

Exploring Scope Models

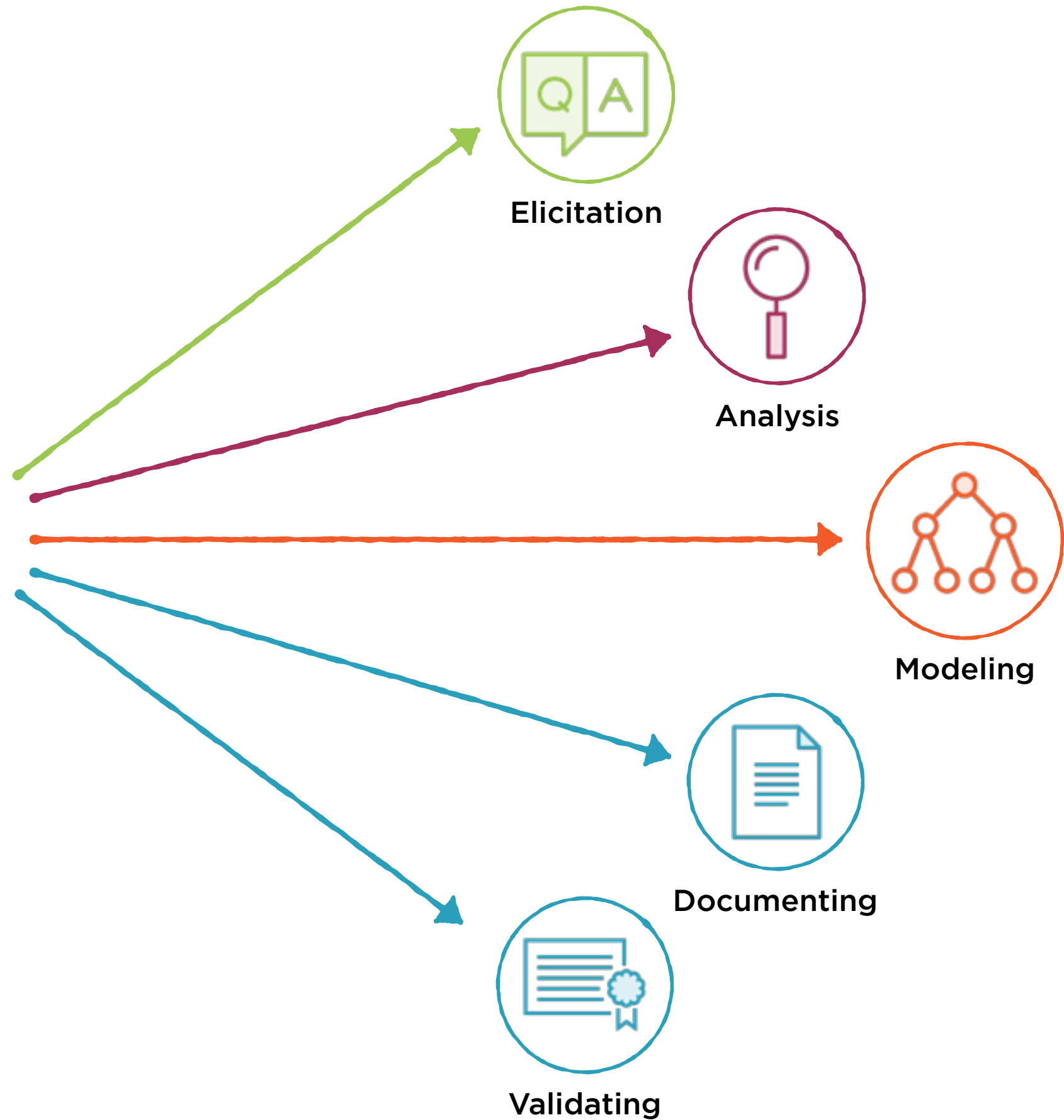


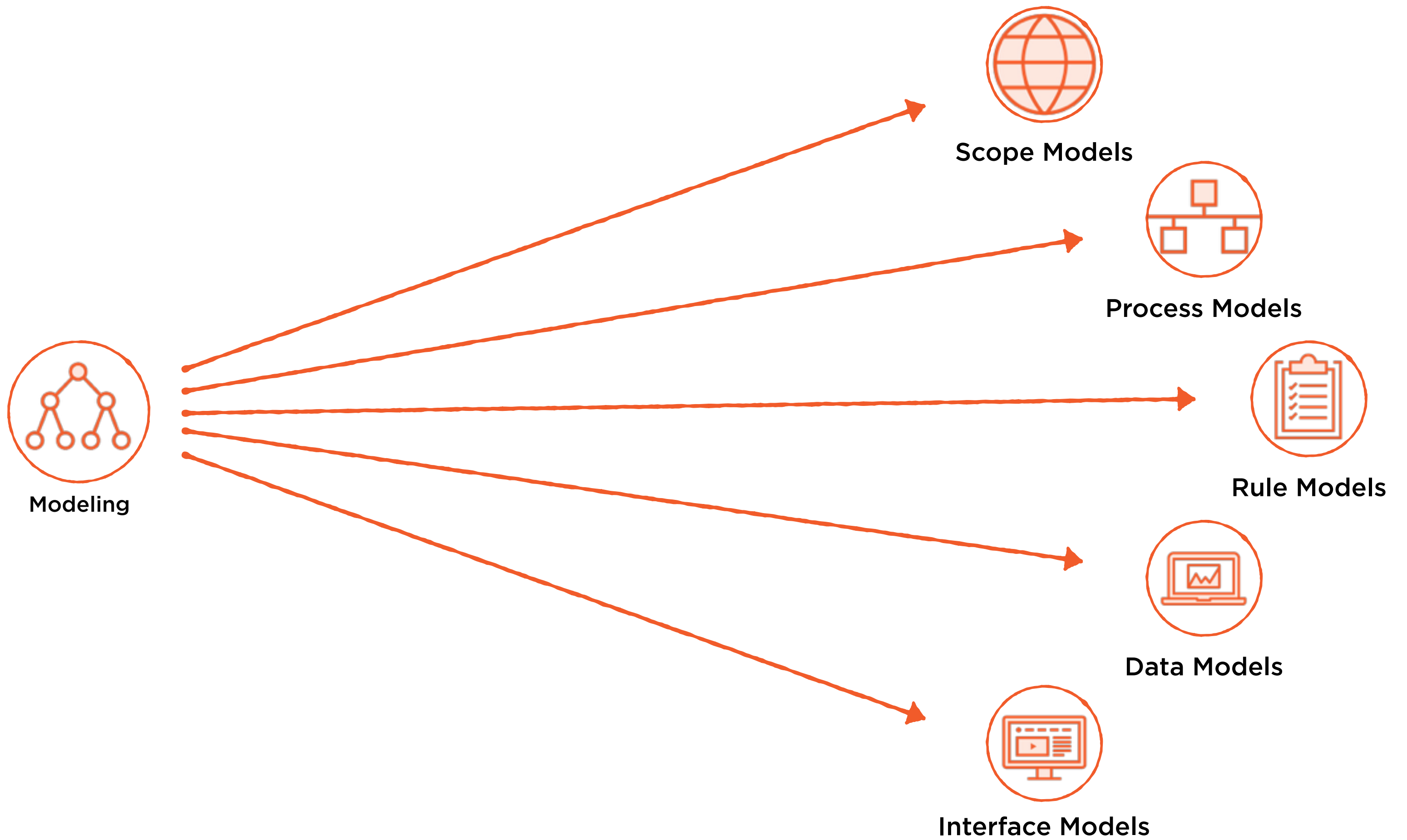
Casey Ayers

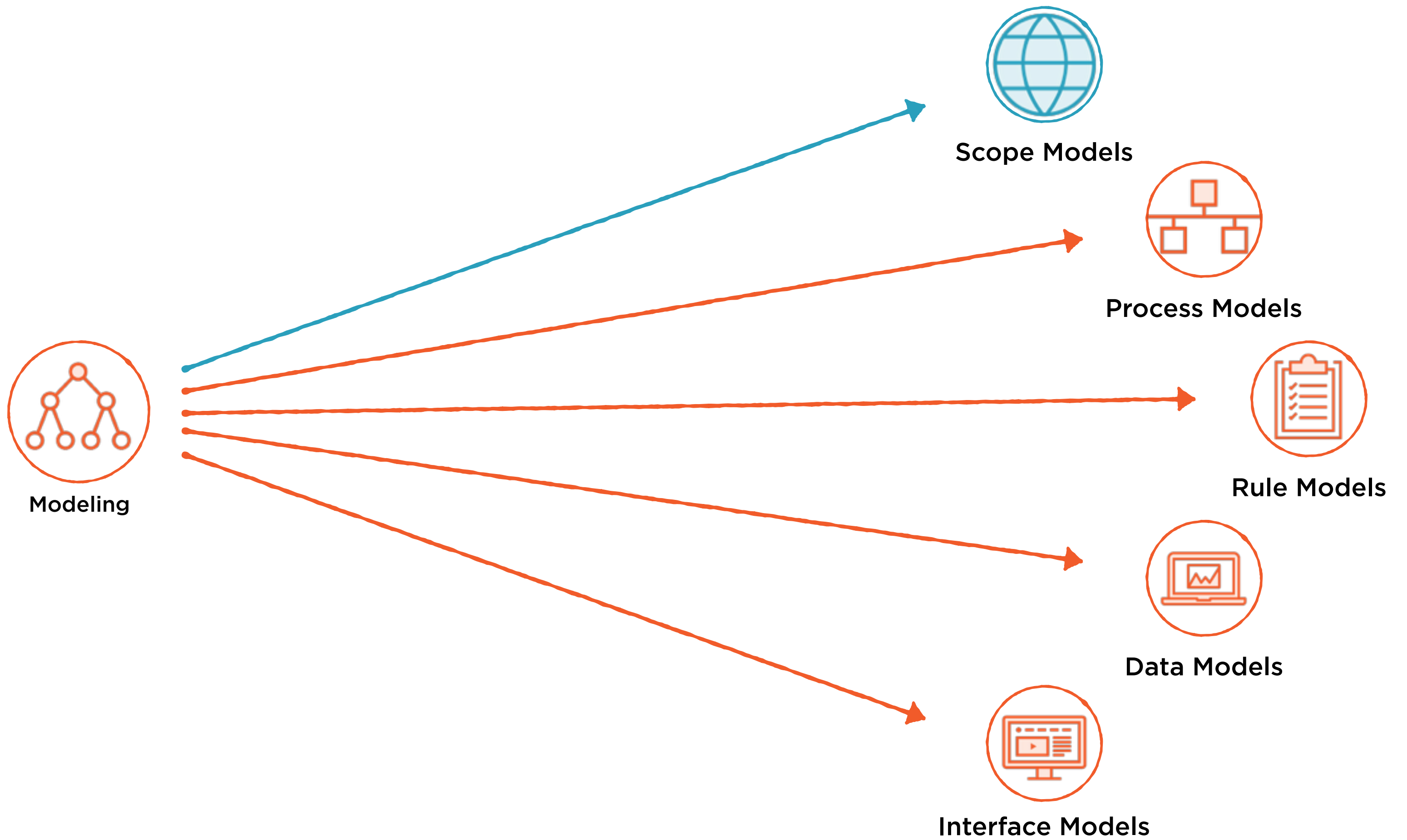
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CaseyAyers.com | [@caseyayers](https://twitter.com/caseyayers)
[linkedin.com/in/caseyayers](https://www.linkedin.com/in/caseyayers)

Elicit, document and manage stakeholder requirements to meet business and project objectives









Scope Models

Helpful in organizing, understanding, and communicating:

Goals and objectives

Features and functions

Boundaries of focus



What's Ahead

Goal & Business Objective Models

Ecosystem Maps

Context Diagrams

Feature Models

Use Case Diagrams

Goal & Business Objective Models



Goal & Business Objective Models

Diagram-style models

Organizes and represents...

Goals

Problems

Objectives

Success Metrics

High-Level Features



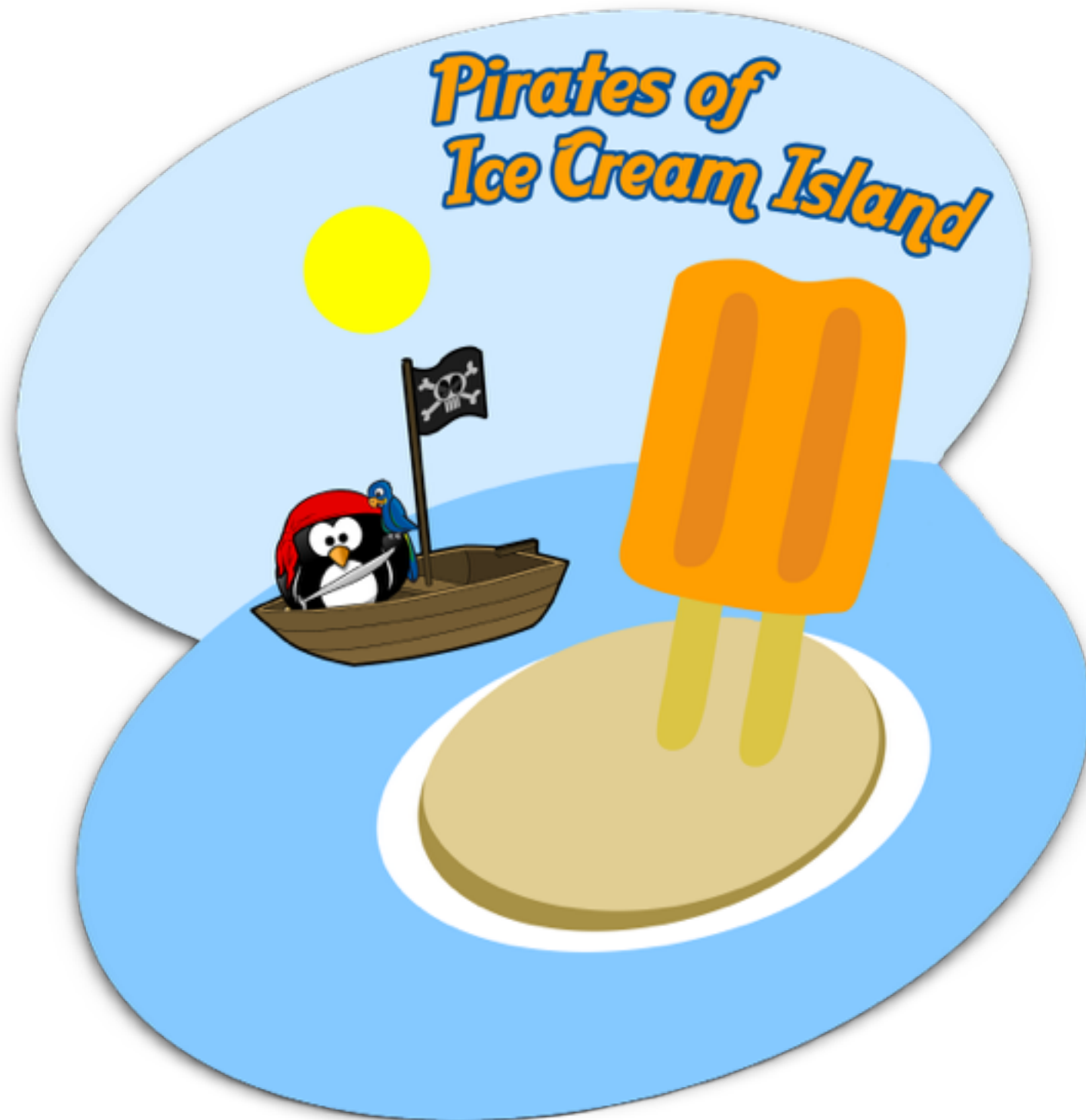
Goal & Business Objective Models

Problems and objectives tied together to represent creation of value

Value may be represented by increased revenues, decreased costs, higher quality, greater risk resilience, etc.

Indicates why objectives are important, helpful in prioritizing selection/resources

Creating a Business Objective Model



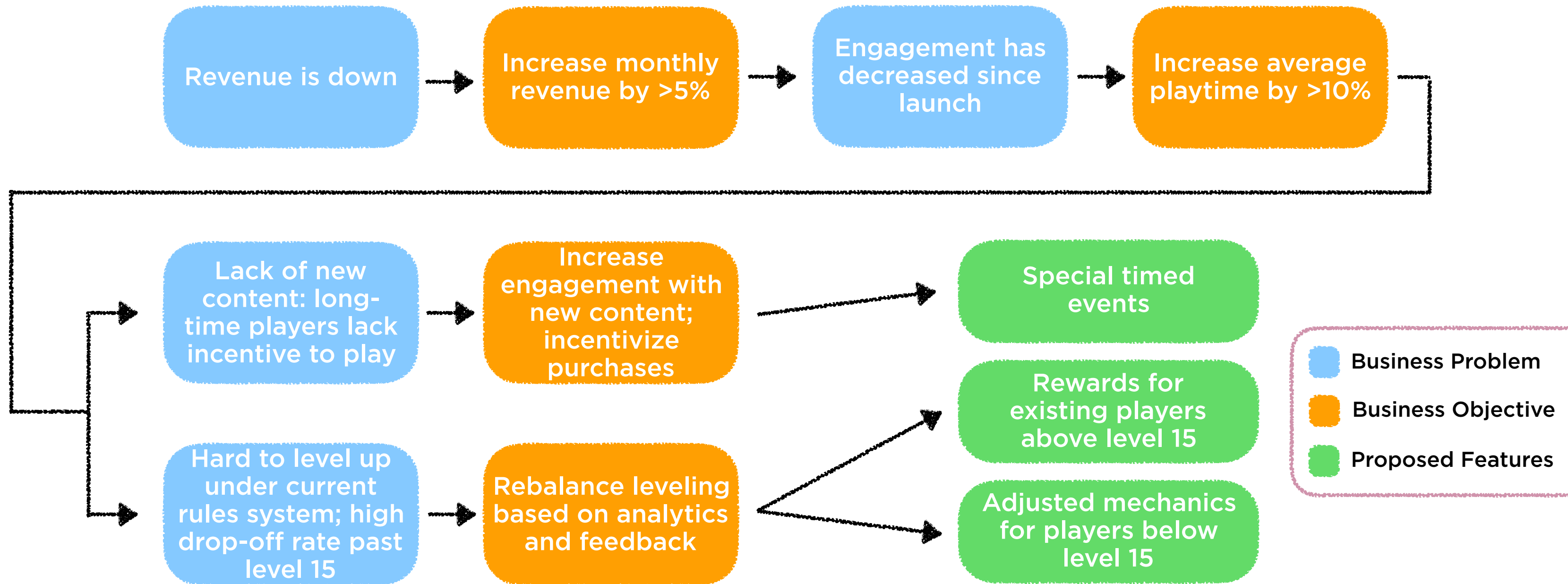
Game Overview

Popular freemium mobile game

Players build their fleet to capture islands yielding sweets as rewards

Loot can be used as currency for further upgrades, leading to more challenging conquests

Creating a Business Objective Model





**Goal & Business
Objective Models**

Tips for Usage

Typically most useful when built early on

Helpful when...

Determining features and requirements

Assigning resources

Developing project plans

Useful tool in communicating with stakeholders and securing approvals



**Goal & Business
Objective Models**

Relation to Requirements

Business objective models allow requirements to be specified, linked to objectives and problems

All requirements should be traceable back to objectives and problems

Not all requirements are equally critical

Ecosystem Maps



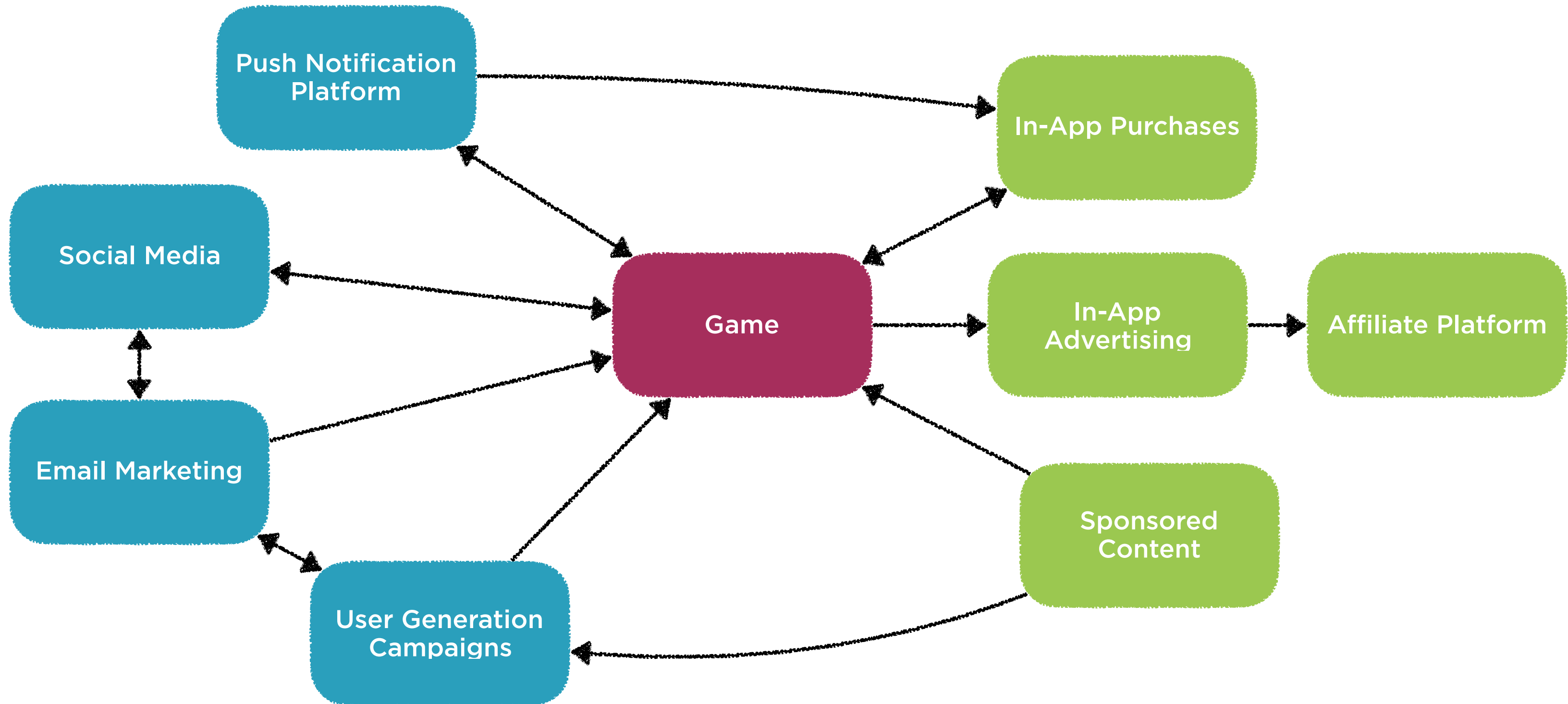
Ecosystem Maps

Shows systems and their relationships

May indicate how data moves

Systems in scope and those impacted by or impacting data should be included

Creating an Ecosystem Map





Ecosystem Maps

Tips for Usage

Illustrates where attention may need to be paid to interfaces between systems

Indicates what data may pass through or be required to meet objectives

Includes items not directly related to solution under consideration, unlike context diagrams



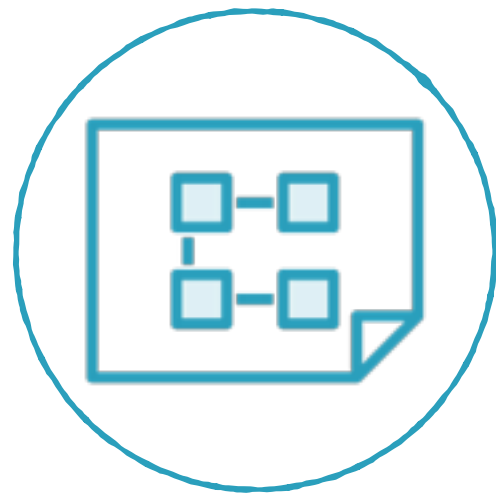
Ecosystem Maps

Relation to Requirements

Represents interfaces, but does not include specific requirements information

Indicates where more specific system interface tables and data models may be needed

Context Diagrams



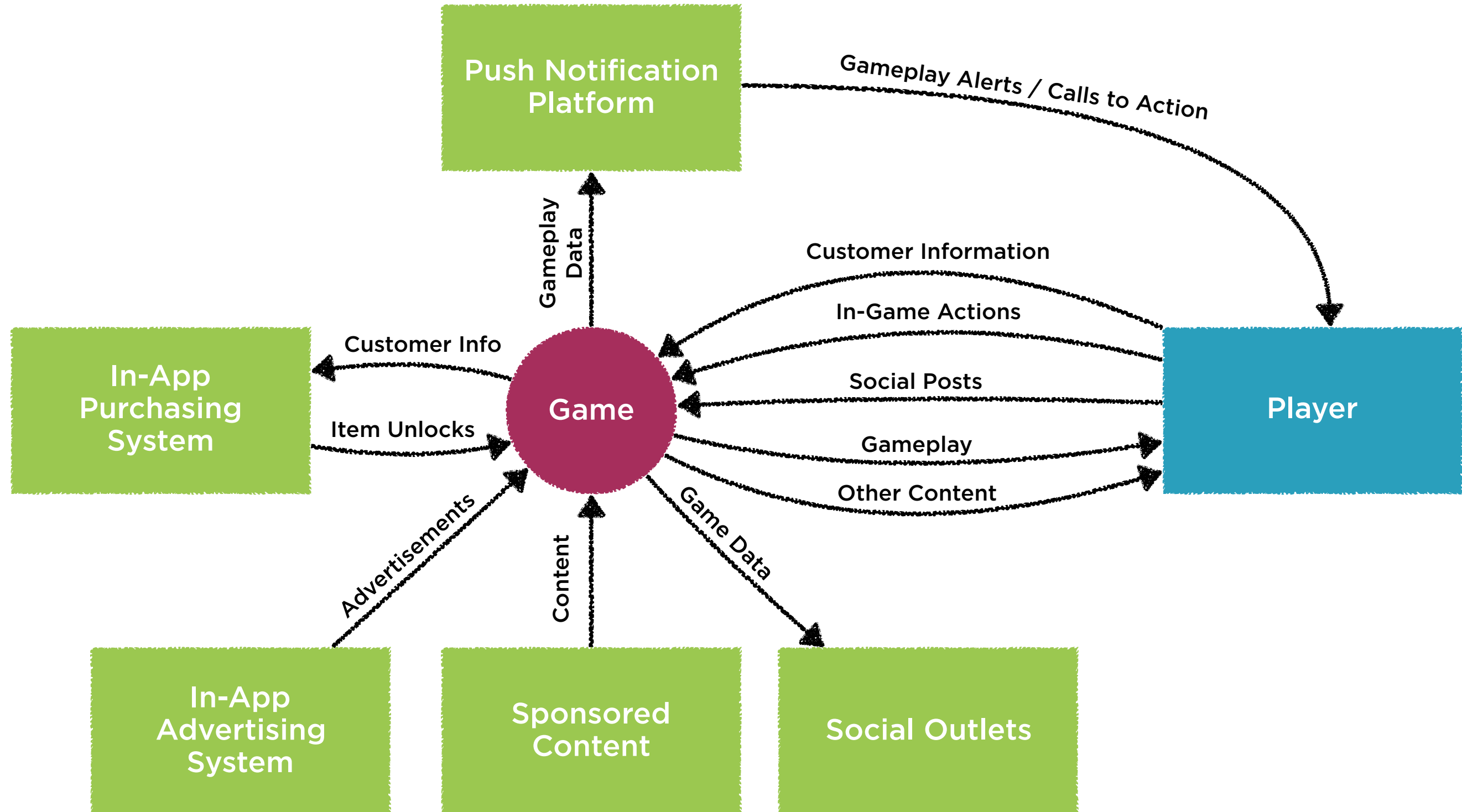
Context Diagrams

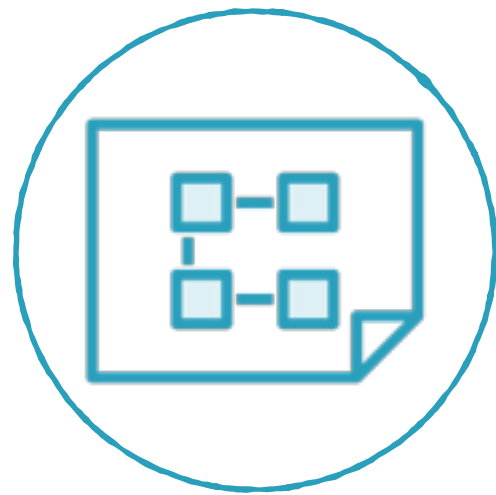
Shows both system and human interfaces

Indicates scope of project and where new work may be needed to meet objectives

System in development at center shown as a circle; systems and people as boxes; lines indicate data movement

Creating a Context Diagram





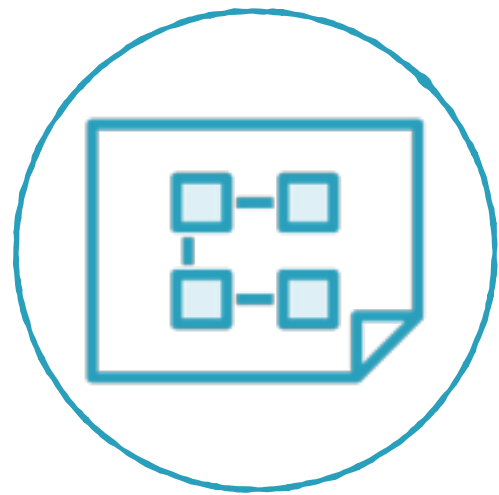
Context Diagrams

Tips for Usage

Context diagrams can be much more complex than the one shown here

All external connections/impacts related to the work in question should be included in a complete diagram

Provides **context** from business, user, and data perspectives regarding project impact



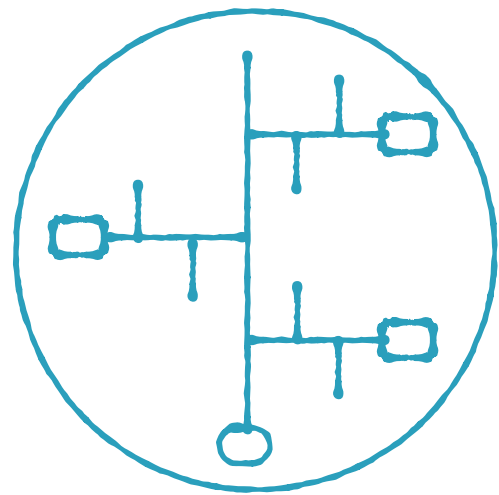
Context Diagrams

Relation to Requirements

Useful when eliciting interface requirements, thanks to identifying where relationships exist

May assist in development of various interface models

Feature Models



Feature Models

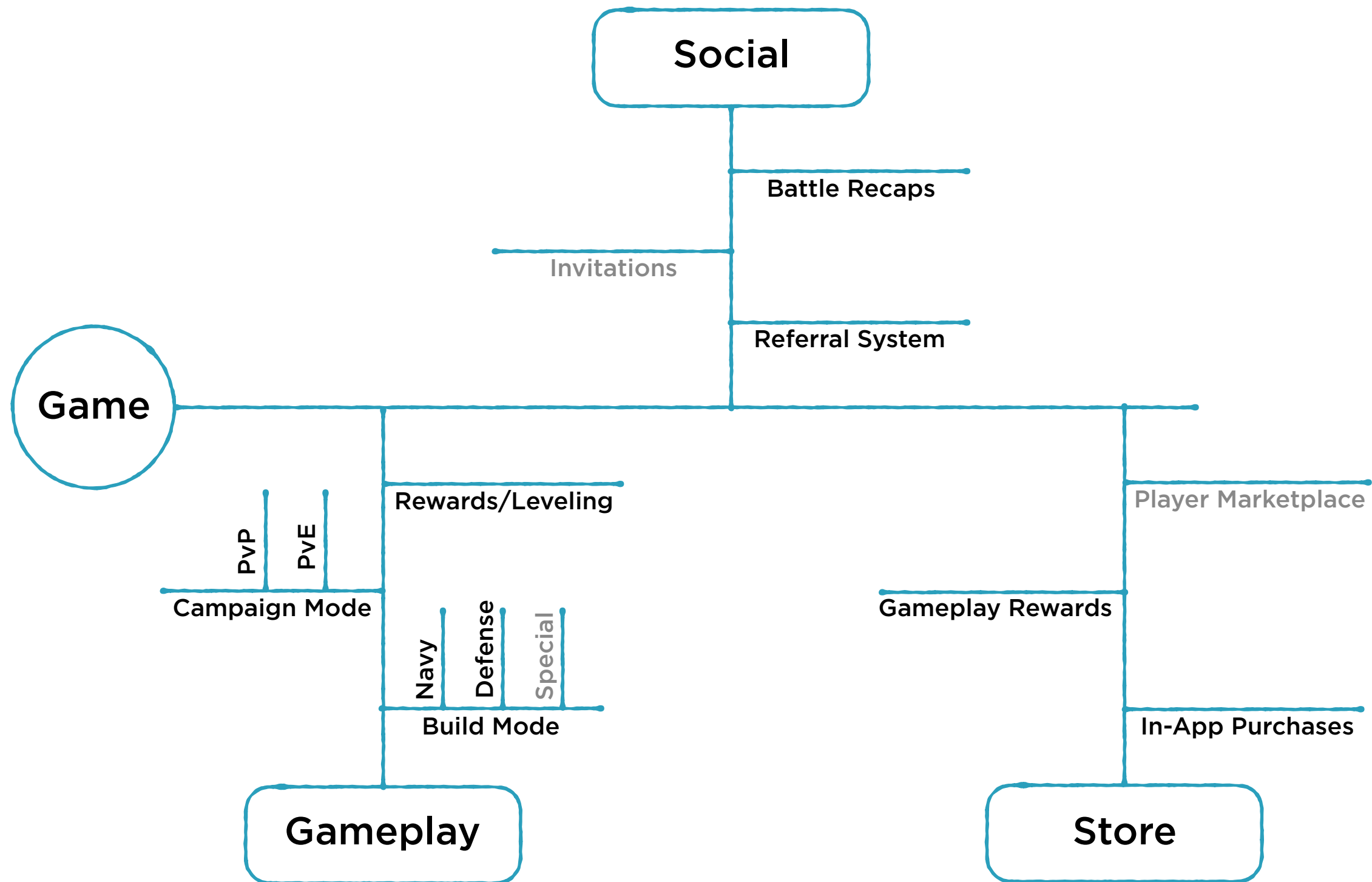
Hierarchical representation of all features

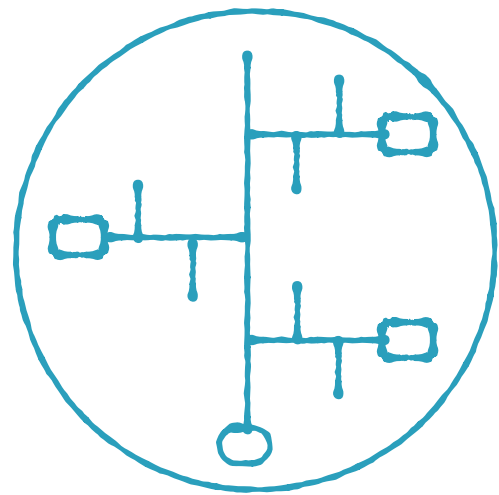
Features may encompass several related requirements

Up to three levels typically used in model

Color differences may be used to represent current status of features

Creating a Feature Model



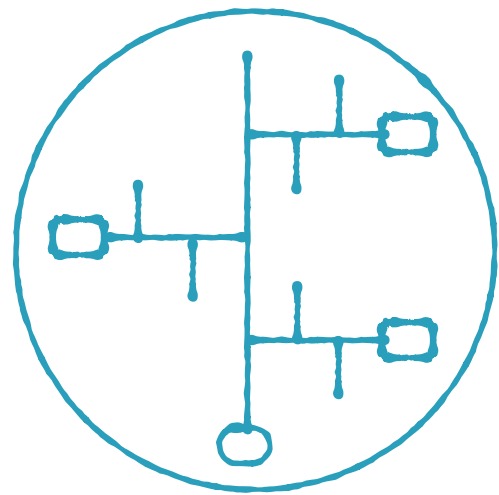


Feature Models

Tips for Usage

Feature models can easily encompass several hundred listings

Hierarchy of features can be useful in planning, understanding scope, and allocating resources



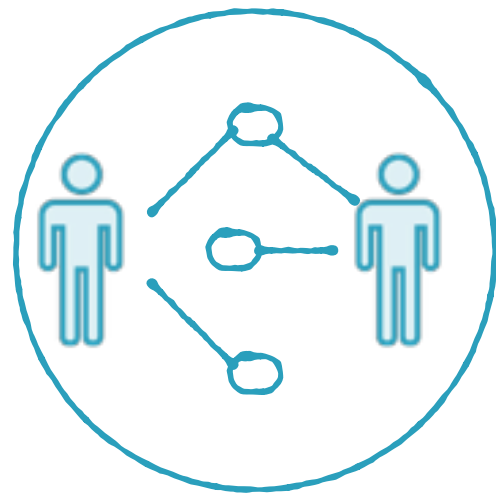
Feature Models

Relation to Requirements

Features are sets of requirements

Feature models help in organizing requirements and understanding their context within the solution at large

Use Case Diagrams



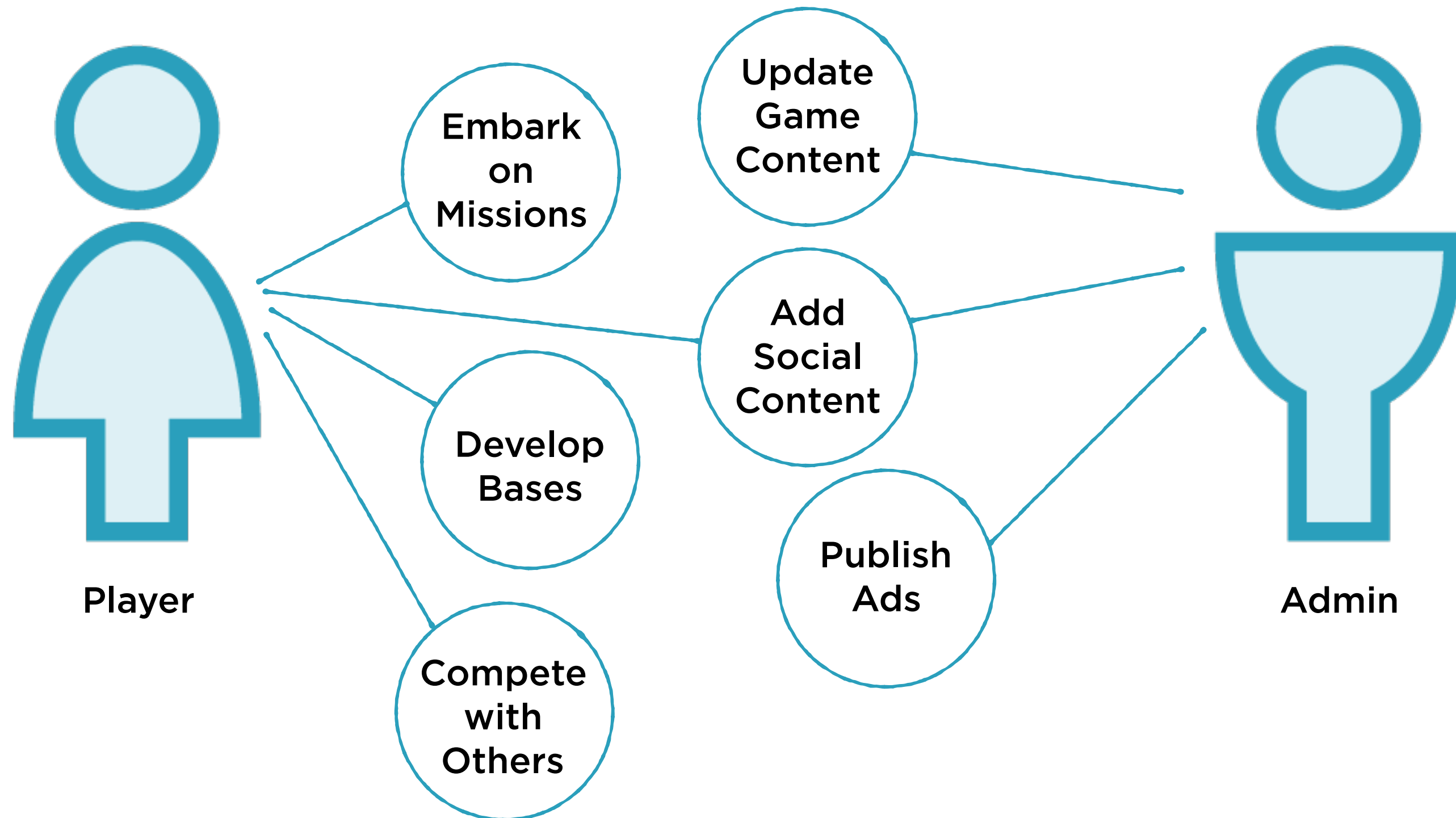
Use Case Diagrams

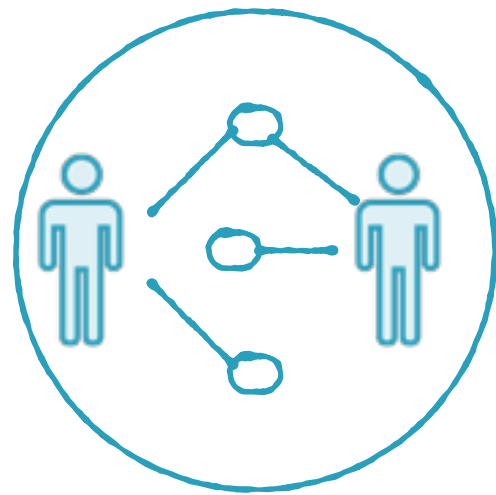
Represents ways users interact with the system, and for what purposes

Typically, use cases in circles connect to figures representing types of users

Multiple users may be tied to multiple use cases

Creating a Use Case Diagram





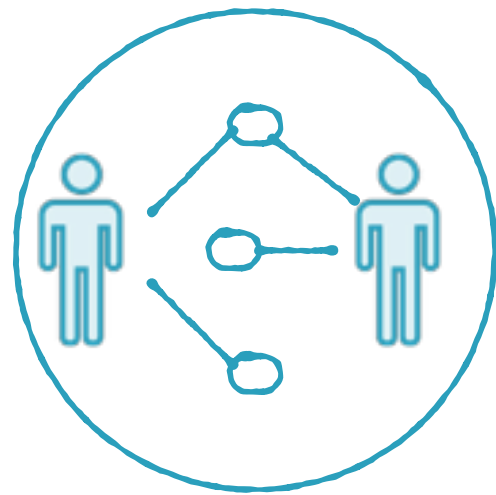
Use Case Diagram

Tips for Usage

Useful tool for viewing scope from different perspectives

Indicates points of direct interaction

May help in determining activities and features that are out of scope



Use Case Diagram

Relation to Requirements

Helps in sorting requirements by use case

Assists in planning project work and tracking progress in creating solutions



Takeaways

SCOPE MODELS

Help organize information for better understanding and communication

Goals/objectives, features/functions typically focus of scope models



Takeaways

GOAL & BUSINESS OBJECTIVE MODELS

Connects problems to objectives, and objectives to proposed features

Used to indicate value of objectives and to help in prioritizing resources

Enables requirements to be specified



Takeaways

ECOSYSTEM MAPS

Shows systems and their relationships

Focuses on systems within scope and those directly impacted by solution

Represents interfaces/points of integration, but does not include specific requirements



Takeaways

CONTEXT DIAGRAMS

Includes systems *and* human interfaces

Helpful in gauging scope of project,
defining requirements

Provides *context* from business, user, and
data perspectives on project impact



Takeaways

FEATURE MODELS

Hierarchical representation of all features

Tree-like model may be presented either vertically or horizontally

Up to three levels typically present in model

Helpful when organizing requirements and analyzing how they can be bundled into orderly feature sets



Takeaways

USE CASE DIAGRAMS

Represents how users interact with systems

Helpful when trying to understand scope and impact from multiple perspectives

May lead to discovery of missing or out of scope features



What's Next

Utilizing Process Models