
PLEXIS™
HEALTHCARE SYSTEMS
EMPOWERING THE
BUSINESS OF HEALTHCARE



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PLEXIS is trusted and built on partnership

PLEXIS Healthcare Systems is a leading payer technology company that delivers trusted enterprise solutions to healthcare payers and delivery systems around the globe

20 YRS
PIONEERING
PAYER
SOFTWARE

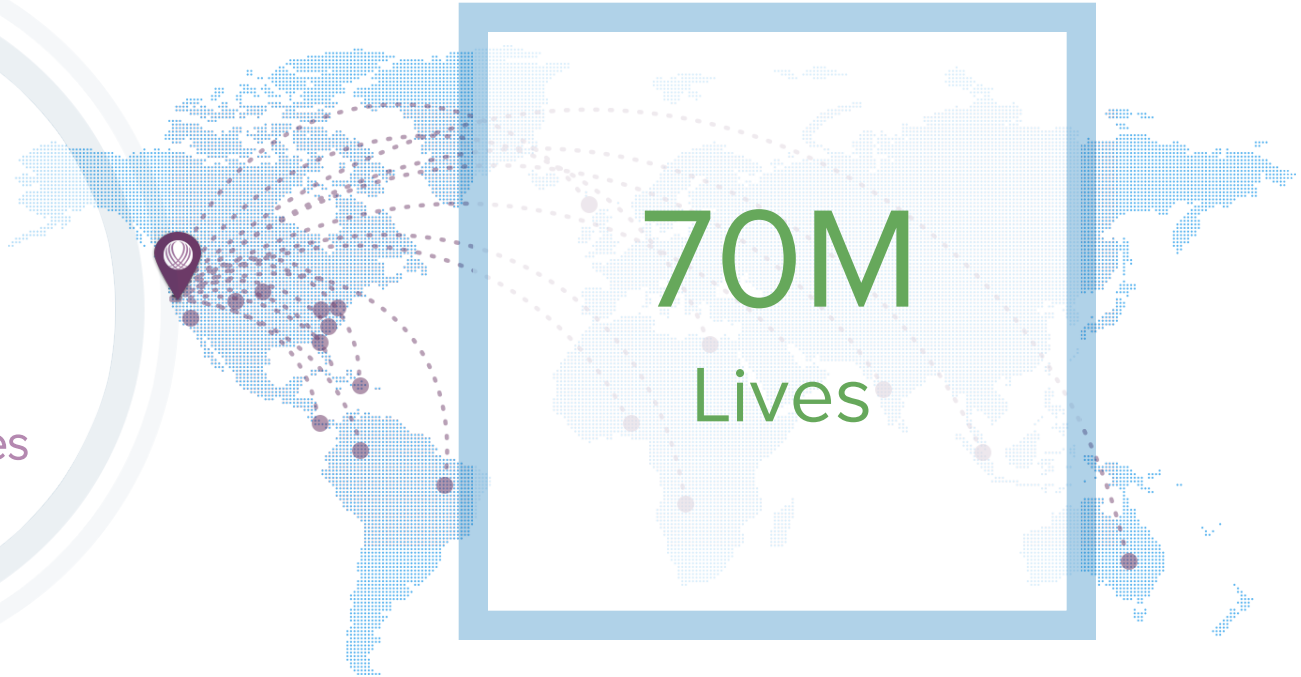
95%
LIFETIME
CUSTOMER
RETENTION

100+
CUSTOMERS
DOMESTIC &
INTERNATIONAL

100+
Active Customers

37
States

15
Countries





Core Administrative Technology

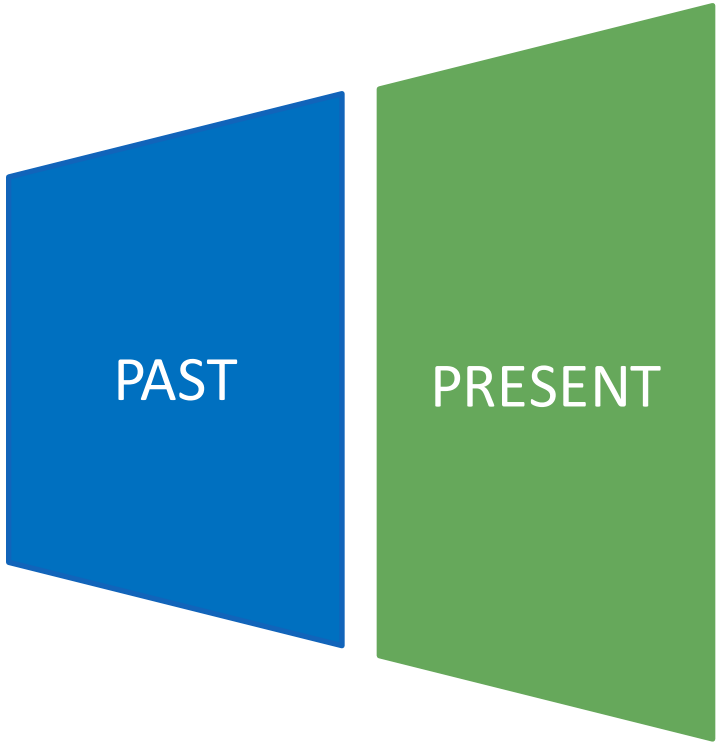
2.0

CORE ADMINISTRATION 2.0 goes beyond the traditional back office application with a shift to a platform approach that includes rich digital experiences, data liquidity, real-time integrations, and much more!



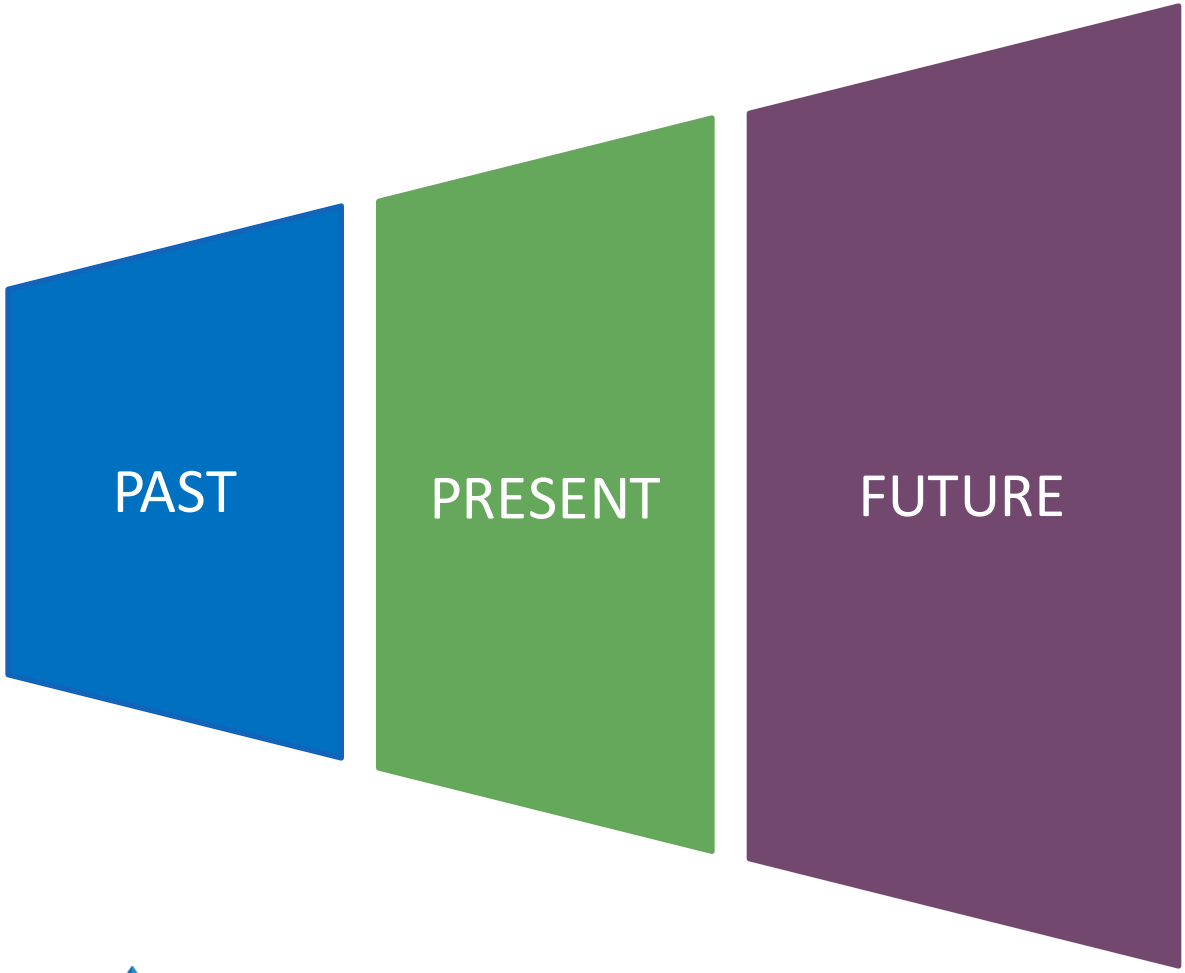
PAST

- ✓ Customization
- ✓ Business Rules
- ✓ Paper vs. Electronic claims
- ✓ Auto adjudication



PRESENT

- ✓ Configuration vs. Customization
- ✓ Standardize and Centralize
- ✓ Platform approach
- ✓ Known software and Technology



FUTURE

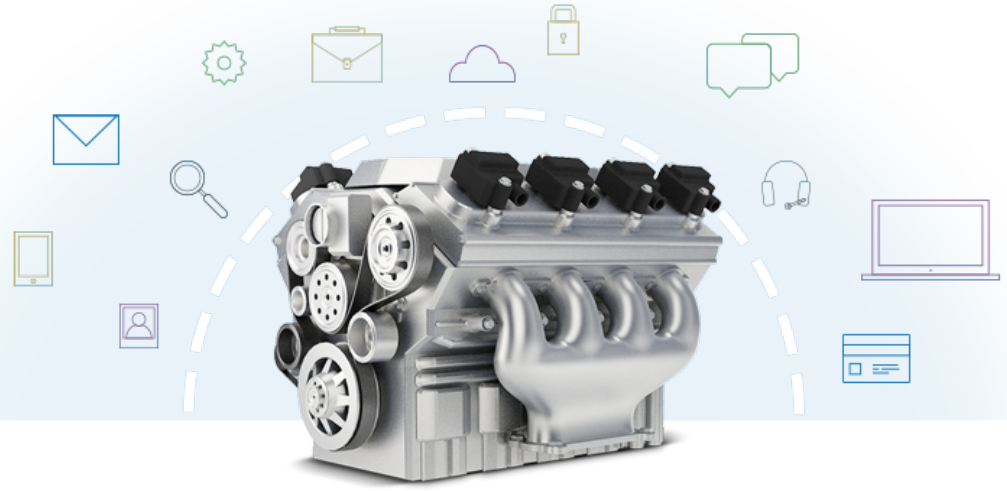
- ✓ Actionable Analytics
- ✓ Data Liquidity
- ✓ Optimized User Experience
- ✓ System Design

PLATFORM APPROACH to system design empowers your organization to be flexible and incorporate new tech/systems and becomes an enterprise-wide force multiplier

PLEXIS PAYER PLATFORMS

PLEXIS BUSINESS APPS

Portals
Customer Service
Business Analytics
EDI
Plus More



PASSPORT CONNECTIVITY SERVICES

Real-time Web Services
Batch Services
Bring your Own Apps

CORE ADMIN + CLAIMS MANAGEMENT ENGINES


TRENDS +
DRIVERS

BUSINESS CONSIDERATIONS

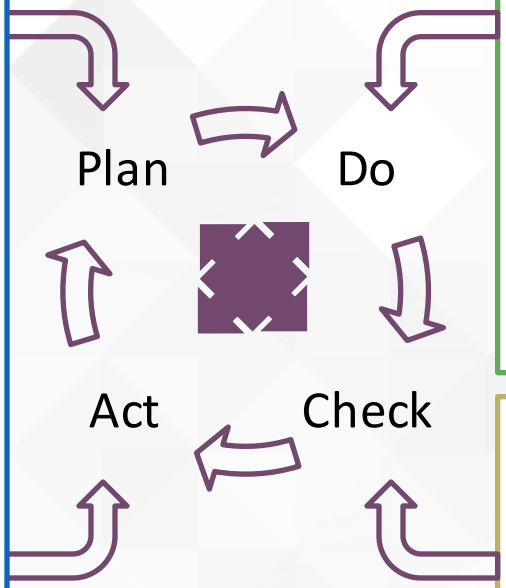


TRENDS + DRIVERS

Industry trends and contributing forces to corporate and product roadmap planning

Market Dynamics
- ✓ From groups to individuals
- ✓ Exchange connectivity
- ✓ Payment reforms
- ✓ Regulatory
  - ✓ ACA
  - ✓ ICD-10
  - ✓ X12, CAQH/Core
  - ✓ Taxes
- ✓ Expanding Markets
- ✓ Cost Shifts
- ✓ Consumerism/B2C

Opportunities
- ✓ New or Existing
  - ✓ Products
  - ✓ Services
  - ✓ Clients

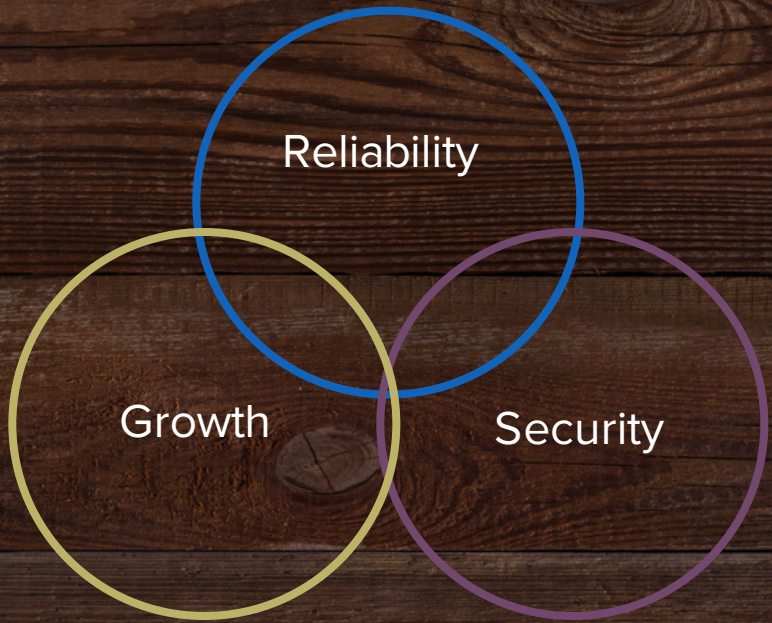


Business Drivers
- ✓ Cost
- ✓ Customer Service
- ✓ Agility
- ✓ Innovation
- ✓ Evolution
- ✓ Supplier dynamics
- ✓ Time to market
- ✓ Market differentiation

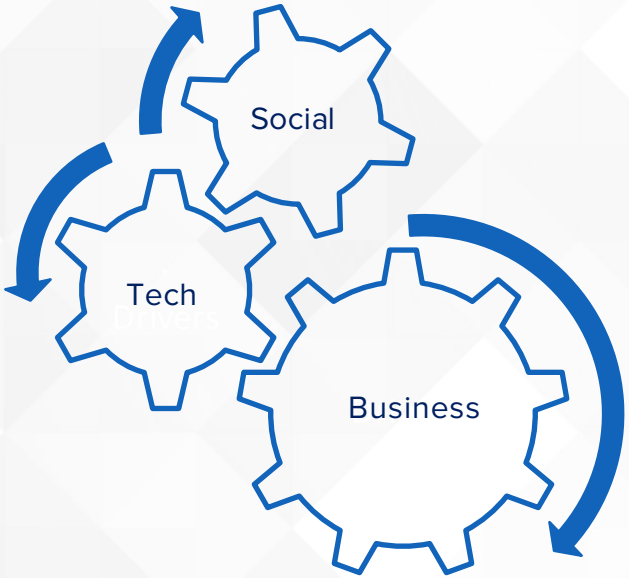
Disruptors
- ✓ Economic conditions
- ✓ Resource skills
- ✓ Legacy vs. innovation
- ✓ New entrants
- ✓ Speed of change

Technology objectives at times appear removed from the business

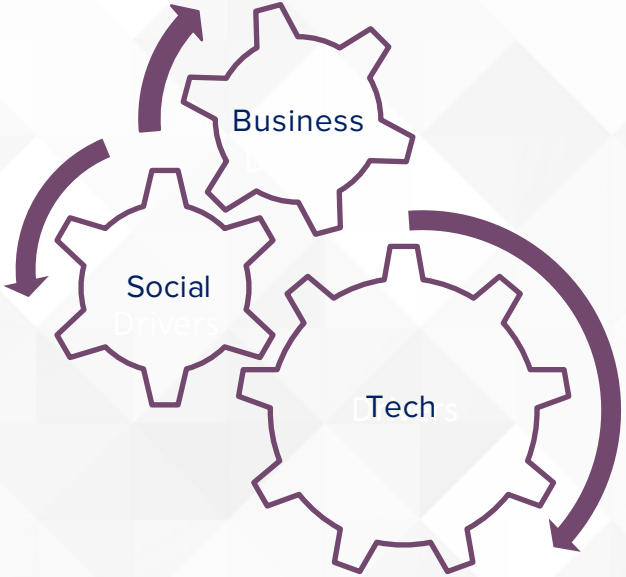
- ✓ More integrations
- ✓ Identity and access controls
- ✓ More BCP/DR
- ✓ BYOD (MDM)
- ✓ More visibility, process
- ✓ More third party solutions
- ✓ Resource optimizations

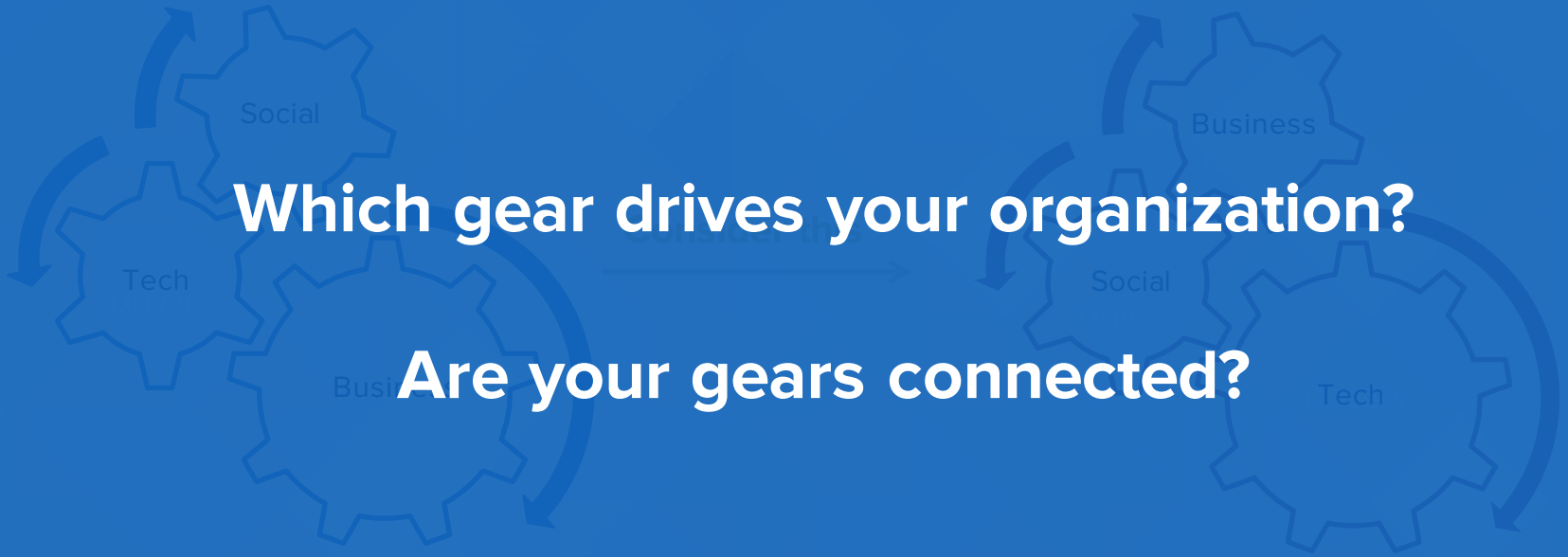


TRENDS + DRIVERS: A DIFFERENT VERSION



Consider this

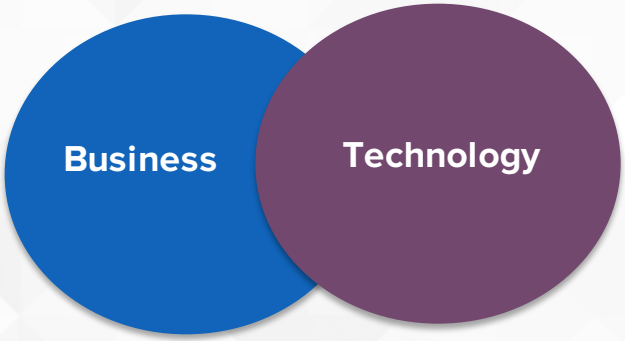




Which gear drives your organization?

Are your gears connected?

TRENDS + DRIVERS: A DIFFERENT VERSION



Is the game changing

- Cloud & Virtualization
- Internet of things
- Laws struggle To adjust for Technology

Digitization

- Algorithms Big Data
- BYOA, BYOD, Mobile
- Social Awareness Power
- Citizen Developer
- Robotic Assistance
- Crowd Sourcing

Key Concerns:

1) Is there less separation?
2) Are some roles crossing over?
3) How does this impact our:
   - Markets
   - Customers
   - Employees
   - Value chain
   - Assumptions
   - Culture


FLEXIBILITY,
SCALABILITY +
OPTIMIZATION

FLEXIBILITY: STAY FLUID

Considerations

Define Flexibility

- ✓ Flexibility to whom?
- ✓ What needs to be flexible – business, technology, vendor, clients, market, laws, regulations

Scope of Flexibility

- ✓ Why does it need to be flexible?
- ✓ What needs to be flexible?
- ✓ How flexible does it need to be?
- ✓ How long does it need to be flexible?

Cost of Flexibility

- ✓ What will you pay to be flexible?
- ✓ Will you wait for something to be built to be flexible?

Possible Values

Response options

- ✓ Key to respond to challenges and issues
- ✓ Difficult to respond to issues to ridged constraints

Options and opportunity

- ✓ Critical if company cannot upgrade due to too much manual training
- ✓ Business cannot adjust to change in direction, technology or partner
- ✓ Difficult to adopt change due to people, process or technology
- ✓ Business cannot capitalize on opportunity due to ridged constraints

SCALABILITY: HOW FAR CAN YOU GO WITH WHAT YOU HAVE?

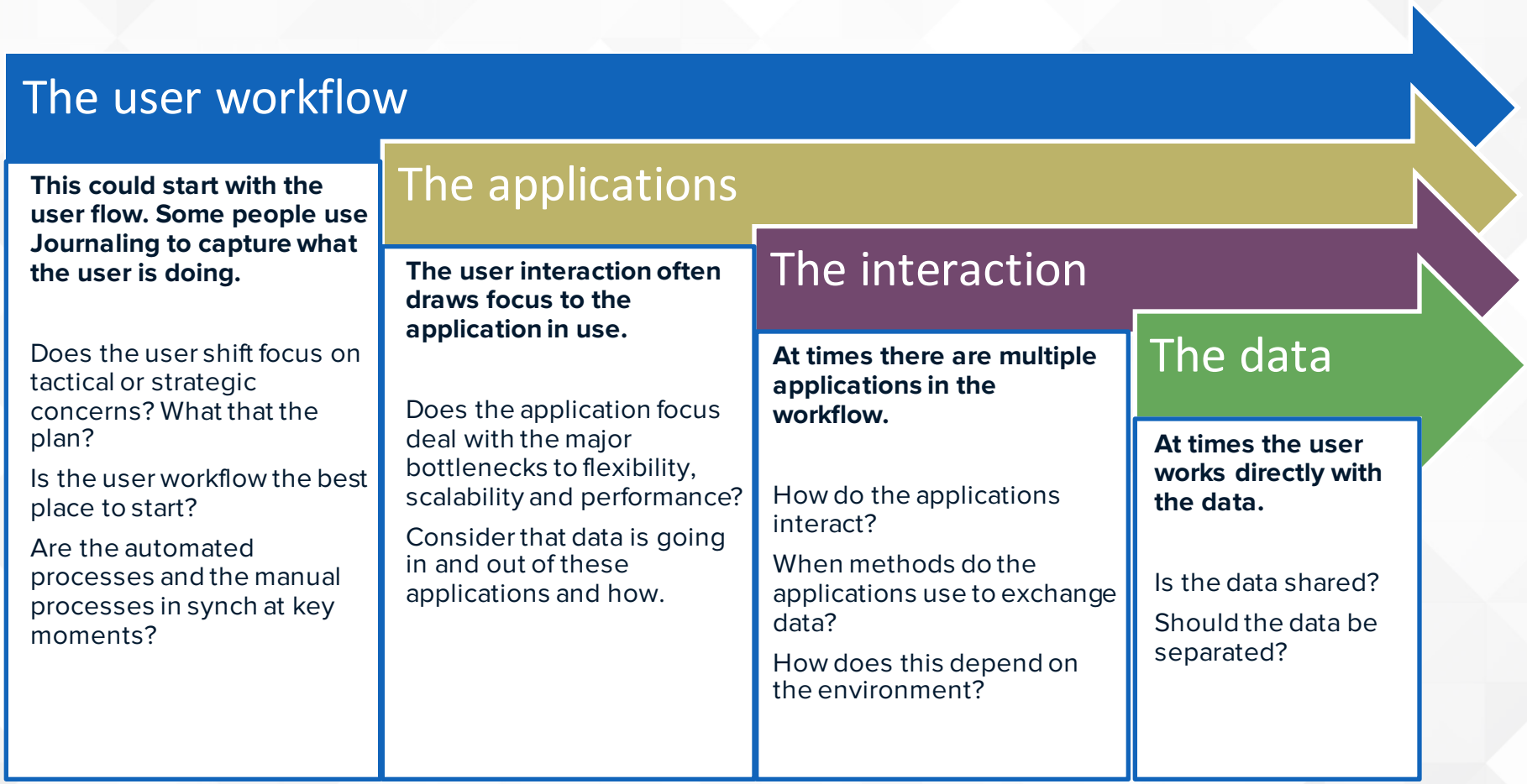
Considerations

- ✓ What needs to scalable?
- ✓ What are the demands or expectations?
- ✓ What is the capability of the system?
- ✓ What are the limits?
- ✓ What are the leading indicators – to know if on track for future limits?
- ✓ Scalability is achieved by what methods?
- ✓ Scalability is possible by what methods?
- ✓ What items are key to support scalability?
- ✓ What are you giving up for scalability?
- ✓ What are you willing to pay to get scalability?

Possible Values

- ✓ Key to respond to challenges and issues
- ✓ You can expand the system, service, value by scaling
- ✓ You can add more functionality
- ✓ You can add more people
- ✓ You can add more load to the same system
- ✓ You do not have to recertify, retest or add a new system to grow or gain capability
- ✓ You do not have to retrain your team to get more from existing solution

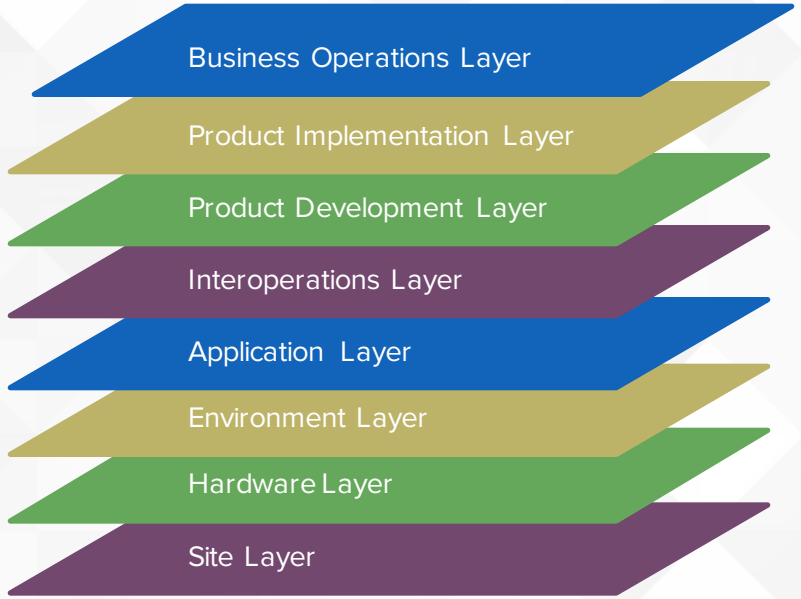
CONSIDER THE FLOW



SAMPLE SCOPE FOR CONSIDERATION

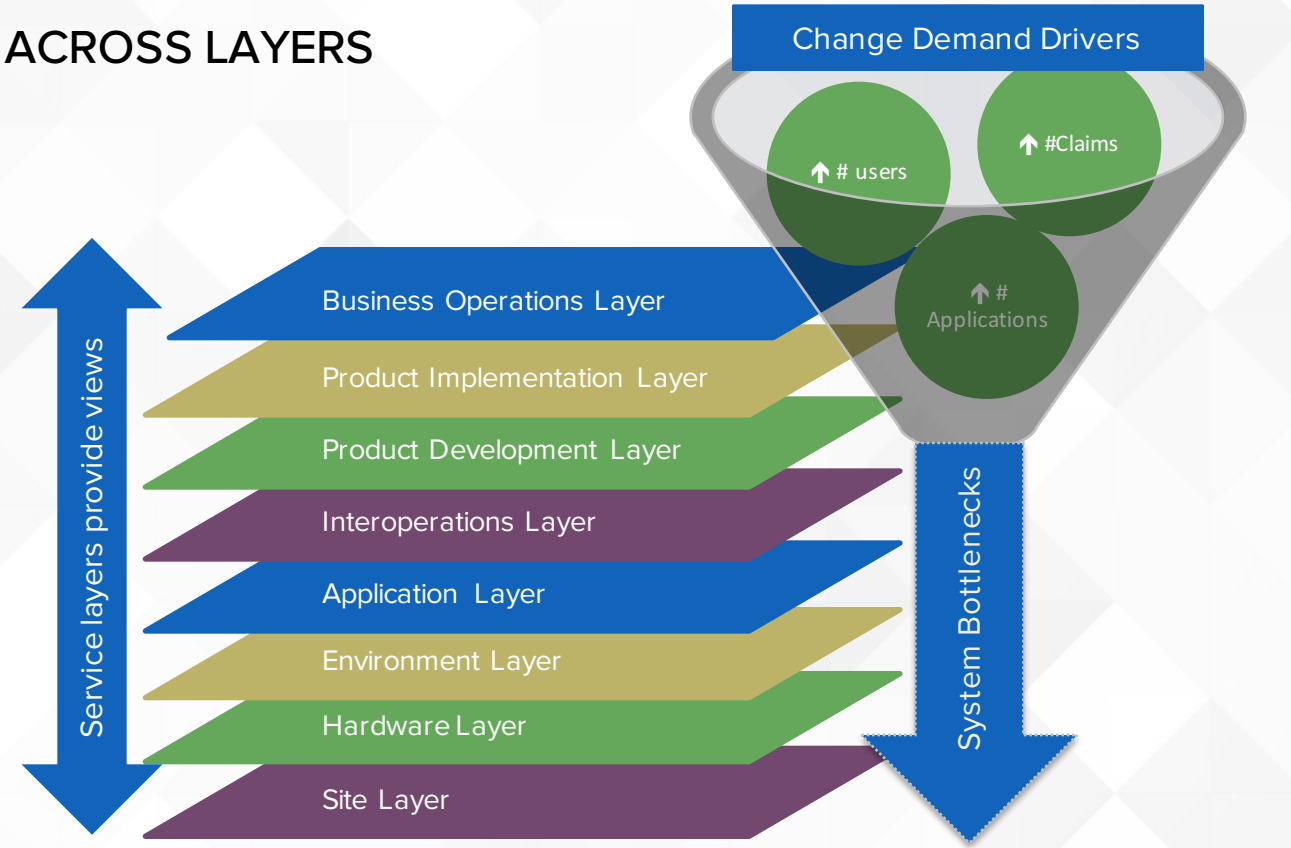
Solution systems are a combination of multiple layers. A review of flexibility, scalability and optimization, needs to review all the solution relevant solution layers and how they interact.





CONSIDER SERVICES ACROSS LAYERS

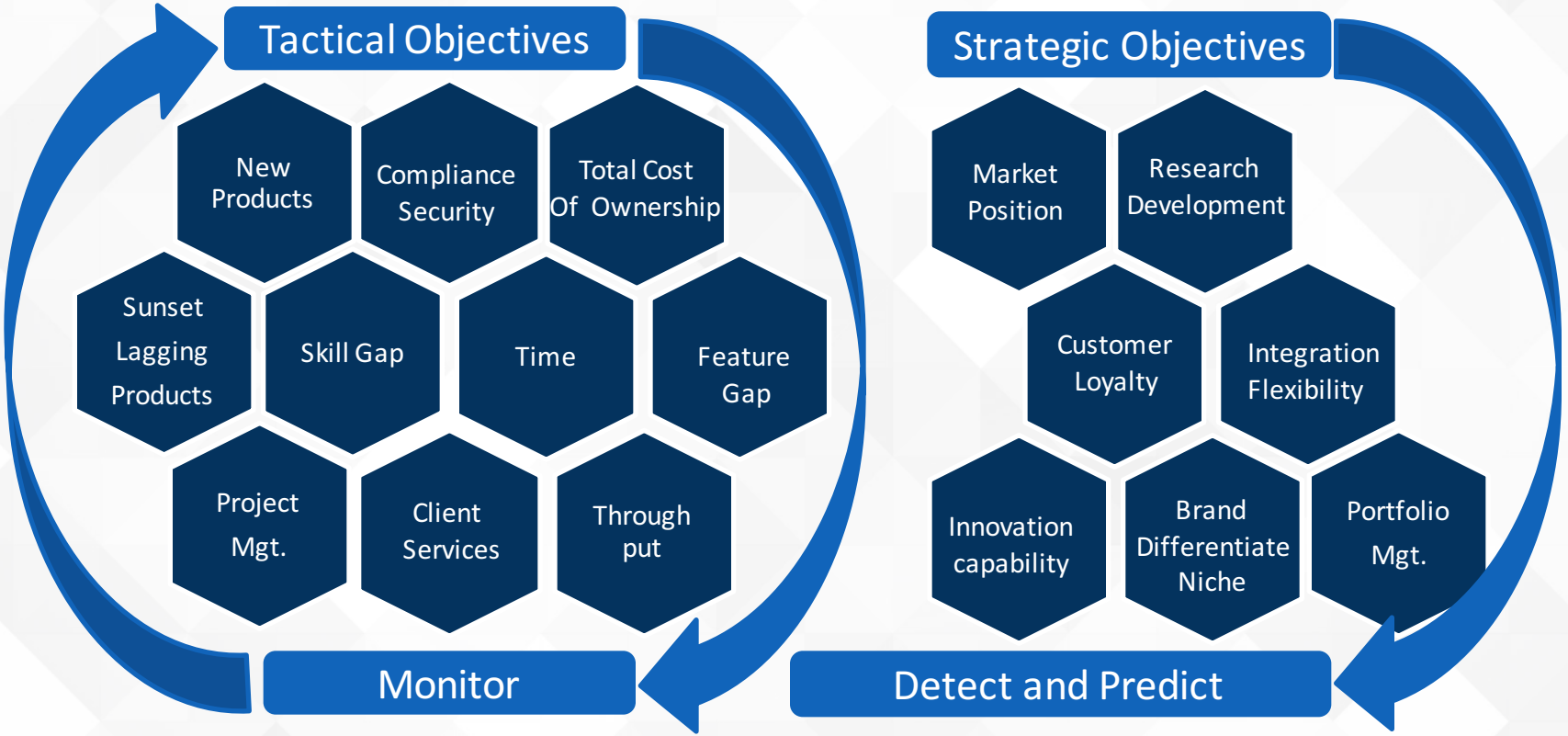
Service concepts (based on concepts like ITIL) can be used to tie each layer together to ensure operations capability and ongoing support. These services can be used to help identify if given a particular demand how does the system respond (e.g., performance, scalability, reliability, optimizations, security, etc.)



Allows for: focus, particular use cases, tractability

Flexibility, Performance, Scalability, Reliability, Optimization

OPTIMIZATIONS: SAMPLE OF CONSIDERATIONS



PORTFOLIO PLANNING FOR OPTIMIZATION TARGETS

1

COW SOLUTIONS (Maintain):

- ✓ Low investments but generate revenue
- ✓ Stable solution

2

STAR SOLUTIONS (Invest):

- ✓ Lots of investment & currently low revenue
- ✓ This is a long term revenue strategy

3

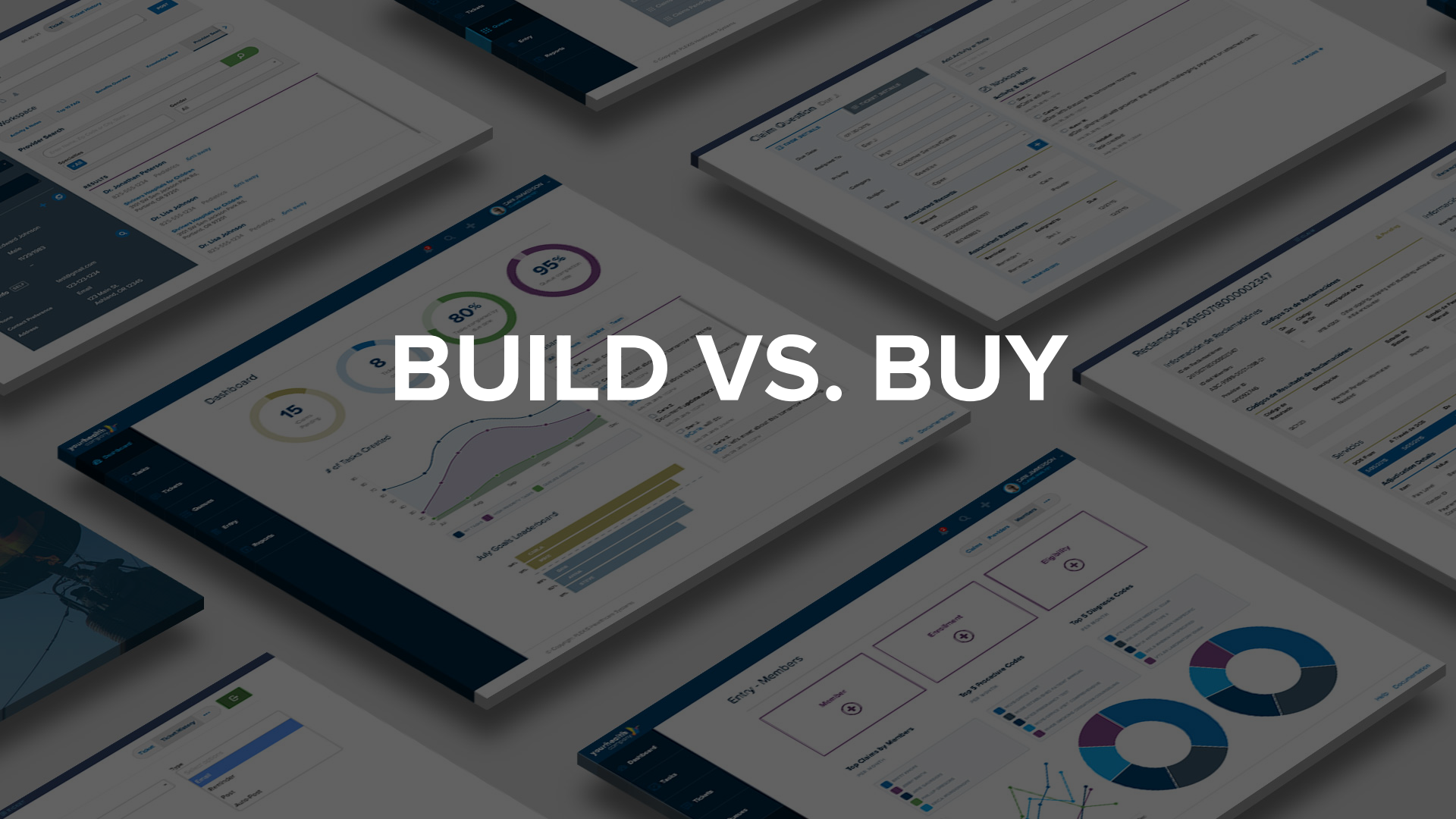
DOG SOLUTIONS (eliminate):

- ✓ Not making money
- ✓ Need to be fixed or dropped
- ✓ Timing?
- ✓ Fallen cow or star solutions

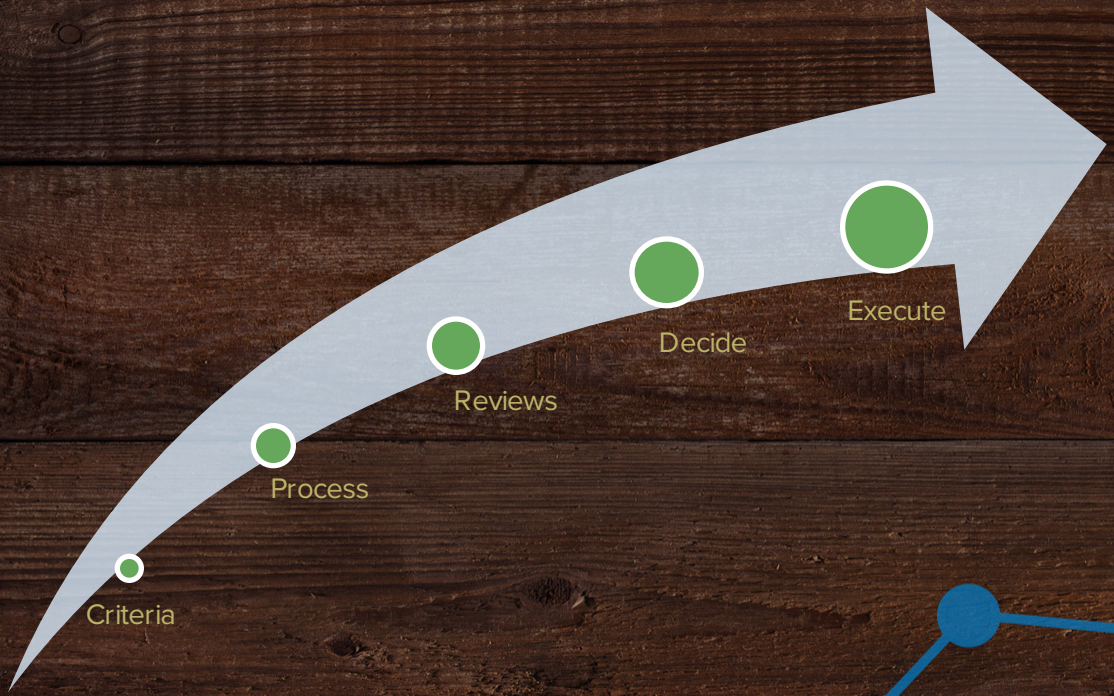
4

UNKNOWN (tolerate):

- ✓ Not sure where they fit
- ✓ Lack of information or changing situation
- ✓ Value is not clear


BUILD VS. BUY

BUY VS. BUILD: TRADITIONAL CONCEPTS



Build vs Buy

- ✓ Start with binary choice
- ✓ Eventually may back into hybrid
- ✓ Best practices simply this choice

Criteria

- ✓ Lots of best practices
- ✓ May start with RFI, RFP
- ✓ Some factor into long term

Consider

- ✓ How much focus on functional requirements
- ✓ Do they see beyond requirements
- ✓ Accelerating rate of change
- ✓ Culture inertia

BUY VS. BUILD: GENERAL CONSIDERATIONS

Common Needs

Best practices

- ✓ Form, fit and function alignment
- ✓ Multiple industry standards and tools

Typical overall solution

- ✓ Cost
- ✓ Time to market
- ✓ Skill
- ✓ Quality
- ✓ Scalability, performance
- ✓ Technology
- ✓ Risk

Sometimes Considered

Alignment

- ✓ Strategic and roadmap
- ✓ Need and requirements
- ✓ Cultural
- ✓ Technology
- ✓ Service

Classic variations

- ✓ Rent, lease, subscribe
- ✓ Borrow, partner, open source

Value

- ✓ Internal skill/resource limit
- ✓ Additional vendor value add
- ✓ Perceived value

BUY VS. BUILD: SPECIFIC

BUY Considerations

Domain knowledge
Synergies from COTS
Types of collaboration:

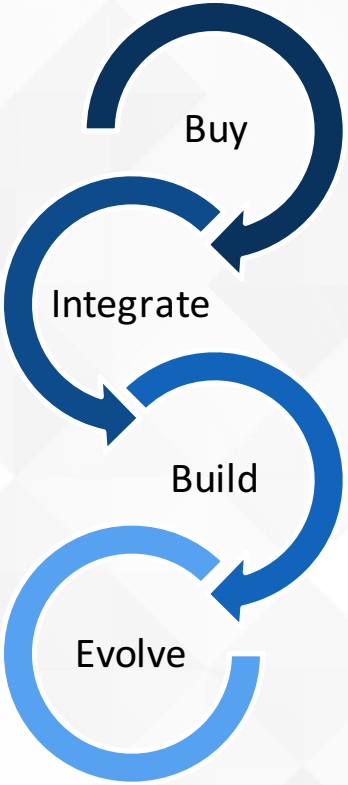
- ✓ Requirement focused
- ✓ Integration focused
- ✓ Co-support
- ✓ Co-assurance (quality)
- ✓ Co-operated
- ✓ Skills transfer
- ✓ Resource leverage
- ✓ Market focused

BUILD Considerations

- ✓ Skill, time, capability
- ✓ Ability to leverage history for future
- ✓ Long term thinking
- ✓ Maker, Checker options
- ✓ Level of domain knowledge
- ✓ Strategic criticality of need
- ✓ Contractual obligation


INTEGRATE VS.
EVOLVE

BUY, INTEGRATE, BUILD, EVOLVE (BIBE)– APPROACHES



Not core competency	Time to Market	Beyond skill
Technology Enabled designs	Components capability	Inter-component Gap
Core competency	Resources available	Unique to position
Strategic view	Integration skills	Integration management

Dynamic Solution Portfolio

LEVERAGE COMMON COMPONENTS FOR FLEXIBILITY

- NServiceBus
- MSMQ
- Windows Server
- Microsoft SQLServer
- NHibernate
- Altova MapForce
- Windows Workflow



SYSTEM ARCHITECTURE: SERVICE ORIENTED ARCHITECTURE (SOA)

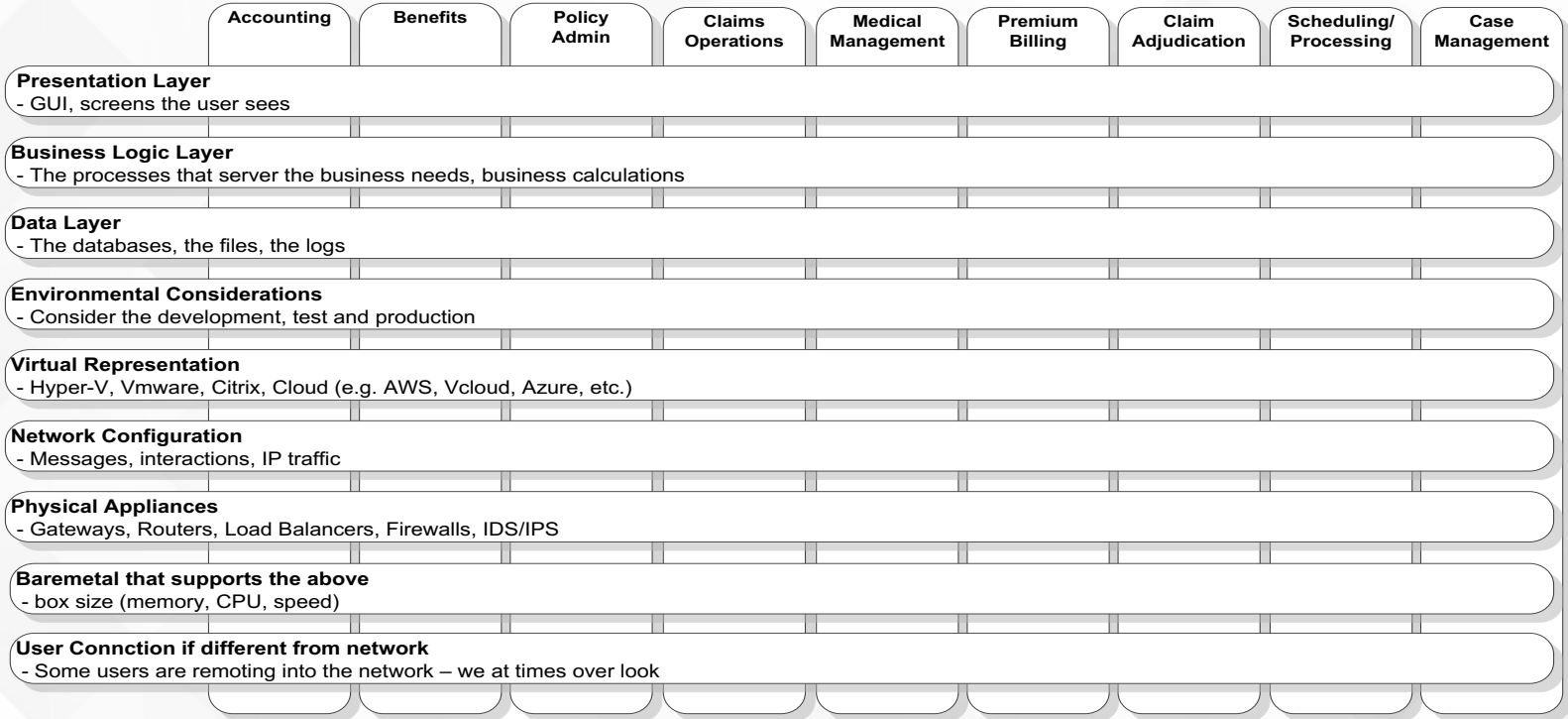
Key Principles:

- Features/components organized from “business” perspective
- Loose coupling
- Separation of business concern

Key Outcomes:

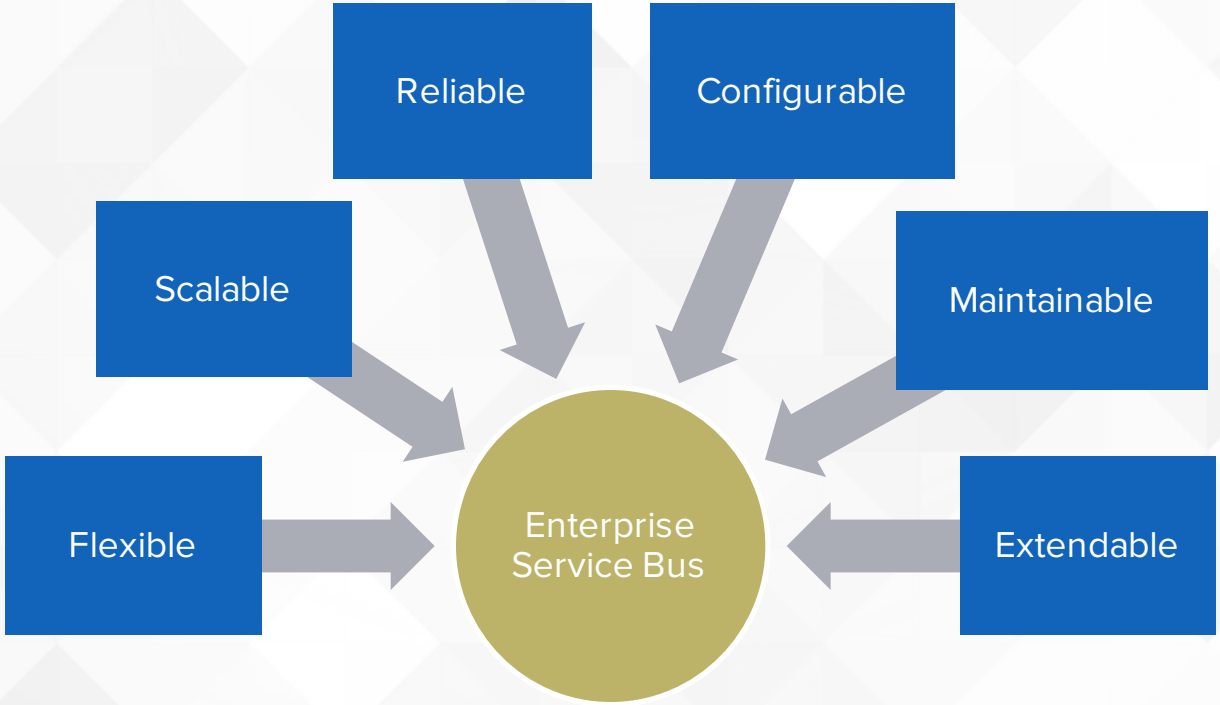
- Technical side and business side speak same language
- Facilitates technology/business alignment
- Features/enhancements better prioritized by business need
- Isolate changes

SAMPLE SERVICE ORIENTED ARCHITECTURE



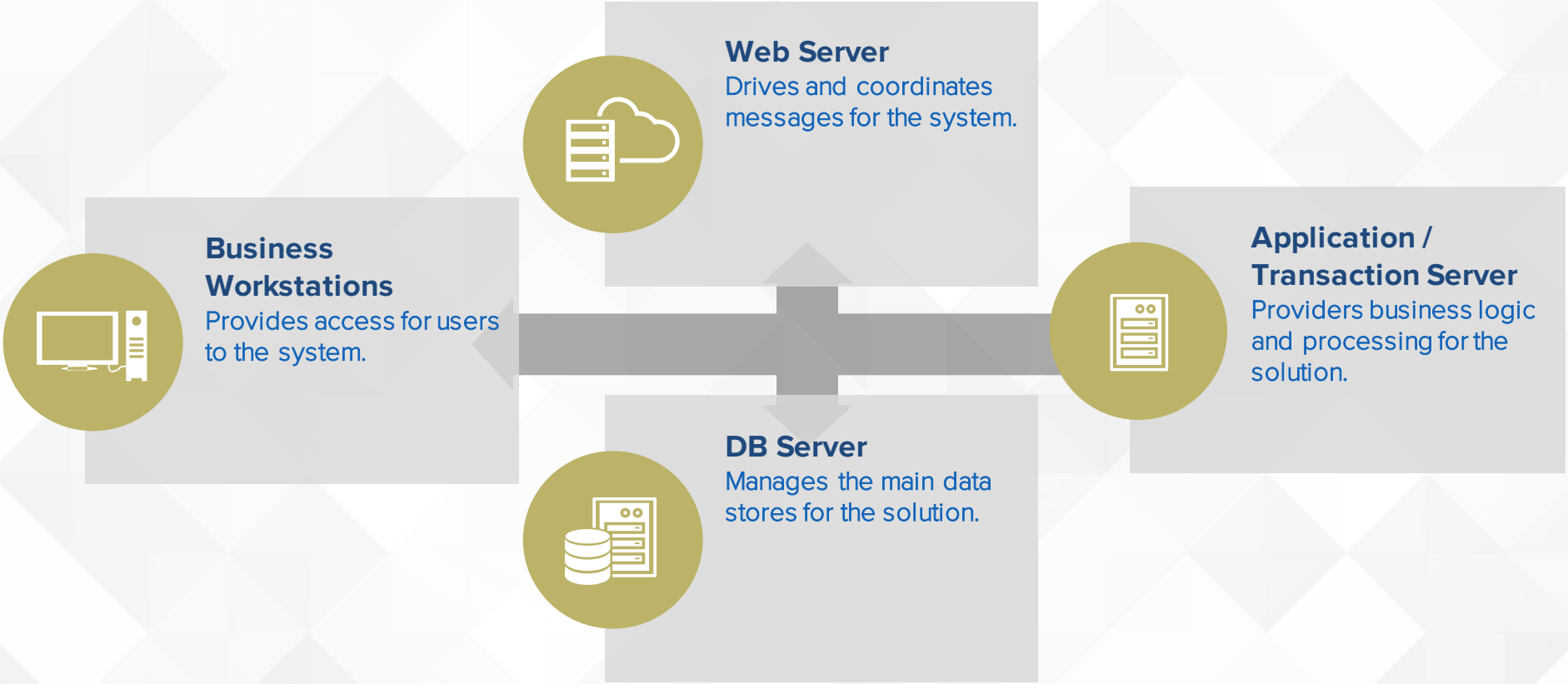
BUS AND SERVICE BASED ARCHITECTURE PROVIDES OPTIONS

Enables the need for system changes.




PLEXIS
STORIES

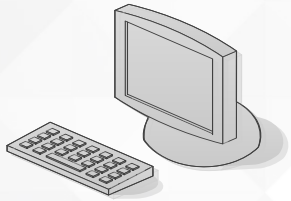
ENVIRONMENT (HARDWARE) COMPONENTS



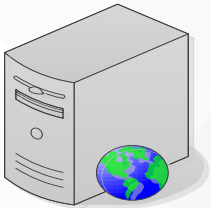
PHYSICAL ARCHITECTURE (SAMPLE COMPONENTS)

Main “building blocks” for a deployment

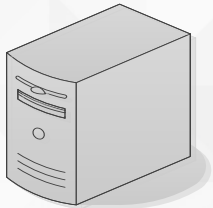
- Each block can be scaled and tuned for performance
- Tuning within each block for scalability and performance
- Tuning across blocks for performance and scalability
- Options provider proportional response to need



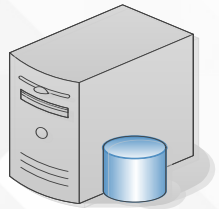
BUSINESS WORKSTATIONS



WEB SERVER(S)

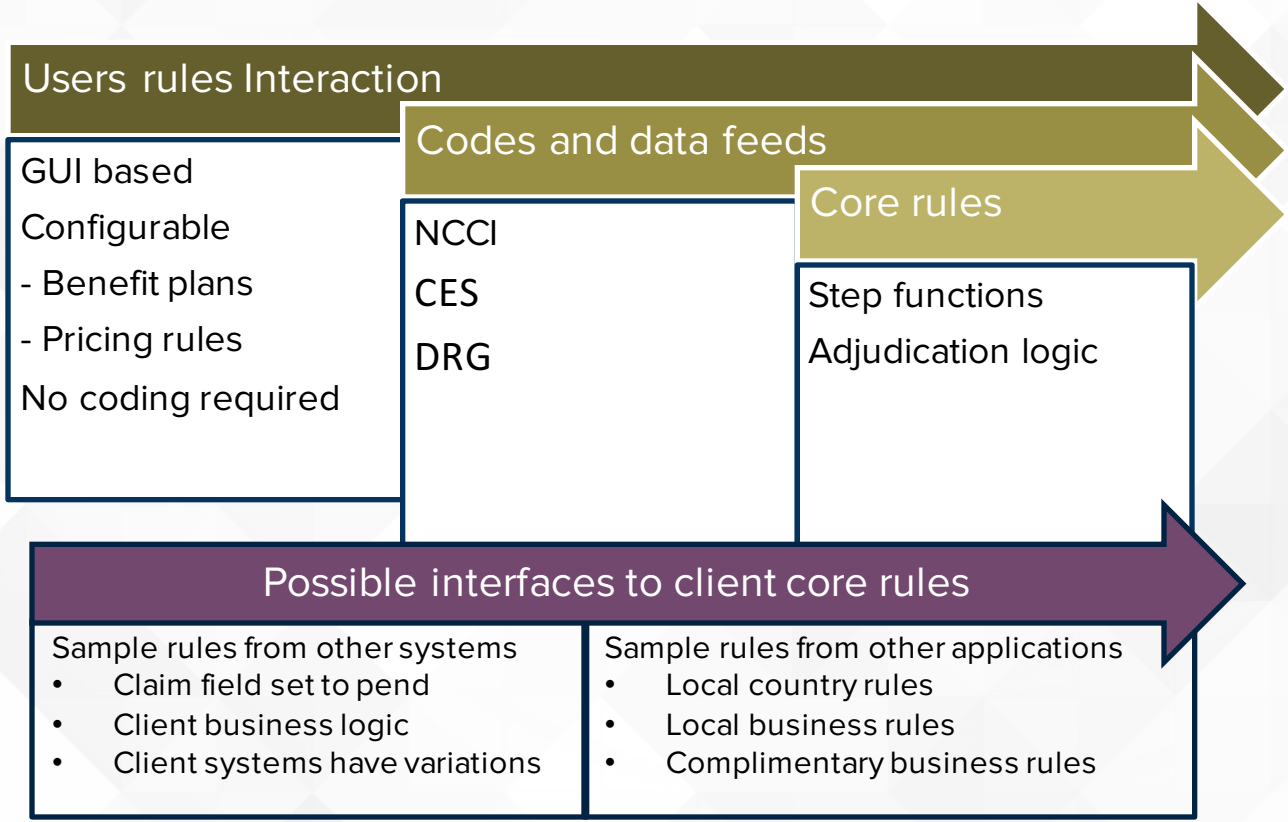


APP/TRANSACTION SERVER(S)



DB SERVER(S)

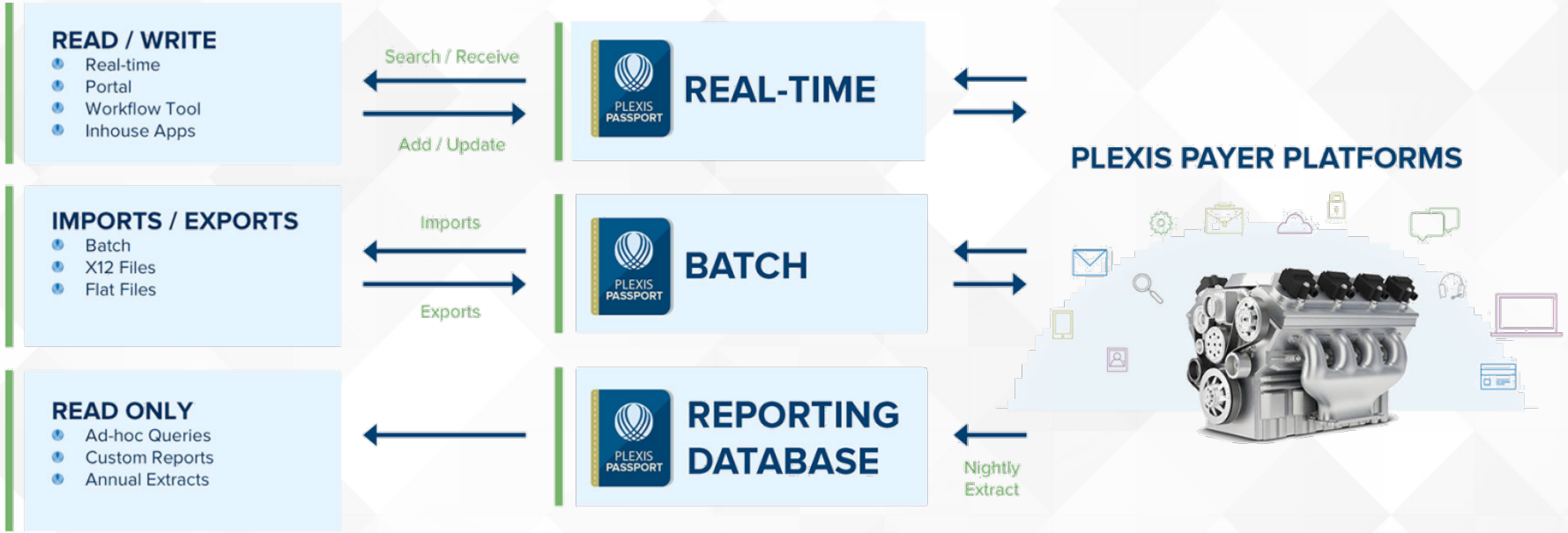
CORE APPLICATION RULES STRATIFICATION



STORED

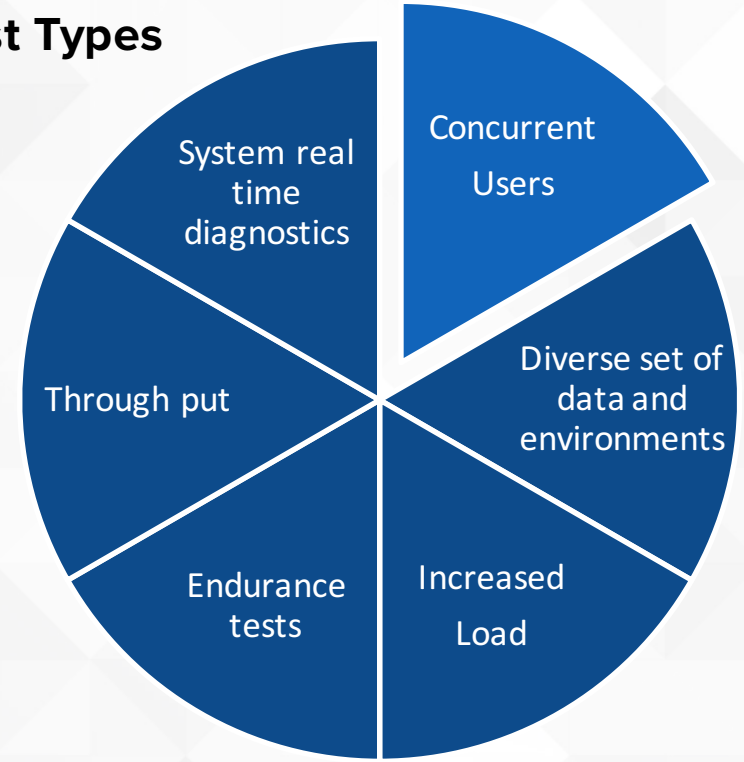
- Leverage external data
- Coding stored logic functions
- Database stores content

SAMPLE OF INTERFACE SERVICES (PLEXIS PASSPORT)



PERFORMANCE TESTING

Test Types



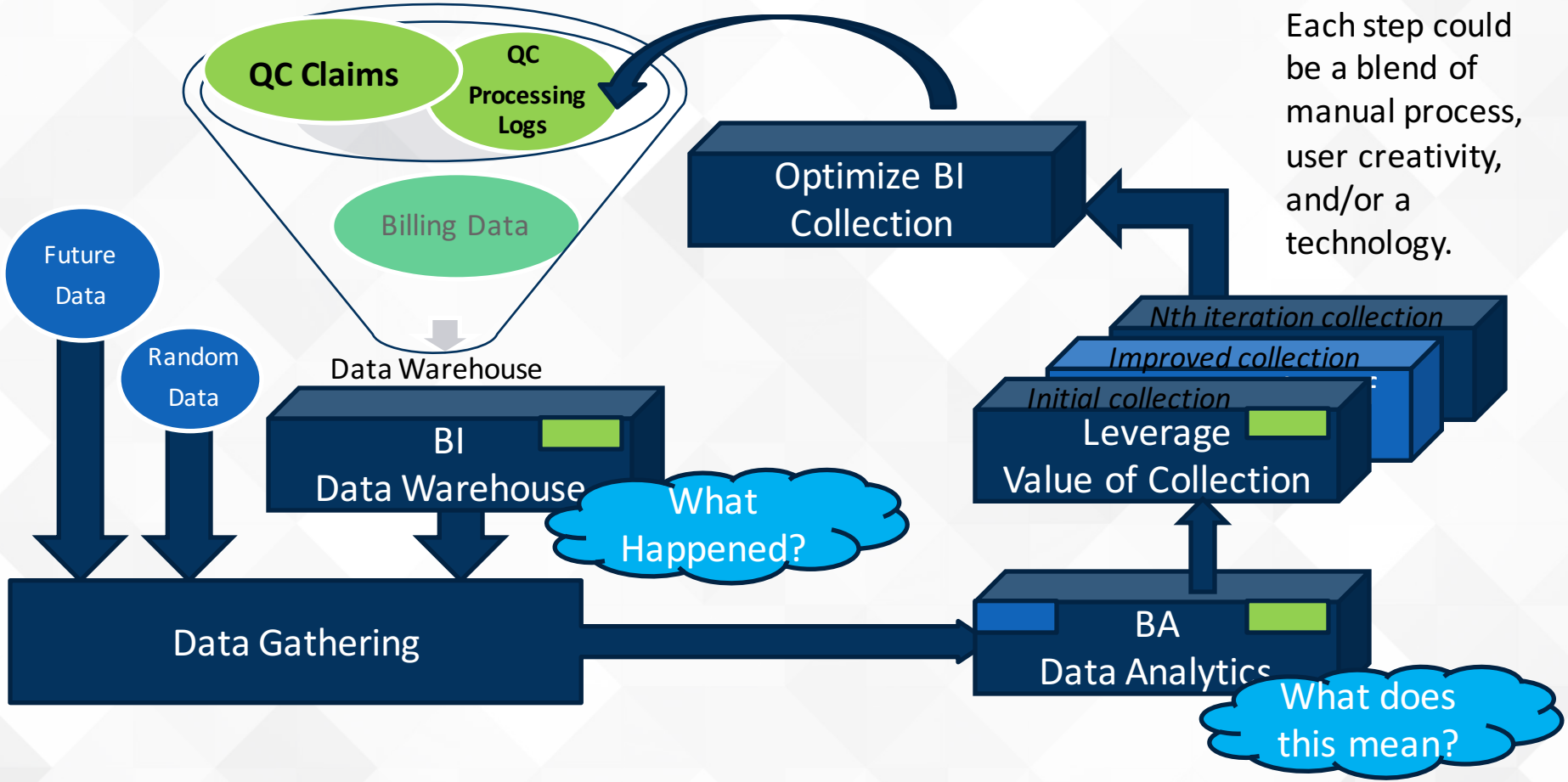
RESULTS

Result Types




WHERE DO WE GO
FROM HERE?

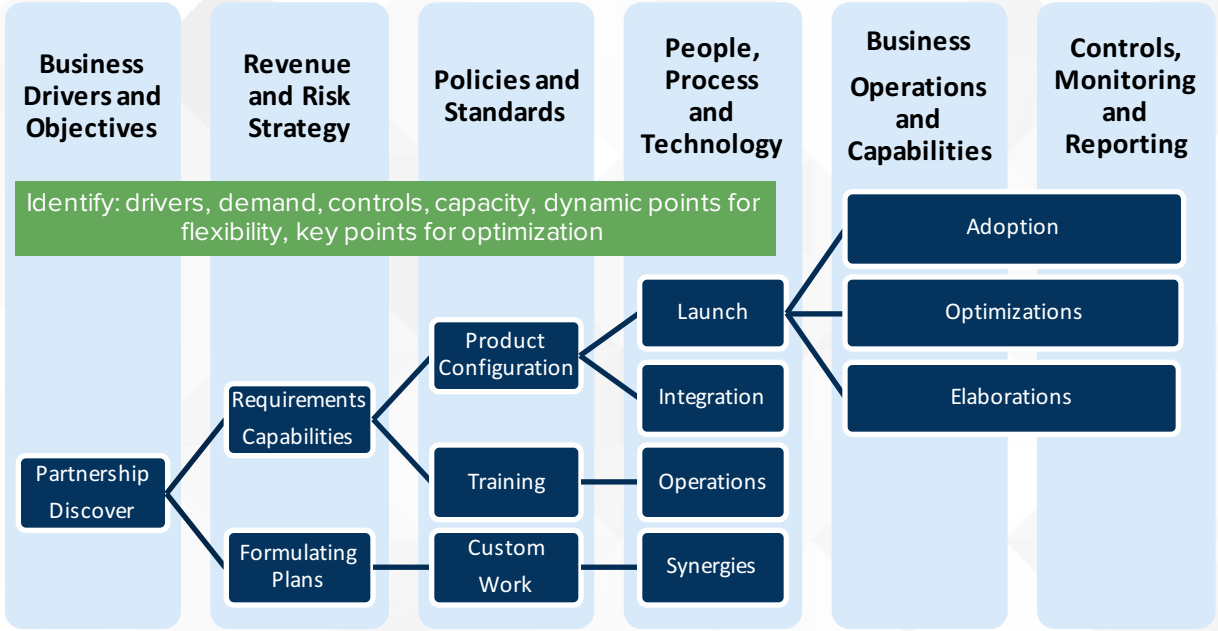
BLURRY LINES BETWEEN BUSINESS AND TECHNOLOGY



Each step could be a blend of manual process, user creativity, and/or a technology.

CONSIDER FLEXIBILITY, SCALABILITY, OPTIMIZATION – ACROSS BUSINESS

- ✓ Opportunities transcend technology
- ✓ Consider leveraging this model
- ✓ Easy to follow
- ✓ Componentized
- ✓ Different work streams
- ✓ Can be iterated
- ✓ Onboarding can follow



SAMPLE: TASK + ARTICFACTS

Sample processes, controls - approaches

- Use baseline processes
- Process tailoring
- Recognizing different methods
- Right method for right work
- Consider team, culture, objectives
- Team structure and optimization
- Balance new development and maintenance

Sample Artifacts

- Project management
- Change control
- Risk management
- Metrics and communication plans
- SDLC

Sample Tasks

- Clarity on objectives, plans and approach
- Clarity on breaking up work (e.g., iterations, sprints, projects, releases)
- Clarity on roles, resources, skills, gaps
- Clarity on tools (e.g., to help code, understand technology, logs, test, track)
- Consider risks more than passive fixed forgotten items

Sample Artifacts

- Charter, objectives, roadmaps, project plans
- Requirement documents (e.g., journaling, story board, requirement documents, stories)
- Technical documents (e.g., architecture documents, vendor documents, design documents, testing documents, training documents)

SCAN SYSTEM FOR POINTS OF FLEXIBILITY, SCALABILITY, + OPTIMIZATIONS

- Trapping auditing information could come from the entire system
- Auditing looks at information across the entire system for the full picture
- Data across multiple sources

User Observations

- User experience, desires
- Future expectations
- Observation and analysis

Technical Observation

- By Inspection
- By Reference
- By Validation

Future Planning

- Business and Technology objectives
- Future indicators (flags, thresholds)
- Strategies, roadmaps, plans

Transition Planning

- Transitional Plans
- Transitional Execution and dynamic response
- Controls, monitoring, evaluations

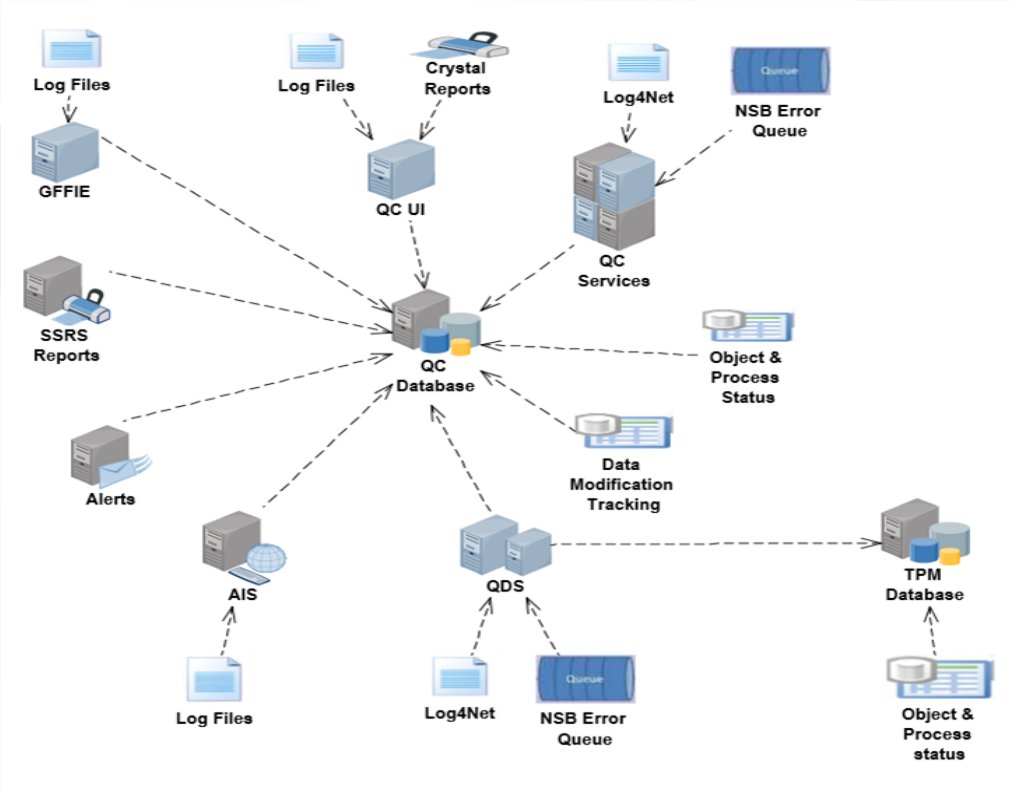
UNDERSTAND THE WHOLE SYSTEM

An ecosystem to understand

- Depending on need, multiple metrics can be generated to serve business objectives
- What type of metrics could you collect to help understand the system?

Examples such as:

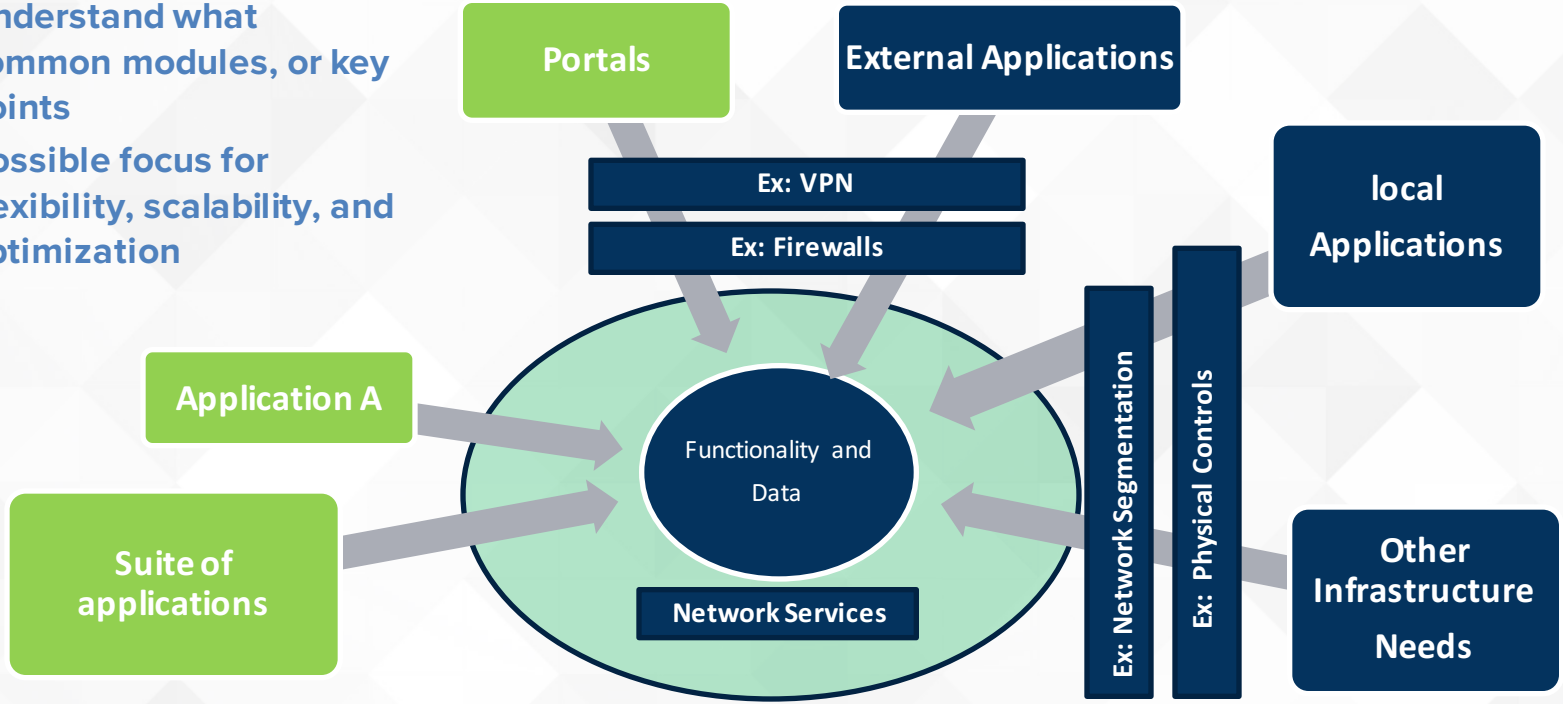
- Productivity
  - Modified claims
  - Claims adjudicated vs pend
  - # users vs claims per day
- Statistical data trending



LOOK FOR CONTRAINTS

Focus on smaller subsystems or use cases to understand bottlenecks

- Understand what common modules, or key points
- Possible focus for flexibility, scalability, and optimization



REFINING ROADMAPS

The “strawman” – to get started

The “1 pager” – for executives

Purposed Based Roadmaps

Product Based

Answers the question about future a product or technology over time

Theme Based

Answers the question of how the organization deals with a challenge

Enabler Based

Answers the question of how we get there (people, process, technology)

External Based

Answers what are we looking for, expecting to believe are accurate

SUMMARY

Trends may have us find flexibility, scalability, optimizations via relooking at buy, integrate, build and evolve.



Buy	Integrate	Build	Evolve
Solutions	Existing data and systems	Your custom reports	Plan for trends and change
Vendor technologies	Interfaces & processes	Your in-house applications	Build skills to evolve
Vendor services	Controls & diagnostics	Your differentiators	Know your win zone



If you have any additional questions or would like a further deep dive, contact Sarah Lesowski at slesowski@plexishealth.com