Agenda

About STPI

SOFTWARE TECHNOLOGY PARKS OF INDIA

Established in 1991, as an autonomous society under the Ministry of Electronics & Information Technology, Government of India, with the objective of encouraging, promoting and boosting the software exports from India.

SERVICES PROVIDED BY STPI

- Statutory Services - STP/EHTP Scheme
- Incubation Services
- High Speed Data Communication Services
- Startup Promotional Services
  - Centres of Entrepreneurship (CoEs)
  - Next Generation Incubation Scheme (NGIS)
- Project Management & Consultancy Services

- Data Centre Services
- Security Operations Centre Services
  - Vulnerable Assessment and Penetration Testing (VAPT)
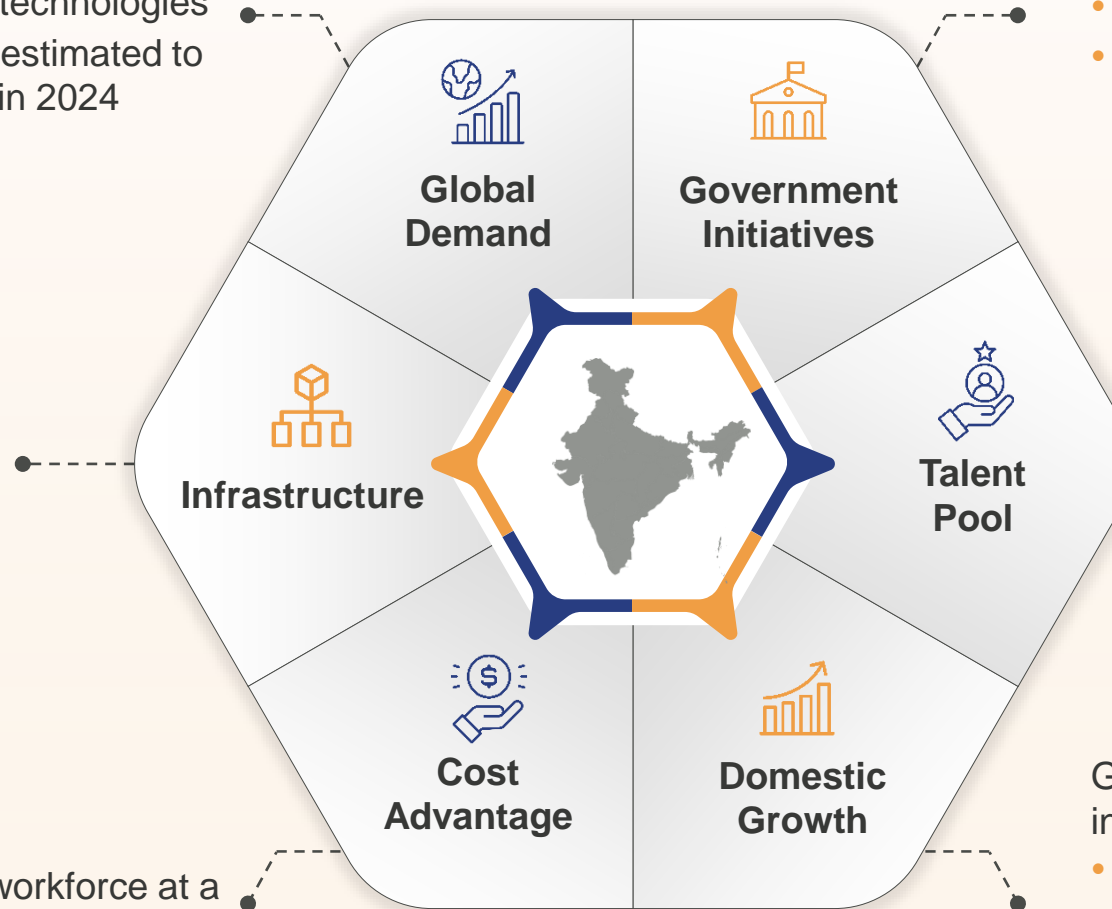- BPO Promotion Scheme
- EMC 2.0 Scheme

India's Growth Drivers

- Increasing demand for IT services due to emerging/new technologies
- Global IT spending is estimated to reach US$ 5.0 trillion in 2024

- Digital India Initiative
- GI Cloud (MeghRaj)
- Data Centre Policies of various states

Global Demand

Government Initiatives

Infrastructure

Talent Pool

Cost Advantage

Domestic Growth

- Robust Fiber Network
- Hyperscale Data Centers

- ~5.0 million skilled workforce

- Skilled & talented workforce at a competitive cost as compared to US & Europe

Growing domestic market due to initiatives such as:
- Smart Cities
- E-Delivery of Citizen services etc.

Reasons for Pursuing Cloud Services

| | 0% | 20% | 40% | 60% | 80% |

The business requires more flexibility while still maintaining optimal IT operations — **74%**

Need to tactically address bursting — **67%**

Need to shift from CapEx to OpEx — **53%**

Lack of expertise in area to manage ourselves — **49%**

Not enough staff to maintain services ourselves — **47%**

We would not pursue an as a service (aaS) offering — **3%**

Note(s): Worldwide; February, March and April 2021; 1,000 respondents; ITDMs*

Source(s): Dell; Vanson Bourne; ID 1264829

Global reasons for pursuing Cloud Service

Top Reasons are

The business requires more flexibility

Resiliency and optimal IT operations

Scale on demand

CapEx to OpEx

Why India Inc. taking the Cloud Seriously

78% of Indian enterprises already have more than **30%** of their data hosted on the cloud

58% of Indian enterprises are moving new workloads focused on modernisation and transformation to the cloud

36% of Indian enterprises' IT infrastructure spend is for the cloud

Modernisation and Business Growth are the single largest reasons for enterprise cloud adoption in India

Indian cloud market expected to grow at CAGR of **22.9%** till 2027

Indian cloud market projected to cross **USD 17.8 billion** by 2027

Cloud may account for **8%** of India's **GDP** by 2026 – up to **USD 380 billion**

Cloud expected to create **14 million** jobs in India

EY, IDC, World Economic Forum

Cloud Roadmap: Embracing the Future

•Hybrid and Multi-Cloud Environments	• Organizations will increasingly adopt hybrid and multi-cloud strategies, leveraging the best of different cloud providers for specific needs.
Focus on Security and Compliance	• Cloud security will remain paramount, with advanced threat detection, zero-trust architectures and compliance regulations becoming central to cloud adoption.
Rise of Serverless Computing	• Serverless architectures will gain traction, offering scalability, cost-efficiency, and simplified application development.
Artificial Intelligence and Machine Learning (AI/ML) Integration	• Cloud platforms will seamlessly integrate AI/ML functionalities, enabling advanced data analytics and intelligent automation.
Edge Computing	• Edge computing will become crucial for real-time processing and analysis of data generated at the network's edge.

ananta
STPI CLOUD SERVICES

Cloud Roadmap: Embracing the Future

•Sustainability in Cloud Computing

- As awareness of environmental impact increases, green cloud computing will become a priority. Future cloud platforms will likely focus on improving energy efficiency and reducing carbon footprints.

Regulations and Data Sovereignty

- Regulations regarding data privacy, sovereignty, and security will be more stringent. This will likely lead to more localized cloud services, adhering to specific regional regulations and requirements.

Security and Privacy Enhancements

- There will be a stronger focus on enhancing security and privacy measures. This may include advancements in encryption techniques, improved identity and access management, and better tools for monitoring and mitigating security threats.

Interoperability and Standardization

- There will be a push for greater interoperability and standardization among different cloud platforms. This could lead to more seamless integration between services from different providers and improved data portability.

The Future is Hybrid and Multi-Cloud

GCC/ Private Cloud

Public Cloud

Multi- Cloud

Hybrid Cloud

End-to-End Best Application Experience

Application Adaptive Infrastructure

Application First Security
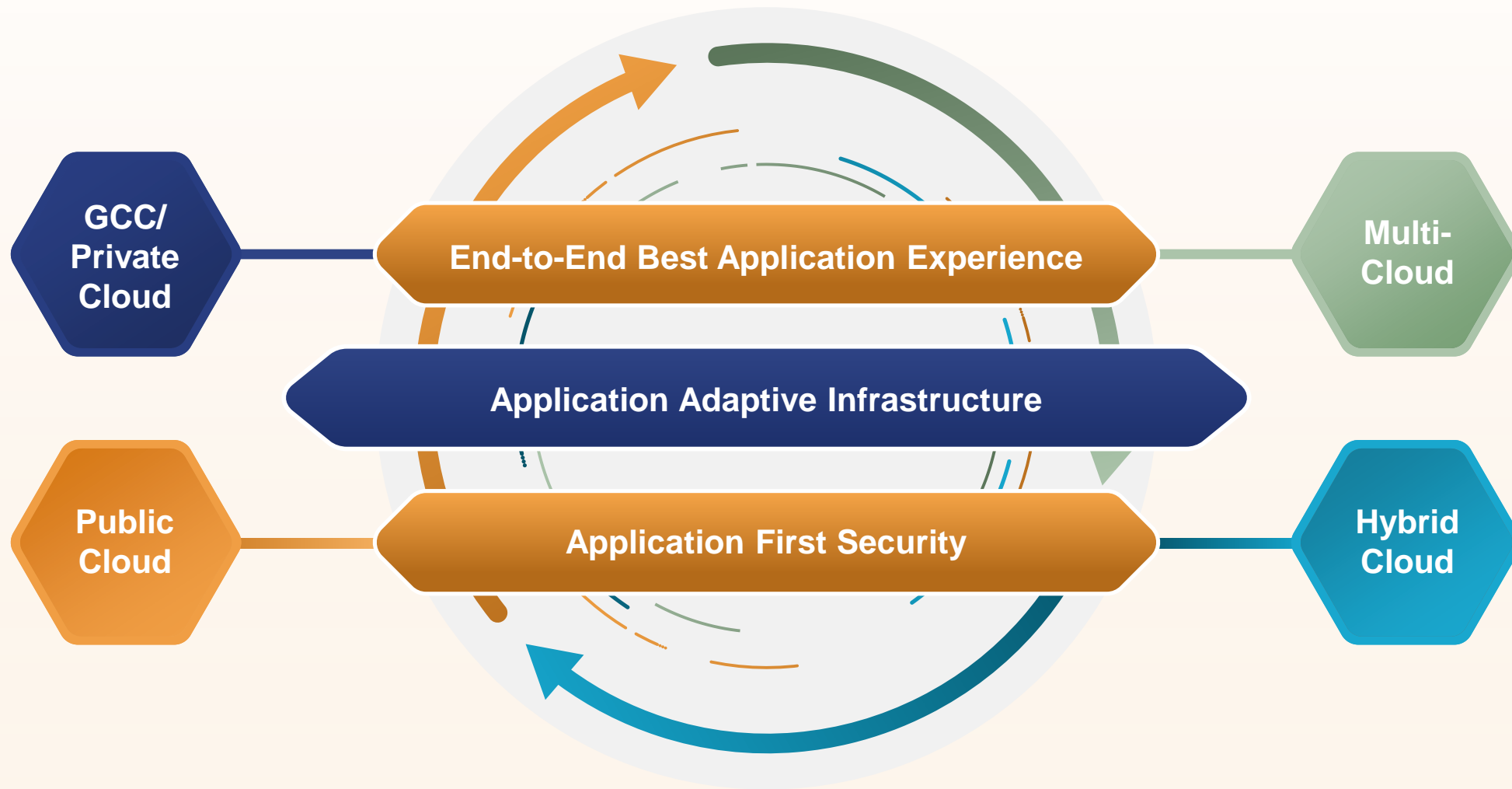
Hybrid Cloud Market

Market was valued at
$96.7 Billion
2023

Projected to reach
$414.1 Billion
2032

Growing at a CAGR
17.2% From
2024-2032

CAGR 17.2%

2024 2025 2026 2027 2028 2029 2030 2031 2032

ananta
STPI CLOUD SERVICES

Hybrid Cloud Market

D **DRIVERS**
- Growing demand for agile, scalable, and cost-efficient computing
- Rising need for interoperability between cloud services and existing systems
- Increasing demand to avoid vendor lock-in
- Growth in digital services and their application

R **RESTRAINTS**
- Lack of awareness about privacy and data protection
- Lack of technical expertise

O **OPPORTUNITIES**
- Growing need for more computational power
- Rapidly increasing adoption rate of hybrid cloud

C **CHALLENGES**
- Secured integration of cloud and on-premises application workloads
- Workload complexities in hybrid cloud environment

Source: MarketsandMarkets

Advantages of Hybrid and Multi-Cloud Solutions

Flexibility

Hybrid and multi-cloud solutions offer greater flexibility compared to traditional on-premises IT infrastructure. They allow organizations to choose the best cloud environment for each workload, and to move workloads between clouds as needed.

Scalability

Hybrid and multi-cloud solutions offer greater scalability compared to traditional on-premises IT infrastructure. They allow organizations to quickly scale up or down based on changing business needs.
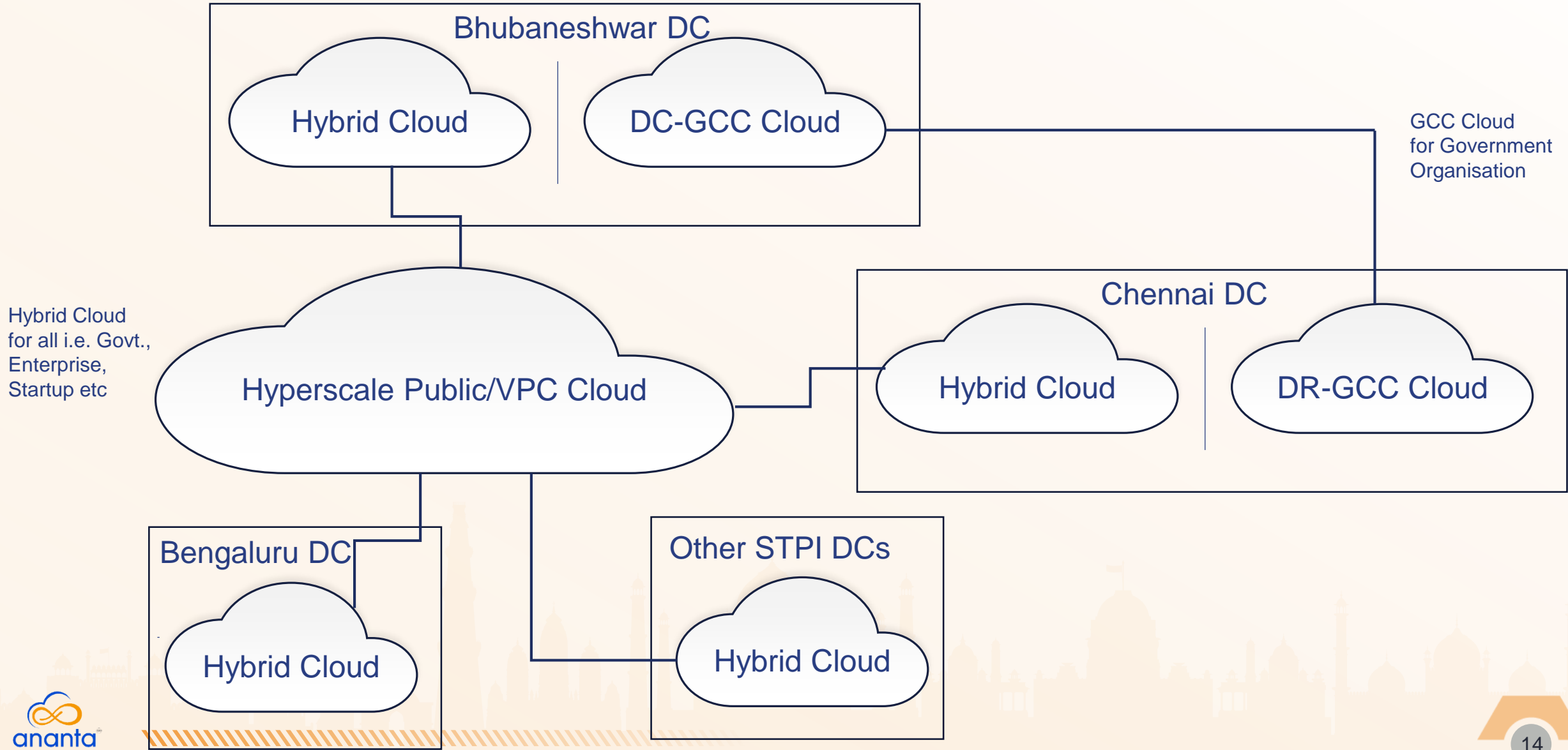
Cost Savings

Hybrid and multi-cloud solutions offer cost savings compared to traditional on-premises IT infrastructure. They reduce the need for organizations to invest in expensive on-site hardware and maintenance.

Ananta Cloud

"**Ananta** is a sovereign and trusted cloud that enables and empowers your organisation to address your current and future business challenges while achieving higher performance and competitive advantage through cloud services. It delivers you the freedom to build, manage, and deploy applications on demand as well as incubate innovations and promote entrepreneurship"

High-Level View of Ananta Cloud

Bhubaneshwar DC

Hybrid Cloud

DC-GCC Cloud

GCC Cloud for Government Organisation

Hybrid Cloud for all i.e. Govt., Enterprise, Startup etc

Hyperscale Public/VPC Cloud

Chennai DC

Hybrid Cloud

DR-GCC Cloud

Bengaluru DC

Hybrid Cloud

Other STPI DCs

Hybrid Cloud

Ananta-Sovereign Cloud

What is a Sovereign Cloud?

Operated by a Sovereign entity

Only national state has jurisdictional control of Data
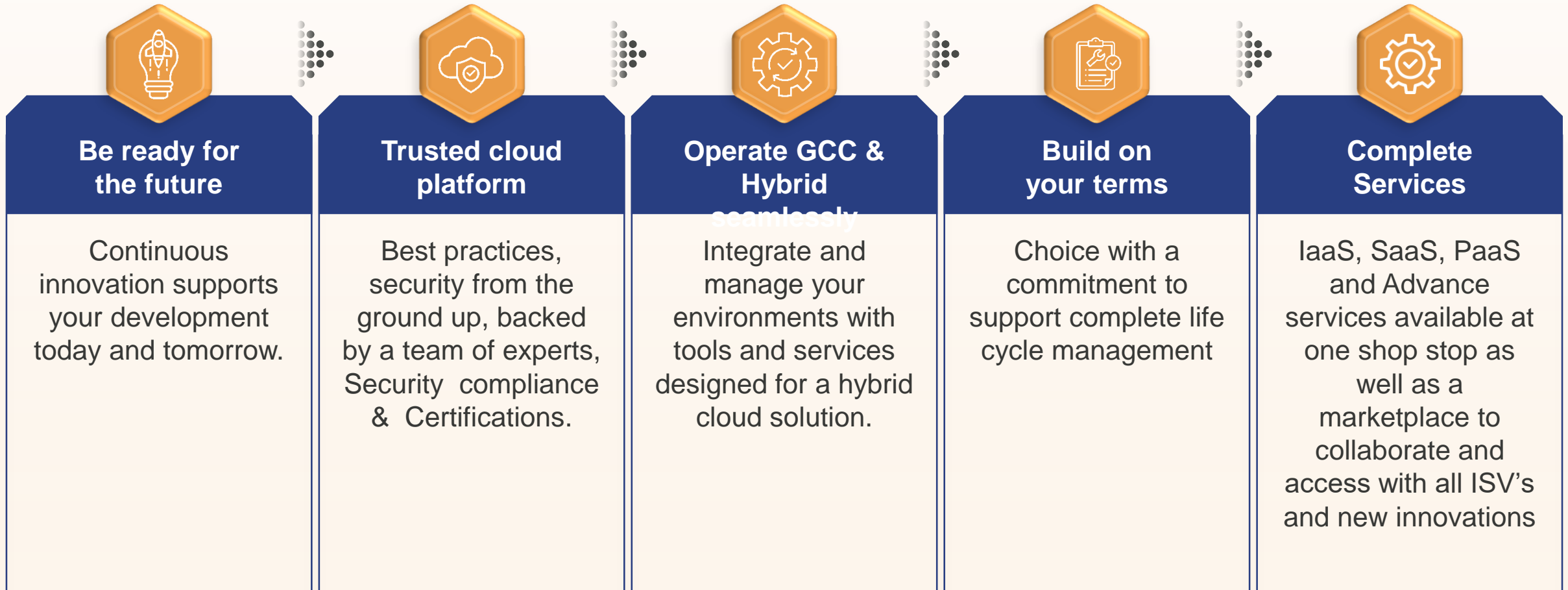
Foreign authorities cannot assert authority over Data

All data is resident in the jurisdiction

Operations & management carried out by Sovereign citizens

Value Streams

Be ready for the future	Trusted cloud platform	Operate GCC & Hybrid seamlessly	Build on your terms	Complete Services
Continuous innovation supports your development today and tomorrow.	Best practices, security from the ground up, backed by a team of experts, Security compliance & Certifications.	Integrate and manage your environments with tools and services designed for a hybrid cloud solution.	Choice with a commitment to support complete life cycle management	IaaS, SaaS, PaaS and Advance services available at one shop stop as well as a marketplace to collaborate and access with all ISV's and new innovations

ananta
STPI CLOUD SERVICES

Cloud Service Portfolio

Foundational

Differentiation

CORE IaaS - ++

Compute as Service : Virtual Machine, Container as a Service, Serverless

Managed Database as Service (SQL Server, NoSQL)

Storage, Backup and Disaster Recovery as a Service

Network as Service: Virtual Network and Load balancer as a Service ,VPN gateway & CDN

Security as Service : Firewall, Web Application Firewall, DDOS, IAM, Threat protection,

Cloud Management and professional Services

Advanced

Differentiation

Optimized

DevOps as a Service

- Low Code Application Development
- Workflow & Integration as a Service
- API Management as a Service PaaS

Application Platform (App Platform) as a Service PaaS

Big Data Analysis as a Service & Data Warehouse as a Service

Data Integration Platform as a Service

Cognitive Services (Computer vision, Language Translation API, Search, ML)

IoT Platform as Service

Business Intelligence & Data Visualization as a service

Video and Data Streaming Service

Massive Data Processing Services

Specialized

Differentiation

Next Gen Services

Email, calendar and contacts

Collaboration

Project management

Personal document storage as service

Citizen/Customer relationship case

management

Customer Insights

Field Service

Remote Assist

Sales & Marketing

Hybrid & Multi Cloud

Configurable

Monitoring and Chargeback

Extensible

Scalable and Agile

Click to Deploy & Deliver

Ananta Foundational Services

Sr No.	Service Classification	Service Descriptions	Service Model	Ananta
1	Core Infrastructure	Virtual Machine	IAAS	✓
2	Core Infrastructure	Serverless	IAAS	✓
3	Core Infrastructure	Container as a Service	IAAS	✓
4	Core Infrastructure	Managed Database as Service (SQL Server, NoSQL)	PAAS	✓
5	Core Infrastructure	Storage as a Service	PAAS	✓
6	Core Infrastructure	Backup as a Service	PAAS	✓
7	Network Services	DR as a Service	IAAS	✓
8	Network Services	Virtual Network	IAAS	✓
9	Network Services	Application Load Balancer	IAAS	✓
10	Network Services	Network load balancer	IAAS	✓
11	Network Services	VPN gateway	IAAS	✓
12	Network Services	Firewall	IAAS	✓
13	Network Services	Public IP	IAAS	✓
14	Network Services	Web Application Firewall	IAAS	✓
15	Network Services	Content Delivery Network	IAAS	✓

Ananta Foundational Services

| Sr No.	Service Classification	Service Descriptions	Service Model	Ananta
16	Security Services	Distributed Denial of Services	IAAS	✓
17	Security Services	Cloud based Hardware Security Module	IAAS	✓
18	Security Services	TLS / SSL Certificate Management	IAAS	✓
19	Security Services	Identity and access management	PAAS	✓
20	Security Services	Dual / Multifactor Authentication	IAAS	✓
21	Security Services	Email Gateway Security as a Service	SAAS	✓
22	Security Services	End-Point Threat Detection & Response for Productivity	SAAS	✓
23	Security Services	Unified End Point Security platform	SAAS	✓
24	Security Services	Secure Desktop OS as a Service for enterprise users	SAAS	✓
25	Mangt. Support Services	Operational Metric Collection	IAAS	✓
26	Mangt. Support Services	Alarm Service & Email /SMS/Voice Call Notification Service	IAAS	✓
27	Mangt. Support Services	Subscription management support	IAAS	✓

Ananta Advanced Services

Sr No.	Service Classification	Service Descriptions	Service Model	Ananta
1	App Development Services	DevOps as a Service	PAAS	✓
2	App Development Services	Low Code Application Development	PAAS	✓
3	App Development Services	Workflow & Integration as a Service	PAAS	✓
4	App Development Services	API Management as a Service PaaS	PAAS	✓
5	App Development Services	Application Platform (App Platform) as a Service PaaS	PAAS	✓
6	App Development Services	Low Code Application Development	PAAS	✓
7	Analytics & AI/ML Services	Big Data Analysis as a Service	PAAS	✓
8	Analytics & AI/ML Services	Data Warehouse as a Service	PAAS	✓
9	Analytics & AI/ML Services	Data Integration Platform as a Service	PAAS	✓
10	Analytics & AI/ML Services	Cognitive Services (Computer vision, Language Translation API, Search, ML)	PAAS	✓
11	Analytics & AI/ML Services	IoT Platform as Service	PAAS	✓
12	Analytics & AI/ML Services	Business Intelligence & Data Visualization as a service	PAAS	✓
13	Analytics & AI/ML Services	Video Streaming Service	PAAS	✓
14	Analytics & AI/ML Services	Data Streaming Service	PAAS	✓
15	Analytics & AI/ML Services	Massive Data Processing Services	PAAS	✓

Ananta Specialized Services

Sr No.	Service Classification	Service Descriptions	Service Model	Ananta
1	Productivity Apps	Email, calendar and contacts	SAAS	✓
2	Productivity Apps	Collaboration	SAAS	✓
3	Productivity Apps	Project management	SAAS	✓
4	Productivity Apps	Personal document storage as service	SAAS	✓
5	SaaS COTS Business Apps	Customer relationship case management	SAAS ✓	
6	SaaS COTS Business Apps	Customer Insights	SAAS	✓
7	SaaS COTS Business Apps	Field Service	SAAS ✓	
8	SaaS COTS Business Apps	Remote Assist	SAAS	✓
9	SaaS COTS Business Apps	Sales	SAAS ✓	
10	SaaS COTS Business Apps	Marketing	SAAS	✓

Complete, Comprehensive Cloud Service

01

02

03

04

Complete 360° Manage Service
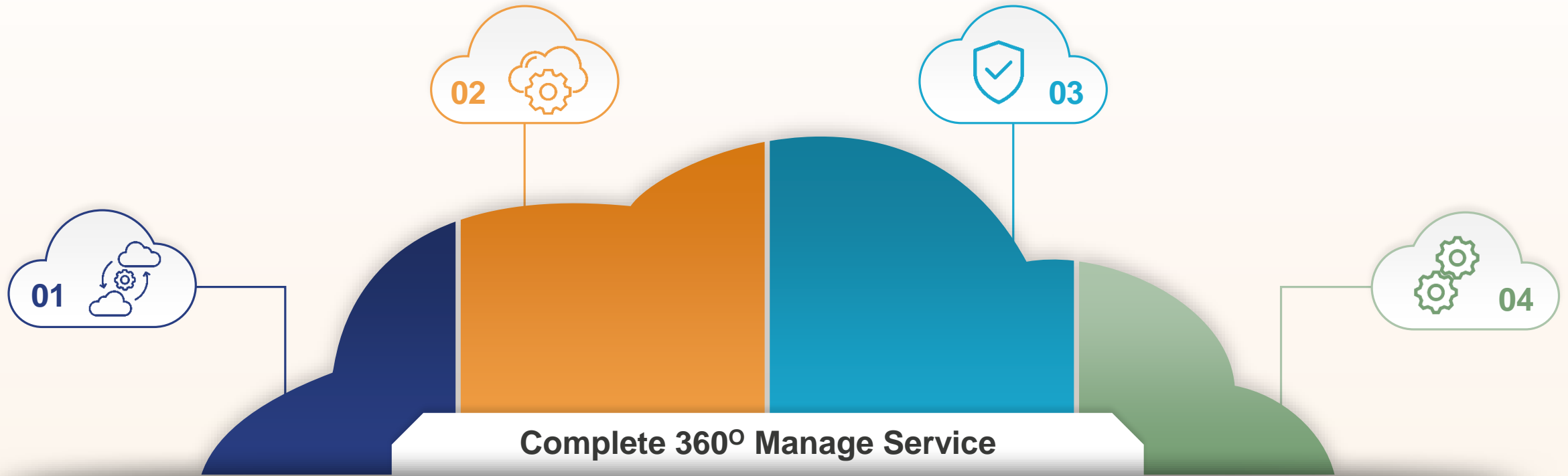
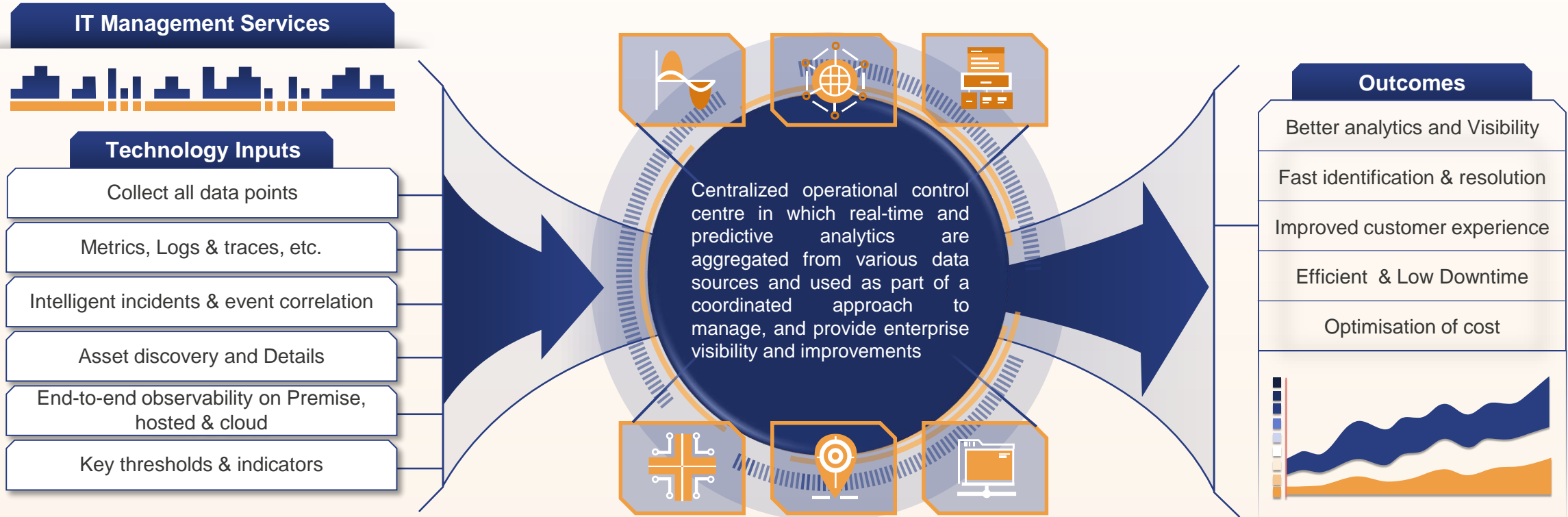| Cloud Adoption and Migration	Cloud Optimisation	Cloud Security	Cloud Operations and Management
Ensure a simple as well as right cloud strategy to adopt and manage your migration to deliver a secure and smooth experience	Cloud is not 'set and forget'. Continuous optimisation can ensure cost control, reduced risk and accelerate innovation.	Strengthen your cyber security defenses with a practical, data-driven approach to reducing cloud vulnerabilities.	Gain the confidence to run your cloud infrastructure, which is fully secure, optimized and compliant.

ananta
STPI CLOUD SERVICES

Ananta NOC and SOC

IT Management Services

Technology Inputs

- Collect all data points
- Metrics, Logs & traces, etc.
- Intelligent incidents & event correlation
- Asset discovery and Details
- End-to-end observability on Premise, hosted & cloud
- Key thresholds & indicators

Centralized operational control centre in which real-time and predictive analytics are aggregated from various data sources and used as part of a coordinated approach to manage, and provide enterprise visibility and improvements

Outcomes

- Better analytics and Visibility
- Fast identification & resolution
- Improved customer experience
- Efficient & Low Downtime
- Optimisation of cost

IT Service Management

IT Operations Management

Enterprise Service Management

IT Business Management

Platform

ananta
STPI CLOUD SERVICES

Ananta Marketplace

What is it?

"Ananta Marketplace" helps connect users with its partners, independent software vendors, and startups that are offering their solutions and services, which are optimized to run on Ananta marketplace customers can find, try, purchase, and provision applications and services from hundreds of leading service providers. All solutions and services are certified to run on Ananta.

Customer Portal

One-Stop Shop for Ananta customers to manage their account as well as access, monitor, and manage all their services
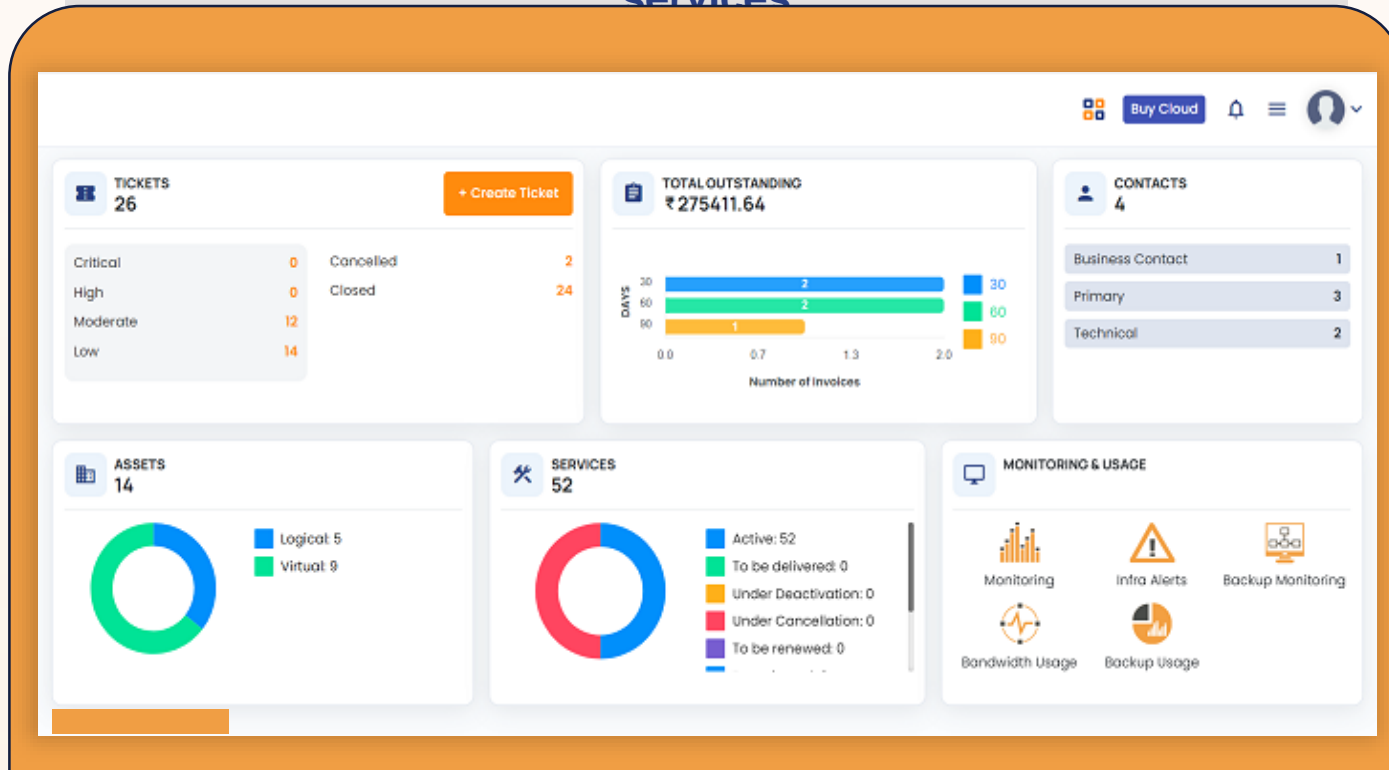
User Management

Raise Tickets

Billing Information

View Services

Monitoring, Usage & SLA