

PUZZLE DATA Process Mining Summit 2019

디지털 트랜스포메이션과
프로세스 마이닝

2019년 11월 21일 목요일
삼성동 코엑스 컨퍼런스룸(남) 402호



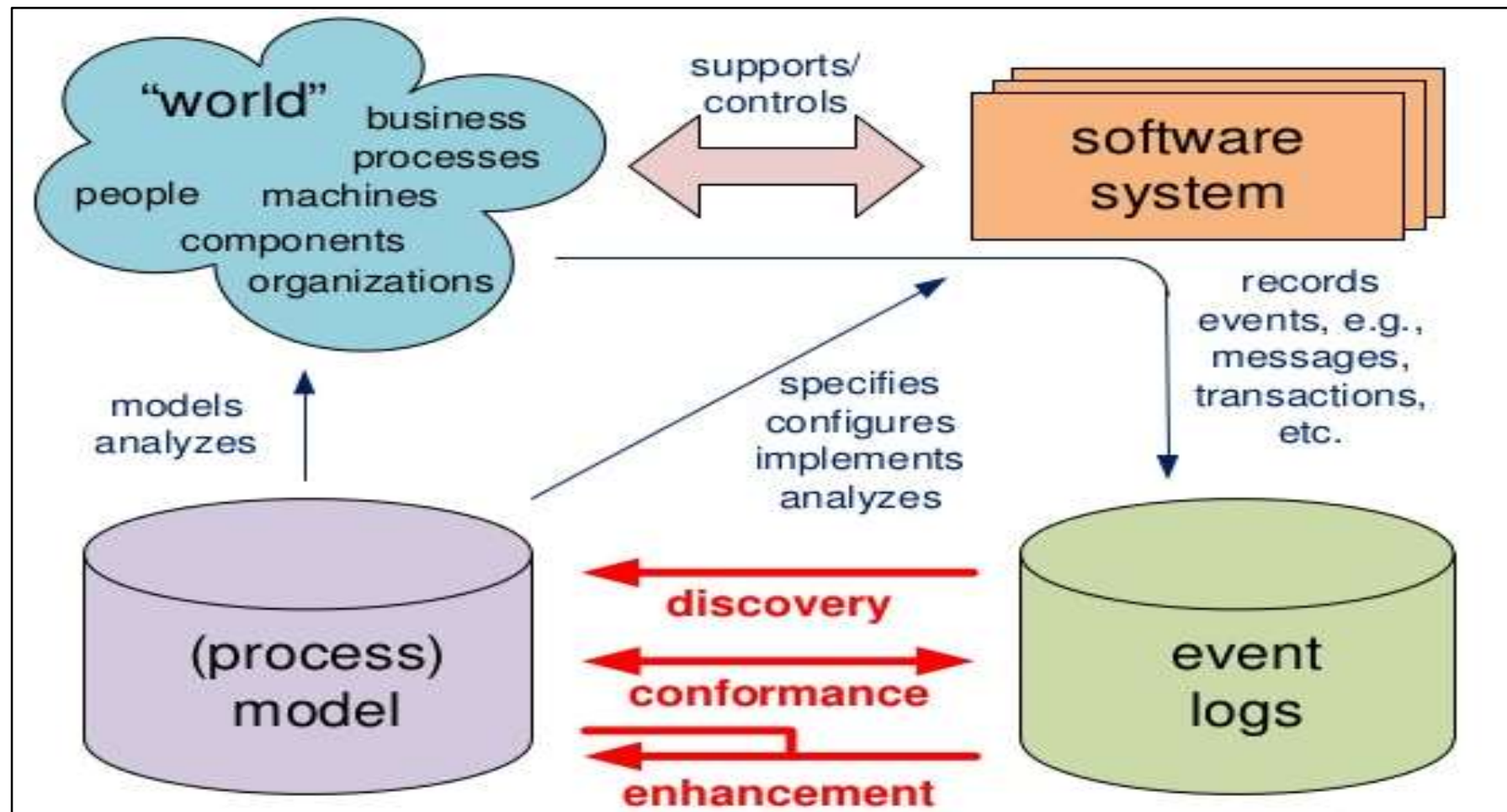
Puzzle Data ProDiscovery

Roadmap Update

퍼즐 데이터
하 봉 문

 PUZZLE DATA
Process Mining
Summit 2019

Process Mining



프로세스
가시화 및 분석
Process Discovery

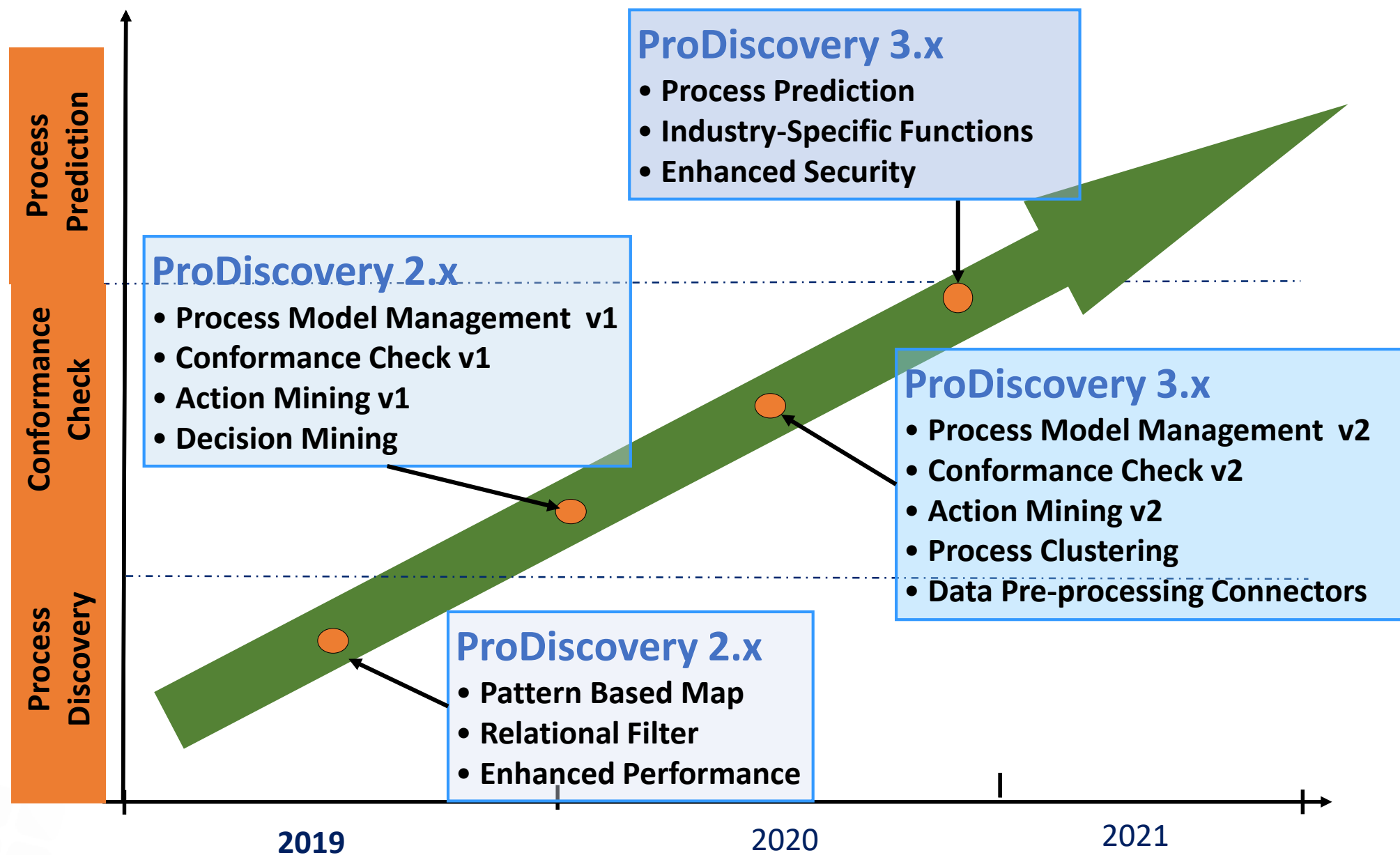
프로세스
모니터링 및 비교
Process Monitoring

프로세스
지속적인 개선
Process Enhancement

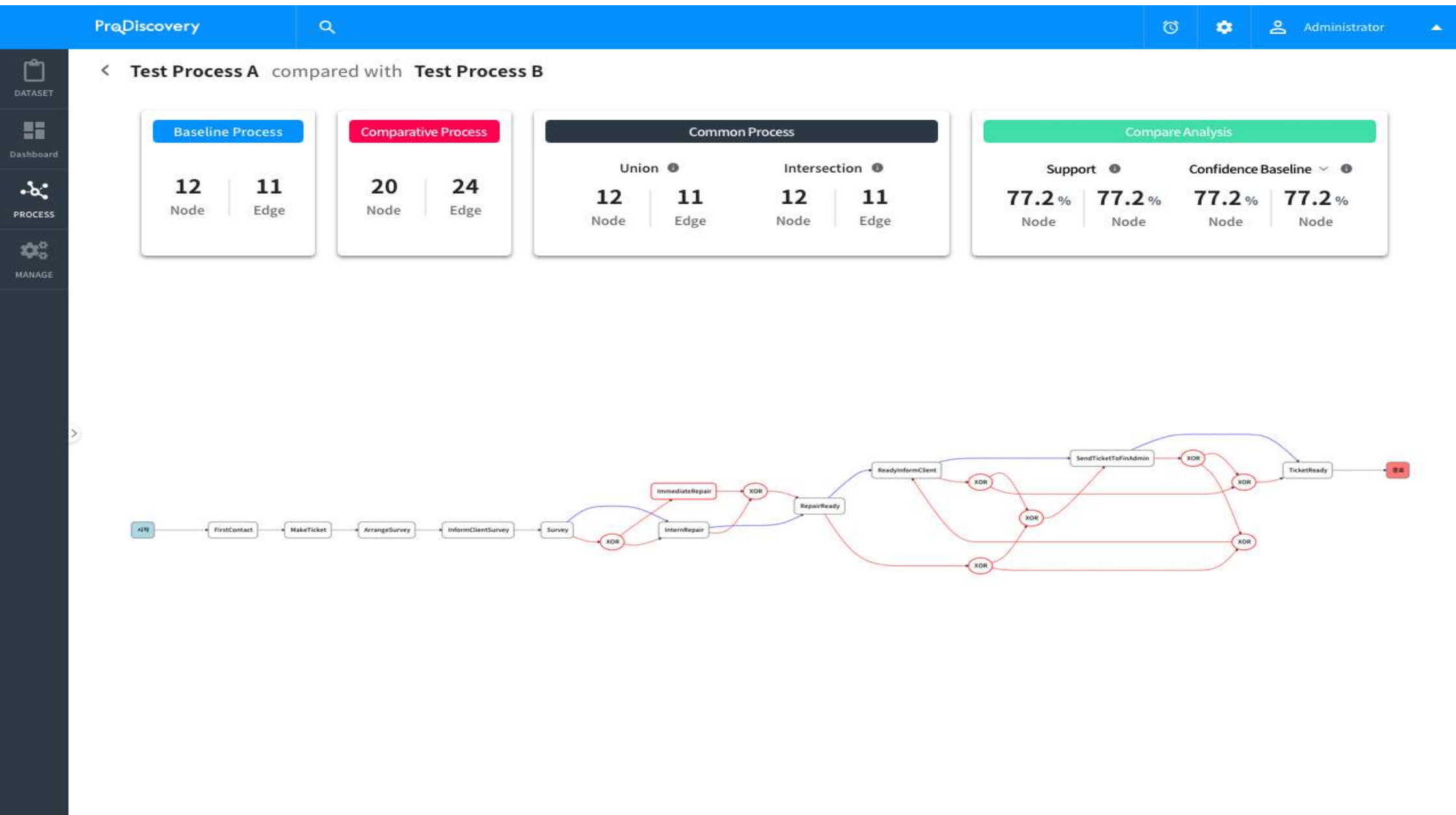
중요 개발 로드맵

Process Discovery	• 다양한 프로세스 마이닝 기법 개발 및 솔루션 적용 • 산업별 특화된 프로세스 마이닝
Process Model Management	• 기업의 표준 프로세스를 작성하고 저장관리 기능 • Conformance Check를 위한 기능 • BPMN(Business Process Modeling Notation) 지원
Conformance Check	• 표준 프로세스와 프로세스 마이닝된 프로세스의 비교 분석 • 다양한 Conformance check 방법 개발 및 적용
Process Prediction	• 프로세스 마이닝으로 도출된 프로세스에 대한 다양한 인공지능 기반 예측 및 시뮬레이션 방안 제공 • Decision Mining, Process Clustering, Process Simulation
Action Mining	• User Action Log + 프로세스 마이닝으로 현업 업무 분석 • 보다 나은 사용자 액션 분석 및 RPA 대상 분석 제공
Security, Performance & etc	• 보다 다양한 보안 기능 제공 • 보다 많은 데이터를 처리가능한 솔루션 확장성 제공

Puzzle Data ProDiscovery Roadmap



Conformance Check (Sample Screen)





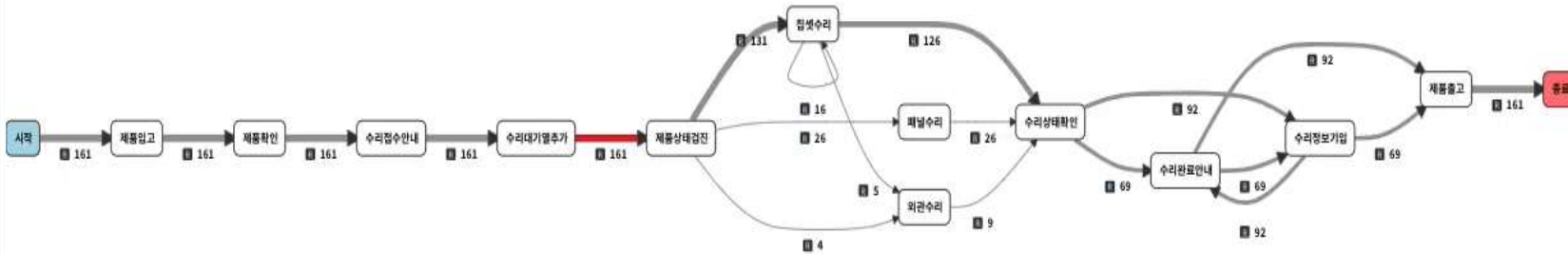
+ Add Puzzle

Dataset > My Folder > TV 수리 데이터 > TV 수리 데이터(1) ▼

Edit ON

성과 상위 20% [Filter](#)

맵 적용범위 : 100.00%



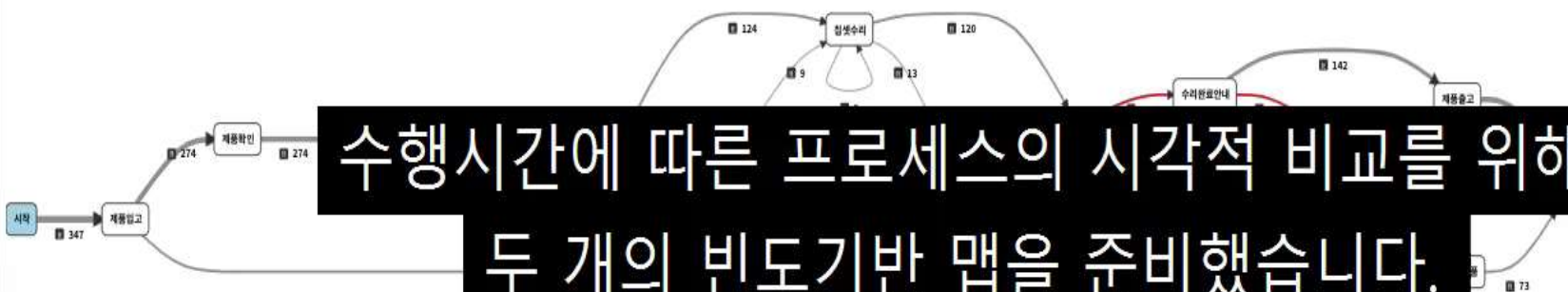
Puzzle Options



퍼즐을 선택하세요

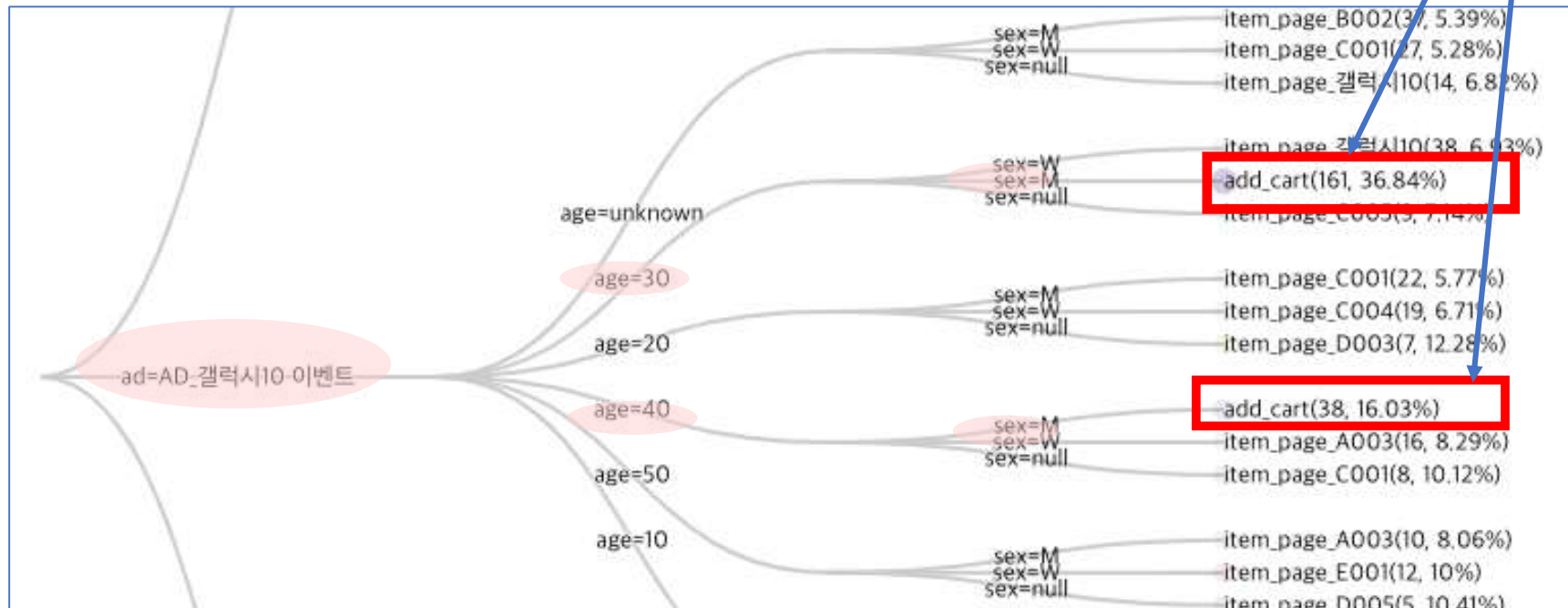
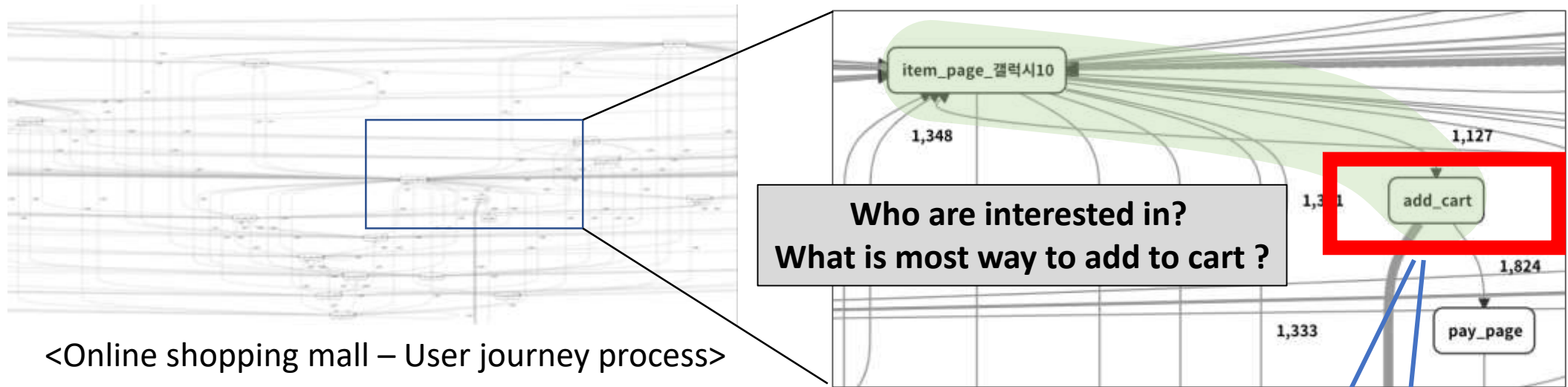
성과 하위 20% [Filter](#)

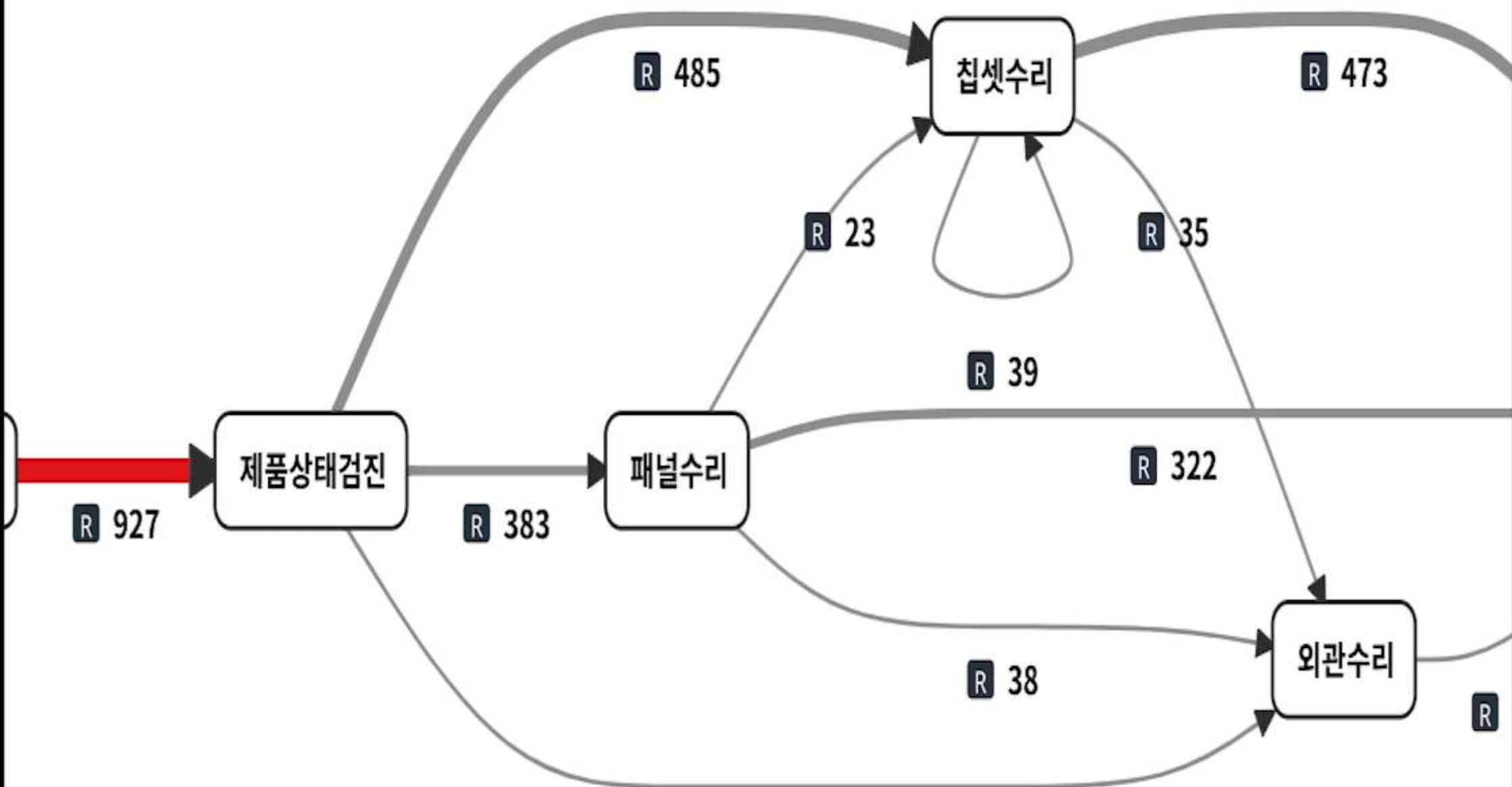
맵 적용범위 : 100.00%



수행시간에 따른 프로세스의 시각적 비교를 위해
두 개의 빈도기반 맵을 준비했습니다.

Decision Mining: 특정 다음 작업을 수행하는 주요 속성 찾기

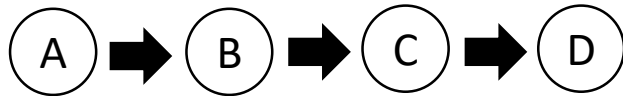




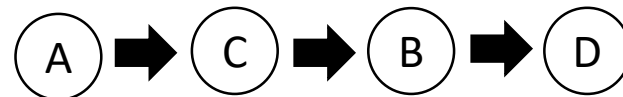
TV 수리 프로세스 맵의 일부분입니다.

Process Clustering: 현재 분석가가 프로세스맵 분석하는 방법

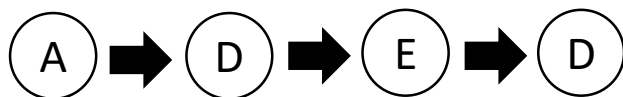
Case 1



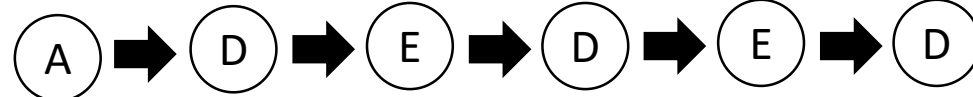
Case 2



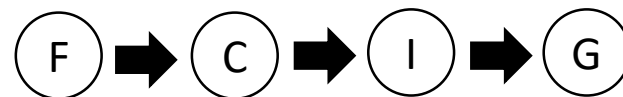
Case 3



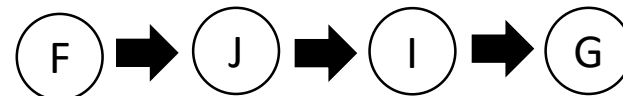
Case 4



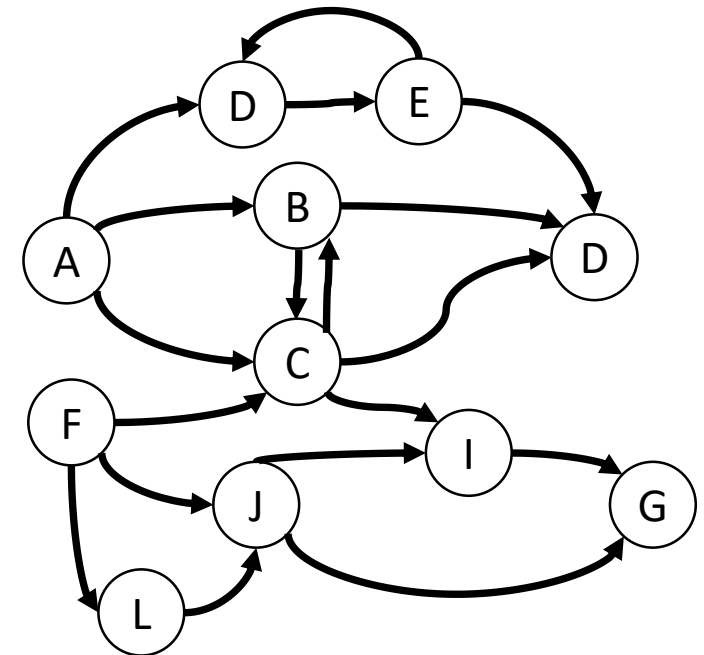
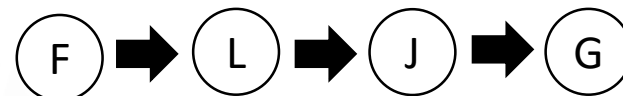
Case 5



Case 6



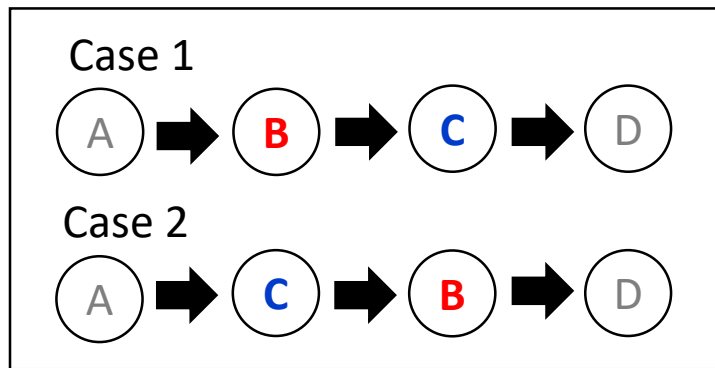
Case 7



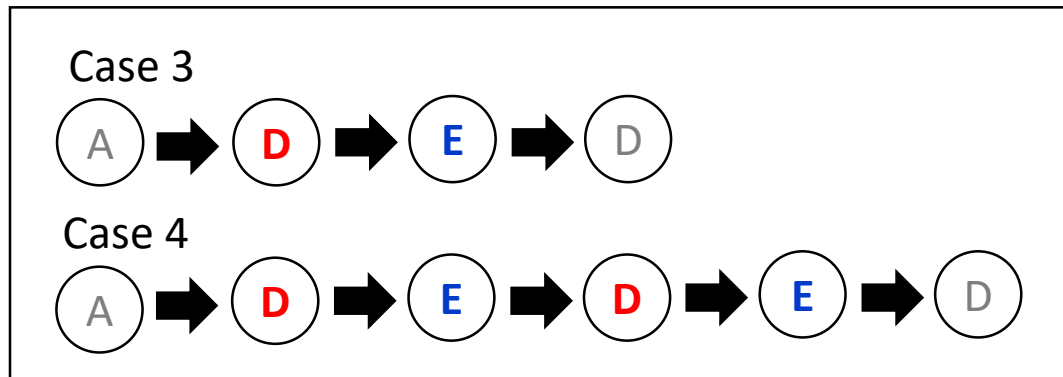
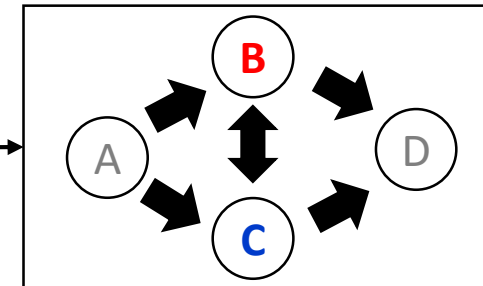
<Process Map from Patterns>

Try to find meaningful result(or insight)
from spaghetti map generated by hand.

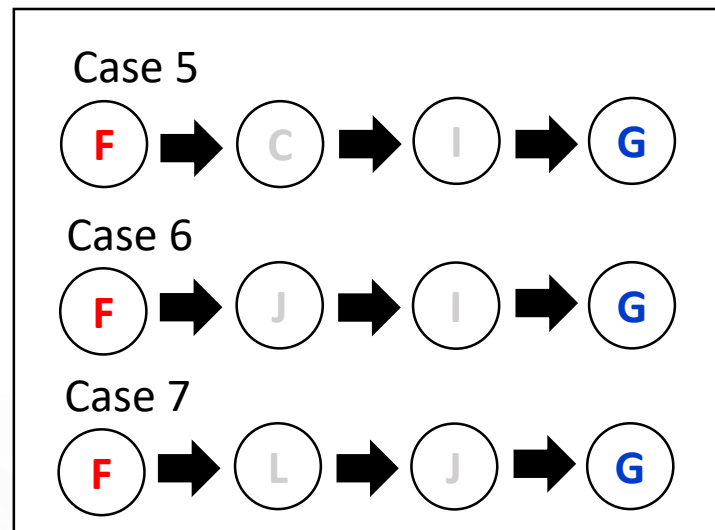
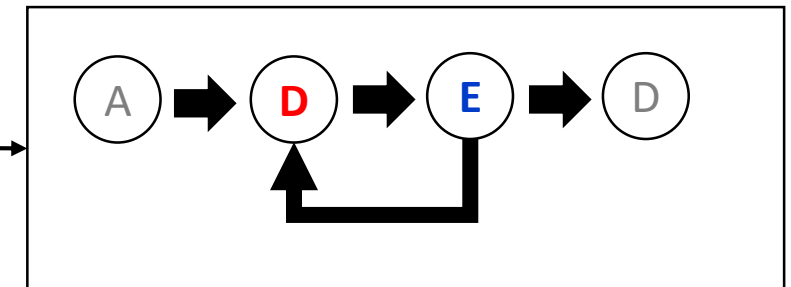
Process Clustering: 의미적으로 비슷한 Case들 군집화



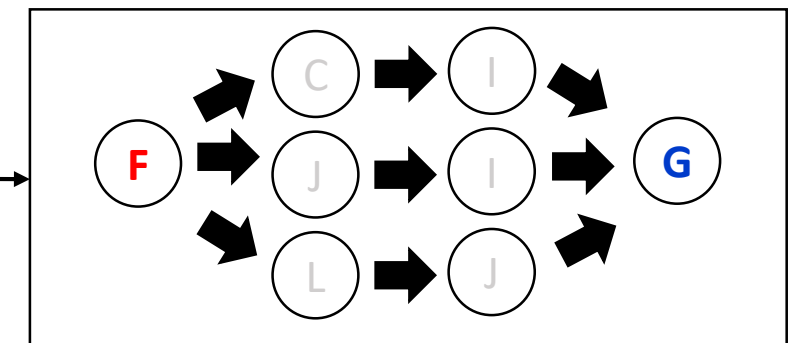
Cluster1 (Reverse, No order)



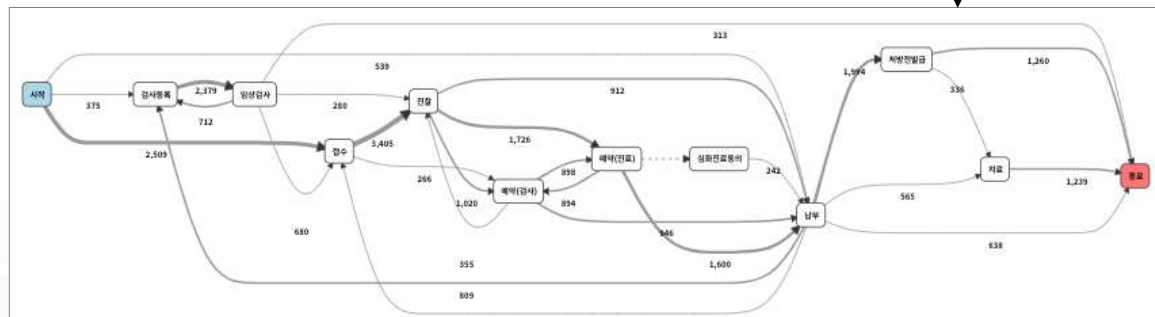
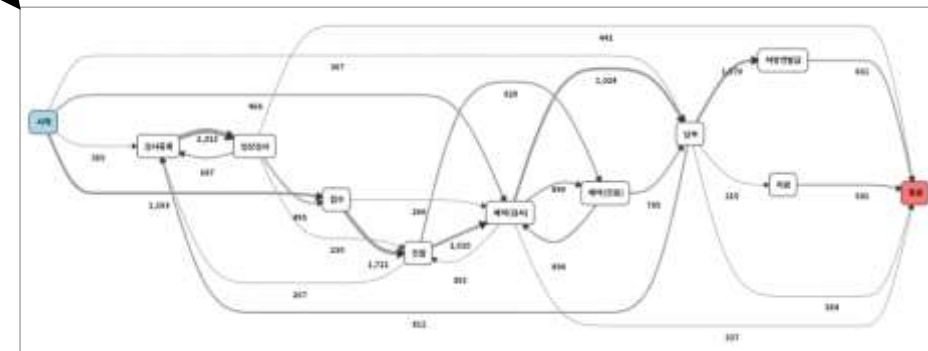
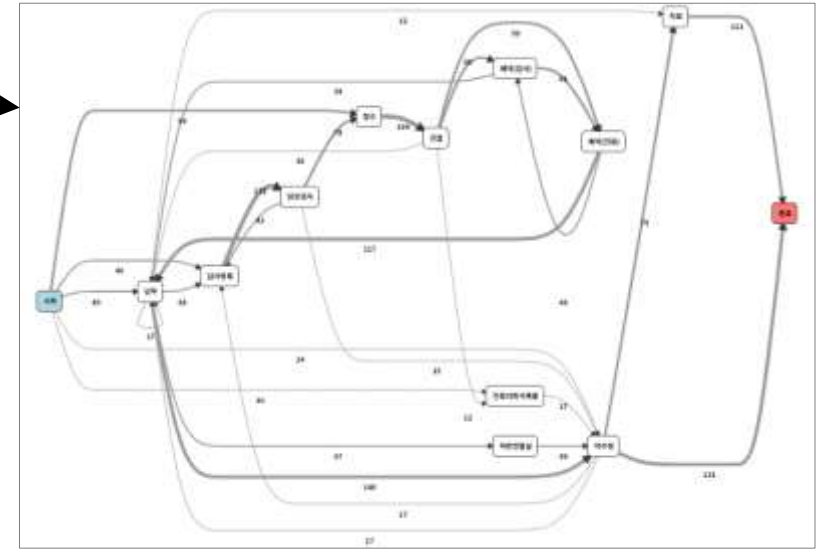
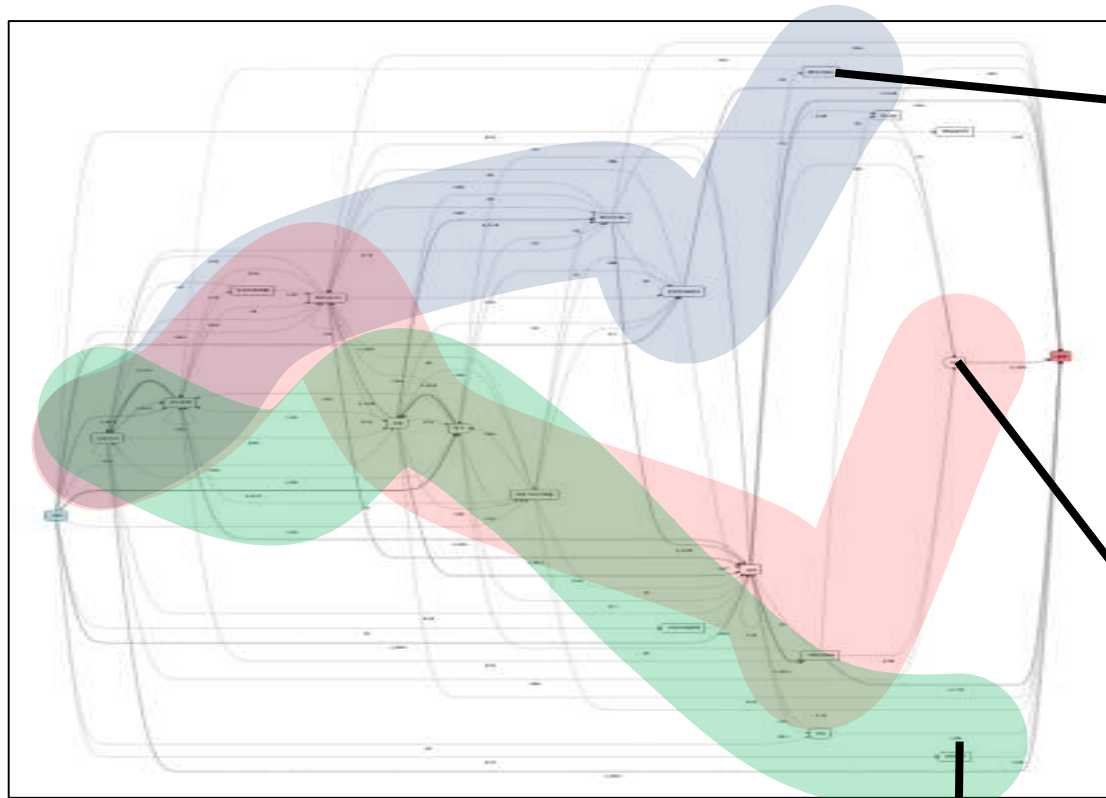
Cluster2 (Recursive matching)



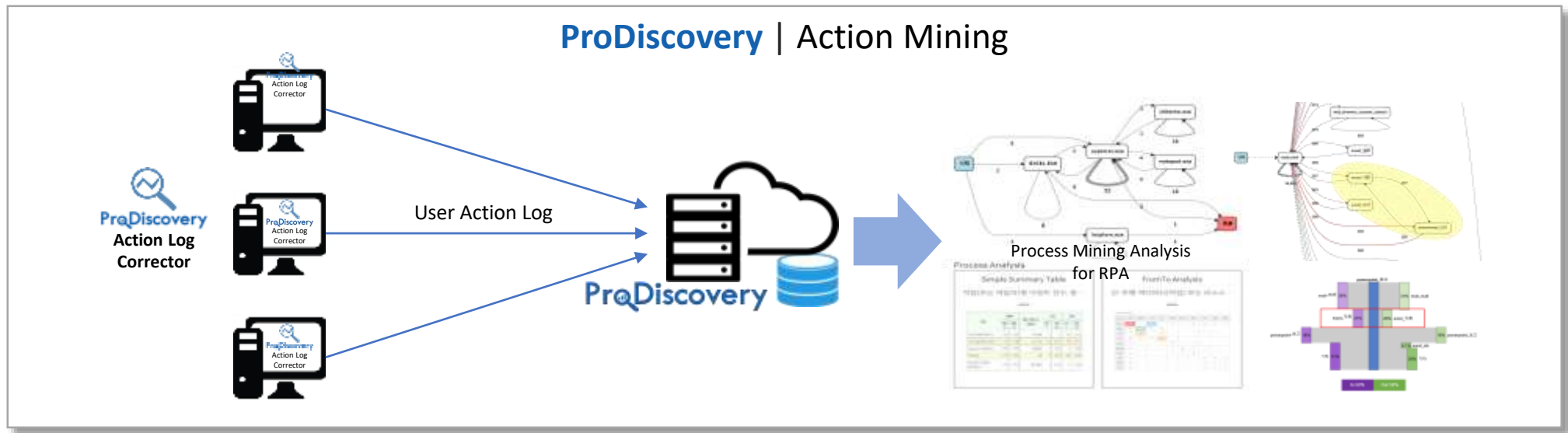
Cluster3 (Partial matching)



Process Clustering: 스파게티 맵에서 서브 프로세스 찾기



Action Mining : User Action Log + Process Mining

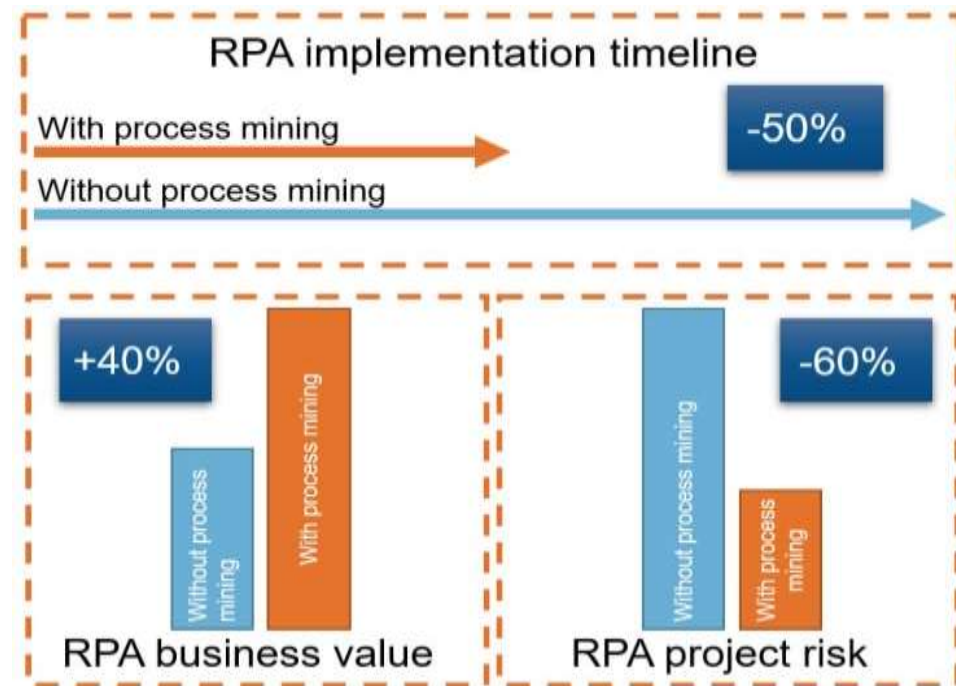


User Action/Event Log

Process Mining + RPA

- 적용 대상 분석 및 추출
- 도입 전후 프로세스 비교
- 성과 분석 및 모니터링

Enhanced RPA



PUZZLE DATA ProDiscovery Roadmap

Process Mining based on AI

ProDiscovery 2.x

As-Is Analysis Process Discovery



As-Is process discovery,
enhancement and analysis

2019 ~ 2021 R&D

Predictive Analysis Automated Consulting Tool

Decision Mining
Technology

Time Prediction
Technology

Discovering
Simulation Models

AI, Machine Learning

ProDiscovery 3.x

Process Intelligence AI Based Process Mining



Process intelligence, insight,
automation for Digital Twin

퍼즐데이터 : 글로벌 프로세스 마이닝 대표기업 (Gartner)

Gartner Market Guide for Process Mining 2018

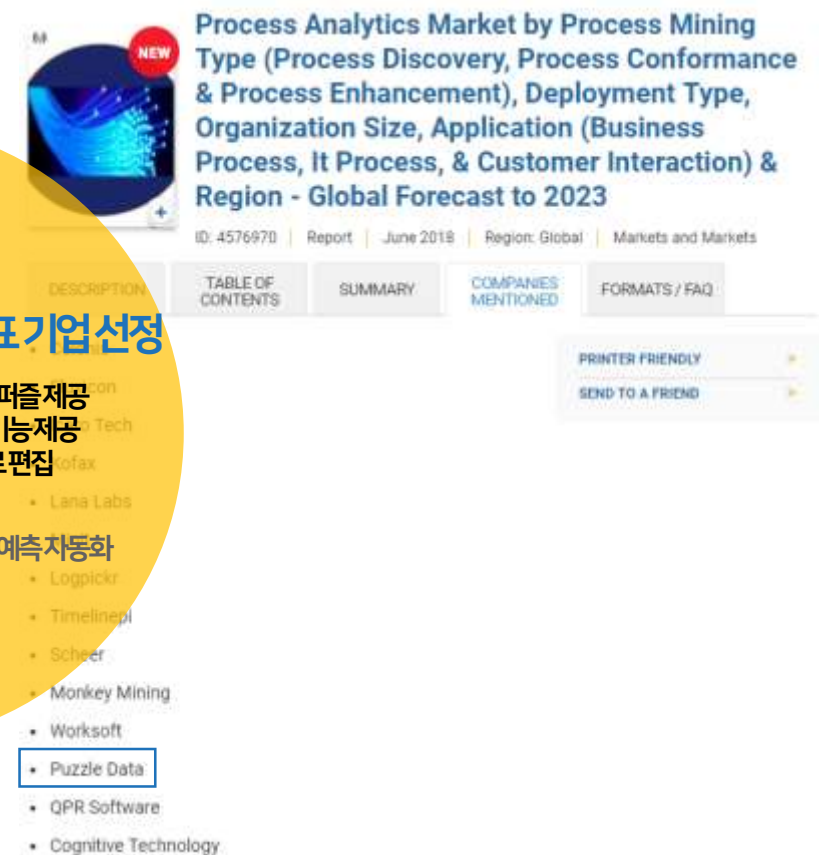
: 대표 업체 (Representative Vendors) 선정 (Apr. 2018)

Gartner Market Guide for Process Mining 2019

: 대표 업체 (Representative Vendors) 선정 (June. 2019)

Research and Markets

: 프로세스 마이닝 주요 업체 (Major Vendors) 선정 (June. 2018)



Global 프로세스마이닝대표기업선정

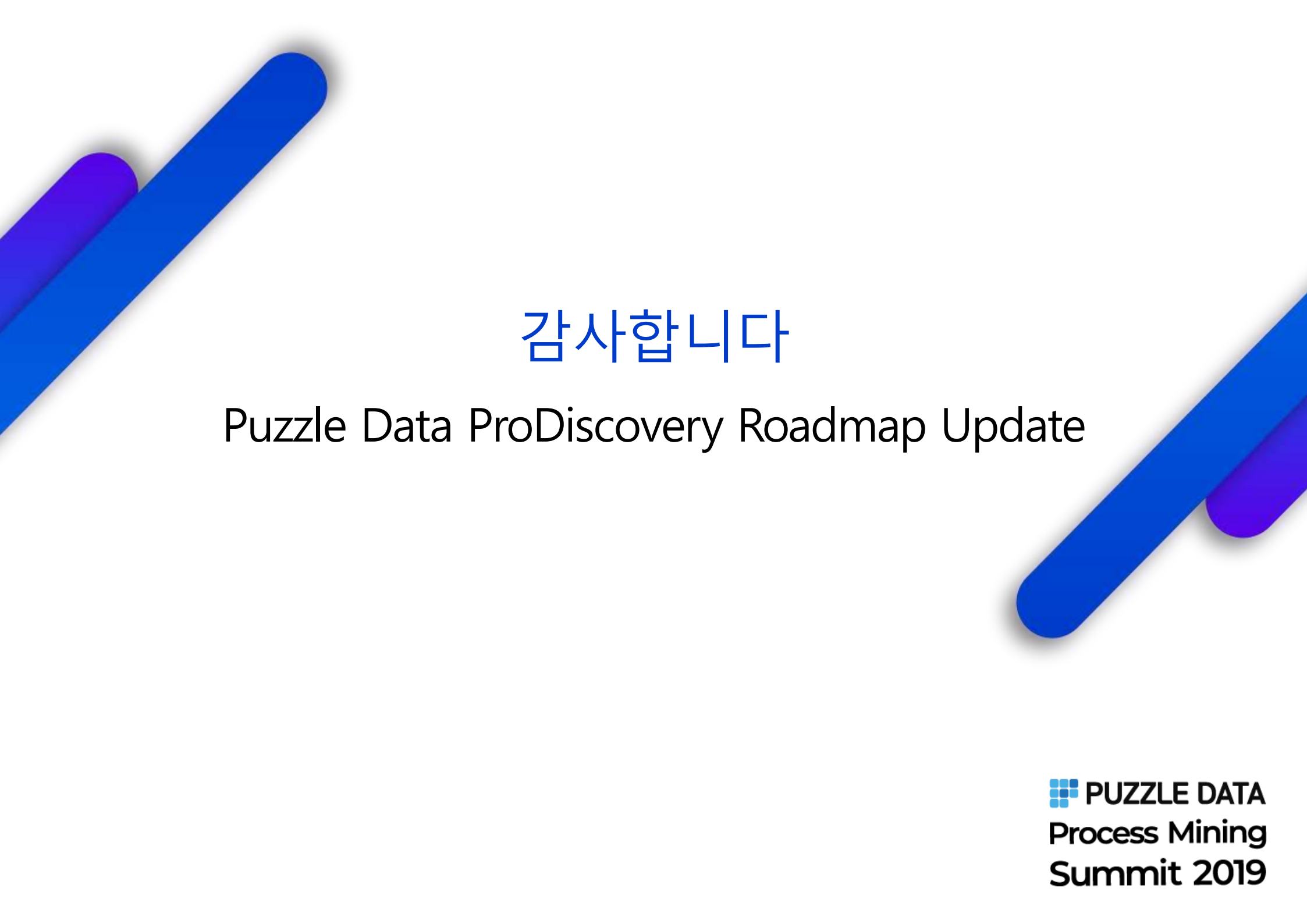
현업니즈를반영한실용적인분석퍼즐제공
최신이론을반영한폭넓은분석기능제공
다양한분석결과원하는형태로편집

+

AI기반분석을통한프로세스진단및예측자동화

[Gartner Report : Market Guide for Process Mining, Gartner, April 2018]

[Process Analytics Market by Process Mining Type – Global Forecast to 2023, Research and Markets, June 2018]



감사합니다

Puzzle Data ProDiscovery Roadmap Update

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