Project Audit & Review Checklist
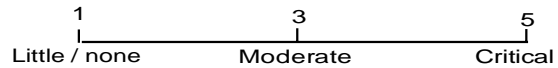
Project Title	Develop a pet health monitoring system
Team Name	Smartpaws
Team Members	22IT063 NIVASSHINI R
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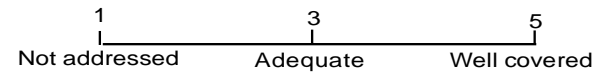The following provides a detailed checklist to assist the PPO with reviewing the health of a project:

Relevance (at this time)	**Theory & Practice**
(How relevant is this attribute to this project or audit?)	(An indication of this attribute's strength or weakness)

1	3	5
Little / none	Moderate	Critical

1	3	5
Not addressed	Adequate	Well covered

Item	Attribute	Relevance	Practice	Assessment
1	**Project Planning**			
1.1	Does the project have a formal Project Plan?	5	5	10
1.2	Are the key elements of a Project Plan present? a. Project Definition & Scope? b. Project Objectives? c. Cost / Benefit Analysis? d. Staffing Requirements? e. Time Line? f. Risk Analysis? g. Critical Success Criteria (if we meet these, we've met our goals?	5	5	10 Well covered
1.3	Have all stakeholders been identified?	5	4	9
1.4	Is a Stakeholder Management plan in place? Have project accountabilities & responsibilities been clearly defined?	5	4	9
1.5	Have the scope, objectives, costs, benefits and impacts been communicated to all involved and/or impacted stakeholders and work groups?	4	5	9

Item	Attribute	Relevance	Practice	Assessment
1.6	a) Have all involved stakeholders and work groups committed to the project? b) Have all necessary approvals been obtained?	4	4	8
1.7	Has a project Communications Plan been developed?	5	4	9
1.8	Are funding and staffing resource estimates sufficiently detailed and documented for use in planning and tracking the project?	5	5	10
1.9	Does a documented project organizational policy & plan (i.e. governance model) exist?	4	4	8 must be clearly addressed
1.10	Have adequate resources been provided by management to ensure project success?	5	5	10
1.11	Is current scope of the project substantially different than that originally defined in the approved project plan?	5	5	10
1.12	Has the approach and development strategy of the project been defined, documented and accepted by the appropriate stakeholders?	5	4	9
1.13	Have project management standards and procedures been established and documented?	5	5	10
1.14	Is there a Steering Committee in place?	3	4	7
1.15	Is the Steering Committee active in project oversight?	3	3	6 The steering committee should be active
1.16	Are there procedures in place to effectively manage interdependencies with other projects / systems?	5	4	9

Item	Attribute	Relevance	Practice	Assessment
2	**Project Management**			
2.1	Have the key elements of a coherent project management strategy been established? a. Project tracking plan & methodology b. Project status reporting structure & process c. Change Management plan & tracking d. Issues Management process & tracking plan e. Risk Management Plan f. Software Quality Assurance g. Software Configuration Management	5	5	10
2.2	**Project Scheduling & Tracking**			
2.2.1	Has a structured approach been used to break work effort into manageable components?	5	5	10
2.2.2	Are team members involved in the development of activity & task decomposition?	5	4	9
2.2.3	Are individual tasks of reasonable duration (8–40 hrs)?	5	5	10
2.2.4	Are milestone deliverables effectively tracked and compared to project plan?	5	5	10 Well tracked
2.2.5	Does the detailed project plan identify individual responsibilities for the next 4–6 weeks?	4	5	9
2.2.6	Have activity relationships and interdependencies within tasks been adequately identified?	4	5	9
2.2.7	Are target dates established for each milestone deliverable?	5	5	10
2.2.8	Are corrective actions taken when actual results are substantially different from detailed project plan? Describe.	5	4	9

Item	Attribute	Relevance	Practice	Assessment
2.2.9	Are changes in deliverable commitments agreed to by all affected groups & individuals?	5	5	10
2.2.10	Is the organization structure for both tracking & controlling project activities work products & costs (effort, schedule & budget) well defined and assigned to a specific individual?	4	5	9
2.2.11	Are measurements and feedback mechanisms incorporated in tracking work effort & refining work estimating techniques?	4	4	8 It should be refined
2.2.12	Have procedures for identifying variances from estimates & adjusting the detailed work program been established?	3	4	9
2.2.13	Is project work proceeding in accordance with the original project schedule?	5	5	10
2.2.14	If not, have all project delays been adequately accounted for, communicated to all stakeholders and adjustments made in overall project schedule?	5	4	9
2.2.15	Is there general agreement & acceptance of the current status and progress of the project?	4	5	9
2.2.16	Is PERT / Critical Path or equivalent methodology being used? Can you see the critical path on the plan?	5	5	10
2.2.17	Is an industry recognized mechanized support tool(s) being used for project scheduling & tracking?	3	3	6 Tools can be utilised
2.2.18	Is it possible to track all classes of project work (e.g. scheduled, un-scheduled, defect repair, etc.)? Can you compare work done to the baseline?	3	5	8

Item	Attribute	Relevance	Practice	Assessment
2.3	**Project Status Reporting**			
2.3.1	Is project status reviewed with senior management at appropriate intervals? What are they? a. Overall status b. Project performance (achievements & milestones) c. Open issues d. Risks e. Action items f. Cost & time performance against plan g. Quality metrics h. Client involvement	3	4	7
2.3.2	Are internal project status meetings held at reasonable intervals?	4	5	9
2.3.3	Are sub-project reviews held at reasonable intervals?	4	4	8 Should be held at intervals
2.3.4	Have adequate procedures been put in place for project coordination and status reporting across project boundaries (ie. interdependent software development among interfacing systems)?	3	4	7
2.3.5	Do project teams & team members report on status / activities / progress?	5	5	10
2.4	**Project Estimating**			
2.4.1	Are multiple estimation methods being employed?	4	5	9
2.4.2	Are current project time & resource estimates reasonable based on the current project stage?	5	4	9
2.4.3	Are actuals compared against estimates to analyze and correct variances?	5	4	9

Item	Attribute	Relevance	Practice	Assessment
2.4.4	Are software metrics formally captured, analyzed and used as a basis for other project estimates?	5	5	10
2.4.5	Is the PPO estimating methodology being used and followed?	4	5	9 The methodology needs to be clearly defined
2.4.6	Do the estimating techniques include any of the following features: a. Ranged estimates? b. Sensitivity analysis? c. Risk rating? d. Quality Assurance overheads? e. Contingency?	4	4	8
2.4.7	Are project team members involved in detailed estimating and scheduling?	5	5	10
2.4.8	Are stakeholders aware and supportive of the principles and practices of modern software estimation?	5	5	10
2.5	**Risk Management**			
2.5.1	Was an original risk assessment completed?	5	5	10
2.5.2	Is there a process in place to monitor project risks?	4	5	9
2.5.3	Has provision been made to reassess project risks at various project stages?	5	4	9
2.5.4	Have all unresolved risks been documented? Have all unimplemented risk strategies been escalated to an issues log?	5	4	9
3	**Quality Management**			
3.1	Does the project have a 'Quality Culture'?	5	5	10

Develop a pet health monitoring system

Item	Attribute	Relevance	Practice	Assessment
3.2	Is there a Quality Plan covering all Policies, Guidelines and Procedures?	4	5	9
3.3	**Quality Assurance**			
3.3.1	Has an overall Quality Assurance Plan been developed for the project?	5	5	10
3.3.2	Does the plan address key project elements? a. Project Planning? b. Project Management? c. Software Quality Assurance (SQA)	5	5	10
3.3.3	Does the SQA process provide objective verification of adherence to applicable standards, procedures & requirements?	5	4	9
3.3.4	Are all key components of an SQA plan present? a. SQA Plan b. Software Configuration Management (SCM) c. Software development standards & methods d. Methodology e. Testing Standards & Methodology f. Data Architecture Standards g. Data Naming Conventions h. Technology Architecture i. Software Metrics	4	4	8 Strengthen the SQA plan
3.3.5	Are the results of SQA reviews provided to affected groups & individuals?	5	5	10
3.3.6	Are adequate resources provided for the SQA function? Are SQA resources experienced?	4	5	9
3.3.7	Are the SQA processes in place and being effectively used?	4	4	8

Item	Attribute	Relevance	Practice	Assessment
3.4	Is there a set of procedures defining the scope, procedures and deliverables defining Quality Control?	5	5	10 Well said
3.5	Are quality metrics defined?	4	5	9
3.6	Is there a set of procedures to capture, analyze and act on quality metrics?	4	4	8
3.7	**Software Configuration Management (SCM)**			
3.7.1	Has SCM been implemented for this project?	5	5	10
3.7.2	Has an industry recognized SCM software version management & control tool been implemented?	3	3	8
3.7.3	Is SCM version management and control effectively linked with the testing function to ensure integration and regression testing have been performed?	4	4	8
3.7.4	Has an automated Change Management tool been implemented?	4	4	8
3.7.5	Is the SCM function adequately staffed?	5	5	10
3.7.6	Is the Testing Coordination function separate from the development staff?	5	4	9 It should be clearly defined.
4.0	**Management Procedures**			
4.1	**Vendor Management**			
4.1.1	Is there a formal set of procedures (for status reporting, contract negotiation & review, time/invoice reconciliation, etc.) supporting Vendor Management?	4	4	8

Item	Attribute	Relevance	Practice	Assessment
4.2	**Issues Management**			
4.2.1	Is there a formal set of procedures supporting Issues Management?	4	4	8 Have a clear procedure to work with issues.
4.2.2	Is there any form of automated support for Issues Management?	4	3	7
4.2.3	Are issues raised, assessed, actioned, and resolved in a timely and efficient manner?	5	5	10
4.3	**Stakeholder Management**			
4.3.1	Is there a formal set of procedures supporting Stakeholder Management?	5	5	10
4.3.2	Is it standard practice to formally commit stakeholders to the project via agreements?	4	5	9
4.3.3	Does a comprehensive set of Stakeholder Agreements exist? Do we have statements delineating what each stakeholder has agreed to do?	4	3	7
5.0	**Resourcing**			
5.1	Are all resource assumptions documented?	5	4	9
5.2	Does the project team have the skills necessary to successfully complete current project(s) and support the application?	5	5	10

Item	Attribute	Relevance	Practice	Assessment
5.3	Have arrangements been made to obtain special expertise or competence by consulting or referencing: a. Similar projects? b. Published materials? c. Personnel with expertise? d. Outside experts?	4	5	9
5.4	Have the personnel with the necessary skills and competence been identified and has agreement for their participation in the project been reached with the appropriate management?	5	5	10
5.5	Is there a project organization chart showing the reporting relationships and responsibilities for each position?	5	5	10
5.6	Has a proper project work location been established that will allow the team to work together with user personnel?	4	4	8
5.7	Does the detailed work plan match the complexity of tasks with the capabilities of personnel?	4	4	8
5.8	Has allowance been made for vacations, holidays, training (learning time for each team member), staff promotions & staff turnovers?	5	5	10
5.9	Has adequate time for orientation & training of project staff been provided for in relation to technical nature of the Application and the experience levels of project personnel?	5	5	10
5.10	Has appropriate allowance been made for the effect of the learning curve on all personnel joining the project who do not have the required prior industry, functional & technical expertise?	4	4	8
5.11	Are the appropriate IT resources adequate to meet planned commitments?	5	4	9

Item	Attribute	Relevance	Practice	Assessment
5.12	Are enough systems & user personnel assigned to the project?	5	4	9
5.13	Are the people assigned to the project sufficiently qualified?	5	5	10
5.14	Are project managers participating in the project adequately to know its true status first hand? a. Is a qualified person sufficiently involved in each critical area? b. Are communication lines working?	5	5	10
5.15	Is a senior systems department representative allocated to each user department to provide liaison and support? Does the project have both a business team leader and a technical team leader?	4	4	8 Make sure whether it is allocated.
5.16	Do the project team have a good understanding of the existing and/or proposed hardware / software environments?	5	5	10
5.17	Are project leaders committed to this project full time?	5	5	10
5.18	Are project team members committed full-time?	5	5	10
5.19	Is the Production Support function adequately resourced? Is the Production Support function resourced full-time?	4	4	8
5.20	Is there a production support plan, with a plan for transition from development to production?	4	5	9
6.0	**Users**			
6.1	Is user involvement adequate?	5	5	10
6.2	Are the people assigned to the project sufficiently qualified?	5	5	10

Item	Attribute	Relevance	Practice	Assessment
6.3	Is there a formal Service Level Agreement (SLA) with the appropriate client departments?	3	4	7
6.4	Does the SLA define: a. The Project/Application Scope? b. The objectives of the Agreement? c. The business areas to be supported? d. The systems / applications to be supported? e. The basis for costs and charges? f. The extent of user participation? g. The frequency of progress reporting – i.e. weekly, bi-weekly, monthly, etc.? h. The form of the final report? i. The work plan(s)?	4	3	7
6.5	Are the project team members located locally to the users?	5	5	10
6.6	Has the provision been made for training staff, including: a. Formal training related to the project? b. On the job training? c. Formal training not related to the project? d. Vendor training?	5	5	10
6.7	Are users adequately trained and are all training requirements filled?	5	5	10
7.0	**Development Approach**			
7.1	**Methodologies**			
7.1.1	Is a recognized development method(s) been followed?	5	5	10
7.1.2	If more than one method has been implemented, does a documented process exist for effective integration between / among methods?	5	5	10

Item	Attribute	Relevance	Practice	Assessment
7.1.3	Is the selected method appropriate for the Application, Technical and Data Architectures?	5	5	10
7.2	**CASE**			
7.2.1	Are CASE tools being used?	5	5	10
7.2.2	Does the CASE 'integration strategy' include a process for reverse integration (i.e. updating the analysis tool if a change is made at the design level)?	4	5	9
7.3	Are structured requirements & design reviews and/or walkthroughs in use?	5	5	10
7.4	Are detailed design and code inspections in use?	5	5	10
7.5	**Analysis & Design**			
7.5.1	Are requirements & design standards in place?	5	5	10
7.5.2	Are specifications clearly traceable from physical design to logical requirements?	5	5	10
7.5.3	Are the requirements and design methods suitable for the type of application & environment?	5	5	10
7.5.4	Do the design specification documents reference: a. Purpose / scope? b. Glossary of terms? c. Requirements specifications? d. Modular decomposition diagrams? e. Technical environment specification? f. Constraints? g. Testing & Data Conversion strategy?	5	5	10

Item	Attribute	Relevance	Practice	Assessment
7.6	**Development/Construction**			
7.6.1	Are coding standards in place?	5	5	10
7.6.2	Is there a clearly documented relationship between logical (conceptual) design and technical design?	5	5	10
7.6.3	Is design and code re-use supported?	5	5	10
7.6.4	Are program control procedures in place?	5	4	9
7.6.5	Are there procedures to govern unit test cases, conditions, expected results, logs & sign-offs?	5	5	10
7.6.6	Do adequate development and test environments exist?	5	5	10
7.7	**Testing**			
7.7.1	Which of the following test phases are covered by the methodology: a. Unit Testing? b. System Testing? c. Integration Testing? d. User Acceptance Testing?	5	4	9
7.7.2	Is a test strategy in place?	5	5	10
7.7.3	Do detailed test plans/cases exist?	5	5	10
7.7.4	Are all necessary Quality Control procedures in place?	4	4	8 It should be well defined.
7.7.5	Is there an audit trail of all tests and results?	5	5	10
7.7.6	Are effective testing tools incorporated?	4	5	9

Item	Attribute	Relevance	Practice	Assessment
7.7.7	Is adequate allowance made for regression testing?	4	5	9
7.7.8	Is adequate allowance made for defect repair both before and after implementation?	4	4	8 Make sure the allowance is made
7.7.9	Will the following components of systems testing be carried out: a. Communications? b. Volume? c. Stress? d. Recovery? e. Usability? f. Operations? g. Environment? h. Security? i. Efficiency/performance?	4	4	8
8.0	**Application Architecture**			
8.1	Are object-based design and layered architecture principles being employed?	5	5	10
8.2	Does the application conform to recognized industry architecture standards?	5	5	10
8.3	Is the application being implemented using client / server architecture?	5	5	10
8.4	Is business process re-engineering being undertaken in parallel with and/or as part of this project?	5	5	10
8.5	Are there limitations to business operation flexibility due to the chosen Application Architecture?	5	4	9 Limitation should be mentioned
8.6	Are application interfaces designed in such a way as to facilitate maintenance and change?	5	5	10

Item	Attribute	Relevance	Practice	Assessment
8.7	Does the Application Architecture support information needs at all levels of user operations (Strategic / Tactical / Operational)?	4	4	8
8.8	**Client / Server**			
8.8.1	Are there design limitations which are impacting service delivery and/or performance?	4	4	8
8.8.2	Is the current architecture scalable?	5	5	10
9.0	**Data Architecture and Standards**			
9.1	Is the project operating under a formal set of data architecture standards?	4	4	8
9.2	Does a formal data architecture and model exist for the application?	5	5	10
9.3	Has a fully attributed data model been developed for the application?	5	5	10
9.4	Has the data model been integrated with the other user and system views of the data?	5	5	10
9.5	Is an industry recognized mechanized tool being used to support the data modelling area?	5	5	10
9.6	Has a set of data naming conventions and/or standards been established?	5	4	9
9.7	Is an active data dictionary in place?	5	5	10
9.8	Is the data dictionary fully integrated with the development method?	5	5	10

Item	Attribute	Relevance	Practice	Assessment
9.9	Has the DBMS been optimized to support any of the following: a. OLTP? b. Decision Support / EIS? c. Data Warehousing?	5	5	10
9.10	Is the DBMS cost effective against expectations as defined in the Business Case?	5	5	10
9.11	Is the DBMS portable across target platforms?	5	5	10
9.12	Does DBMS vendor support meet formal agreements and/or expectations?	5	5	10
9.13	Is there (or has there been) significant interruptions to development or support activities due to DBMS behavior?	5	5	10
9.14	Does or will the DBMS support extensibility appropriate for current and future business needs?	5	5	10
9.15	Is there a clear upgrade path to future Phases of the DBMS?	5	5	10
9.16	If an alternative DBMS is being considered, is there a proven conversion path?	5	5	10
9.17	Is the DBMS consistent with SOE?	5	4	9
9.18	Is the DBMS regarded as 'State-of-the-Art'?	5	5	10
10.0	**Technical Architecture**			
10.1	Is the choice of hardware platform consistent with the Standard Operating Environment (SOE)?	5	5	10
10.2	Is the software environment consistent with SOE?	5	5	10

Item	Attribute	Relevance	Practice	Assessment
10.3	Is the development language platform-independent?	4	4	8 Make sure and refine it.
10.4	Is the mixture of technologies proven, stable and easily supportable?	5	5	10
10.5	Is TCP/IP or other industry recognized application interface standard being employed?	5	5	10
10.6	Does the user interface employ GUI representation?	5	5	10
10.7	Is the application software cost effective against expectations as defined in the Business Case?	4	4	8
10.8	Is the application software portable across target platforms?	5	5	10
10.9	Does the application software vendor(s) support meet formal agreements and/or expectations?	5	5	10
10.10	Is there (or has there been) significant interruptions to development or support activities due to application software behavior?	4	4	8 Interruptions should be defined
10.11	Does or will the application software support extensibility appropriate for current and future business needs?	5	5	10
10.12	Is there a clear upgrade path to future Phases of the application software?	4	5	9
10.13	Is the software regarded as 'State-of-the-Art'?	5	5	10
11.0	**Platforms**			
11.1	Has the cost effectiveness of the platforms been measured & compared against estimates in the Business Case?	5	4	9

Item	Attribute	Relevance	Practice	Assessment
11.2	Is there adequate project-based technical support?	5	5	10
11.3	Is there adequate vendor-based technical support?	5	5	10
11.4	Do the platforms meet reliability requirements?	5	5	10
11.5	Does the mixture of platforms support portability of software and DBMS?	5	5	10
11.6	Do the platforms represent 'State-of-the Art'?	5	4	9
11.7	Are the platforms considered efficient in transaction processing and data storage?	4	5	9
11.8	Are the platforms the SOE?	5	5	10
11.9	Do Service Level Agreements exist for Platform (Hardware) Support?	4	4	8
12.0	**Networks & Communications**			
12.1	Has the cost effectiveness of the networks been measured & compared against estimates in the Business Case?	4	4	8 Should be well defined
12.2	Is there adequate project-based technical support?	5	5	10
12.3	Is there adequate vendor-based technical support?	4	4	8
12.4	Do the networks meet reliability requirements?	5	5	10
12.5	Do the networks represent 'State-of-the Art'?	5	5	10
12.6	Do the networks support business needs in terms of bandwidth?	4	4	8

Item	Attribute	Relevance	Practice	Assessment
12.7	Are all components of the networks in accordance with the SOE?	5	5	10
12.8	Do Service Level Agreements exist for Network Support?	5	5	10
13.0	**Production & Operations Support**			
13.1	Do adequate operations procedures exist?	4	5	9
13.2	Are operations support measures in place for: a. OLTP b. Inquiries & Decision Support c. Utilities & back-ups	5	5	10
13.3	Do formal & documented procedures exist for: a. User (security) maintenance? b. Acceptance of applications to Production Support?	5	4	9
13.4	Is the Production Support (Application Maintenance) function well defined?	4	4	8 It should be well defined.
13.5	Are any of the following types of maintenance carried out on a planned basis: a. Perfective maintenance b. Preventative maintenance c. Adaptive maintenance	5	5	10
13.6	Are Service Level Agreements in place between the Support Functions and the user departments?	4	4	8
13.7	Is production problem resolution supported by: a. Formal and agreed procedures? b. Accurate time & cost estimating? c. Prioritization? d. Tracking? e. Reporting?	5	4	9

Item	Attribute	Relevance	Practice	Assessment
13.8	Are Maintenance Metrics defined and in place? (These metrics may include: defect rates; problems per no. of users; defects per module/system; defects per Function Point; mean time to repair defect; mean cost to repair defect)	4	4	8
13.9	Is there an improvement program in place?	5	5	10
13.10	Are Help-desk functions well-defined, efficient and adequately resourced?	3	4	7 Ensure well-defined, efficient, and adequately resources.

Evaluation

Evaluated on	21/04/2024
Evaluated By	22IT026 HARINI S
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