
Unleash Your Domain
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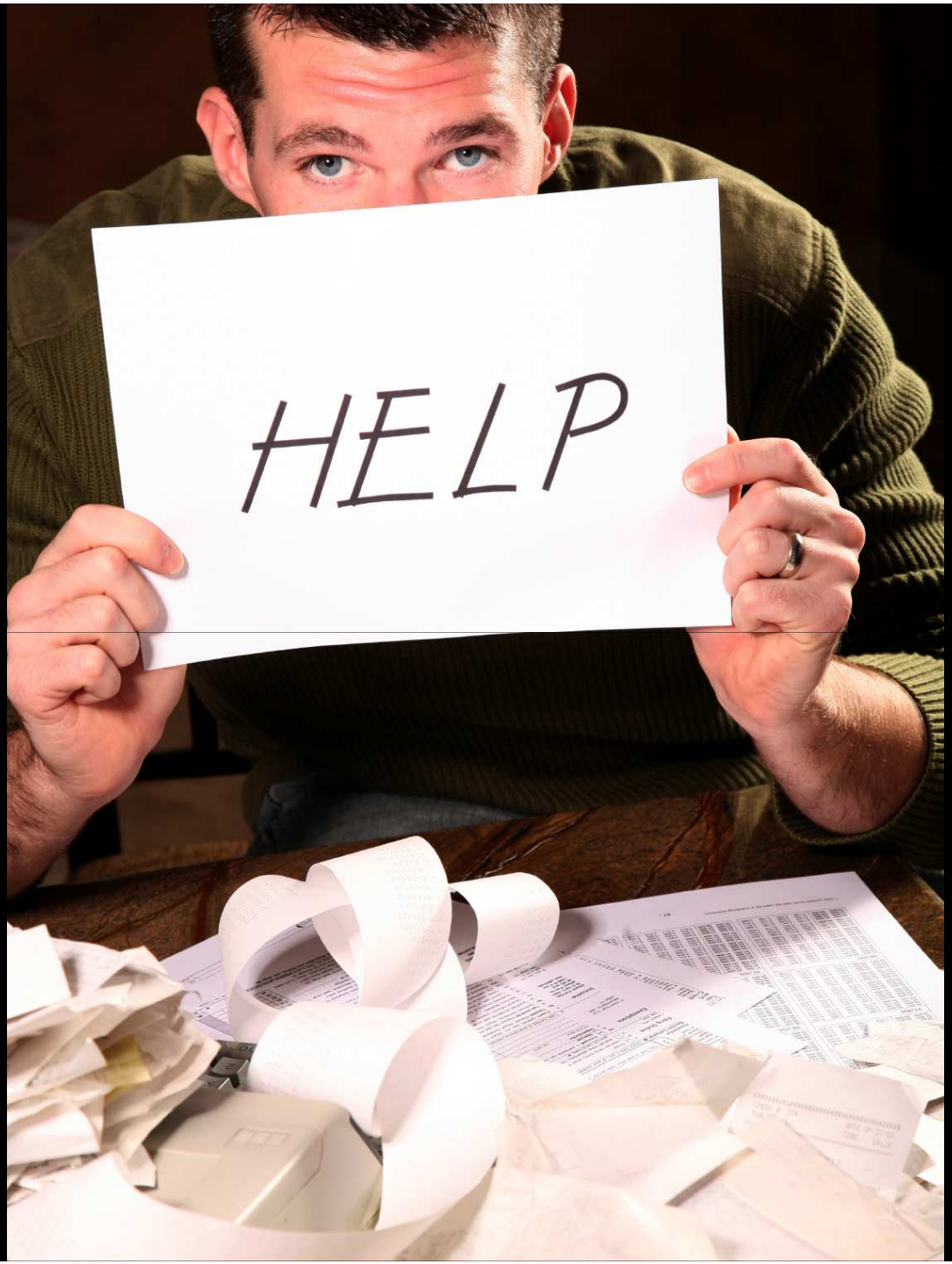
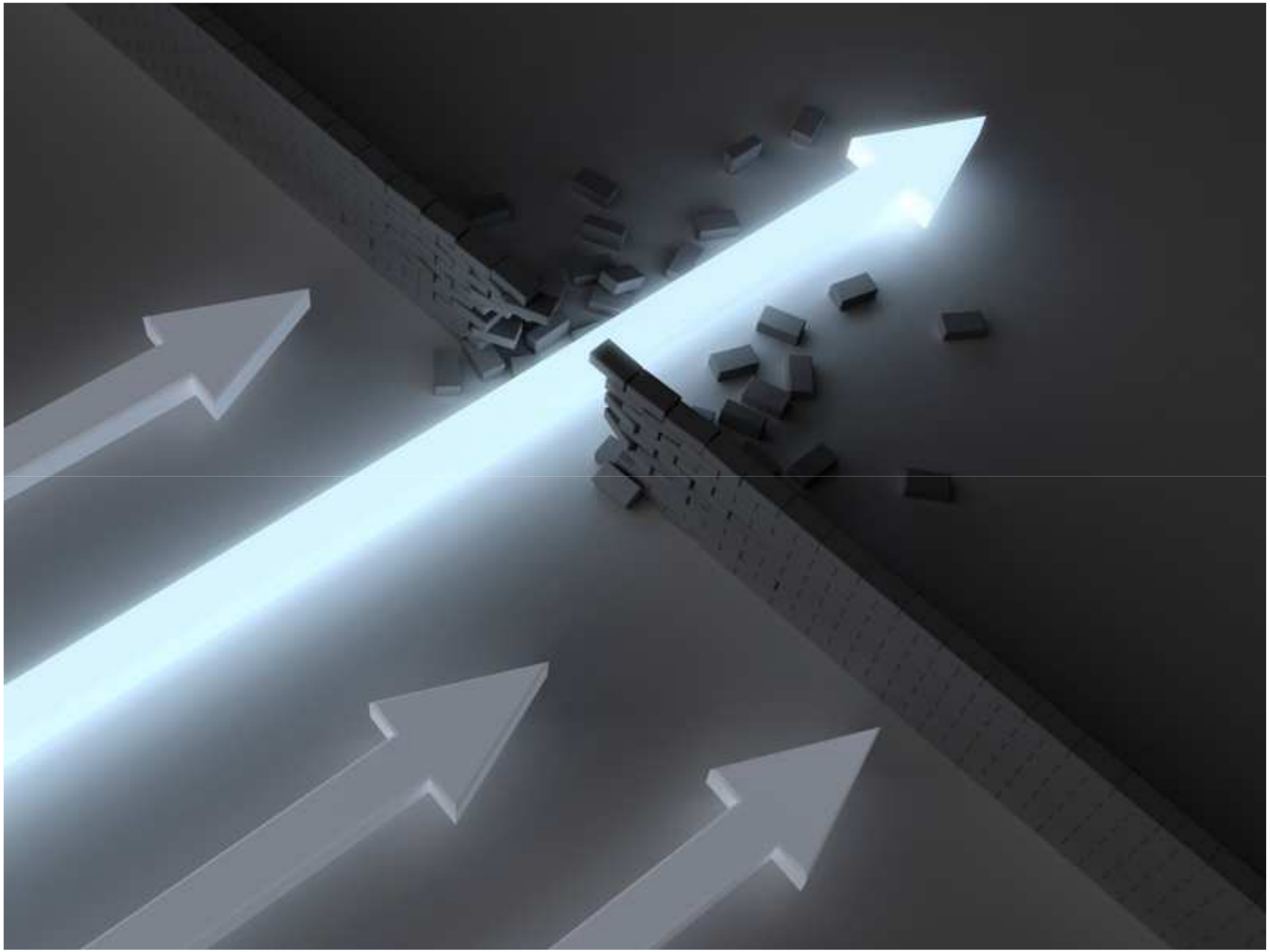
Agenda

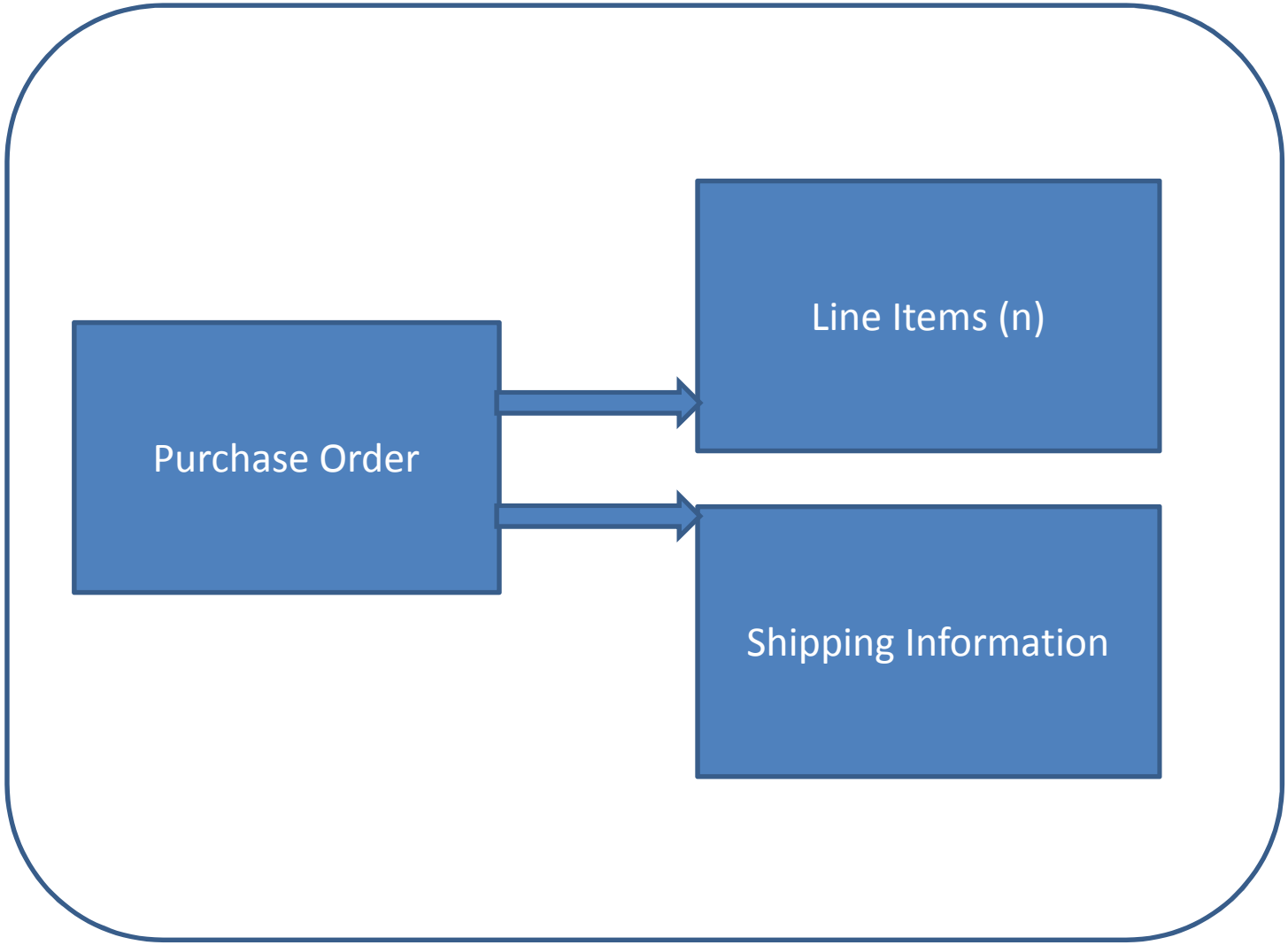
- The Issues
- The Breakthroughs
  - Explicit State Representation
  - Command Query Separation
  - Asynchronous Context Mapping
- Summary
- Questions

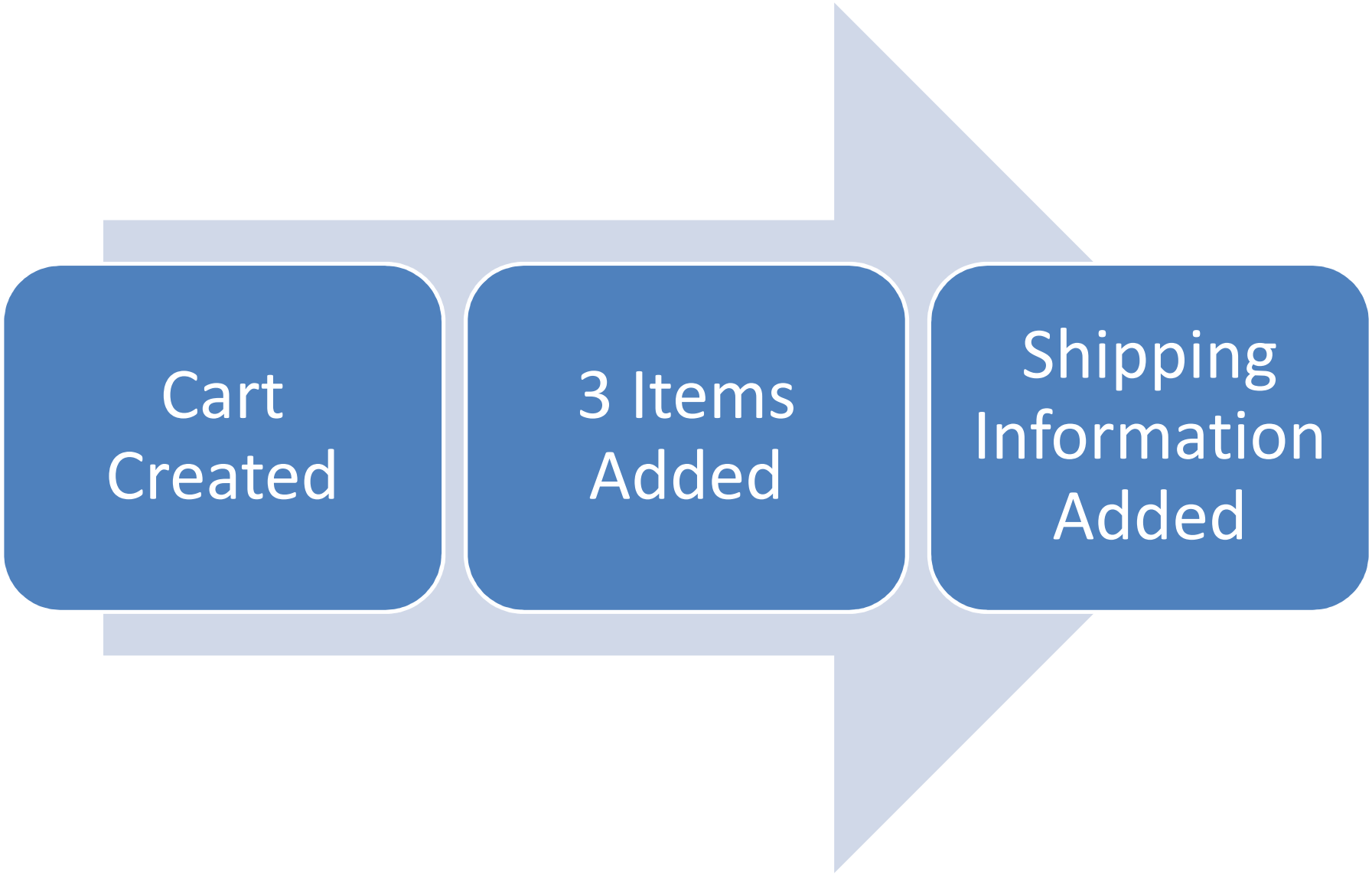

TOXICITY REPORTING FORM (continued)
Patient reference no
O/WNL
1 (Mild)
2 (Moderate)
3 (Severe)
4 (Unacceptable)
1. Stomatitis
2. Abdominal pain: severity treatment
3. Constipation
Diarrhoea
none
erythema, or mild soreness
painful/odema can eat
cannot eat or drink
requires parenteral or enteral support
none
—
mild not required
moderate required – helps
moderate-severe required-no help
no chg
mild ileus
mod ileus
severe ileus
none
none
none
>2-3 stools/day
reasonable intake 1 x/day
>4-6 stools/day or mod. cramps
decreased intake 2-5 x/day
>7-9 stools/day or severe cramps
no sig. intake 6-10 x/day
>90
80-89
65-79
50-64
normal
tachypnea
dyspnea
O2 required
>30
24-30
20-24
<20
asymptomatic/ slight Fr. <20%
asympt./transient increase by >20mmHg. no RX req
asymptomatic/sl fr. <80% baseline
recur./persist increase by 20mmHg. no Rx req
mild CHF/ responds to Rx
requires therapy
severe or refractory CHF
hypertensive crisis
mod sensory loss, mod paresthesias mild obj weakness / no sig impair
interferes with function
—

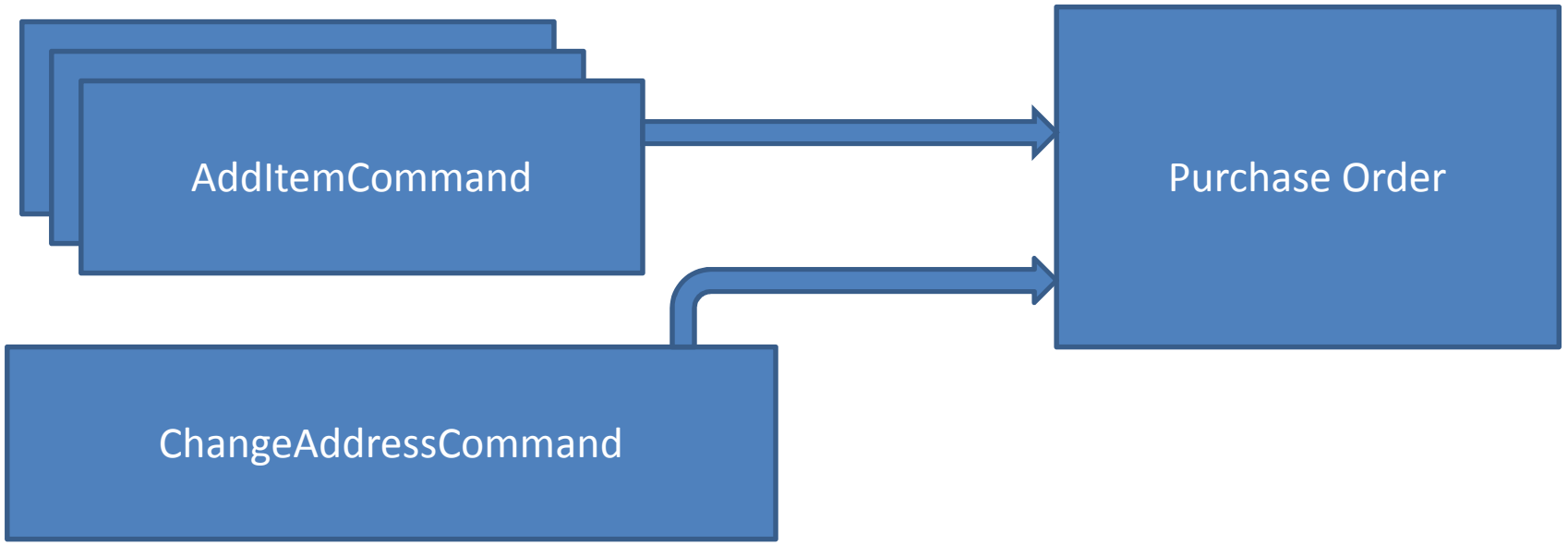

HELP

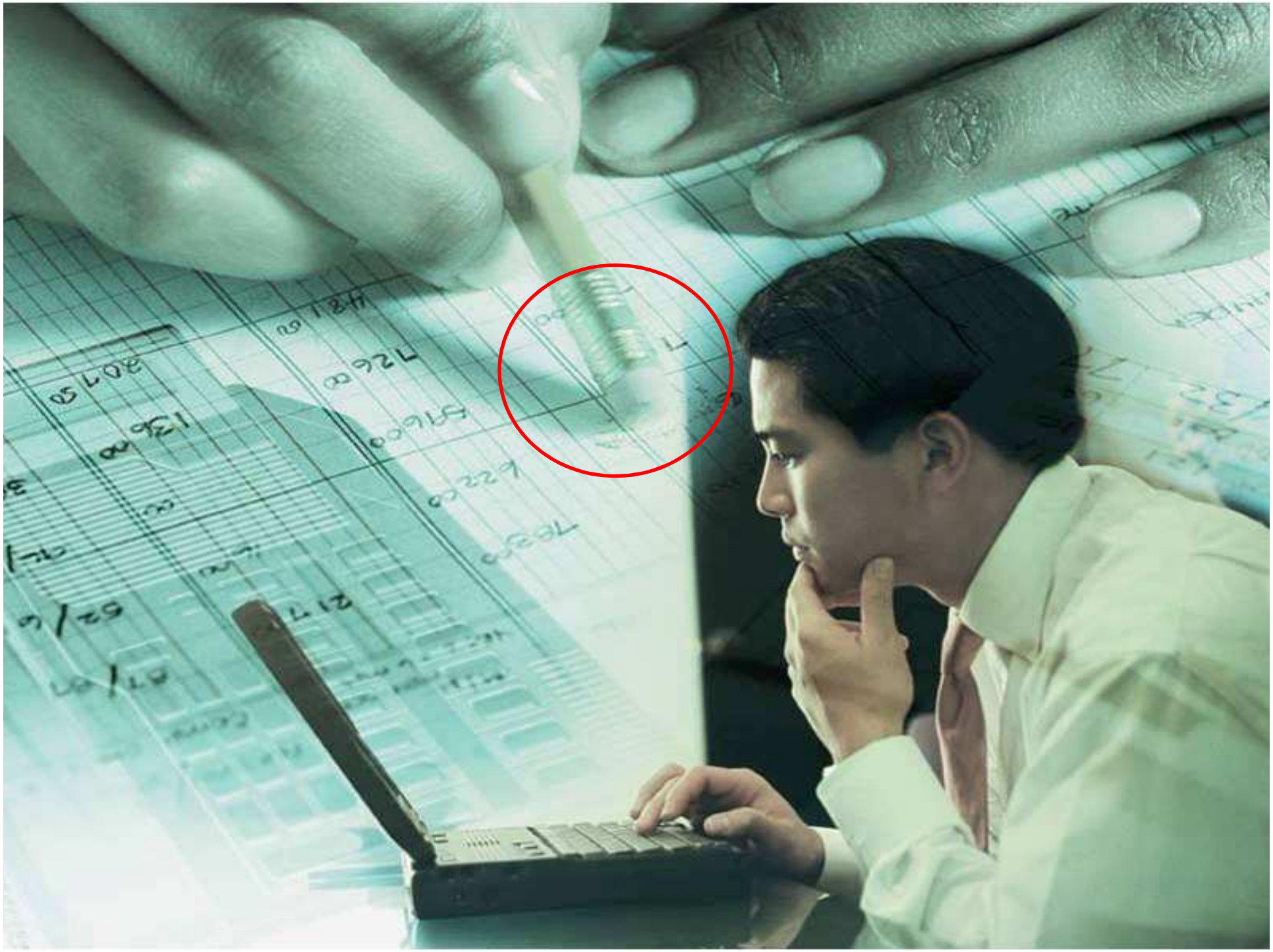


State transitions are an important part of our problem space and should be modeled within our domain.


Purchase Order
Line Items (n)
Shipping Information

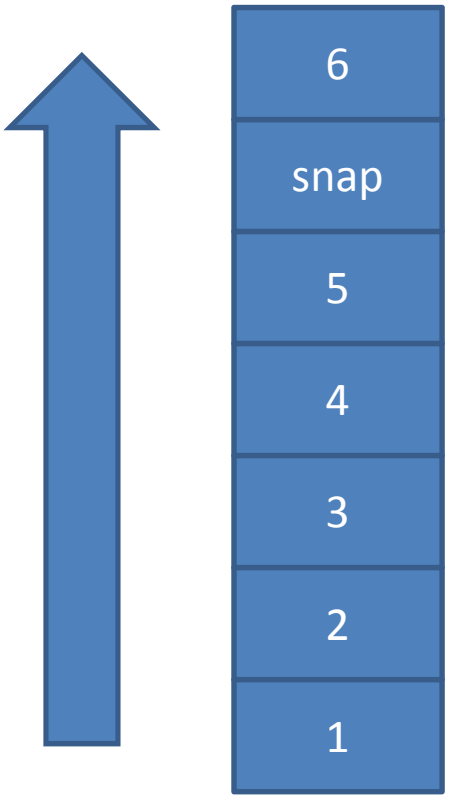

Cart Created
3 Items Added
Shipping Information Added


AddItemCommand
ChangeAddressCommand
Purchase Order

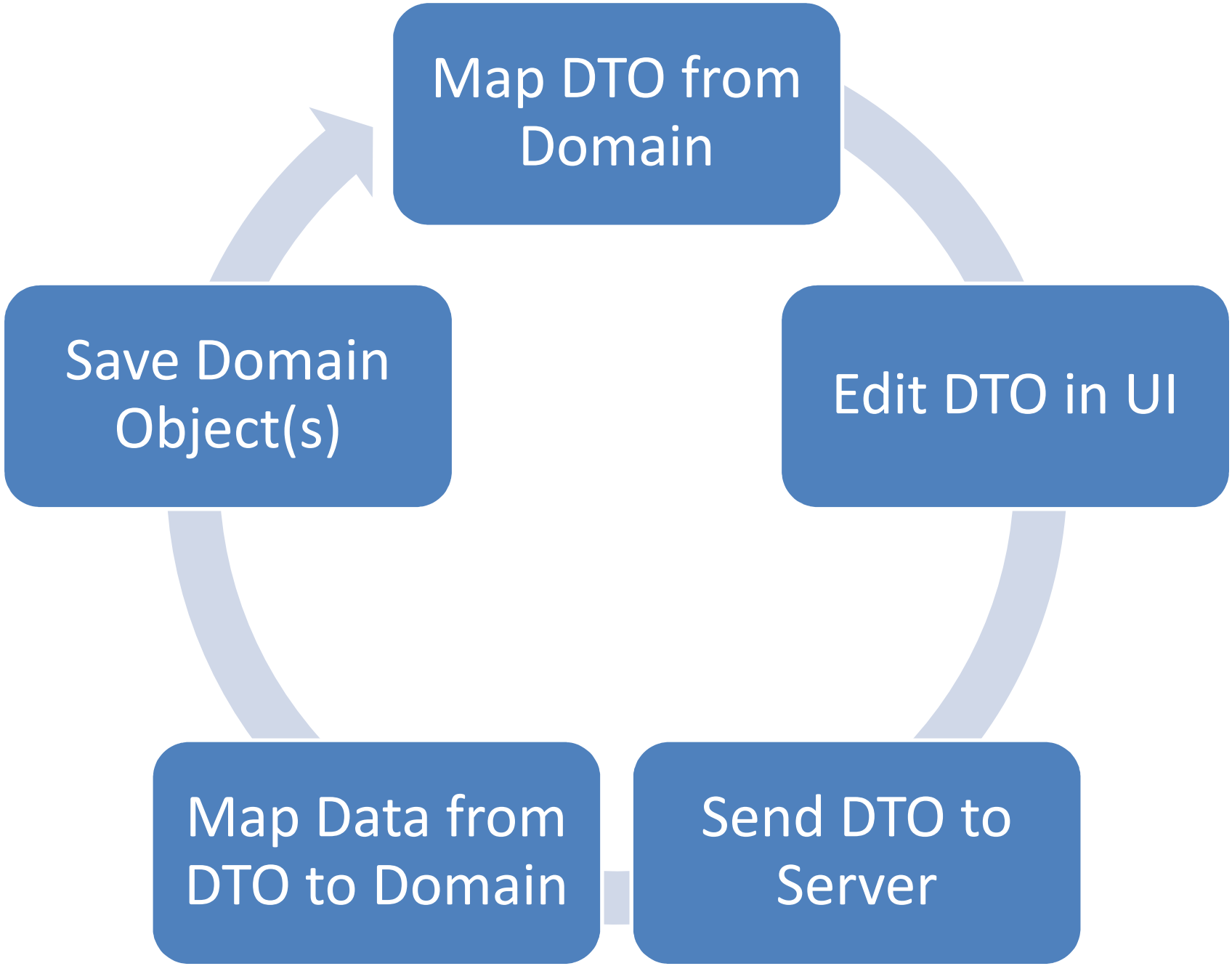


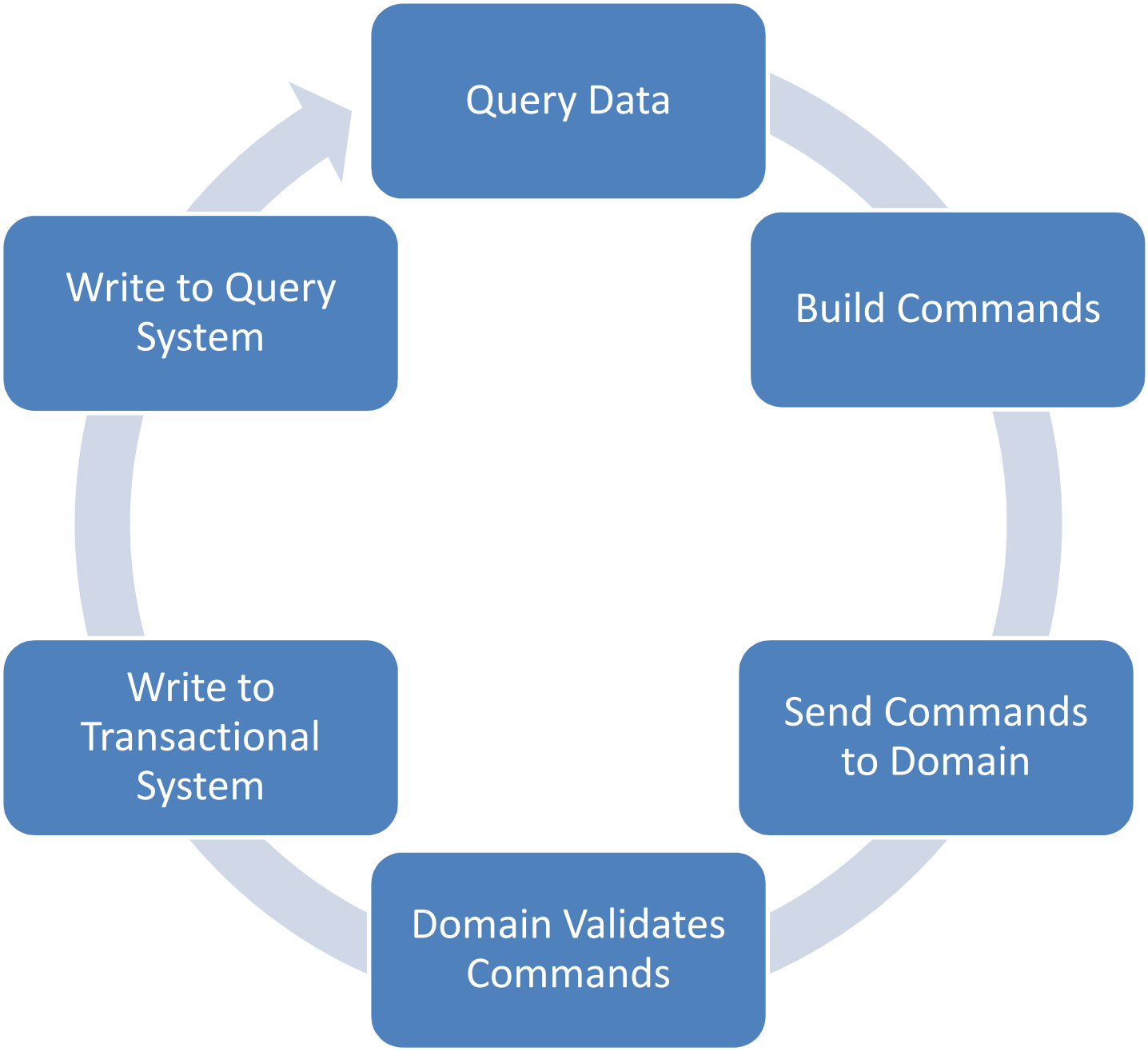

Cart Created
3 Items Added
1Item Removed
Shipping Information Added


Replay
Skip


6
snap
5
4
3
2
1

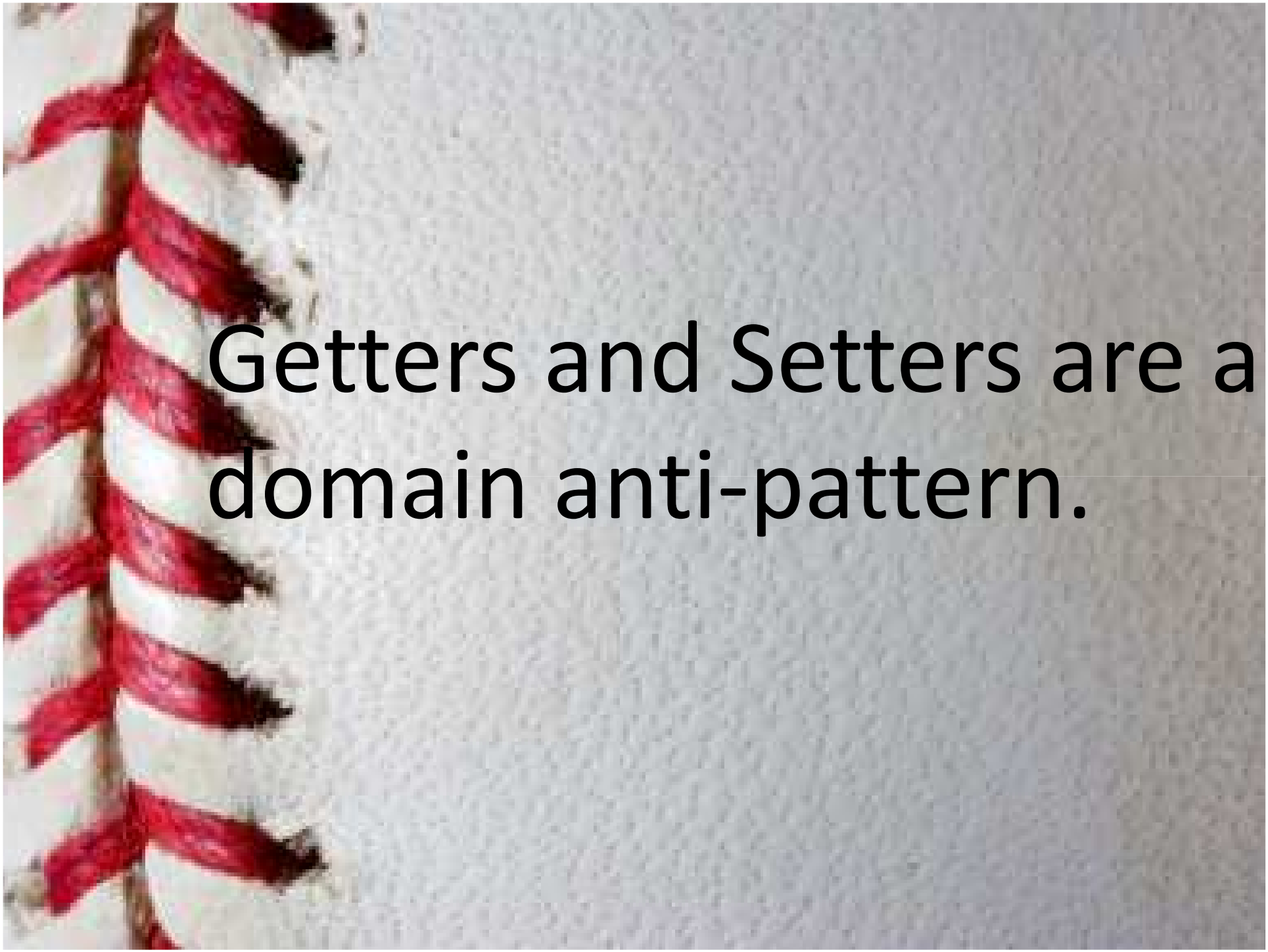
A single model cannot be appropriate for reporting, searching, and transactional behaviors…


Map DTO from Domain
Edit DTO in UI
Send DTO to Server
Map Data from DTO to Domain
Save Domain Object(s)


Query Data
Build Commands
Send Commands to Domain
Domain Validates Commands
Write to Transactional System
Write to Query System

The model that a client needs the data in a distributed system is screen based and different than the domain model.

Most queries can operate with relaxed consistency…


Getters and Setters are a
domain anti-pattern.

```java
public interface Content extends IdBasedDomainObject, Editable {
    String getByline();
    DateTime getLastLiveTime();
    DateTime getPublicationDate();
    DateTime getWebPublicationDateTime();
    Publication getPublication();
    Integer getPageNumber();
    boolean isSensitive();
    String getMarkedSensitiveBy();
    DateTime getMarkedSensitiveOn();
    List<Tag> getTags();
    List<Keyword> getKeywords();
    NewspaperBook getBook();
    NewspaperBookSection getBookSection();
    Series getSeries();
    Contributor getContributor();
    List<Contributor> getContributors();
    List<Tone> getTones();
    Section getDerivedSection();
    Page getPage();
    List<Content> getNestedContent();
    boolean shouldBeDeletedWhenPageIsDeleted();
    boolean isTrailblockFromDisplayStoryPackage();
    boolean isPluckCommentable();
    boolean isSynchronisedWithPluck();
    void removeSeries();
    void addTag(Tag tag);
    void removeTag(Tag tag);
    void replaceTag(Tag originalTag, Tag replacementTag);
    boolean isTagSetValid();
    List<Series> getSeriesList();
    String getTypeName();
    String getTrailNameDisplay();
    Trailblock<TrailblockElement> getTrailblock();
    boolean hasSensitiveKeyword();
    void setFootballMatchReference(ExternalReference externalReference);
    ExternalReference getFootballMatchReference();
    void setCricketMatchReference(ExternalReference externalReference);
    ExternalReference getCricketMatchReference();
    ExternalReference getFilmReference();
    void setFilmReference(ExternalReference filmsExternalReference);
    void setFilm(Film film);
    Film getFilm();
    DateTime getScheduledExpiryDate();
    boolean isExpired();
    DateTime getClosingDateForCommenting();
    DateTime getClosingDateForCommentRecommending();
    boolean isCommentingClosed();
    boolean isCommentRecommendingClosed();
    StarRating getStarRating();
    boolean isInMicrosite();
    List<? extends Factbox> getFactboxes();
    boolean hasTone(ToneName name);
    boolean isEditorial();
    boolean isBlockAds();
```

Most Bounded Contexts can interact with relaxed consistency.


60
5
10
15
20
25
30
35
40
45
50
55

“Man acts as though he were the shaper and master of language, while in fact it is language that is the master of man.”

Getters and Setters are a domain anti-pattern!

Most Bounded Contexts can interact with relaxed consistency.

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A single model cannot be appropriate for reporting, searching, and transactional behaviors…

Questions