

# BUSINESS OF CLOUD

---

Driving Cloud Program Success

# THE BUSINESS OF CLOUD

---

In June 2019, the LMI Research Institute (LRI) funded an effort to help federal cloud programs be successful. The program consists of three parts:

1. Interview and research federal cloud programs, their stakeholders, customers, partners, and academia. Determine why federal cloud programs fail to meet their goals, and then provide education to the government detailing key tenants for a successful program and how to promote positive change.
2. Retool and leverage LMI's 60 years of IP to provide the ability to measure, validate, and track the progress of any individual cloud program, and its supportive ecosystem, against program goals.
3. If asked, be able to bring together everything from parts 1 & 2 and combine it with advanced analytics, advice, and services to provide a clear path and on-demand action to ensure a program successfully meets its goals.

Early on, it was found that the lack of a “business mentality and focus” was a key missing element in struggling federal cloud programs. The effort was then named “The Business of Cloud” in order to draw attention to and focus on this important point. This presentation outlines what we have discovered.

# MOST FEDERAL CLOUD PROGRAMS DO NOT HAVE A DEFINED GOAL

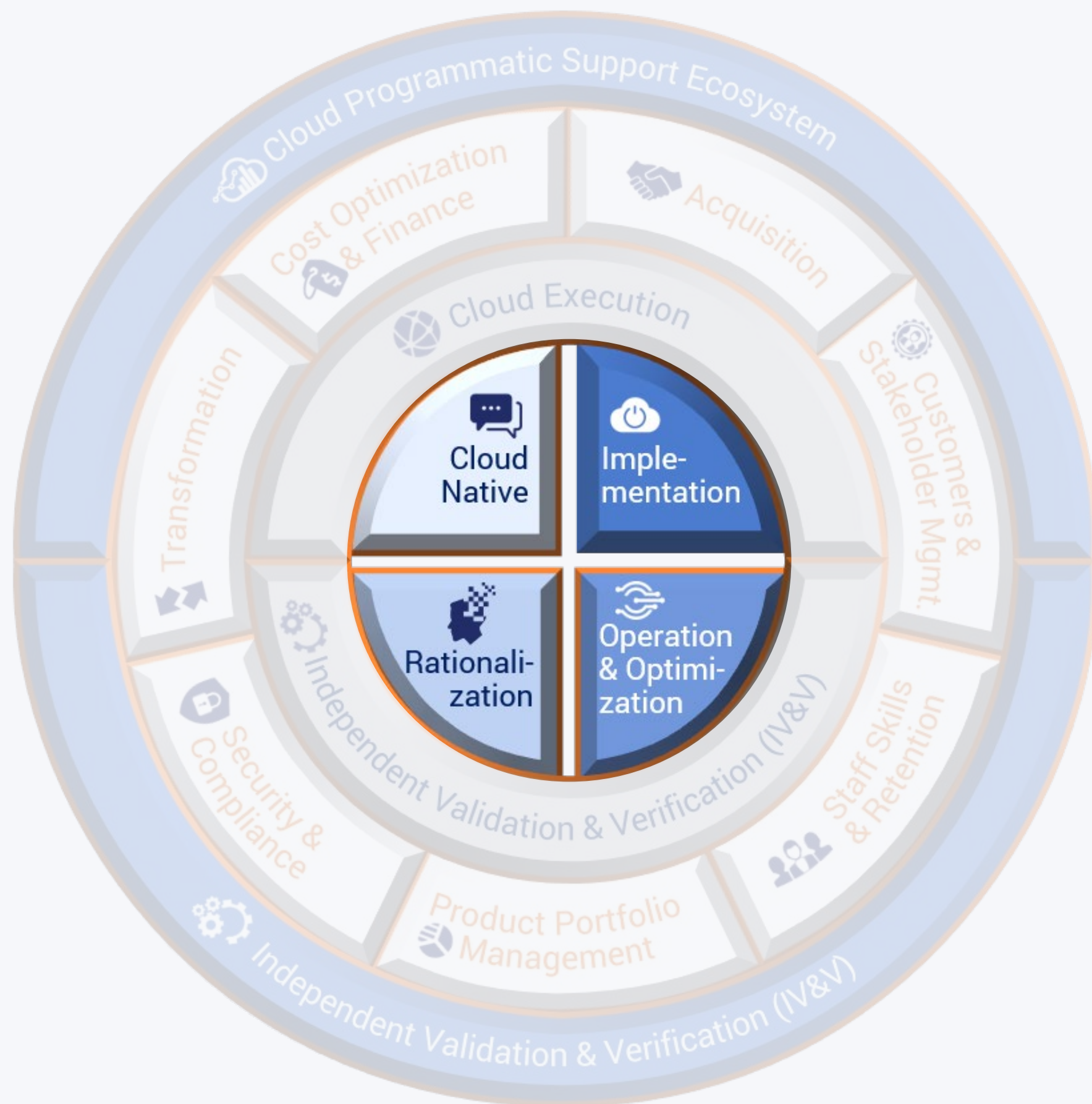


Figure 1. Cloud Program Technical Core

If asked, most federal cloud program managers say their program goal is to “get to the cloud”. This is because all agencies are mandated to adopt cloud services. When there is a mandate, any progress will check the cloud adoption box. That success does not necessarily add value to an agency.

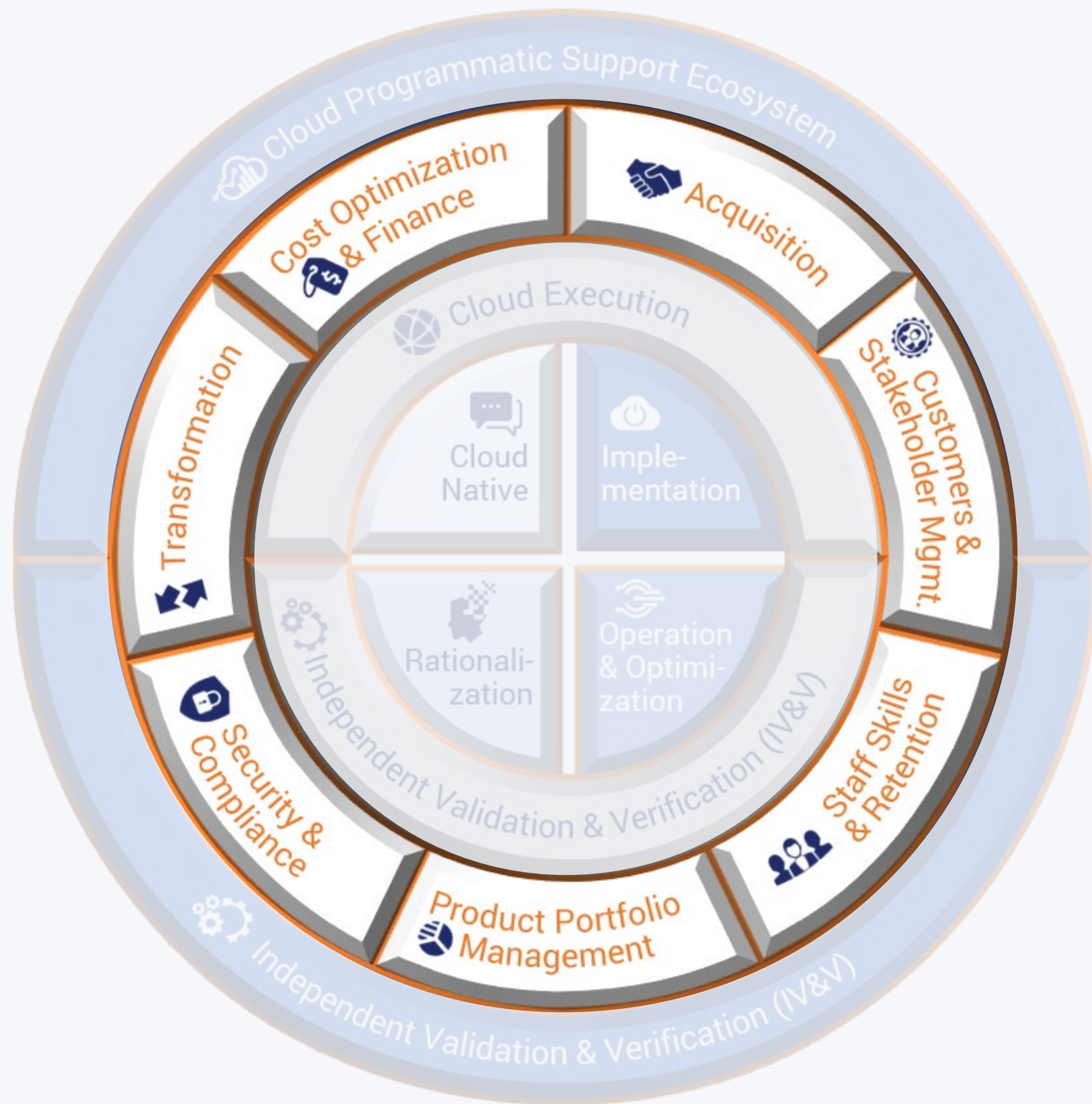
When probed further, one or more of these four high level goals will tend to emerge:

*“I hope our cloud program will”:*

1. Help ensure my services are reliable, stable, and safe.
2. Help drive the mission through flexibility, speed, and scale.
3. Help me get completely out of IT, **or** help me transform into a service provider for others.
4. Help me have clear cost transparency, move from CapEX to OpEX, and/or save my agency money.

Programs tend to start and then focus only on the technical aspects of the effort including application rationalization, migration, application design, cloud operations, etc. LMI calls this the “Technical Core” of the program. Unfortunately this is only a small part of a truly successful program.

# MANAGING ONLY THE TECHNICAL CORE WILL USUALLY LEAD TO FAILURE



Figures 2. Cloud Support Ecosystem the "Business of Cloud"

Managing the technical core is necessary, but program managers must also manage their program's support ecosystem. Program managers must understand how aspects of the ecosystem can drive or hinder their cloud program. Since these key aspects are business focused, together they comprise the "Business of Cloud":

- **Acquisition:** Contract requirements, service agreements, cost, funding, accounting, and charges incurred as the cloud is consumed.
- **Customer and Stakeholder Management:** The cloud program is comprised of services but the program is a service itself. Managers must deliver what their customers want, actively sell their program to stakeholders, and manage customer expectations.
- **Staff Skills and Retention:** The acquisition, training and retention of qualified staff can be very difficult but it is essential to the cloud program. So is managing the work culture.
- **Product Portfolio Management:** It is critical that your services fill the needs AND desires of your customers, your portfolio is regularly updated, and a visionary roadmap is maintained and communicated.
- **Security and Compliance:** Beyond meeting FedRAMP, or other security control frameworks, your program will now spread your security perimeter across you, your contractor, and your cloud service provider.
- **Transformation:** The cloud fundamentally changes the way IT is done. To get the most benefit, your way of doing IT and in fact your organization will need to transform as well.
- **Cost Optimization and Finance:** How much will it cost, will I save money, how do I get funded, how do I track and optimize my costs, and how do I train staff to consume cloud economically?

# IN ORDER TO MANAGE, YOU MUST MEASURE, VERIFY, AND VALIDATE. INDEPENDENTLY.

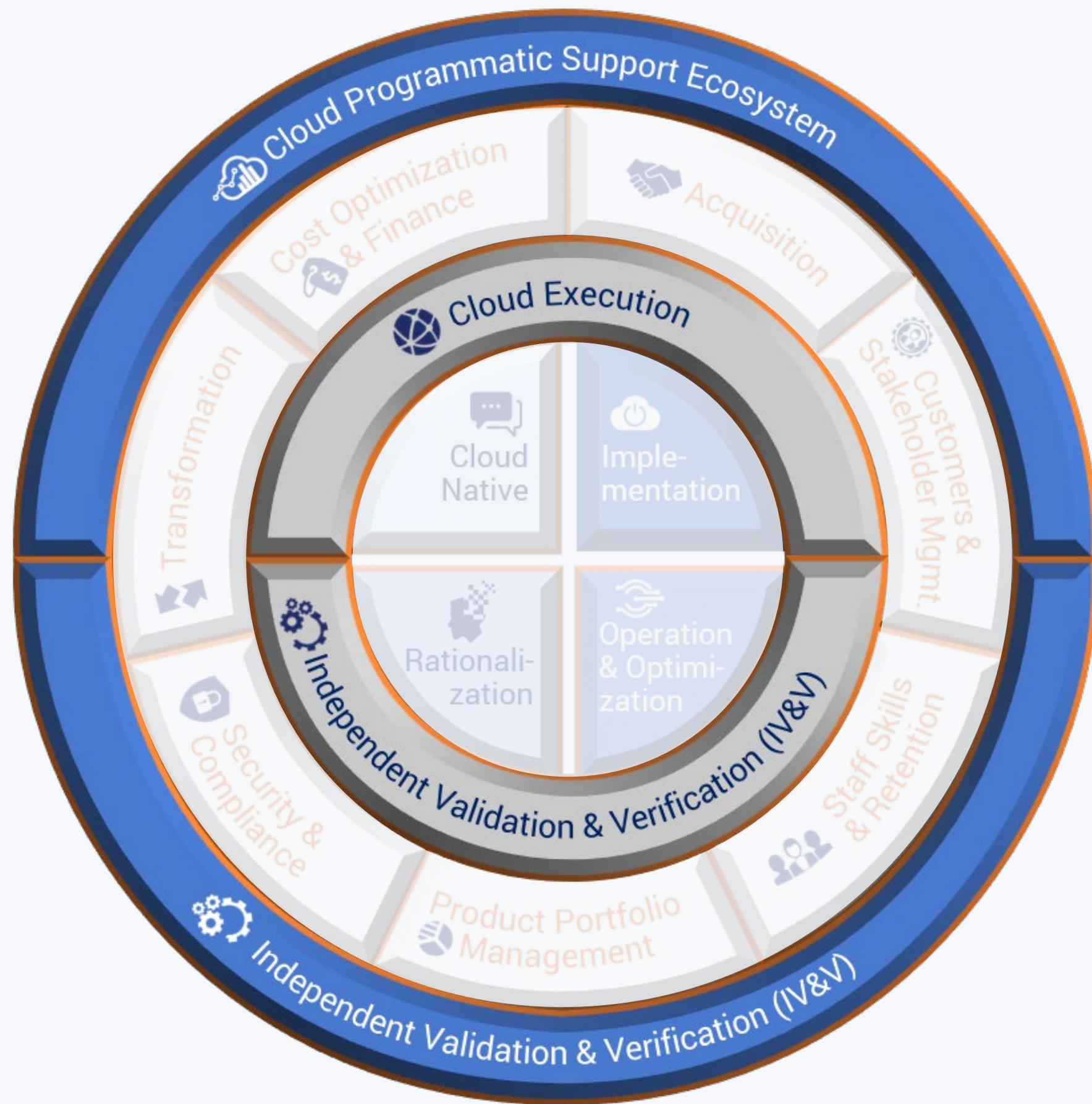


Figure 3. Cloud IV&V Rings

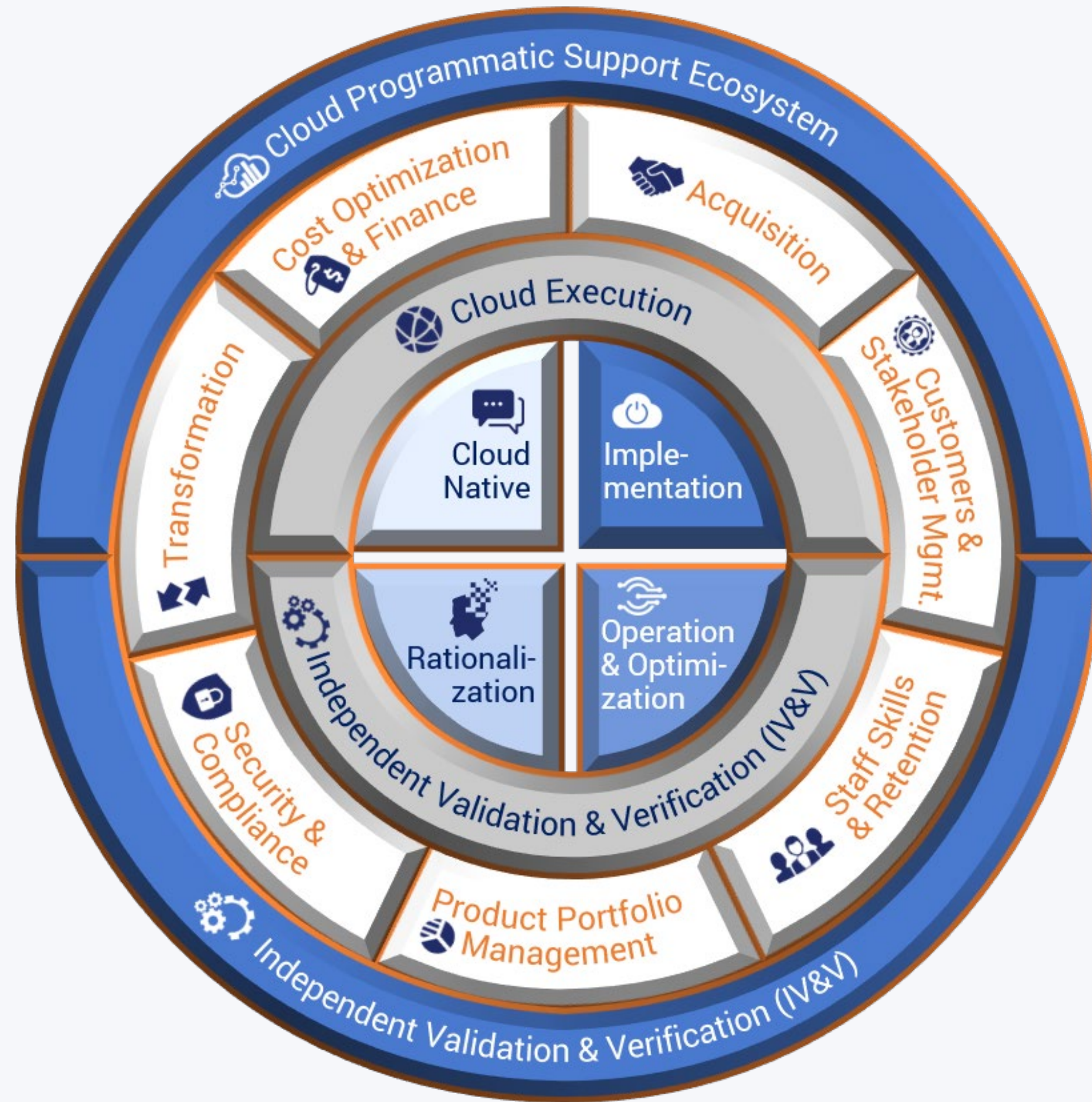
The Technical Core must function correctly. The Business of Cloud support ecosystem must provide the lifeblood of the program. In order to determine what is working and what is not, key performance indicators (KPIs) or “sensors” must be deployed across the entire program.

The sensor data must be reliable, repeatable and trustworthy. Each sensor will help measure one aspect of the program and whether it is providing what is necessary to reach the program’s goals.

The sensors for a cloud program take many forms. The sensors measuring and tracking the technical core tend to be more quantitative and the ones measuring the ecosystem more qualitative. The key is that together they measure the program’s ability to achieve the goals set forth, and identify areas where the program is seeing challenges.

Most critical, an independent verification and validation (IV&V) program, evaluating the work being done by contractors, staff, and service providers must be implemented in order to ensure processes, policies, regulations, and best practices are followed.

# IN ORDER TO BE SUCCESSFUL, AGENCIES NEED TO MANAGE THEIR WHOLE PROGRAM



- The research conducted by the LRI has shown that the Business of Cloud program ecosystem can be more important to a program's success as the technical core.
- Programs need to clearly define their goals, and what value they expect the cloud to deliver.
- Metrics or "sensors" must be deployed across the entire program in order to measure performance against the established goals.
- IV&V programs must be established to ensure work is being performed according to established processes, policies, and best practices.
- Constant training and transformation are required to optimize the value cloud computing brings to federal agencies.

# BUSINESS OF CLOUD KEY TENANTS

# OUR FINDINGS—

## What does a successful federal cloud program require?

---

- Successful cloud programs require a focused business mentality, true transformation, and a supportive ecosystem.
- The program must give customers what they need and desire in a way that is easy to consume.
- The program must clearly define the benefits it will bring to its customers, and why the customers will choose the program for services (value proposition).
- The program must work with others to provide customers a way to get a whole solution.
- A service roadmap which provides constant iterative value must be established and revised regularly.
- The program must manage the expectations of its stakeholders and customers so that they are reasonable.
- Clearly defined goals, which are designed to drive the program's value proposition, must be established and revised regularly.
- The program must have contracts which provide adequate support for all goals over the program lifecycle.
- All aspects of the ecosystem must be regularly measured against the program goals over the program lifecycle.
- Independent verification and oversight must be provided to ensure product/program compliance and to validate program trajectory compared to goals.
- Cost models, processes, and policies must be constantly optimized and transparent.
- An adequate stream of funding must be established to support goal attainment and program evolution.
- The program must transform its support ecosystem, processes, and products regularly.
- The program must evaluate personnel, train them regularly, and retain them if appropriate.
- Program value must be properly messaged to customers, partners, stakeholders, and staff on a regular basis. The program must sell and resell its value.