ANALYTICS DESIGN CONVERGING TECHNOLOGIES

Beyond the limits of human imagination !

ANALYTICS DESIGN
CONVERGING TECHNOLOGIES
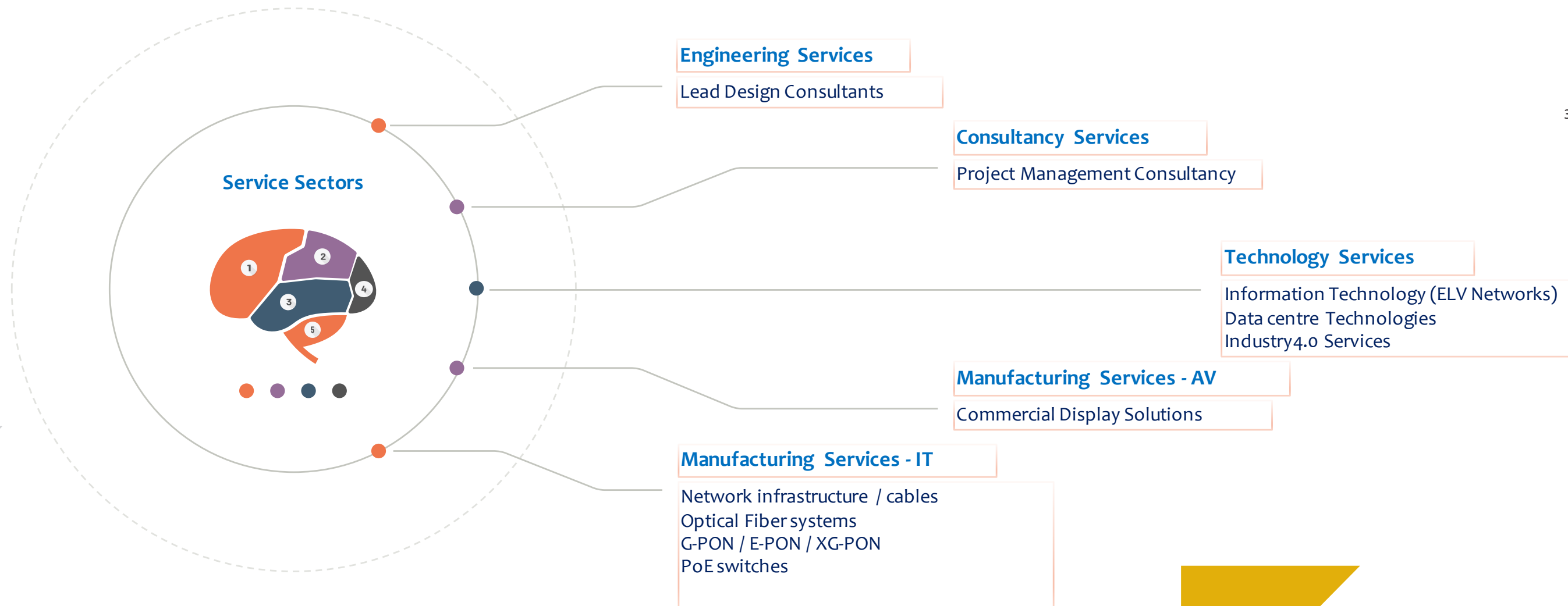
ANALYTICS DESIGN CONVERGING TECHNOLOGIES + **INTREX**

Service Sectors

Engineering Services

Lead Design Consultants

Consultancy Services

Project Management Consultancy

Technology Services

Information Technology (ELV Networks)
Data centre Technologies
Industry 4.0 Services

Manufacturing Services - AV

Commercial Display Solutions

Manufacturing Services - IT

Network infrastructure / cables
Optical Fiber systems
G-PON / E-PON / XG-PON
PoE switches

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INTRODUCTION

Who am I ?

I am Analytics Design Converging Technologies and I represent the future of emerging technologies. I am for people who are committed to uphold quality, precision and speed when it comes to finding Design & Engineering solutions to ensure a great future. I am from Industry 4.0 to revolutionize the future.

Where do I come from ?

I am an offshoot of Industry 4.0 and have decades of meritorious involvement in the design and installation of engineering systems across big corporate and government agencies across the world.

What do I do ?

I have excelled in synergising various modern-day Engineering, Designing and Trading Services to provide holistic solutions to the corporates and facilitate productivity and optimization for both today and tomorrow.

What am I like a person?

I am uncompromising and committed to achieve perfectionism in whatever I do.

Who am I for?

I am for people who are committed to up-hold, quality, precision and speed with it comes to delivering engineering solutions that stand the test of time. I stand for humans who believe in a future where machines and humans co-exist in an intelligent and smart world.

What do I fight for?

I fight to get solutions that stand the test of time.

What makes me different ?

My capacity to take an idea from inception to success while being rooted in the ethos, expectations and sensibilities of my audience. To succeed, I use design techniques and science methodically with utmost precision to create Design & Engineering solutions that stand the test of time.

2024

ANALYTICS DESIGN
CONVERGING TECHNOLOGIES

THE
ORGANIZATION

Designing concepts that transform space

Step in to the ultimate world of engineering and technology where solutions are tailor-made to suite each of our clients. We are part of Industry 4.0, where our engineering solutions are driven by a passion to engage day to day engineering problems with emerging technologies to provide every client with simple timeless solutions with an accelerated return of investment. Analytics Design Converging Technologies caters to the global community's most discerning clientele, offering a wide array of services and products ranging from Artificial Intelligence and Robotics to Industrial Automation & Robotic process automation, Project Management and Consulting services to Sustainability & Energy Engineering and Emerging technologies. With an instinctive understanding of our client's desires, requirements and objectives, we set out to match them in every possible way. We have always stood for people who are committed to uphold quality, precision and speed when it comes to finding Design & Engineering solutions to ensure a great future. We, the people at ADCT recognize that people are our most valuable asset. Our Motto is "encourage consistent behavior that reflects our values of honesty, compassion, consideration for self and others', excellence in effort, desire for personal growth, concern for our company, society, mankind and our planet". We encourage each person to reach their potential and honor their achievement. The strategy to reach our goals is to closely work with every client to understand their requirements and provide solutions that stand the test of time.

Crafting simple timeless solutions

Analytics Design Converging Technologies has established various strategic partnerships, alliances and joint ventures with some of the most trusted names in their fields. Through innovation and by partnering with global companies to bring international expertise to the local and regional markets. Analytics design Converging Technologies is setting the standards for emerging technologies and engineering services with the aim of becoming the service provider of choice in the region. ADCT is a fully integrated company that operates through four major divisions: Emerging Technologies & Automation, IOT and Smart systems, Engineering Consultancy & Lead Design services, Sustainability and Building services.

Economic Viability

As an evolutionary process based on ever changing market scenarios, we constantly develop, maintain and communicate a business plan that is flexible, up-to-date & visionary resulting in an efficient use of available resources for current and future needs. We believe in making the best efforts within the constraints of space, time and resources. We truly believe in engineering solutions to provide all our clients with the best of a return of investment on assets and manpower

ORGANIZATION & SOCIAL RESPONSIBILITY

At ADCT, we are aware and very concerned of the environmental and other ecological issues facing us and our future generations. As a socially responsible company we make every effort to ensure that the products that we deal in conform to the highest environmental protection standards. Many green concepts are being incorporated as core values including the use of materials, design forms and processes that minimize the negative impact on the environment. Together with world renowned partners who are eco-conscious, we pride in doing our small part to conserve our ecosystem. We choose products from companies that are socially and environmentally responsible by reducing or nullifying their carbon foot print with the introduction of newer products using recyclable materials, reducing water consumption at their plants and using biodegradable materials in their production. We always value environmental aspects when we strategize on tying up with partners and we ensure that manufacturers of labor-intensive products do not engage in any form of child labor at their facilities.

NORTH AMERICA

EMEA

INDIA

SOUTH EAST ASIA

ADHERING TO

"THE TEN PRINCIPLES OF

THE UN GLOBAL COMPACT"

With multiple international collaborations, we serve a large clientele with a commitment to provide the best in class innovative technologies for a better and agile workplace that blends resources with the local culture, environment, wellbeing and economics of the local markets.

ANALYTICS DESIGN
CONVERGING TECHNOLOGIES

INTREX

ENGINEERING SERVICES

CONSULTANCY SERVICES

DATA CENTER TECHNOLOGIES - DESIGN, IMPLEMENTATION & AMC

IT - ELV NETWORKS - DESIGN & IMPLEMENTATION SERVICES

IT - ELV SYSTEMS - DESIGN & IMPLEMENTATION SERVICES

IT INFRASTRUCTURE (POWER & COOLING SYSTEMS)

ARTIFICIAL INTELLIGENCE

ROBOTICS & PROCESS AUTOMATION

IoT SYSTEMS

DESIGN ENGINEERING SERVICES

ENGINEERING CONSULTANCY SERVICES

PROJECT MANAGEMENT SERVICES

THE PROCESS

The Process @ ADCT

IDENTIFY
1. Identify the problem
2. Define the problem
3. Mission - Establish primary objeectivies
4. Mission - Establiish secondary objectives

R & A
1. Reseearch & Analysis - Background
2. Identify system drivers
3. Define Functional requirements
4. Allot resourcees for sysetm elements

SOLUTION BRIEFING
1. Define the solution
2. Establish constraints (Costs, implementation , schedule)
3. Execution and P2P clienet relations
4. Implementation of KAIZEN

The Process @ ADCT - Manufacturing & Assembly

ITERATION CPD
1. Re-define solutions
2. Manufacture / Assembly
3. Robotic Process autoamtion

The Process @ ADCT - Emerging technologies / Industry 4.0 Product deveeloopment

T & A
1. Testing and Analysis
2. A.I integration and Machine learning
3. Continuous product development

ON-SITE TESTING
1. On-site testing
2. Analytics and reports
3. Product improvements

GO LIVE
1. Training - client
2. Systems handover

SERVICE & SUPPORT
1. Post handover - Tech support
2. System maintenance
3. Parts & Maintenance (Manufacturing)

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ADCT's Artificial intelligence for A.I security & surveillance utilizes programs and algorithms that analyze audio and video from video surveillance cameras in order to recognize humans, vehicles, objects and events. ADCT's software is designed to define restricted areas within a camera's view (such as a fenced off area, a parking lot but not the sidewalk or a public street outside the lot) and can be programmed for different times of the day (such as after the close of business) for the property being protected by the camera surveillance. Our client-centric algorithms with machine vision as the input feed detect trespassers breaking the rules set in conjunction with the client requirements. Our software is well equipped to identify firearms, masked humans, vehicle plate numbers and most importantly utilizes behavior analytics to monitor human emotions & acts to determine the level of a threat and simultaneously alert the concerned authorities. Our A.I. Algorithm is capable of maintaining surveillance of hundreds of cameras simultaneously. Its ability to spot a trespasser/ firearm or an event in the distance or in rain or glare is superior to humans' ability to do so. As our goal is to reduce adverse outcomes by increasing visibility of the environment. Ideally, increased visibility means being able to deploy security resources in trouble-spots, respond quickly and put in preventative measures to stop problems from recurring.

The use of artificial intelligence (AI) has subtly grown to become part of everyday life. We deploy AI based surveillance systems for simple tasks such as facial recognition for offices / workplaces to AN PR readers for automated vehicle entry in parking lots.

PRODUCT & SERVICES OFFERED

- A.I based intelligent security
- Fire arms detection
- Behavioral analytics
- Anomaly detection Analysis for Data security & A.I in Data Centre
- Loss prevention & theft detection for retail business
- Machine learning for process automation.
- NLP integration for visitor management systems
- Facial recognition for workplaces
- Machine vision systems for deep learning

ROBOTICS & PROCESS AUTOMATION
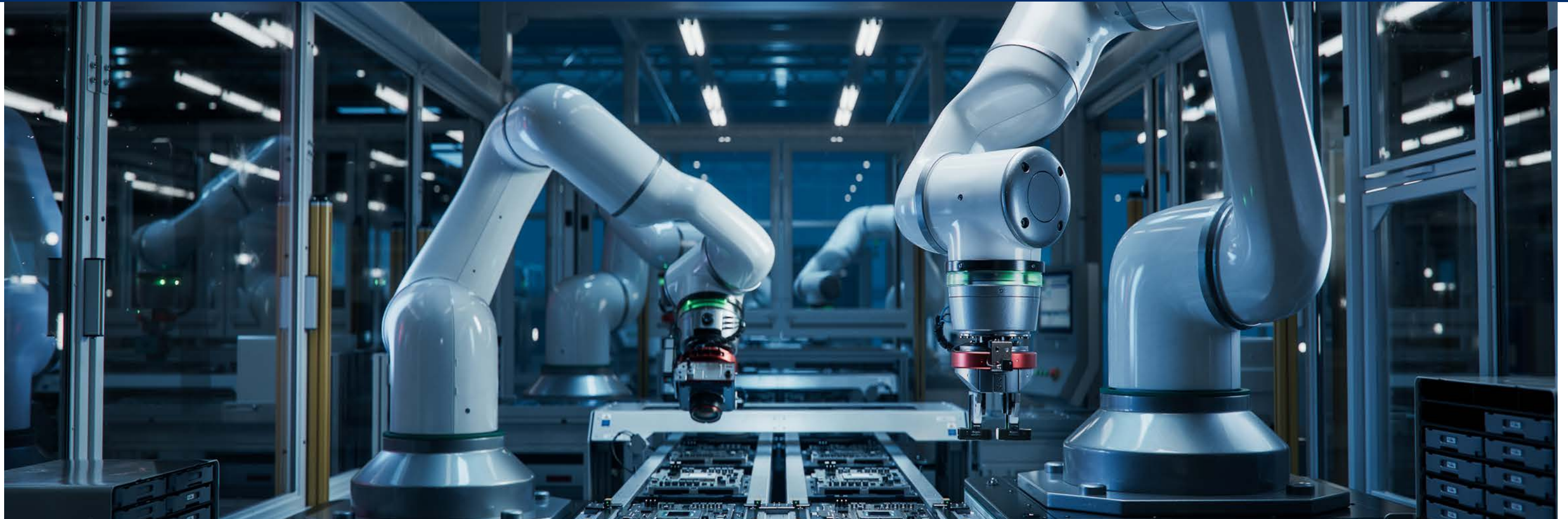
ADCT's tele-robotics program puts heavy emphasis on semi-automated devices and robots with the objective of carrying out our day to day activities in line with client specific requirements. Our top of the line products includes tele-robots to carry out our missions where direct human intervention or inspection is not an option. Our primarily focus on semi-automated machines to carry out visual inspections, videography, non-destructive testing, cleaning of areas where human access is not possible or may be limited. Our systems utilize machine vision (MV) and ultra-sophisticated kinematic and control modules to navigate the machines to get the job done. ADCT inputs the use of set technologies and automatic control devices to cater to the industry requirements in conjunction with machine vision and tele-robotic systems. As an extension of our tele-robotic systems, we develop systems and control devices to integrate process automation into day-to-day activities so as to reduce human intervention and increase productivity with accuracy and precision. Our set of tele-robots would interact with the physical world via sensors and navigate with the help of state-of-the-art actuators and sensors for inertial navigation ideal for carrying out visual inspections, maintenance, videography and other critical tasks.

ADCT also integrates components of AI onto fully autonomous or semi autonomous systems for day to day activities like visitor management, visitor guidance systems for large offices. These systems ease or can even replace human intervention to guide visitors to offices. We customize semi-autonomous robotic equipment for specialized tasks for the facility management industry.

PRODUCT & SERVICES OFFERED

- Crawlers and tele-robotic machines for Maintenance
- NDT & Defectoscopy
- Semi-autonomous robotic specialized equipment for customized tasks
- Fully Autonomous machines with AI & Machine vision
- Machine vision integrated systems
- Robotic process Automation.
- Chat bots, ERP automation

Industry 4.0 is giving rise to a data culture for accelerating digital transformation. Organizations are developing data-driven business models for utilizing data to its maximum potential. As a result, data has become an asset and a significant part of almost every business operation. Practically every organization has started implementing aggressive data collection and analysis for various applications and for this purpose, organizations deploy large data centers to store and process data. ADI contributes to the design and development of data centers in conjunction with Industry 4.0 standards' by designing and building A.I based data centers where physical security, equipment safety, redundancy in power and cooling systems, early warning and detection systems, environmental monitoring systems and most importantly data security are all integrated onto a common platform which provides organizations with a live feed of data analytics which is key to the maintenance of data centers in today's world. With an increased demand on data centers and data security, organizations need to hire skilled professionals for maintaining and monitoring at least the most critical of requirements. Running data centers and hiring staff can be immensely expensive for every organization. Furthermore, supervising and monitoring staff is an additional task. Hence, organizations are continuously looking for better alternatives to the conventional method. At this juncture, we the people at ADCT have developed anomaly detection & analysis (ADA) which can be deployed in data centers to fully automate data Centre processes.

AT ADCT, we strictly follow the international norms for data center tier classification based on end user needs with the ultimate goal to ensure zero downtime. Our motto is to encourage Leveraging Artificial intelligence and Machine learning with anomaly detection analysis in the data Centre in a feasible manner is necessary for every data-driven business.

"Gartner has claimed that more than 30% of data centers that don't deploy AI and machine learning won't be operationally and economically feasible by 2020. Therefore, every data-driven business must implement AI and machine learning in their data centers. AI will also help organizations stay ahead of increasing data storage and processing requirements".

SERVICES OFFERED

- Design and built : co-location data centers
- Artificial Intelligence in Data centers (Intelligent Data centers)
- Anomaly detection and analysis for data security (ADA)
- Design and built: Green and energy efficient data centers
- Design and built : NOC rooms & control rooms
- Design and built: conventional Data centers
- Design of IT network Infrastructure
- Design and implementation : Electrical Low Voltage Solutions (ELV)

ADCT'S STATE OF THE ART IT & DATA CENTER ARCHITECTURE

A.I Implementation in Data centers / Command and control centers

Physical Security

1. A.I Based CCTV)
2. Intrusion detection systems (I.R fending)
3. Access control systems (Realtime)

Energy Conservation

1. CFD analysis – heat mapping
2. Cooling on demand
3. Energy recovery
4. Immersion cooling

Data center Admin– Central Integration

DCA → **DA**

Dashboard Analytics

Data security

1. A.I Based predictive analysis (Equipment's)
2. Rule based data flow for increased security
3. Threat detection in Realtime

Dashboard Analytics

ADA → **DA**

Anomaly Detection & Analysis

Infrastructure Analysis

1. VESDA / Similar
2. Power analysis & Modulation
3. Power on demand

Dash Board Analytics

1. Power analysis
2. Data Flow
3. Cooling loads
4. Physical security

DCA   **ADA**

Threat Detection & Alert mechanism

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The Internet of Things is an emerging topic of technical, social, and economic significance. Consumer products, durable goods, cars and trucks, industrial and utility components, detectors and sensors and other everyday objects are being combined with Internet connectivity and powerful data analytic capabilities that promise to transform the way we work, live, and play. Projections for the impact of IOT on the Internet and economy are impressive, with some anticipating as many as 100 billion connected IOT devices and a global economic impact of more than $11 trillion by 2025 "

One of the key areas that we focus on is Home automation, a system to primarily control lighting, energy, entertainment systems, and smart appliances. We may also include access control, fire alarm and intrusion detection systems to our system.

SERVICES OFFERED

- IOT and Mobile solutions – Systems automation
- Asset Tracking & Asset management systems
- IOT and mobile Strategy IOT, Cloud and Enterprise Integration
- Dashboards and Analytics systems Integration with enterprise systems like SAP etc.
- Product design and development for Internet of Things (IOT)
- Mobile Data Management tools (MDM)
- Energy management Solutions
- Home automation
- Environment monitoring systems
- Software and App development

ADVANCED ENGINEERING SOLUTIONS

Artificial Intelligence :
Machine Vision & Machine learning on Intelligent secure systems for ATM's,Vaults, Highly Secure areas

Artificial Intelligence :
Anomaly detection analysis (ADA) in threat detection, intrusion detection, anomaly detections and implementation of counter measures in intelligent data center

Artificial Intelligence :
Loss prevention / Theft detection & counter measures, customer engagement for retail sectors

Artificial Intelligence :
Machine learning for predictive analysis (equipment & operations)

Artificial Intelligence :
Artificial Intelligence & Human Integration : Behavior analysis, object / people tracking , Asset management , NLP systems.

Robotics & Process Automation :
Semi-autonomous & fully autonomous visitor management systems, reception handling systems, guidance systems .

Robotics & Tele-Robotics :
Design of automated or semi-automated tele-robotic machines for NDT, Defectoscopy, facilities maintenance and remote videography. NDT, Defectoscopy, facilities maintenance and remote videography.
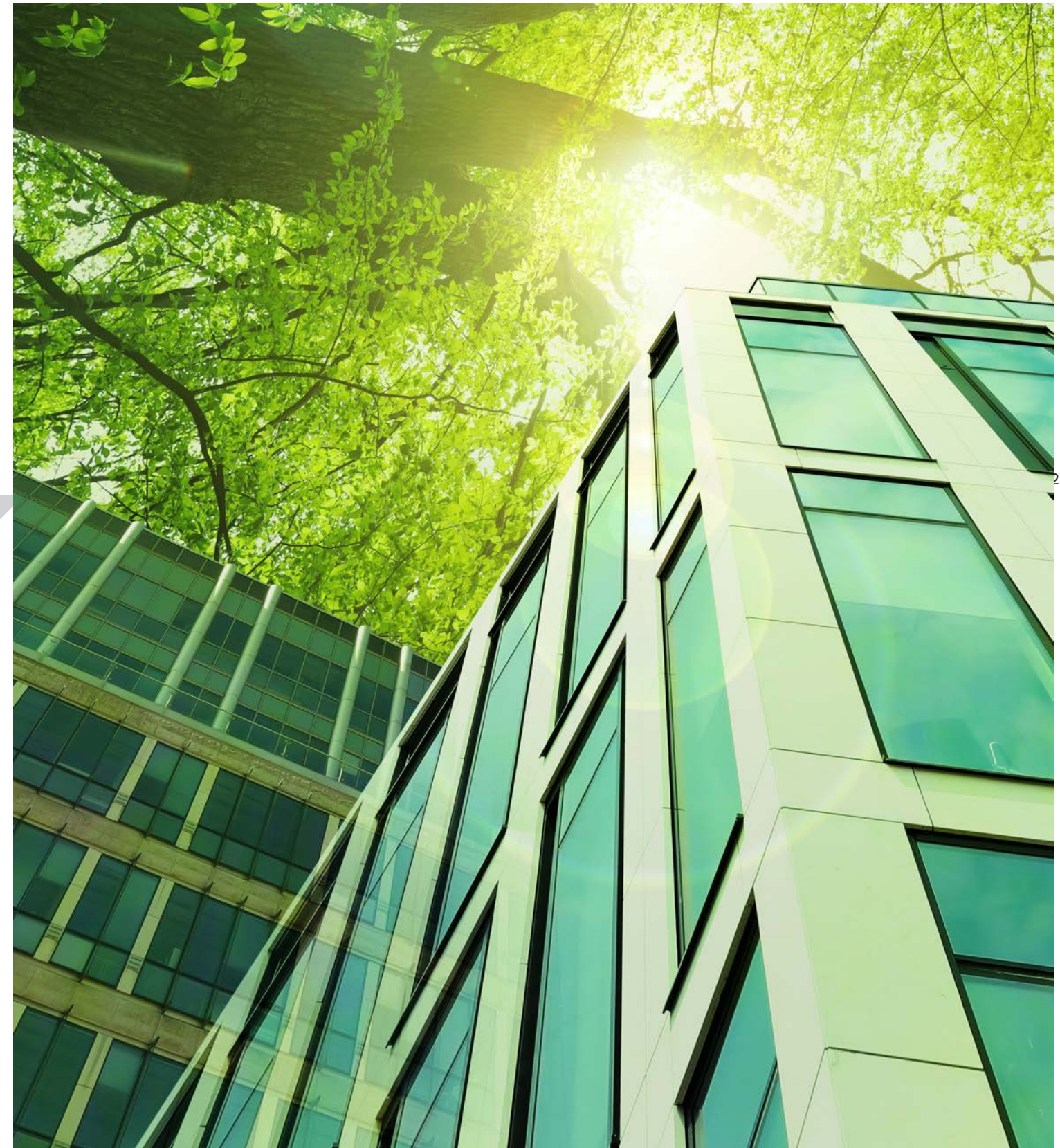
Modeling & Analysis :
CFD, ANSYS & CATIA modeling for static & Dynamic elements

SPECIALIZED SERVICES

T E C H N O L O G I E S

- CATIA modeling with ANSYS detailing (components and systems)
- BIM services
- Auto-cad, Pro-E and StadPro services - modeling and analysis
- Reverse Air-conditioning and spot cooling for open campuses (Temperature control in open environments)
- Pre-construction services for clients / technical evaluation of office spaces (pre-leasing)
- Software development and customization
- Engineering services – MEP design services
- Design & Implementation : AV solutions & PA systems
- Design & Implementation : Video conferencing solutions
- Design & Implementation : video walls
- Design & Implementation : security solutions
- Design & Implementation : Lighting and energy management, Lighting automation and IOT services
- Design & Implementation : White noise and sound masking solutions
- Design & Implementation : Acoustic solutions
- Smart glass technology for offices
- Design & Implementation : Applications development (mobile applications for android and iOS)
- Power systems : UPS, swing in generators (Selection / Design, Supply and installation)
- Power systems : ATS solutions

Integrating technology into modern architecture

Analytics Design Converging Technologies

Serving our clients worldwide
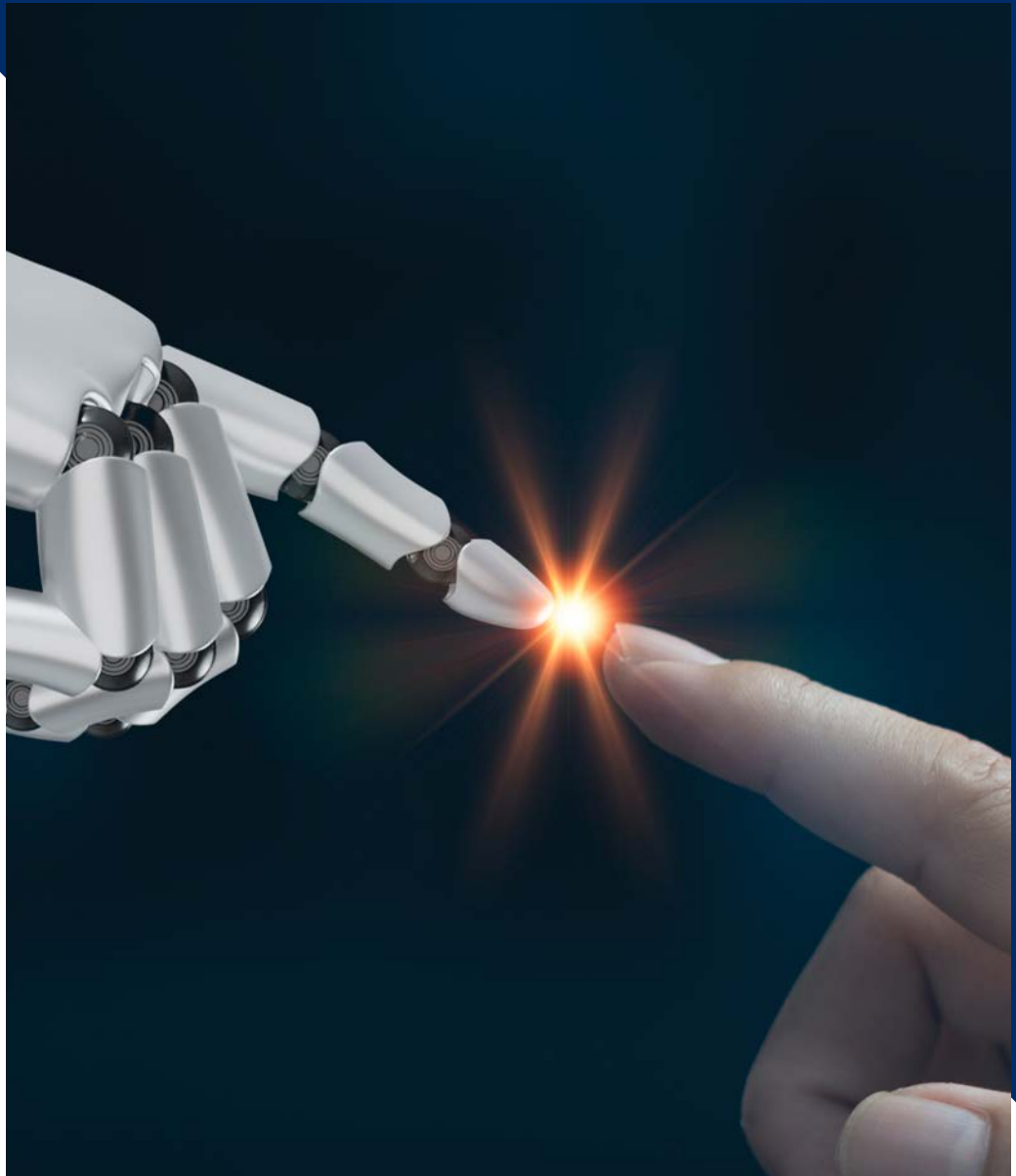
**Innovate
Save planet**

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