FPT CLOUDSUITE

Digital Suite
For
Cloudification

Table Of Content

Multi-Cloud Is Not Just Trend

The Majority Of Large Enterprises Use Multiple Clouds

Enterprise Cloud Strategy
1000+ Employees

- **84% |** Multi-Cloud
- **10% |** Single public
- **3% |** Single private
- **3% |** No plants

- **58% |** Hybrid Cloud
- **17% |** Multi public
- **9% |** Multiple private
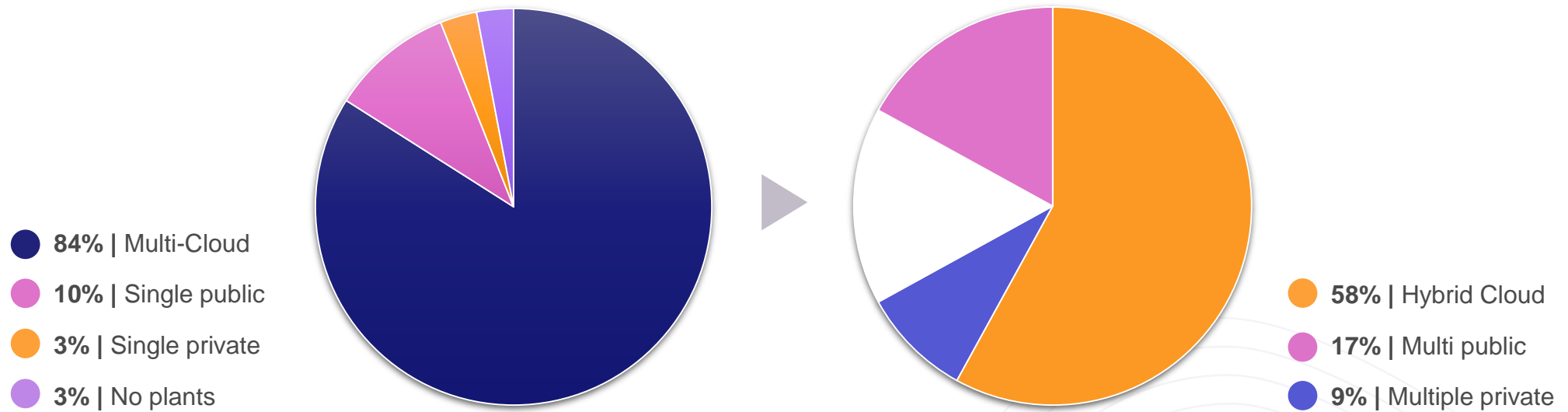
Top 5 Challenges to Public Cloud

*IDG 2020 Cloud Computing Study

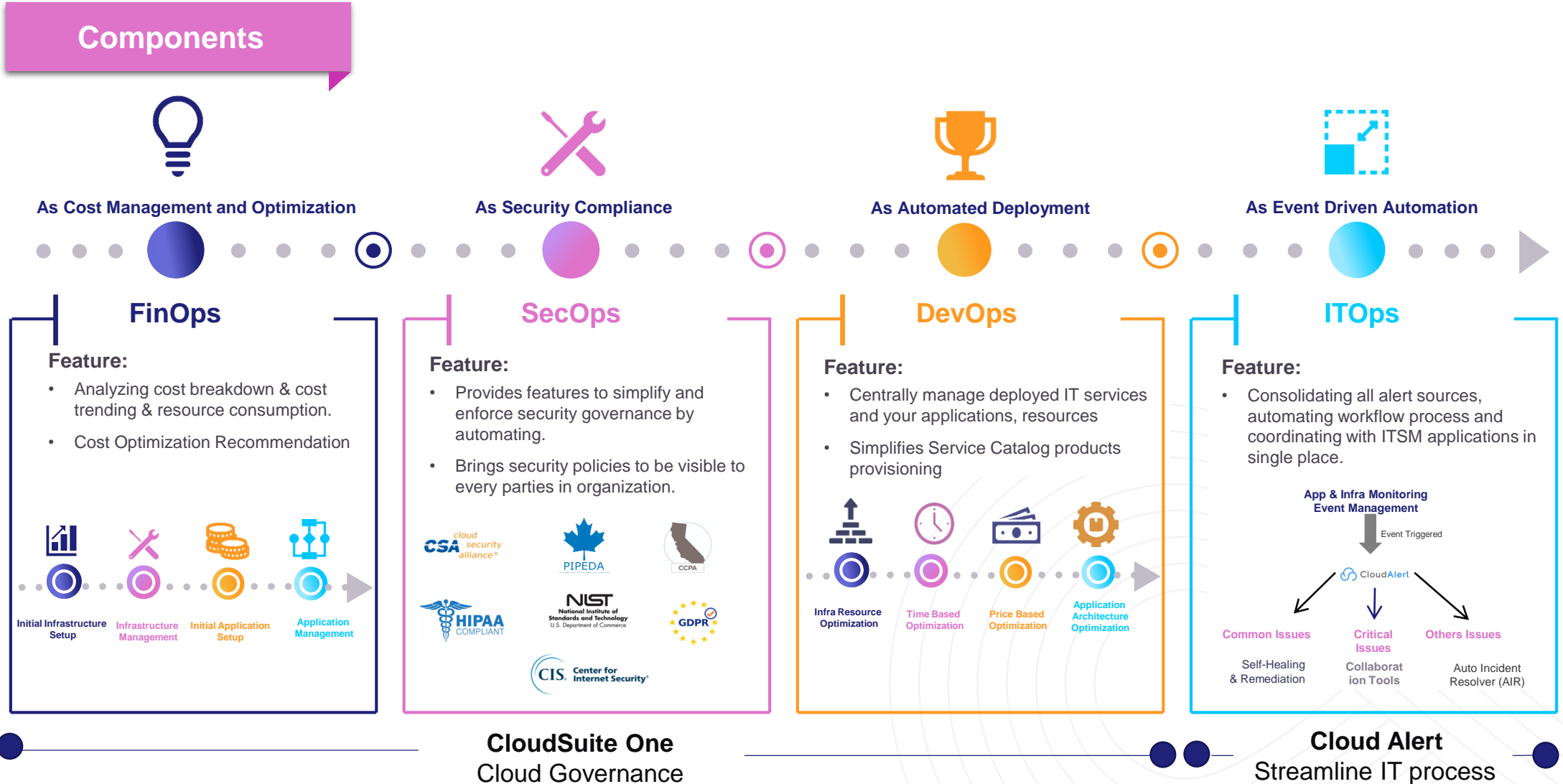| 40%	38%	31%	30%	30%
Controlling **Cloud costs**	Data privacy and **security challenges**	Securing **protecting cloud resources**	**Governance**/compliance	Lack of cloud **security skills/ expertise**
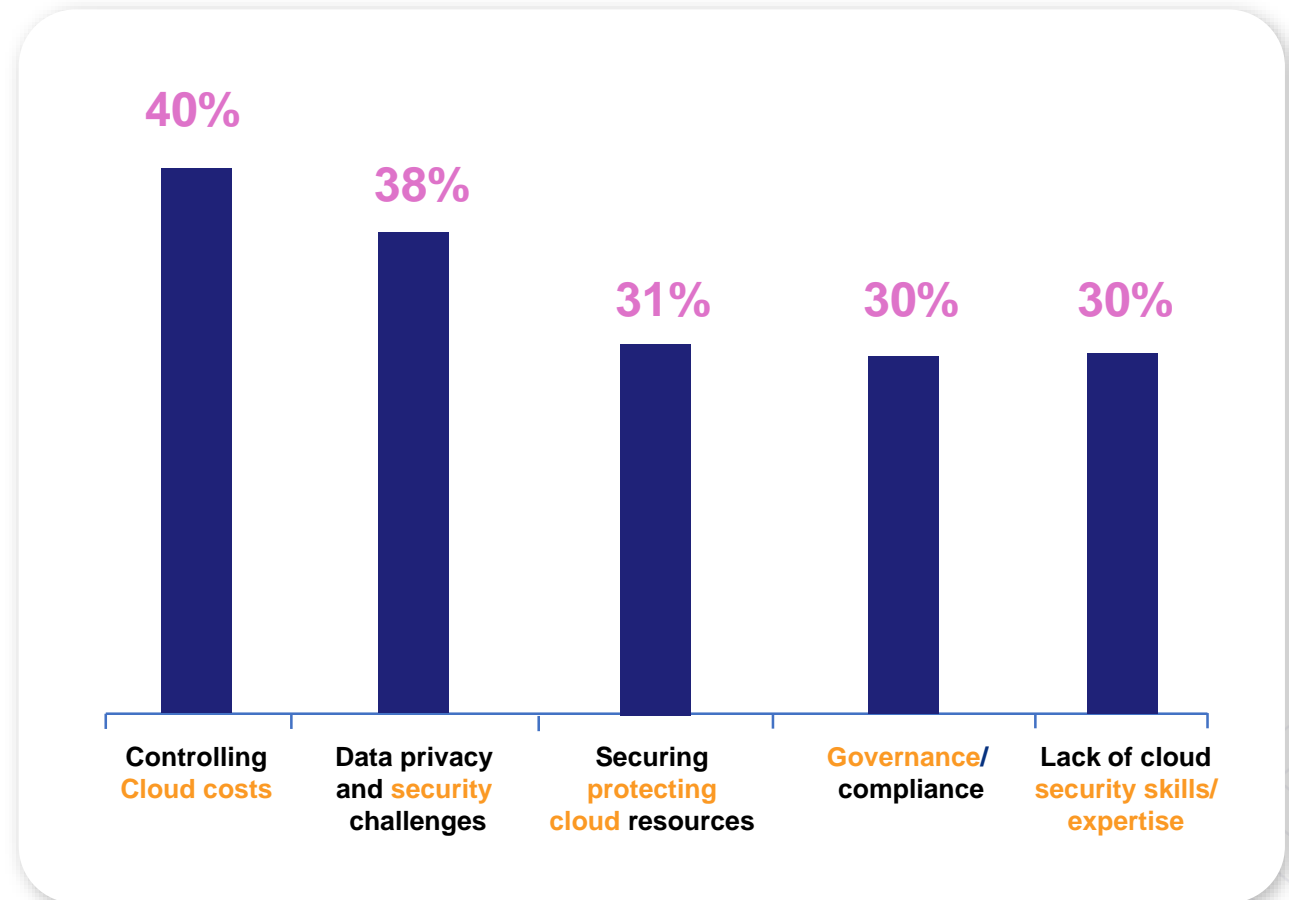
FPT Cloudsuite Overview

CloudSuite – More than just CMP

Cloud Suite is the set of solutions that enables organizations to **operate, optimize & automate** their **multi-cloud** environment to achieve the best efficiency in cloud operation.

Components

As Cost Management and Optimization

FinOps

Feature:
- Analyzing cost breakdown & cost trending & resource consumption.
- Cost Optimization Recommendation

Initial Infrastructure Setup
Infrastructure Management
Initial Application Setup
Application Management

As Security Compliance

SecOps

Feature:
- Provides features to simplify and enforce security governance by automating.
- Brings security policies to be visible to every parties in organization.

CSA cloud security alliance®
PIPEDA
CCPA
HIPAA COMPLIANT
NIST National Institute of Standards and Technology U.S. Department of Commerce
GDPR
CIS. Center for Internet Security®

As Automated Deployment

DevOps

Feature:
- Centrally manage deployed IT services and your applications, resources
- Simplifies Service Catalog products provisioning

Infra Resource Optimization
Time Based Optimization
Price Based Optimization
Application Architecture Optimization

As Event Driven Automation

ITOps

Feature:
- Consolidating all alert sources, automating workflow process and coordinating with ITSM applications in single place.

App & Infra Monitoring Event Management

Event Triggered

CloudAlert

Common Issues | Critical Issues | Others Issues
Self-Healing & Remediation | Collaboration Tools | Auto Incident Resolver (AIR)

CloudSuite One
Cloud Governance

Cloud Alert
Streamline IT process
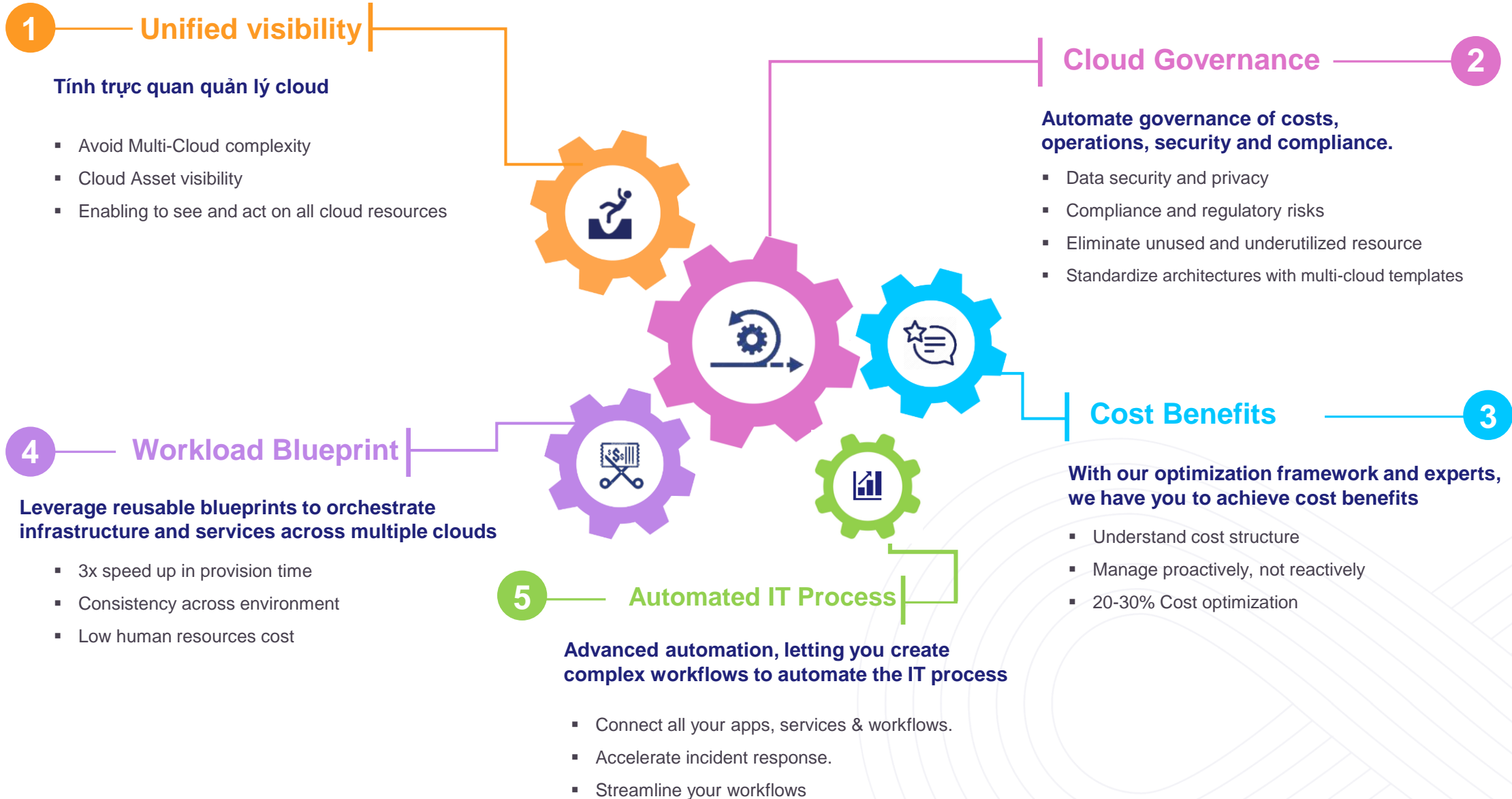
Cloud Product – Features

A successful cloud journey starts well before a cloud platform vendor is selected. It begins when business and IT decision makers realize that the cloud can accelerate a specific business transformation objective.

Features

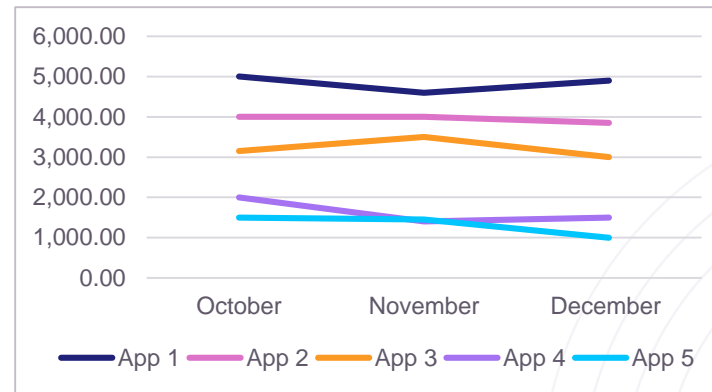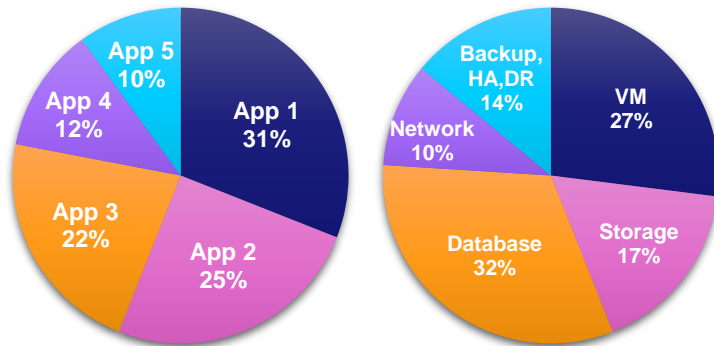| Inventory	FinOps	SecOps	DevOps	ITOps (Alert)
Resource Management Category & Classification Resource Change (Drift Detection) Resource Filter Resource Detail AWS, Azure, GCP	**Cost Management** Dashboard Cost Allocation Trending & Forecast Budget & Alert Billing Report **Cost Optimization** Policy & Recommendation Reserved Instance **Tag compliance** Tag policy **Vendor** AWS, Azure, GCP	**Security Compliance** Build-in compliances (10+) Built-in security policies (450+) Inventory dashboard Violated resource detection Resource detail Recommendation Investigate by RQL **Report** By cloud resource By security standard **Vendor** AWS, Azure, GCP	**Service Catalog** Create, manage & deploy template Support dynamic template Support script installation AWS Cloud Formation Azure Resource Manager Terrafrom **Resource Control** View VM status Start / Stop/ Reboot VM Scheduling control AWS, Azure	**Event source** Raw event message CSV Mapping field **Rule engine** Define by criteria **Action** Action logs Email, MS Team, Slack ServiceNow, PagerDuty Runbook **Vendors** AWS, Azure, GCP DataDog, Nagios, Zabbix

(Resource)   (Expense)   (Safe)   (Ops)   (Alert)

Values We Can Bring

CloudSuite **FPT**

① **Unified visibility**

Tính trực quan quản lý cloud

- Avoid Multi-Cloud complexity
- Cloud Asset visibility
- Enabling to see and act on all cloud resources

Cloud Governance **②**

Automate governance of costs, operations, security and compliance.

- Data security and privacy
- Compliance and regulatory risks
- Eliminate unused and underutilized resource
- Standardize architectures with multi-cloud templates

Cost Benefits **③**

With our optimization framework and experts, we have you to achieve cost benefits

- Understand cost structure
- Manage proactively, not reactively
- 20-30% Cost optimization

④ **Workload Blueprint**

Leverage reusable blueprints to orchestrate infrastructure and services across multiple clouds

- 3x speed up in provision time
- Consistency across environment
- Low human resources cost

⑤ **Automated IT Process**

Advanced automation, letting you create complex workflows to automate the IT process

- Connect all your apps, services & workflows.
- Accelerate incident response.
- Streamline your workflows

8

Unique selling points

- ✓ **All-in-one solution:** 4xOps in the real world (FinOps, SecOps, DevOps, ITOps)

- ✓ **Comprehensive solution & service in cloud operation:** More than the tool sets, we provide the methodologies and implementation to help the customer overcome the challenges.

- ✓ **Flexible pricing:** Offer the competitive pricing compared to the other vendor

- ✓ **Easy customization:** support customers to personalize a product according to their needs and preferences.

FinOPs

SecOps — Cloud CoE — DevOps

ITOps
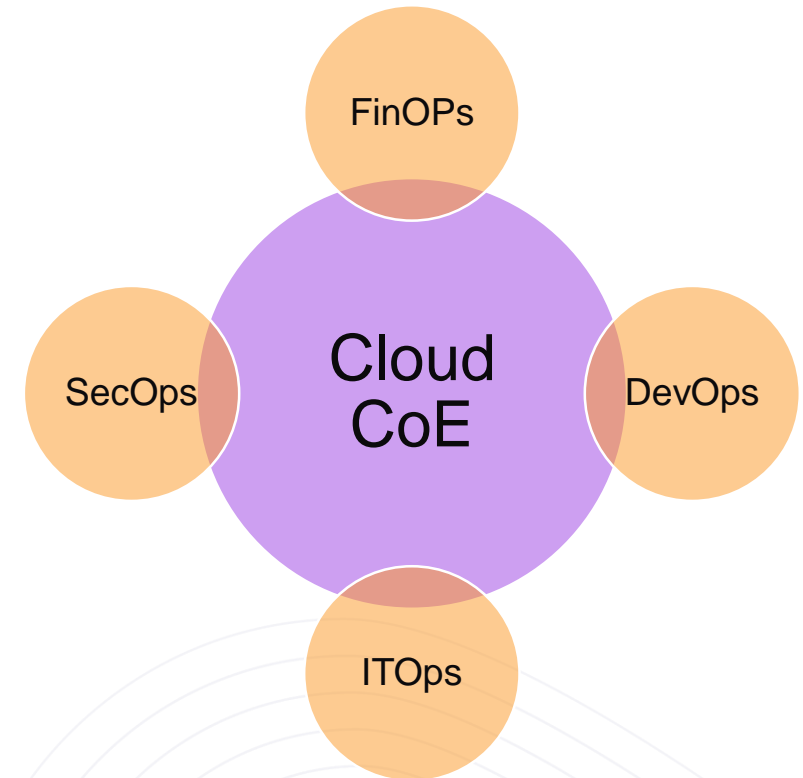
FPT Cloudsuite Components

FinOps - Cost Management & Optimization

- Analyze cost breakdown & cost trending
- Analyze resource consumption

Cost Optimization Lifecycle

- Cost Optimization Recommendation
- Best Practices & Guidelines

Infra Resource Optimization

Time Based Optimization

Price Based Optimization

Application Architecture Optimization

App 5 10%
App 1 31%
App 4 12%
App 3 22%
App 2 25%

Backup, HA,DR 14%
VM 27%
Network 10%
Database 32%
Storage 17%

- Analyze cost breakdown reports to select critical components need to optimize

- Analyze cost trending to detect the anomalies

- Analyze resource consumption to optimize components

SecOps – Security Compliance

Cloud SAFE provides features to simplify and enforce security governance by automating and bring security policies to be visible to every parties in organization.
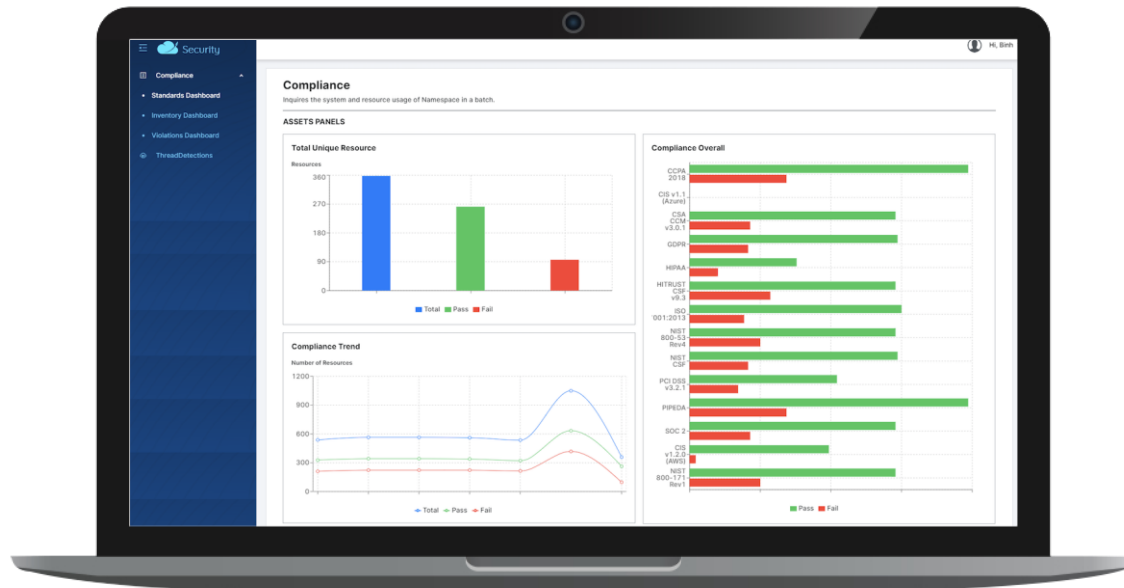
Compliance	Policies	Coverage
AWS Foundational Security	133	
HIPPA	56	
CCPA 2018	247	
NIST	280	
CSA	101	**100%** for Azure & AWS & GCP
CCPA	247	
GDPR	84	
PIPEDA	246	
CIS	144	

DevOps – Resource Control & Service Catalog

Resource Scheduling

Resource Control

Automation

Resource Management

Service Catalog

DevOps – Automated Deployment
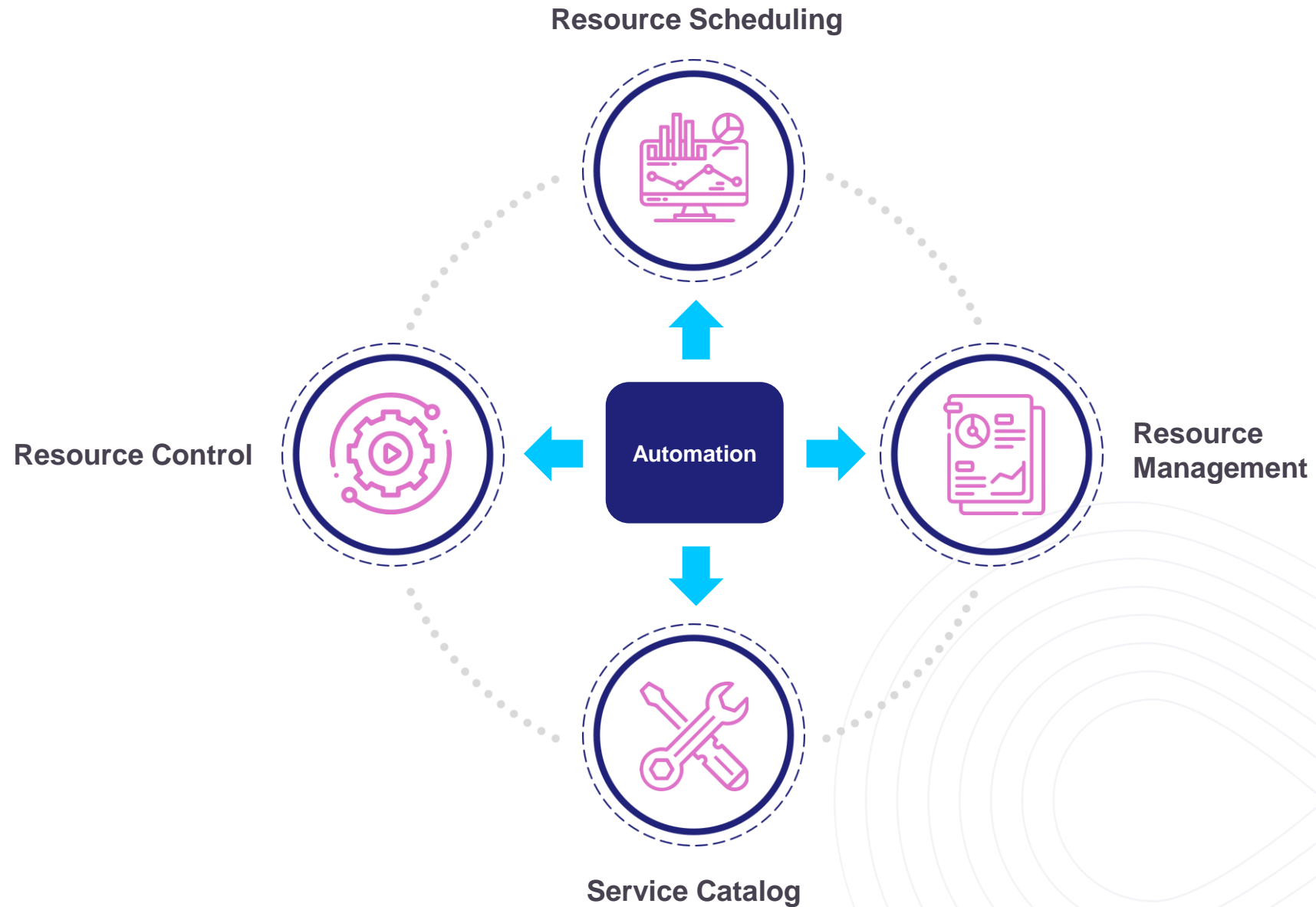
Manually setup & deployment
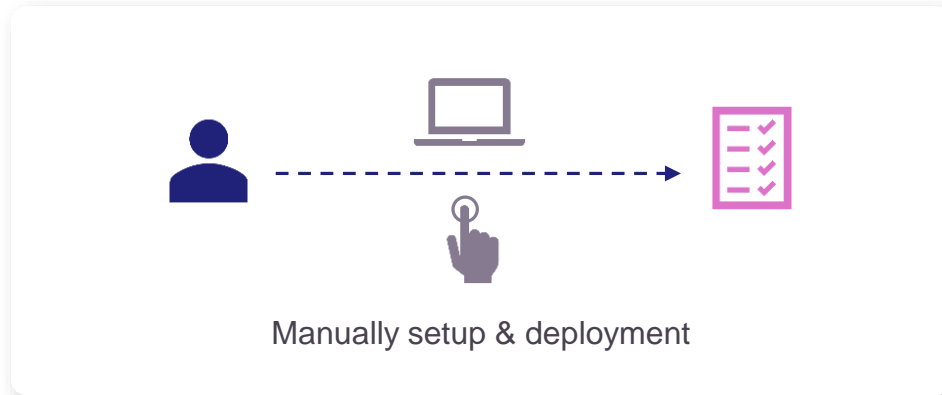
- Setup servers
- Configure networking
- Create route tables
- Install software
- Configure software
- Install database
- Deploy applications/services
- Manage applications/services

Servers

Initial Infrastructure Setup

Infrastructure Management

Initial Application Setup

Applications Management

Manual Drawbacks
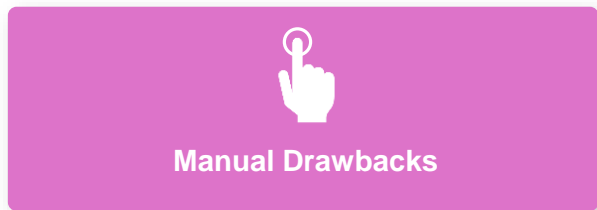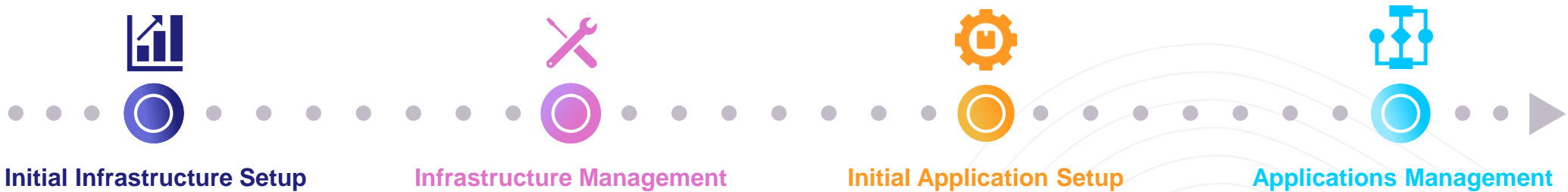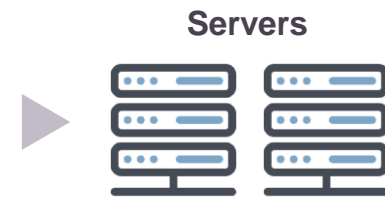
- ✓ Consistency across environment
- ✓ Unreliability
- ✓ Hard to audit

- ✓ Low human resources cost
- ✓ Less effort and time
- ✓ Less human errors possible

ITOps - Event Driven Automation
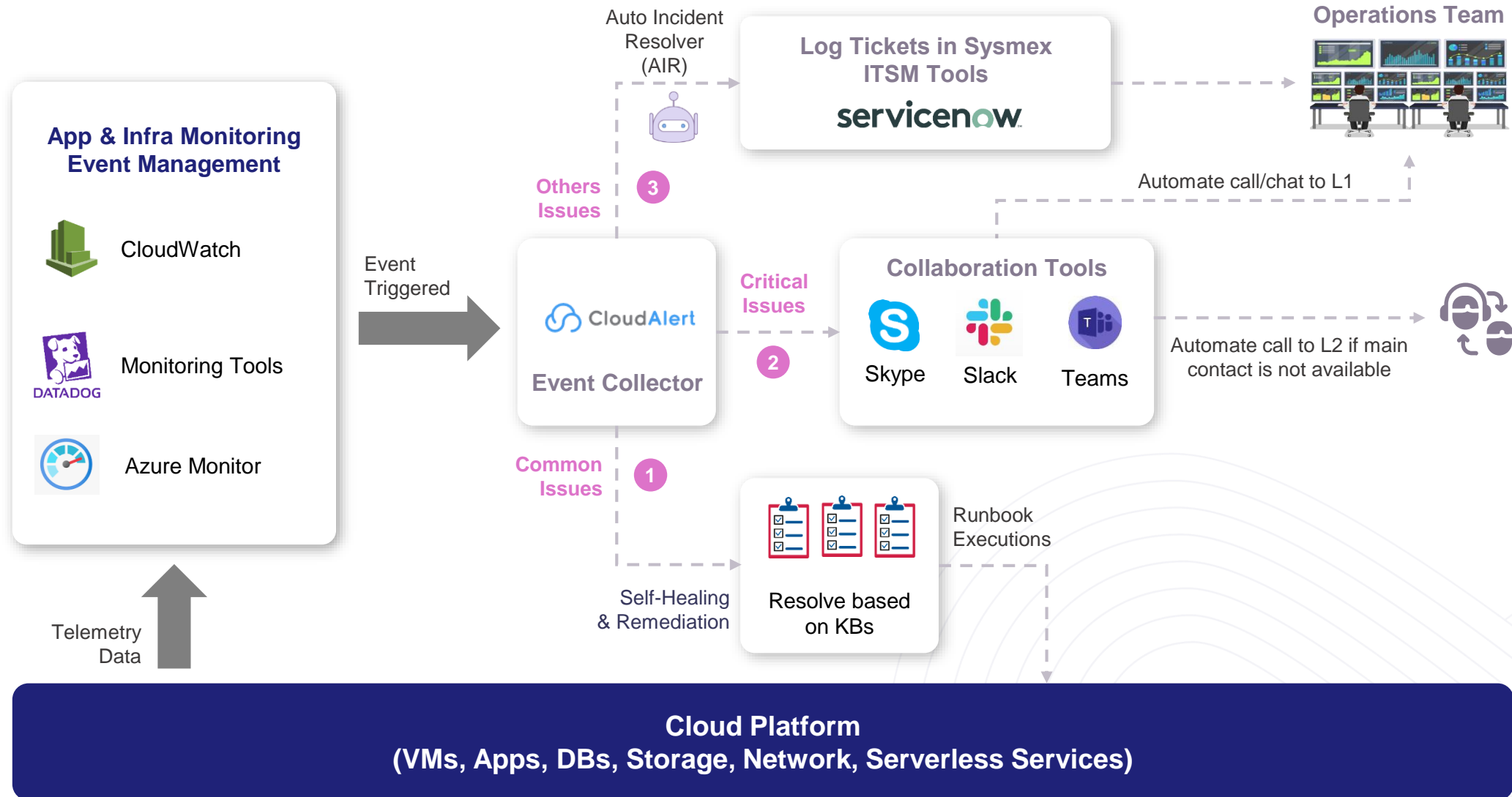
App & Infra Monitoring Event Management

- CloudWatch
- Monitoring Tools (DATADOG)
- Azure Monitor

Telemetry Data

Event Triggered

CloudAlert
Event Collector

Others Issues ③

Critical Issues ②

Common Issues ①

Auto Incident Resolver (AIR)

Log Tickets in Sysmex ITSM Tools
servicenow

Operations Team

Automate call/chat to L1

Collaboration Tools
- Skype
- Slack
- Teams

Automate call to L2 if main contact is not available

Self-Healing & Remediation

Resolve based on KBs

Runbook Executions

**Cloud Platform
(VMs, Apps, DBs, Storage, Network, Serverless Services)**

Awards

Honors & Awards

2022 Globee Awards

2022 Asia-Pacific Stevie Awards
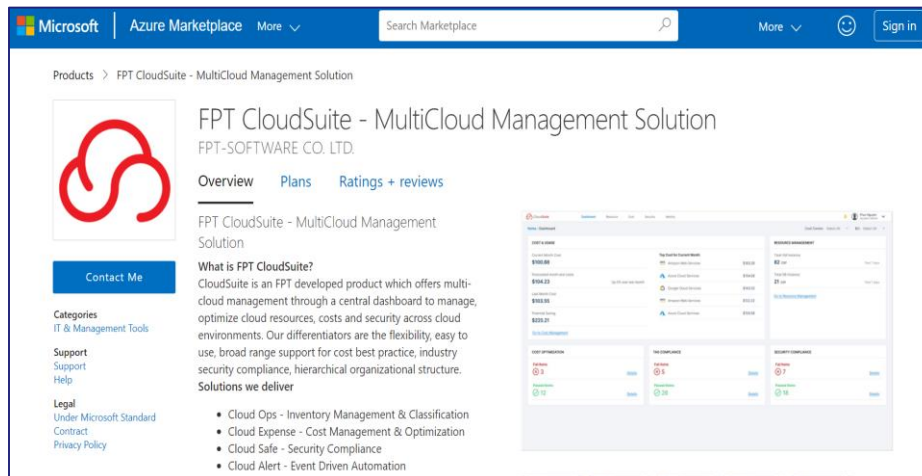
Azure marketplace

Sao Khue 2022

Success Stories

Success Story: Cloud Management Platform

CloudSuite **FPT**

Our Customer

South Korea's corporation

$100B+
USD Revenue

10K+
Customers Served

60,000+
Employees

B BUSSINESS NEEDS

The client wants to build up the managed service which has the main features as below:

- User can manage or monitoring and review resources status as visualize data from Multi Cloud services and Hybrid
- Grants you the ability to classify resources according to the required criteria such as cloud account, service, region
- Accounts, access & authority to use resources are managed from cell level of organization
- Easier to integrate with other system as Monitoring suite (Grafana, Prometheus…), Incidents Management applications.

C TECHNICAL CHALLENGES

04	**100+**	**500**
Cloud Vendors (AWS, Azure, GCP, IBM)	Asset & Resource	Metrics for managing cloud services on multi-cloud environment

S SERVICES & SOLUTIONS

Build up the web based application as Cloud Management Platform (CMP)

- Provide the collector to get information periodically from the Cloud vendors
- Analytics & Aggregation data algorithm to offer consistency across environments

R RESULTS & IMPACTS

- **Operation Efficiently:** offers CMP for user to manage resource across MultiCloud environments. Centralized Management on single management place.
- **Cost Optimization:** reduce 25% cost spending, 30% human effort
- **Data Security Level Improved:** Reduce complexity and Optimizing Operational Efficiency
- **User Management:** Accounts, access & authority to use resources are managed from cell level of organization

Success Story: Hybrid Cloud Management

Company Stats

🏛️ **Global IT service**

💰 **$3B+**
USD Revenue

👥 **1000+**
Agents

👥 **10,000+**
Employees

B BUSSINESS NEEDS

- Manage & control the large number of virtual machines on VMware ecosystem
- Expensive license when using third party software solution
- Self-service, multi-tenant support, easy to customize
- Capable of extending to support AWS, Azure

S SERVICES & SOLUTIONS

- Build up the V2MP to support resource management VMware and capable of extending to the other Public Cloud vendor (e.g. AWS, Azure)

- Apart from that the system allows other services be able to integrate with through REST API

Support the main features:
- Compute Management
- Storage Management
- Network Management
- Performance & Usage
- Service Catalog Management

R RESULTS & IMPACTS

- Saving 30% licensing cost
- Unlock single-pane-of-glass visibility of customer's hybrid cloud environment

- Centralized monitoring resource, performance & usage
- Optimized spend and usage
- Easy to integrate with the ITSM system

Success Story: Event Driven Automation

CloudSuite | **FPT**

Our Customer

FPT Software (in-house development & commercial product)
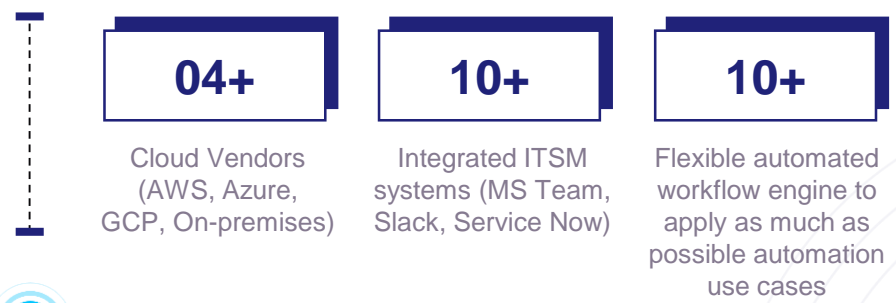
$800M+
USD Revenue

10K+
Customers Served

30,000+
Employees

B BUSSINESS NEEDS

The client is maintaining the complex application with multiple integrated components from Monitoring to ITSM system. They want to build up the application which is used to solve our the following problem:

- Collaborative platform that enables technical and non-technical users to build internal tools/workflows faster together.
- Generate tickets, groups alerts, filters out the noise, and notifies you using multiple channels.
- Providing the necessary information for your team to immediately begin resolution.
- Leverage operators to respond to critical issues before they impact your business by automated workflows
- Easier to integrate with other system as Incidents Management (Service Now), collaboration tools (MS Team, Slack), automation tools as Airflow, Pager Duty.

C TECHNICAL CHALLENGES

04+	**10+**	**10+**
Cloud Vendors (AWS, Azure, GCP, On-premises)	Integrated ITSM systems (MS Team, Slack, Service Now)	Flexible automated workflow engine to apply as much as possible automation use cases

S SERVICES & SOLUTIONS

Build up the event driven automation solution:

- Adapt to microservice architecture
- Design rule engine as the core component to ingest, match criteria and route message
- Apply & leverage Airflow as Runbook engine
- Adapter to integrate with 3rd ITSM system

R RESULTS & IMPACTS

- **Operation Efficiently:** Modern incident management for operating always-on services, quickly response time
- **Cost Optimization:** reduce 20% human effort, improve the productivity
- **Leverage automated strategy:** Harness the alert intelligence and custom playbooks.

Contact Us

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Thank You!