

# A Process Mining Based Model for Customer Journey Mapping

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## Customer Journey Mapping (CJM)

Customer journey mapping enables professionals to better understand customers' experiences when they interact with the steps involved in a service. Two uses of CJMs: (1) the expected journey aiming to represent anticipated journeys, and (2) the actual journey, which aims to describe how the journey was "really" experienced by customers.

## Challenges

- Multiple ways to create CJMs exist
- CJMs are not consistent nor mutually compatible
- The customer journey analytics market "is a nascent, highly fragmented market with many vendors offering partial solutions"



## Process Mining

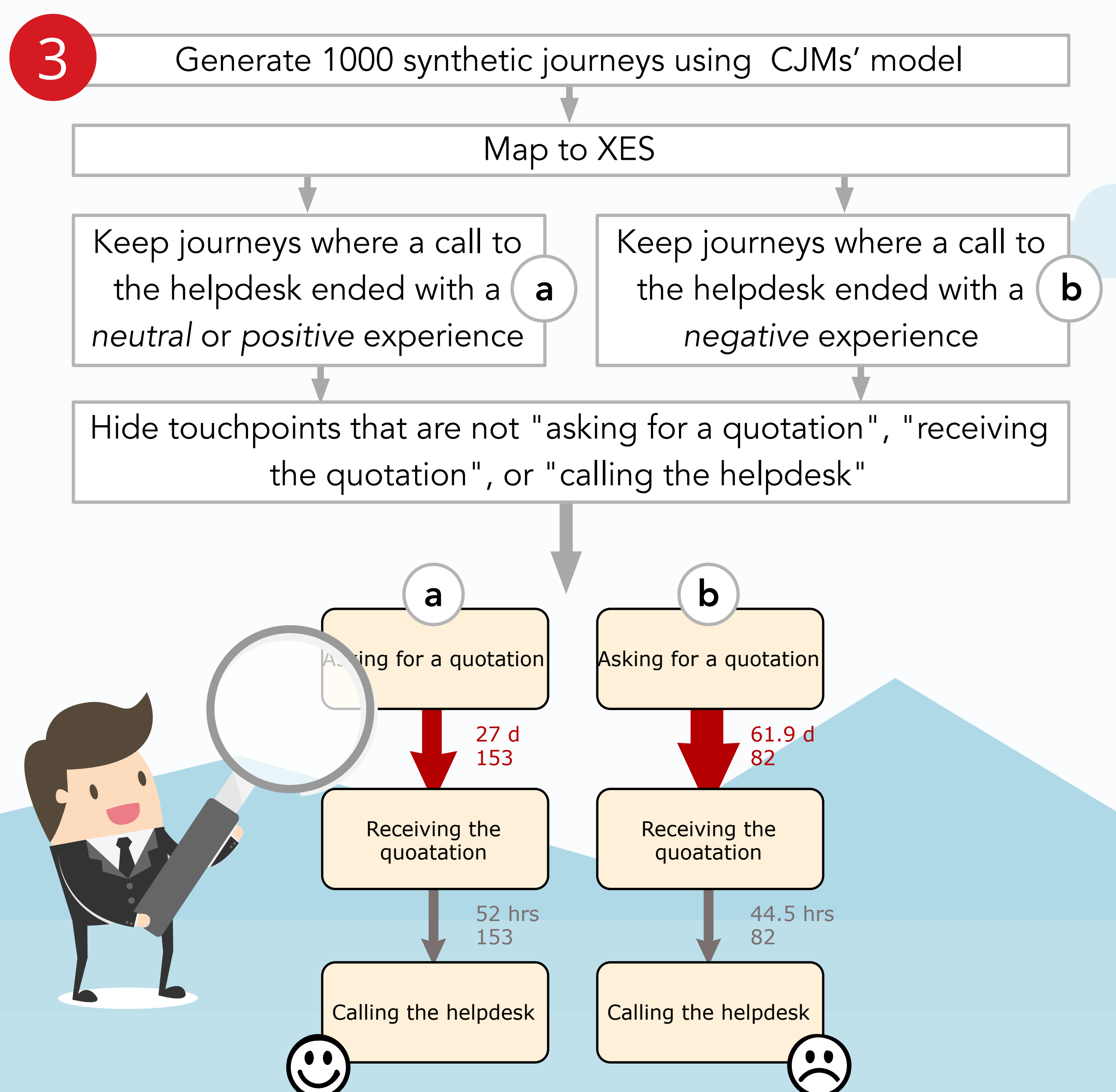
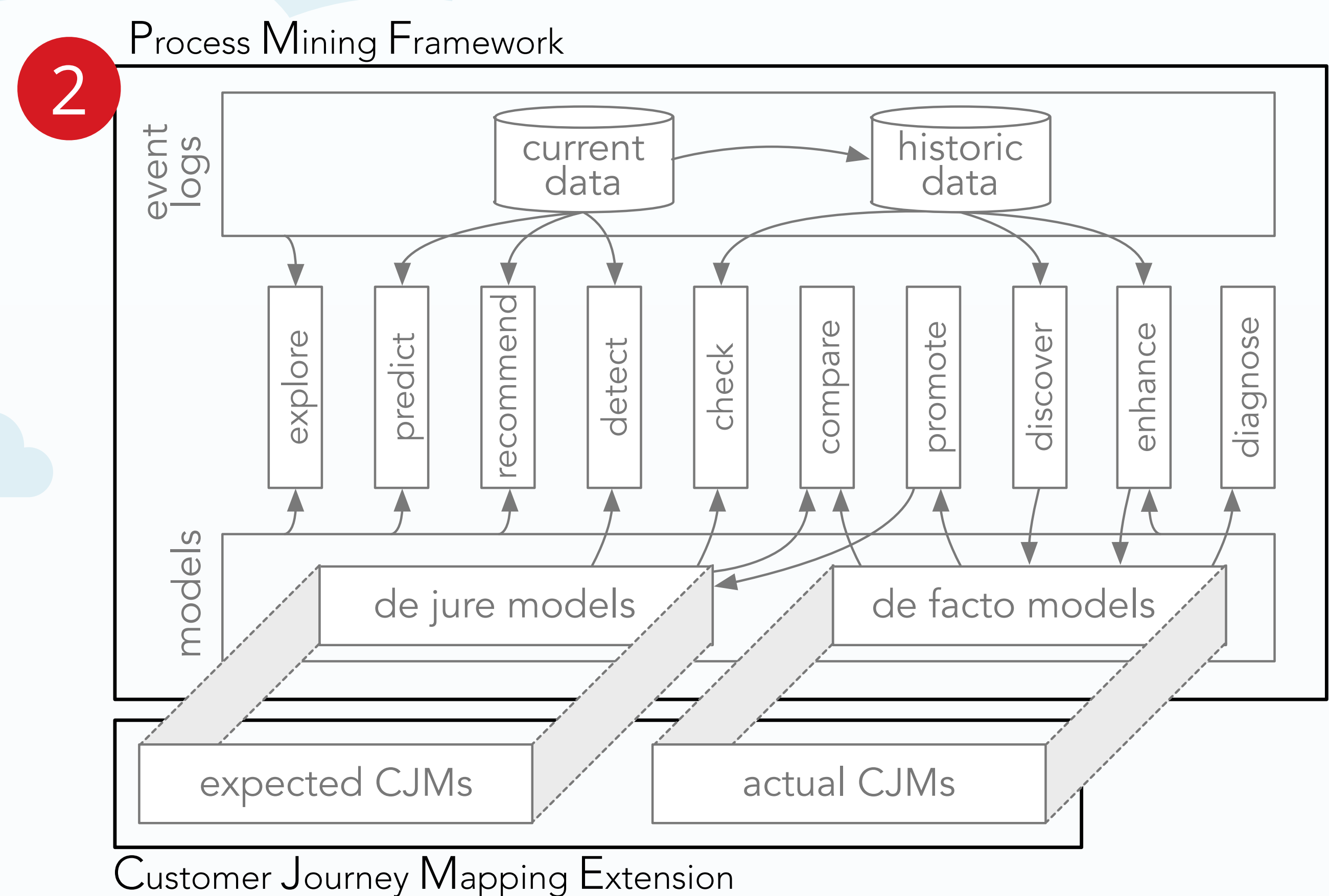
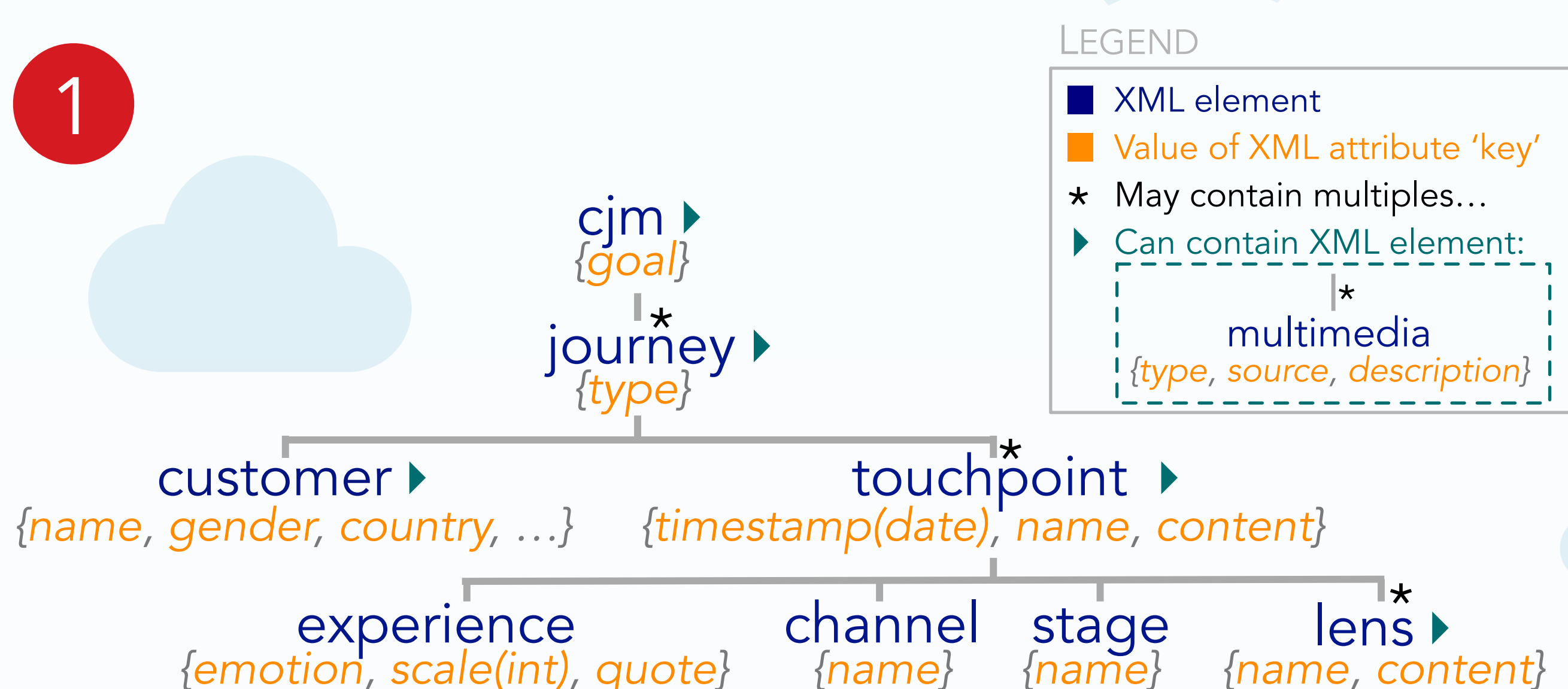
Process mining is a discipline that has the ability to play with process models and events logs to deliver fact-based insights.

## Opportunities

- Traces of customer journeys available in information systems could be used to build a CJM from facts
- Process mining works with event logs, a sequential format ideal for representing CJMs
- Working with expected and actual models is at the core of the process mining framework
- Gartner predicted that by 2018, 60% of large organizations will develop in-house customer journey mapping capabilities



**We contribute by:** (1) clarifying the components of CJMs and proposing a model (literature review), (2) discussing how CJMs can be integrated within the process mining framework, (3) illustrating how process mining can be used to analyze CJMs.



## Outlook

- Process mining algorithms that fully leverage CJM specificities are required (e.g., emotions, personas, journeys' path characteristics)
- There is a need to investigate how typical process mining activities can be applied to analyze CJMs
- Further case studies should be undertaken to investigate the potential for bringing multiple stakeholders' perspectives, as well as qualitative and quantitative methods, together onto the same CJM
- The advances in the sentiment analysis algorithm, and the growing complexity of customers' needs, provide an exciting opportunity to advance our knowledge of CJMs with empirical tools