

Work Breakdown Structure (WBS)

WBS Dictionary

WBS	Name	Description	Assumptions/constraints/exclusions
1	Wilmont Pharmacy Drone Delivery Project	Overall project	Project begins January 5th, all the resources listed as 100% (1 FTE) on the project
1.0	Project Management and reporting	Project coordination and controlling activities	
1.0.1	PMO activities	Project Management Officer supporting the Project Manager	
1.0.2	Management and stakeholder communication	Management and stakeholder communication	
1.0.3	Meetings organization	Scheduled and unscheduled meetings organization, logistics, documentation, communication	
1.0.4	Project accounting controls	Monitoring of project control accounts to chart progress, trends, and notify PM/PMO on potential issues	
1.0.5	Quality	Quality Control and Quality Assurance	
1.0.6	Risk monitoring	Risks monitoring	
1.0.7	Procurement coordination	Coordination of procurements activities to ensure compliance with contract and corporate rules	
1.1	Phase: Initiation and contract/plan definition	Preliminary activities to confirm scope and goals of the project	
1.1.1	Develop Scope and Plan	Prepare the Statement of Work, Project Cost Estimate, Schedule and other Baseline Documents	
1.1.2	Engage Stakeholders	Communication with Project Stakeholders including status reports, discussions on scope, etc.	
1.1.3	Define contract	Define the contract between Wilmont and DroneTech for both the project and operations	
1.1.4	System design - define IT and engineering requirements	Finalize, based upon contract, IT and engineering development/integration as well as operational constraints, and data access/security/confidentiality/privacy framework	
1.1.5	Define revised cost estimates, and risk management plan	Finalize cost estimates and risk management plan	Wilmont maximum acceptable budget USD 1,750,000 - DroneTech CEO proposed to Wilmont USD 750,000: try to keep below the lower figure
1.1.5	Approval of new revised budget and staffing	Obtain approval from project sponsors and stakeholders	
1.2	Phase: Drones and operations adaptation activities	Engineering and process activities to adapt drones and operations to the agreed project needs	
1.2.1	Drone flight operations processes adaptation	Adapt operations processes to project needs as per agreement; includes defining also the batteries replacement/loading and spare parts management	drone delivery operations to apartments in buildings out of scope; Gerald Hasper will lead this activity
1.2.2	Engineering sub-project for temperature controlled bags	Adapt drones so that Wilmont temperature-controlled packaging bag system can be used	only four drones will be used; identify also all
1.2.2.1	Define tolerances and drone changes	Define engineering changes	each drone must be able to operate delivery for a full working day
1.2.2.2	Approval of engineering changes and associated costs	Approve engineering changes to use Wilmont temperature-controlled packaging bag system	
1.2.2.3	Engineering procurement activities	Carry out engineering procurement activities	
1.2.2.4	Develop adaptations to drones for temperature controlled-bags	Develop adaptations to drones	
1.2.2.5	Test modified drones	Test modified drones	
1.2.2.6	Approval of modified drones test results	Approval of modified drones test results	
1.3	Phase: IT integration development	Software development and software integration activities	
1.3.1	Prototype and pilot test with stakeholders proposed integration on mock-up	Workshop to propose integrated end-to-end processes from customer order entry on Wilmont systems to delivery and delivery results	
1.3.2	Confirm data confidentiality, security, privacy framework with Wilmont	Confirm data confidentiality, security, privacy framework with Wilmont	Wilmont Information Security Management Team is leading this activity
1.3.3	Define data flows exchanges Wilmont to/from DroneTech	Define data, data constraints, and dataflows between Wilmont and DroneTech	
1.3.4	Develop mobile app	Develop mobile app	
1.3.5	Develop software components to be embedded within Wilmont IT	Develop software components that will be integrated within Wilmont systems	
1.3.6	Develop DroneTech software platform adaptation	Develop software adaptation of existing DroneTech software platform	
1.3.7	Integrate Wilmont-DroneTech software components non visible to customers	Integrate all the software component realized with the existing systems	
1.3.8	Integrate customer-facing components within Wilmont customer order system	Integrate all the software component realized that will be visible to customers as part of Wilmont software and corporate identity (logo, etc)	
1.3.9	Integrate dashboard for Wilmont to interface with DroneTech drones flight scheduling system	Integrate dashboard for Wilmont to allow direct scheduling from Wilmont integrated with DroneTech platform	
1.3.10	Integrate return dataflow from flight delivery system with Wilmont customer order system	Integrate dataflow returning to Wilmont information about success/failure of deliveries and other operational information collected during the flight	
1.3.11	Test integration of all the software components with simulated hardware	Test software flow end-to-end using simulated hardware	
1.3.12	Approval of software test results	Approval of software test results	
1.4	Phase: integration software and drones	Integrating software and hardware components	
1.4.1	Test integration of all the software components with hardware	Test software flow end-to-end using simulated hardware	
1.4.2	Pilot test with drones	Deliver pilot test with software and drones (test deliveries)	
1.4.3	Approval of pilot test results	Approval of pilot test results	
1.4.4	Develop operational manuals	Develop operational manuals	
1.4.5	Develop training material	Develop training material	
1.4.6	Pilot training	Delivery of first training to simulate training to staff involved end-to-end (Wilmont operations and store, DroneTech delivery)	
1.4.7	Adapt operational and training manuals based upon pilot training feed-back	Finalize operational and training manuals	
1.5	Phase: Start operations	Activities to start operations	
1.5.1	Deliver training to stores and operational staff	Deliver training to stores and operational staff	
1.5.2	Communication/advertisement plan execution	Execution of communication plan on the new service (outsourced)	
1.5.3	Initiate deliveries by drone	Start the drone delivery service	only four stores within the San Francisco area will be involved; first delivery flight no later than November 5th
1.6	Close down project	Project completion activities and transition to Business-as-usual	
1.6.1	Monitor operations for one month	Monitor operations while keeping a mix project-operations team	
1.6.2	Document lessons learned	Collect information about the first phase of the delivery service	
1.6.3	Disband project team and hand-over to operations	Hand-over to operations of the project results, transferring documentation and monitoring systems	
1.6.4	Finalize review control accounts and report to management	Finalize analysis of control accounts and project budget consumption history	need to identify also parameters for eventual scalability to extend to all the 8,000 stores
1.6.5	Prepare and deliver final report to stakeholders	Prepare and deliver final report to stakeholders as per agreement with management	