



Professional Services



Our goal is to help develop an understanding of your facility, the environment in which it operates, the process and procedures it must adhere to, and the regulations it must follow. Torpedopot field trials are designed to understand how your strains grow in a vertical containerized growing system. We will also investigate how to maximize harvest for various species of cannabis and find ways in which we can develop the highest concentration of active ingredients. The biological evaluation alone is a poor indicator of whether technology is suitable for your environment. This document aims to provide you with enough information about our products and services so you can make an informed decision.

Benefits

- Operates unattended without interruption
- Can grow 6 million plants in one acre, inside or outside
- Manages the plants full lifecycle
- Managed by a hand full of employees
- Fully automated with redundancy built-in
- Portable, scalable, mobile, and can be networked
- Allows you to double your production in less than a week
- Meets FDA security requirements
- Customized graphics, reports, alarms, and dashboards
- Monitor and controls the environment
- Real-time data acquisition of environmental parameters
- Integrate sensors, data loggers, transmitters and probes
- Compliant with federal and local regulatory requirements
- There is no wasted water, soil, fertilizer, chemicals, space



Torpedopot[™] can grow anything! We need to merge the beauty of the greenhouse with the efficiency and automation found in high-end production. Greenhouses must morph into a place where plants can experience their full lifecycle (germination, production, harvesting, and packaging) under one roof.



What we do

Torpedopot[™] has a vast amount of experience in the food and drug industry. Not only do we provide staffing for short and long term projects, but we can serve as an extension of your staff to help support and manage your project objectives. Torpedopot[™] understands the regulations, standards, and best practices for launching and maintaining the integrity of your product. We take a risk-based approach and validate against requirements and get your products approved.

- Validation CSV, Laboratory, Devices, Process, Product, Cleaning, IT, labs
- Commissioning/Qualification Facilities, Utilities and Equipment
- Quality Risk Management Identification, Analysis, Evaluation, Reduction
- Quality/Compliance Policies, Manual, Standards, Procedures, etc.
- Quality Systems CAPA, Audits, Metrics, Risk, Change Control, Incident Mgt
- Regulatory Affairs CFR, Standards, ICH, MHRA, USPs, Guidance's

Some of our Clients:















Service platform

We choose the services that matter the most. For those who are operating in a regulated environment, Torpedopot[™] platform utilizes a wide variety of services to get your project off the ground. We take a holistic approach to integration and implementation. Torpedopot [™] will structure your growing environment and ensure the essential components are in place to cause your plants to thrive. Our subject matter experts are trained in identifying common problems in the field! Let them walk you through the discovery process and conduct a GAP assessment to ensure you have the right growing equipment.

Continuous Monitoring (CM) SAS Cloud

Central Repository Data Management

Data Acquisition (DA) Data Management Reports Graphics/dashboards Alarms/Alerts



Development Stack

Policies, Processes (PP) Procedures Risk Management Records Management CAPA

> Validation (VA) Gap Assessments Validation Plan Deign Requirements System Release

Sensors, Monitoring and Control (SC) Sensors Wiring Monitoring Actuation /Control Project Management (PM) Initial Assessment Build Sustainability stability



Project Management

Torpedopot[™] will provide project management tools, processes, and principles to enable successful project execution. This includes managing project goals to ensure we are within scope, on budget, and on schedule. We measure and report project execution progress and make risk-based decisions. We create and manage all project management deliverables



1. Assessment

The assessment phase consist of assessment, planning and preimplementation. We conduct a rigorous assessment.

- Requirements, architectural specifications, design,
- Soil test, weather conditions, seasons
- Access to land, water, and seeds
- Market size, sustainability, agribusiness
- Address any regulatory requirements
- Scalability, profitability, roles and responsibilities

2. Build

We'll order materials and execute contracts. This phase includes ensuring that plans for integrating into your environment have been tested and processes are in place.

- Install growing equipment:
- Train local personnel, and security
- Reinforce responsibility and expectations
- Develop procedures and provide training,

3. Sustainability

The goal of sustainability is to ensure that we can reproduce the results of year two and to make changes in the process. Increasing types and availability of crops.

- Develop a predictable model
- Ensure its practical, profitable and useful
- Develop a cookie cutter operation to be mimicked
- Ensure all materials can be sourced
- Determine the cost, risk and competitive advantage

Initial Assessme	ent Property location, soil requirements, water quality, water pressure, nutrients, plant anatomy, types and amount of crops, weather conditions, light, harvest, acceptance criteria, etc.
🔲 Build	Determine what components (hardware, software, communication systems, electrical, networks, foundation, computer systems, controllers , planters, water systems, lighting, We identify all of the components need for a successful trial.
Sustainability	Sustainability assessment is used to determine if the technology is acceptable within the in a whole campus. We will analyzes acceptability for the various business groups who are involved with the technology, determine if there are other application or efficiencies that could be realized.
stability	Determine the long-term beneficial or harmful environmental effects of using a new technology.



Data Acquisition

The system provides a graphical interface to monitor and annunciate alarms with remote notifications and views of facility information in real-time. Our policy provides the interface between client applications and the Server database where all data is stored.

- Designed for management and administration of data within the server.
- Users can create basic report templates that query the Server for point data.
- Schedule or automatically generate reports with predefined data ranges
- Switch environments and download information in spreadsheets for further analysis.



Data Management	We provide real-time cloud-based monitoring and analytics platform, providing visibility into the areas of your operations . Full automation, security and maintenance, and Multi-location management.
Reports	Customizable, easy to export reports store and manipulate data via platform or seamlessly export reports in .CSV file format.
Graphics/dashboards	Intuitive dashboard and user interface graphs, gauges, and digital readings are customized and scaled to your business help you make quicker decisions
Alarms/Alerts	Proactive text and email alerts Designated users will receive notifications based on the alarm limits created for each sensor



Sensors, Monitoring and Control

You can choose from a wide selection of temperature data loggers, transmitters, and probes that will integrate into your production environment. Data is logged continuously and autonomously at the point of measurement, ensuring that temperature, humidity, and other historical data are never lost to power or network downtime. For those in agribusiness, our planters can be manufactured to include built-in sensors that operate without any human intervention. With a variety of alarm notification options and reports, the system is fully configurable to meet your needs. These integrated sensors can easily measure barometric air pressure, humidity, moisture, soil and air temperature, pH, and water and nutrient flow, dissolved solids, and more.

We provide a comprehensive water-quality monitoring system that employs smart network management, enhanced sensing framework, and intelligent and efficient data analysis and forwarding protocols for system-aware decision making. Our sensors can are installed as an on-line or off-line device for laboratory analyses. We can integrate sensors into your existing framework.



Sensors	The application range of sensor technology is far reaching. from the collection of data to the analysis of product the exact measurement of physical values physical values like pressure, temperature, humidity, filling level, positioning, vibration, flow rate, power, turning moment, speed, ultrasound, infrared, are of greatest importance.
Wiring	Each environment requires a different solution. We can install high tensile strength, abrasion and notch resistance with extremely high winding and unwinding strength, good oil resistance, good chemical resistance, supporting screen of high-tech yarn.
Monitoring	Real-time cloud-based monitoring and analytics platform, providing visibility into the areas of your operations . Full automation, security and maintenance, and Multi-location management
Actuation /Control	We can develop closed control loops which provide feedback from sensors and make decisions or the other hand, we can setup open control loop systems which initiates a preset action, as is done with irrigation timers.



Validation Package

Our commissioning and qualification team has the experience and technical skills to ensure our clients' facilities meet or exceed regulatory requirements. We can quickly identify needs and solutions and will work with the clients' team to complete the project within budget, boundaries, and expectations. We will develop commissioning documents to verify proper installation and optimum performance. We have had the opportunity to design, develop, install, assess, remediate, validate, qualify, retire, and automate hundreds of different types of systems. We have years of extensive experience in computer networks and laboratory instrument integration IQ, OQ, PQ, DQ, SOP, and more.

Torpedopot[™] will write and managed the execution of cleaning validation, protocols, analyzed microbiological, visual, analytical, and physical data to detect trends and develop corrective actions as necessary. Torpedopot[™] will write the validation report summarizing results and findings. We will review and analyzed cleaning records, identify adverse trends and non-conformances, and develop process improvements as needed.



Gap Assessments	Before we start any implementation we highly recommend you conduct a Gap assessment. A Gap Assessment will help uncover unseen issues with your current system that we can correct during the new implementation. We need to ensure the environment is acceptable
Validation Plan	We will develop a plan that will set expectation for the rest of the project. Timelines, deliverables, roles and responsibilities will be in included in the validation Plan.
Deign Requirements	We will ensure that you have a documented architectural design of the implementation. From electrical schematics to data management, every process will have its own defined process and set of procedures
Release	Ensure the system has been thoroughly tested and certified before its placed in production. Establish acceptance criteria for release requirements

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Compliance Policies, Manual, Standards, Procedures, etc.

You must train your employees on Food and Drug law. Whether you are using 21 CFR Part 11 or GXP's, Torpedopot will ensure your production environment meets regulatory requirements and industry standards. The need to limit contamination is paramount. We provide color-coded planters so you can quickly identify what is growing where and help identify containers that require cleaning validation.

- Identify and develop your Quality Management System (QMS)
- Define Quality Roles and responsibilities
- Deliver a risk management process
- Implement a continual improvement processes
- Deliver acceptance criteria for all critical processes
- Established a CAPA
- Document Quality Policy and Quality Objectives.
- Deliver a Quality Manual
- Deliver procedures and templates for Quality Records
- Establish a Document Control process
- Establish periodic audits, reviews and walk downs



Procedures	We develop your procedures and establish your processes. From engineering templates to design changes, we determine the risk and draft the necessary changes.
🔲 Risk Management	Quality risk management is a valuable component of an effective quality system. Because each stakeholder might perceive different potential harms, its always good to have representation of the departments we reviewed the original documentation.
Records Management	Good documentation practices is the precursor for great record keeping. Documents must be under a controlled process.
	In the Food and Drug industry, the process of managing non-conformities or defects from manufacturing, engineering, quality or other quality data sources, such as product complaints leading to corrective or preventive actions, should be a formal and controlled process



Continuous Monitoring

Our continuous monitoring process can be used to detect compliance and risk issues associated with an organization's operational environment. We are the subject matter experts who integrate processes and systems to support efficient and effective operations.

A low-cost hardware solution personalized to your environment. Experienced implementation consultants will enhance your team

Your data is collected in the cloud and translated into accessible gauges and graphs. View and access your data anytime and anywhere. Eighty-four percent of technology decision makers say their organizations invested in cloud services. According to Insight's Intelligent Technology Index report, "47 percent are more than halfway implemented in the cloud, with large and medium companies leading the way."



Saas	Real-time cloud-based monitoring and analytics platform, providing visibility into the areas of your operations . Full automation, security and maintenance, and Multi-location management
Virtual management	Provide virtual services such as monitoring, reporting, remote management, backups, security and updates from a remote location.
Data Management	We will monitor operational security, operational, maintenance, calibration, and audit trail to identify incidents. Develop process for archiving, backup & restore, disaster and recovery, and monitoring, disaster and recovery, etc.
Data Security	21 CFR Part 11 security procedures will be developed surrounding system logs, access management and periodic reviews. Logs will be reviewed in a timely manner. Incidents will be escalated for further review.



This document shall not be deemed an offer. It is for informational purposes only. This document shall only become a binding and enforceable contract upon execution hereof by both parties. It is solely for the purpose of review by the party to whom delivered, and neither the delivery nor any prior communications between the parties, whether oral or written, shall in any way be construed as an offer by Seller, nor in any way imply that Seller is under any obligation to enter the transaction which is the subject of this information.

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