

# FX Execution Algos

## Taking stock

Ankur Pruthi, Norges Bank Investment Management

Lars Henriksen, Nordea

# Agenda

- Algo Volumes – Current State
- A slice of history (Algo adoption, Provider Topology, Strategy Evolution)
- Acquiring Algo Execution Capability – End User Perspective
- Providing Algo Execution Capability – Provider Perspective
- Algo Selection & Access
- Outstanding Issues
- FX vs EQ

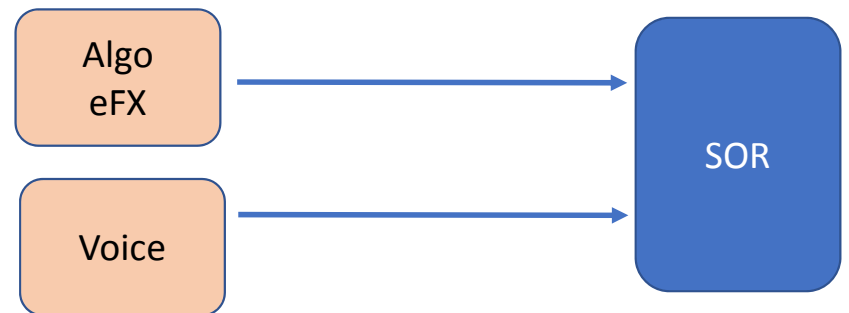
# Algorithmic adoption – contributors

- Contingent Orders – Transparency
- Anonymity
- Size of order
- Appetite for patient execution – avoiding spread on block (urgency/cost)
- Fragmentation – access to liquidity pools
- More control of trade planning
- Risk management according to utility

# Provider topology – evolution

Distribution Channel

Schematic

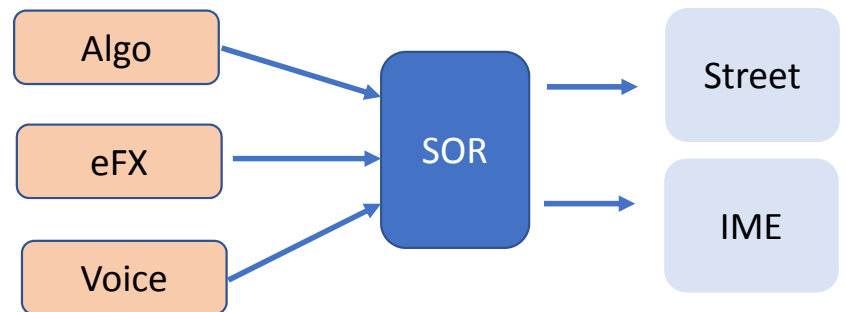
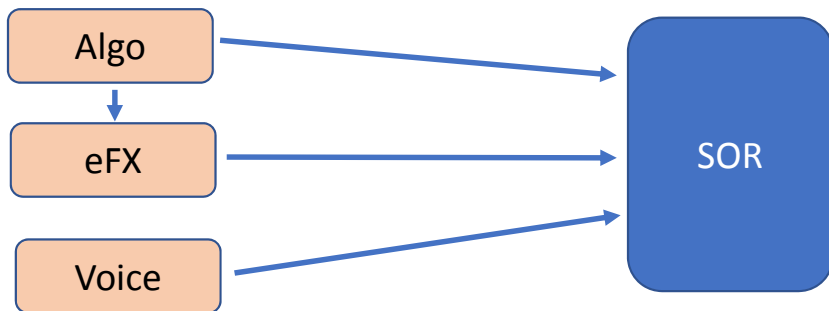


1

2

3

4



NBIM

# Buy or Build? Provider perspective

- Generally, three options:
  1. Build
  2. Buy
  3. White-label
- In reality, it is a continuum



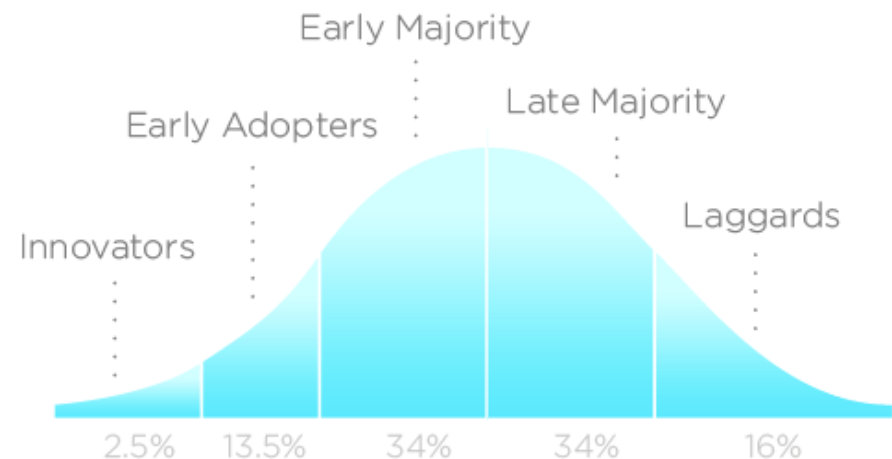
# Build or Buy - 2?

- Implementation path decision

- Cost
- Time to market
- Size of the provider
- Timing

- Future trends

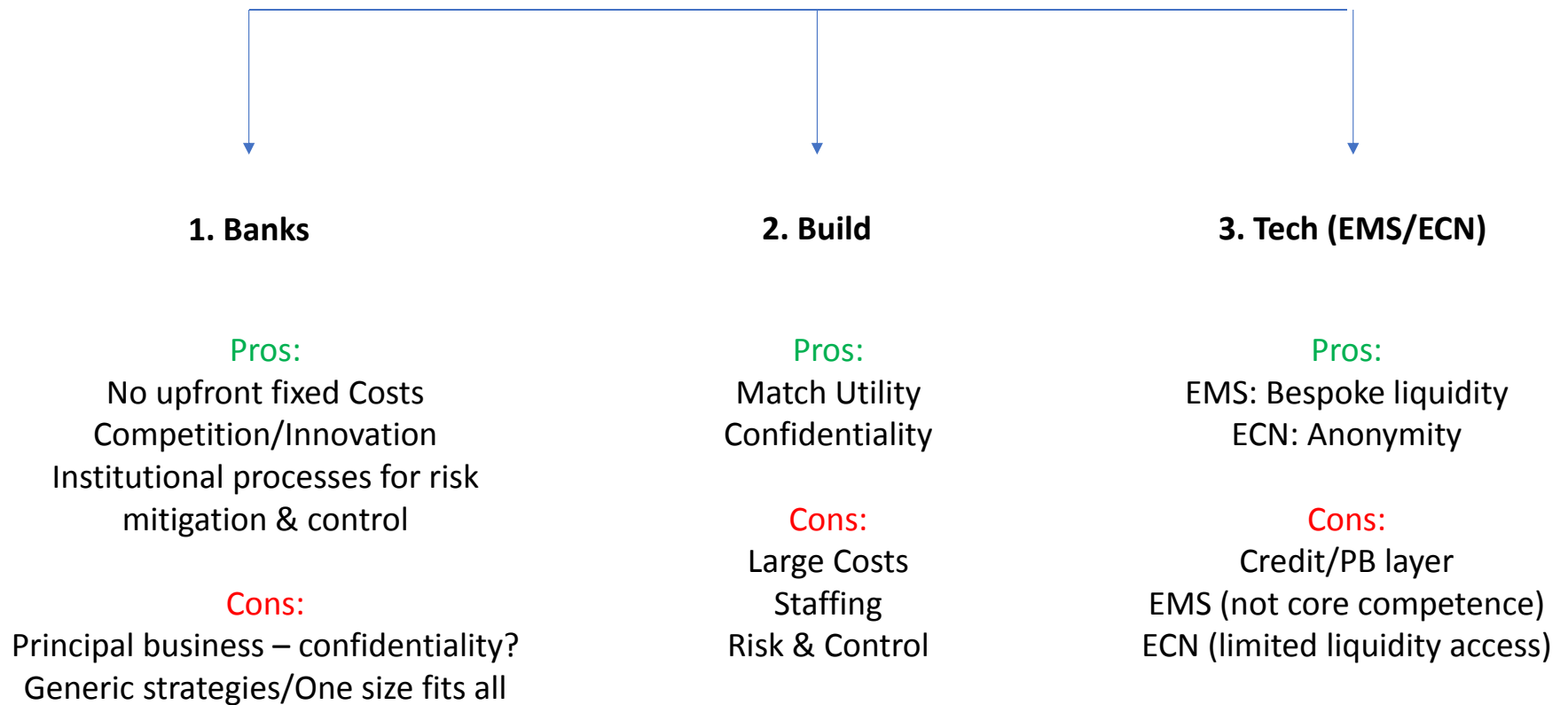
- More white-label and partnerships
- D2C platforms already facilitate white-label solutions
- Opens the space for non-banks



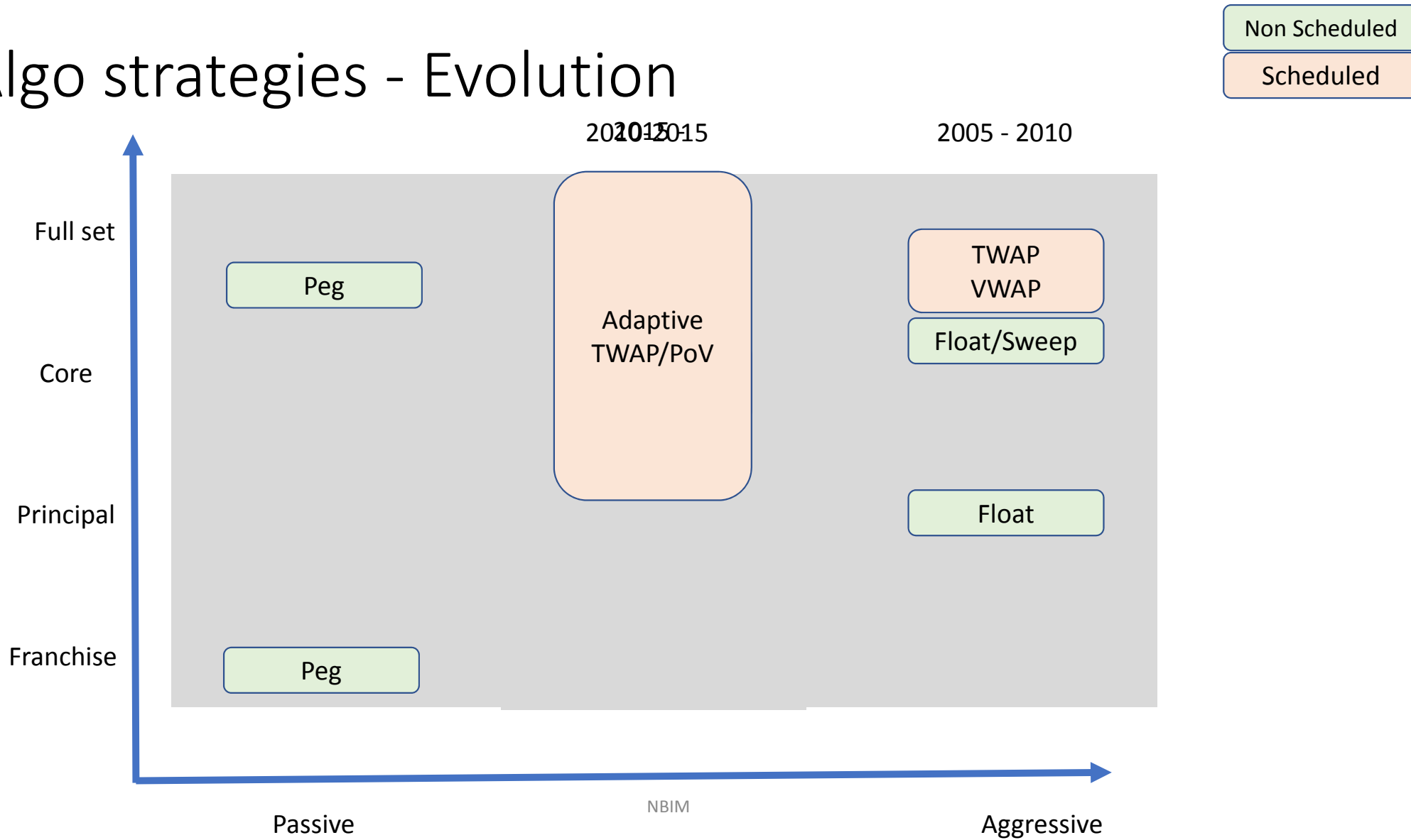
**INNOVATION ADOPTION LIFECYCLE**

*\* Source: Wikipedia*

# Algo Execution – End user perspective



# Algo strategies - Evolution





# Algo selection, access and monitoring : Current trends

- Selection process – some examples
  - Qualitative
    - Transparency, Anonymity, Sales effort/consulting & fee, Algo Suitability/adaptability, Credit Availability, Trial and error
  - Quantitative analysis
    - Market impact, spread retention and internalization are important metrics (amongst others)
- Access channels
  - Voice
  - Single/Multi Dealer Platforms
  - OMS/EMS systems
  - API
- Monitoring
  - Soft real time through visual inspection of in-flight algos
  - Post-trade analysis
  - ‘Little’ systematic monitoring

# Outstanding issues

- Confidentiality
- TCA
- Liability

# Equity vs FX

