions, like capabilities are important

Payment Interaction Concept



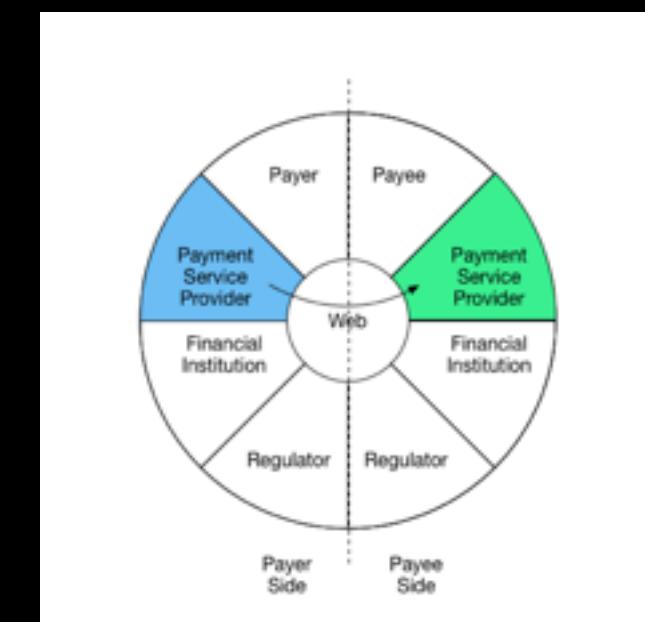
Example 1:

What standards are needed for **payees** to required payment information to **payers**?



Example 2:

How do **payers** consistently interact with their **payment service providers**? What standards are required for that or do they already exist?



Example 3:

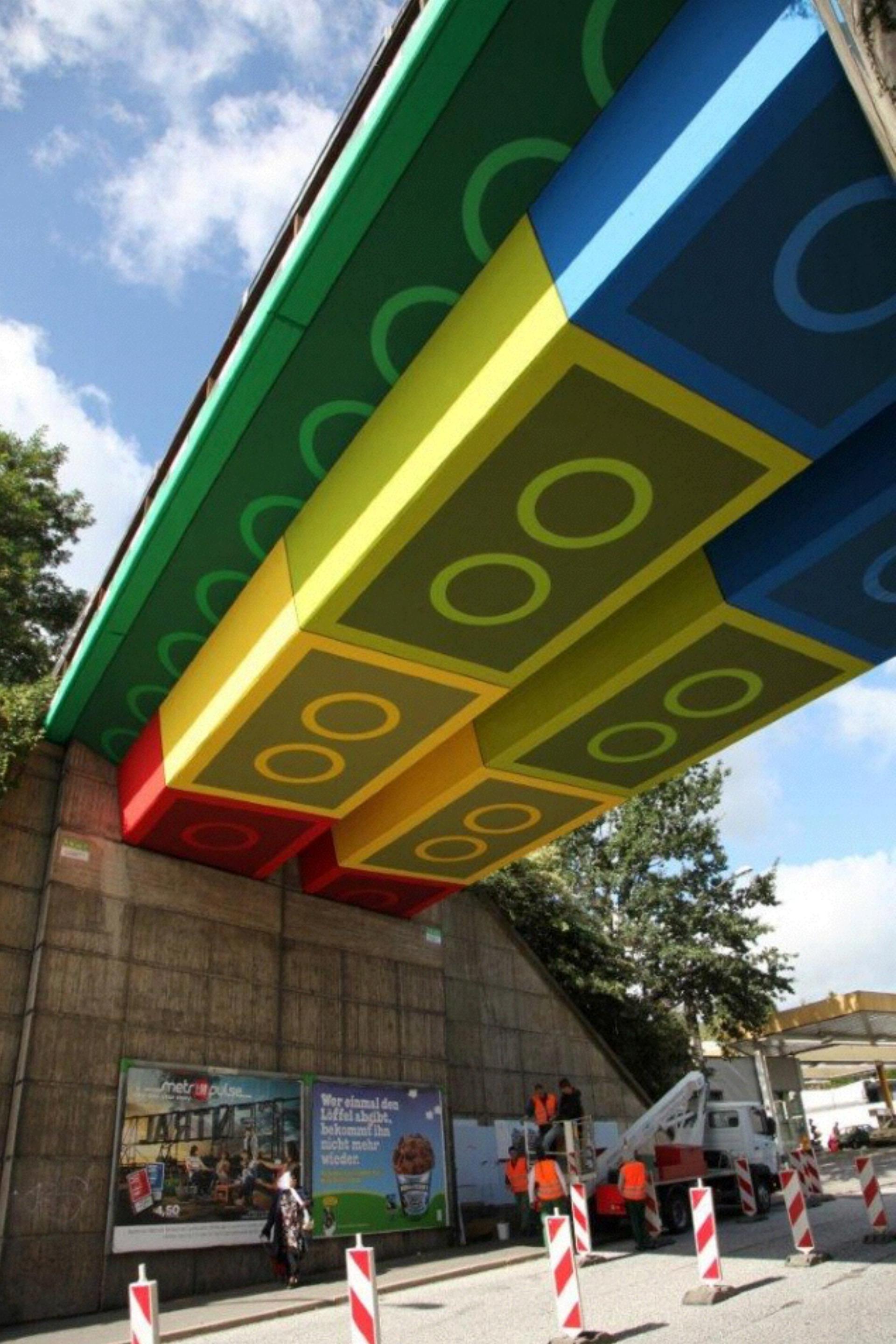
Once payment details have been agreed to, how do **payment service providers** send details to other **payment service providers**?

Depending on the scenario, requirements and context may be and often are different

What would we like to capture in the capabilities document?

DOMAIN BUILDING BLOCKS

1. **Overview of the Domain** - Provides a high level description of how the domain relates to the broader payments ecosystem
2. **Functional description of capabilities/interactions in the domain** - Describes specific key capabilities and interactions that are part of the domain
3. **Key Concepts/Principles** - Are there key concepts or principles related to the domain that need to be consistently communicated to various WG, CG, or Industry groups?
4. **Key Deliverables (existing or planned)** - What key deliverables or artifacts exist or are planned to help readers of the document understand the domain?
5. **Related Specifications and/or Standards bodies** - Identifies existing standards or standards groups which are important to the domain



What is needed to move the capabilities work forward?

1. Validate approach of capability domains and interactions within the IG and identify any gaps/issues that need to be addressed
2. If approach is a valid:
 - a) Need help and participation in authoring/editing capability domain sections to ensure capability domains are comprehensive and representative
 - b) Need reviewers to help review the domains as well as the aggregate document to ensure document is consistent, readable and accurate
 - c) Leverage capabilities document to socialize and communicate key principles and capabilities to impacted groups (ex. WG, CG, Industry groups, etc)
 - d) Practically, what should we communicate during Thursday WG meeting?
3. If approach is not valid:
 - a) Capture and discuss feedback related to validity of approach
 - b) Discuss alternative approaches and how to move forward





DISCUSSION/QUESTIONS