

# Building Systems through Requirements

K.L. Scott & Associates, LLC.

Analytics . Analysis . Advice



# Organizational Overview

# Organizational Overview

K.L. Scott & Associates LLC (KLS&A) is a certified minority owned and operated management and information technology consulting firm. KLS&A transforms organizations by helping them achieve optimum performance of their business processes, human resources, and information technology.

Our objective is to empower our clients with a deep level of understanding of their people, processes, and technology to make informed decisions and/or corrective actions. KLS&A has a three tiered approach to providing results for our clients – **Analytics, Analysis, and Advice.**

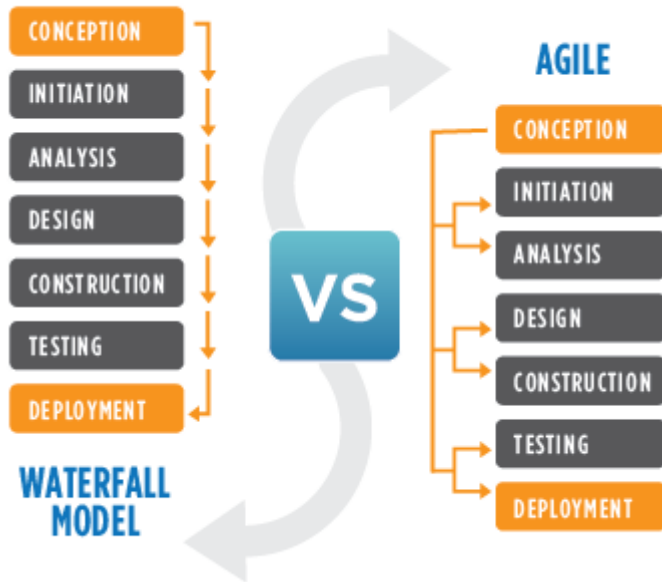


# Software Development: Our Approach to Requirements Building





# Our Approach



KLS&A provides expertise in both agile and waterfall methods of software development. We administer the methodology when the methodology provides the best process to develop new or enhance existing software.

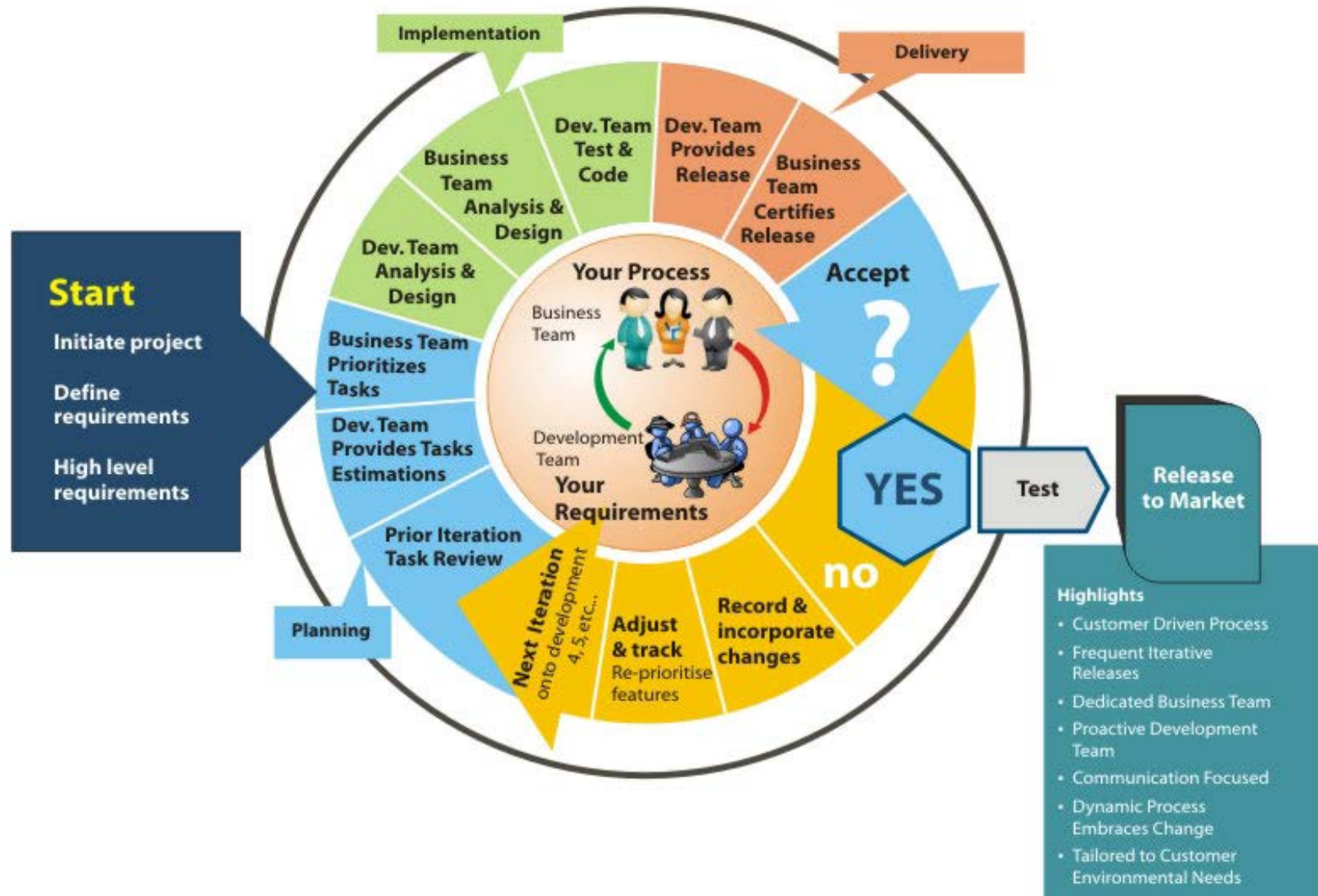
## Waterfall Methodology:

- When there is a clear picture of what the final product should be.
- When clients won't have the ability to change the scope of the project once it has begun.
- When definition, not speed, is key to success.

## Agile Methodology:

- When rapid production is more important than the quality of the product.
- When clients will be able to change the scope of the project.
- When there isn't a clear picture of what the final product should look like.
- When you have skilled developers who are adaptable and able to think independently.
- When the product is intended for an industry with rapidly changing standards.

# Our Approach : Agile



## Agile Methodology

- **Planning**
  - High Level Requirements
  - Requirements Definition
- **Implementation**
  - Requirements Analysis
  - Requirements Verification
- **Delivery**
- **Test**

### Highlights

- Customer Driven Process
- Frequent Iterative Releases
- Dedicated Business Team
- Proactive Development Team
- Communication Focused
- Dynamic Process Embraces Change
- Tailored to Customer Environmental Needs

# Our Approach : Waterfall SDLC

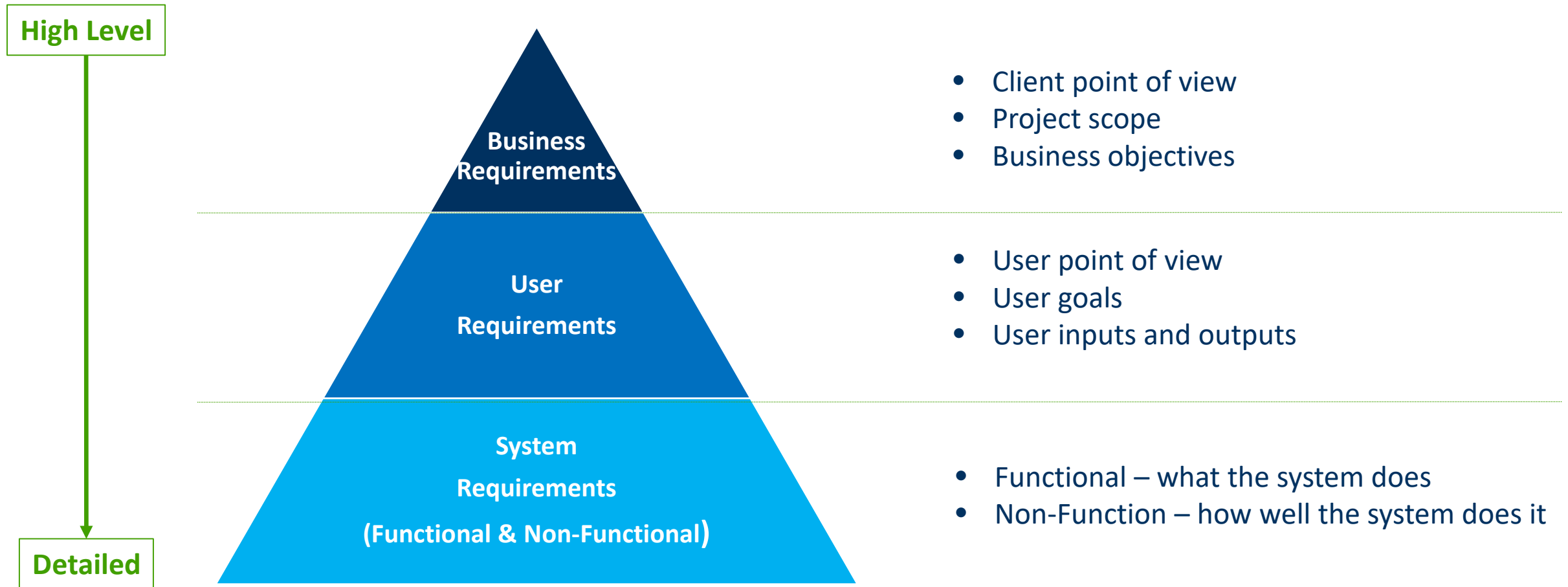


## Software Development Life Cycle

- **Requirements**
  - ✓ Understanding Scope
  - ✓ Determine Business Rules
  - ✓ Model process workflow
- **Design**
- **Development**
- **Testing**
- **Deployment**
- **Maintenance**

# Our Approach : Requirements

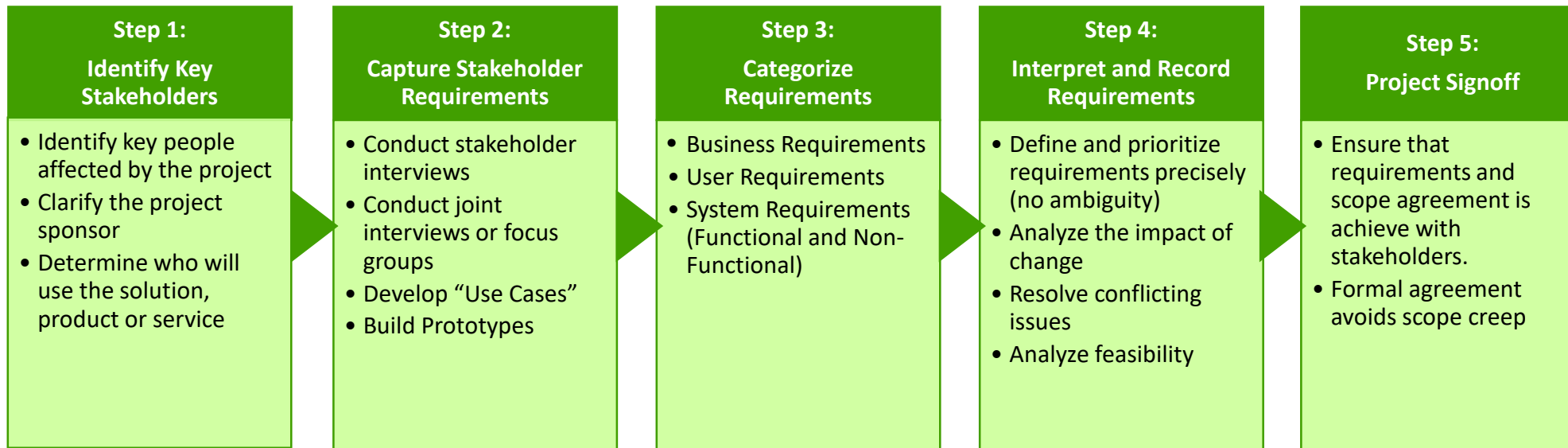
KLS&A provides senior level business analysts that are experts at segmenting requirements into three tiers – business requirements, user requirements, and system requirements.





# Our Approach : Requirements

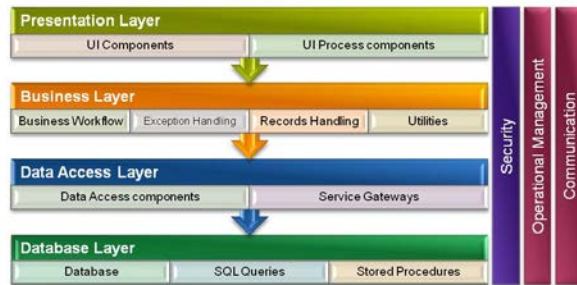
KLS&A Business Analysts conduct a 5 step approach to requirements gathering. Our approach is based on industry best practices.



# Our Approach : IT Strategies

The KLS&A team is composed of Senior Business Analysts, Software Developers, Quality Assurance Engineers, Solution and Enterprise Architects that are experienced in providing high performing software from conception to implementation.

## N-Tier Architecture

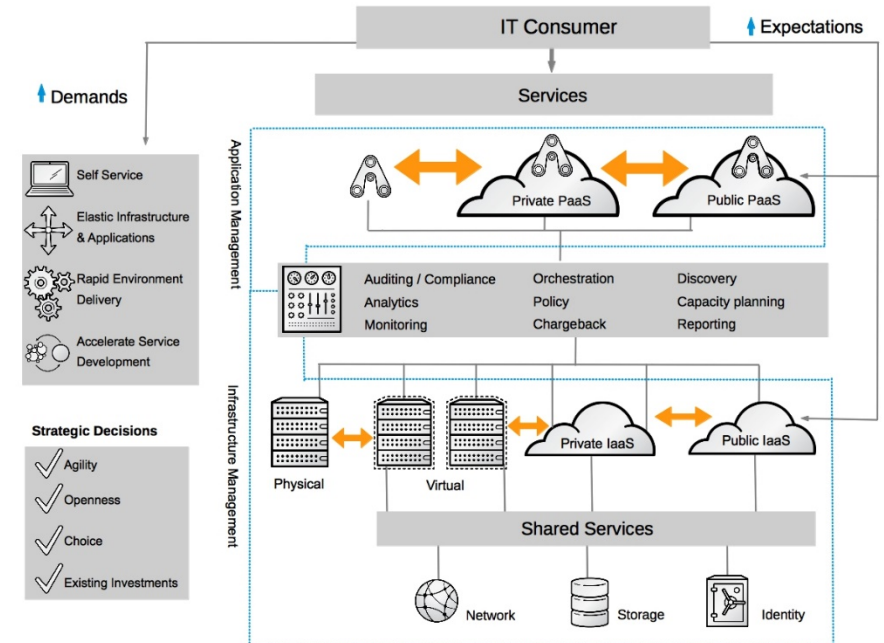


## Traditional Architectures:

- N-tier Layers (Presentation, Business Logic, Data)
- Web Services and Service Oriented Architectures
- Rich and Thin Clients
- Security

## Cloud Architectures:

- Software as a Service (SaaS)
- Platform as a Service (PaaS)
- Infrastructure as a Service (IaaS) or Virtualization
- Database as a Service (DBaaS)



# Our Approach : Presentation Tier “Mobile First”

KLS&A has administers a “Mobile First” approach to building system requirements. The transition from traditional desktop to the ability to integrate within a cloud architecture has enabled systems to be platform independent.

Our “Mobile First” approach concentrates on the user experience. We ensure that users administer consistent task accomplishment that is seamless regardless of their computing platform.

Rich or thin – client interfaces that are flexible is an area where KLS&A continues to be on the cutting-edge.



Responsive Web Design

---

Mobile First Web Design

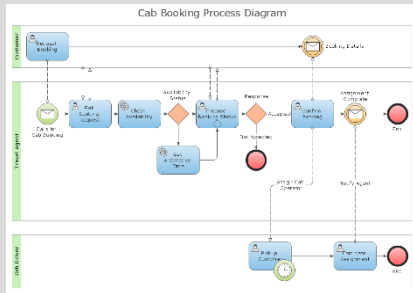


# Our Approach : Business Tier – Rules and Requirements

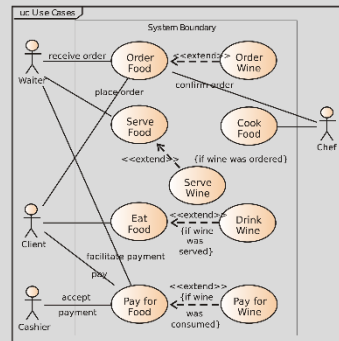
## Presentation Tier

Web Forms (UI) · Responsive Applications · SaaS

## Business Tier



**Business Rules and Workflows**



**Use Cases**

Business logic is the means by which the business derives conclusions from facts. Our practitioners separate and model business logic (rules) as the missing piece of requirements.

Business rules have their own structure and integrity that are different from other assets. Business rules are the intellectual capital and differentiator of an organization. They are the foundation of making operations perform at an optimal level.

## Data Tier

DBaaS · XSLT · XML · Data Model



# Our Approach : Documenting Requirements (Example)

## Scope Statement

Business Objective: Increase retention by 25%

## High Level Requirements

Business Policy: Provide discounts to customers with high purchases volumes.

## Glossary

Customer: A Customer is a person or organization who purchases products from ABC Company stores

## Detailed Requirements

### Functional & Non-Functional

The system shall calculate the Total Order Cost (RULE001 Volume Discount)

### Business Rules

RULE001: Volume Discount

If a Customer's previous purchases exceed \$1,000 within the last 12 months, subtract 15% from the Total Order cost.

Business Rule Type: Action Enabler

# Our Approach : System and Data Tier

## Presentation Tier

Web Forms (UI) · Responsive Applications · SaaS

## Business Tier

Business Rules and  
Workflows

Use Cases

Analytic Reports

## Data Tier

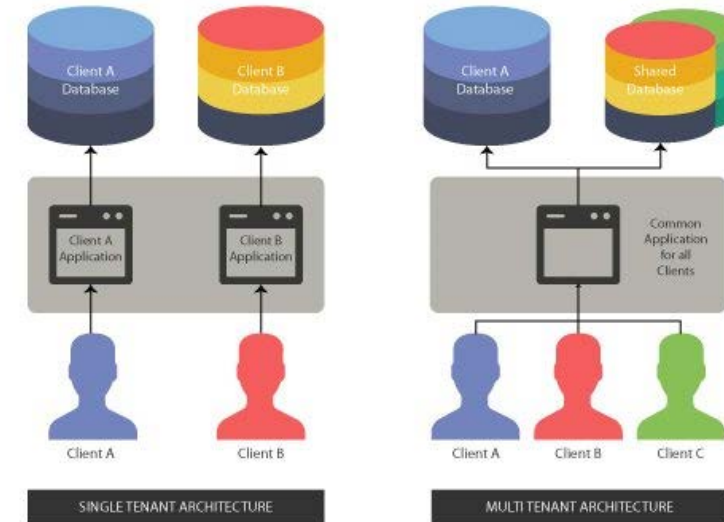
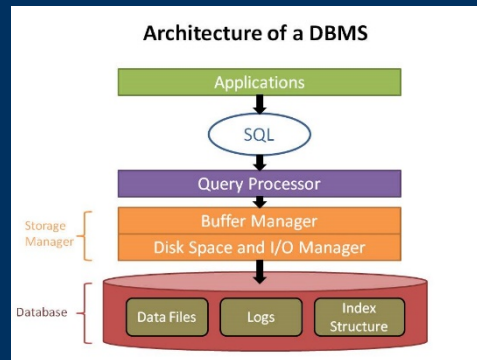
DBaaS

Tradition n-tier DBMS

XSLT

XML Files

Data Tables / Views



With the increased adoption of the cloud and virtualization, KLS&A provides expert analysis of identifying data relationships regardless of the data architecture. Through detailed analysis of business process, actors, and rules, our team helps to shape the data models and relationships through the enterprise.

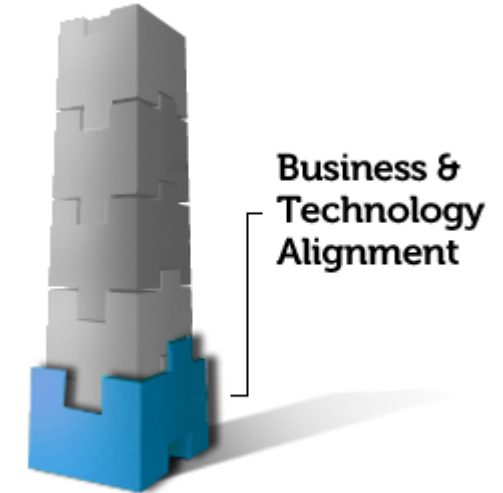
# The KLS&A Capability

KLS&A understands that the business need leads the technology implementation. This enables our clients to align their business strategy with the appropriate technology. Our team has years of experience helping clients maximize the use of their technology investment.

Our practitioners work with clients in the private and public sector to meet their business and system implementation needs throughout the full software development lifecycle.

We provide services in:

- **Business Requirements Development**
- **Solutions and Enterprise Architecture**
- **Application System Design**
- **ERP Implementations**
- **Business Analytics**
- **Quality Assurance and Testing**
- **Operations and Maintenance**



A diverse group of five business professionals, three men and two women, are standing in a row against a plain white background. They are all dressed in professional business attire, including suits and blouses. The man in the center is a Black man with short dark hair, wearing a light beige suit and a blue tie, with his arms crossed and a friendly smile. To his left are a white man in a blue suit and a woman of Asian descent in a grey suit. To his right are a woman of European descent in a white striped blouse and a man of Latin American descent in a grey suit. All five individuals have their arms crossed and are looking directly at the camera with positive expressions.

Why Should You Work with K.L. Scott & Associates?



# Why Team K.L. Scott & Associates?



## **Why Team K.L. Scott & Associates?**

- Focused on improving customer performance and efficiency
- True independence and agnostic approach to solutions
- Capability to bridge Business and Information Technology
- Successfully proven strategic methodology
- Strong team of experienced personnel
- Proven history of successful past performance
- Small business teaming that expands our service capacity
- Solid business practices and financial standing
- 100% excellent client referrals



# K.L. SCOTT & ASSOCIATES

ANALYTICS ANALYSIS ADVICE

**[www.klscottassociates.com](http://www.klscottassociates.com)**

235 Peachtree Street NE

Suite 400

Atlanta, GA 30303

P +1 404 692 5552

E [info@klscottassociates.com](mailto:info@klscottassociates.com)