

发起人高层会议总结报告

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一、总体发现

本次依托 CMMI V3.0 标准开展的 CMMI 5 级基准评估，通过文档核查、人员访谈与量化分析评审方式，全面复盘公司量化度量建模、项目治理、风险管控、流程变更、质量保障、测试验证及数据应用等全维度管理过程。评估精准梳理出现有量化模型构建、数据动态管理、治理体系落地、风险预判机制、流程迭代优化、过程质量管控、历史数据复用以及测试能力建设中的短板与改进空间，各项评估发现贴合组织当前项目运行与过程落地实际。通过与评估方的深度沟通交流，我们收获了高成熟度过程管理的专业指导建议，为组织量化管理升级与全域治理优化筑牢基础。公司高层、EPG 过程改进小组、项目管理、质量及研发核心团队针对本次评估各项问题开展联合研讨，达成统一共识，充分认可本次评估结果的客观性与实用性。后续我们将全面吸收本次评估成果，结合自身业务现状梳理优化方向，稳步落实各项改进工作，持续规范过程管理、完善量化管控体系，全面提升组织整体成熟度与精细化运营管理能力。

二、经验教训

接下来，我们从工程过程、项目管理、支持过程、过程管理四个方面为切入点分别进行详细总结。

在量化度量与模型搭建方面，当前整体生产力主要依托设计生产力与编码生产力完成建模分析，设计监测问题密度的统计依赖需求粒度、模块规模及复用率等相关指标，此类指标普遍以滞后性统计为主，仅能反馈过往过程问题，缺少阶段前瞻类度量指标的融入，无法实现过程风险与效能的前置预判。同时，组织现阶段多数定量分析模型均基于历史固化数据构建，未结合项目实时运行状态与即时度量数据动态修订更新，无法真实反映项目当下的动态变化，加之现有项目监控管控体系缺少量化管理对应的内置纠正措施，难以支撑历史模型的动态迭代与精准应用。在量化数据采集与分析过程中，虽已选取多类项目样本积累定量分析数据，但未结合试点项目的业务场景与实施特点，针对性筛选适配的历史数据子集，历史数据与当前项目的场景匹配度不足，导致数据分析与趋势预测的参考价值大打折扣，无法为项目决策提供有效支撑。

在治理管控与风险管理层面，目前组织治理工作更多聚焦战略规划层面的落地实施，针对一线项目执行的战术性治理赋能不足，治理管控要求未能深度结合日常风险动态监控与项目实际运行现状，造成治理要求与现场执行脱节，整体管控的敏锐度与落地有效性不足。风险管理与机会挖掘工作仍以事后复盘评估为主，缺乏前置化、主动式的预判机制，在探索绩效提升的潜在机会时，未能综合考量项目复盘过程中人力、成本等资源投入所能产生的实际业务回报，长期来看难以搭建具备稳定性与韧性的持续改进规划，无法充分发挥风险管理对过程优化的驱动价值。

在质量保障与工程测试管理上，质量保证工作重心过度集中于最终产品质量的检验与管控，对于过程度量规则制定、数据采集应用、过程指标监督等环节管控力度不足，重视产品即时质量优化的同时，忽视了过程缺陷整改、流程短板修复的重要性，过程治理与产品质量管控未能实现均衡并行。测试体系建设层面，单纯引入单元测试工具难以实质性提升测试有效性，测试技能专项培训、测试意识引导存在欠缺，同时日常项目排

期未能预留充足工时，研发人员无法高效设计完善、有效的测试用例，使得单元测试流于形式，难以发挥缺陷前置拦截的核心作用。

在流程管理与组织协同方面，现行流程变更管理工作脱离一线执行实际，制度修订与流程优化未充分联动各层级利益相关方，缺少一线从业人员结合日常工作实操提出的痛点反馈，导致流程变更方案落地性不足，难以贴合实际工作需求。在业务目标分析与制定过程中，过度依托产品质量、客户满意度、售后数据等宏观指标开展研判，借助图表分析形成宏观决策方向，但忽视了项目执行过程中一线战术层面的实际需求，流程优化与目标制定缺乏精细化考量，无法全面覆盖组织各层级的改进需要。

三、现实意义

实施 CMMI5 高成熟能力模型带来的现实意义非常显著。

完善量化指标体系建设，平衡滞后指标与前瞻性度量指标的结合应用，搭建动态可迭代的量化分析模型，能够切实提升组织过程预判能力，让量化管理贯穿项目全周期，以数据驱动过程优化与效能提升。优化全域治理架构，兼顾战略治理与战术治理双向落地，推动治理要求贴合日常项目管控与风险监控，可全面提升管理精细化水平，保障各项管理机制高效落地。

升级主动式风险管理模式，结合资源投入与业务回报开展综合研判，建立事前预判、事中管控、事后复盘的全流程风险机制，有助于增强组织抗风险能力，构建长效化、韧性化的持续改进体系。同步平衡产品质量与过程质量双向管控，强化过程度量监督与流程缺陷整改，能够从根源上规范研发与管理行为，降低过程问题衍生的产品隐患。

推动流程变更管理全员化、场景化，结合一线实操痛点优化流程迭代机制，兼顾宏观目标与战术落地需求，可有效打通制度与执行的壁垒，提升流程适配性与执行效率。优化历史数据筛选与复用机制，结合项目场景精准匹配分析数据源，同时完善测试体系配套建设，从工具、技能、工时多维度强化测试能力，全方位提升研发交付质量与过程稳定性。全面落地高成熟度管理要求，能够进一步夯实组织管理根基，强化数据决策能力与综合运营实力，持续增强市场核心竞争力，为企业长期稳定发展提供坚实支撑。

四、改进措施

在本次评估后，EPG 团队将与项目人员精诚合作，一起对评估中提出的建议进行深入讨论与识别，通过会议交流和数据分析，我们将总结出差距分析材料，这份材料将成为我们现阶段组织过程改进的核心依据。

我们将全面优化量化建模管理体系，优化现有生产力分析指标结构，在滞后性统计指标基础上，新增阶段前瞻度量相关指标，完善模型维度，强化过程前置分析与风险预判能力。同步建立历史量化模型动态更新机制，结合项目实时运行数据、即时度量信息定期修订模型参数，在项目监控流程中嵌入量化管理纠正措施，保障数据分析贴合项目动态现状，提升模型预测与过程管控的精准度。持续优化定量数据应用模式，针对不同业务类型的试点项目，分类筛选、匹配适配的历史项目数据子集，提升数据分析的针对性，充分发挥历史数据在趋势研判、风险预测、决策支撑中的实际价值。

完善组织全域治理体系，同步强化战略治理与战术治理建设，将治理管控要求与日常风险监控、项目现场实际运行紧密结合，细化一线执行层面的管理要求，提升治理工作的灵活性与实效性。重构风险管理整体策略，转变事后评估的传统模式，建立主动预判式风险管控机制，在绩效提升机会识别、项目复盘工作推进中，综合评估人力、成本投入对应的业务收益，制定长效化改进方案，打造具备韧性的组织改进体系。

调整质量保证工作导向，均衡产品质量管控与过程质量监督的工作比重，严格规范过程度量的定义、采集、分析与全流程应用，在优化工作产品质量的同时，同步推进过程缺陷识别、整改与闭环管理，实现产品与过程双向提质增效。优化测试全流程管理，不再单一依赖测试工具引入，同步配套开展测试技能专项培训，合理优化项目排期与工时分配，保障研发人员拥有充足时间设计标准化、有效的测试用例，切实提升单元测试落地质量与缺陷拦截能力。

优化流程变更管理机制，建立全员协同的流程优化模式，广泛收集一线从业人员日常工作实操痛点与改进建议，让流程变更贴合实际执行场景，打破流程制度与现场工作脱节的问题。合理调整业务目标分析维度，在宏观指标研判的基础上，兼顾项目执行、日常管理等战术层面的实际需求，分层分类制定改进目标与优化方案，保障组织整体改进工作全面均衡推进。

公司高层将全程提供资源保障，统筹协调人力、物资及专项培训资源，保障各项改进措施有序推进。EPG 团队将全程跟进改进落地进度，选取代表性项目开展试点验证，通过数据跟踪与效果复盘验证改进成效，成熟后逐步在全组织推广落地。我们将以本次 CMMI5 评估为契机，深刻查摆自身不足，全面落实各项优化举措，持续打磨过程管理能力、量化管控水平与研发交付实力，稳步推进组织高成熟度能力建设，依托标准化、精细化、数据化的管理模式，实现企业高质量可持续发展。

最后，我们衷心感谢评估师和各位 ATM 老师的辛勤付出和专业指导，高度认可本次评估提出的各项发现与改进建议，后续将认真落实整改优化，以持续改进驱动整体能力升级。

我在此授权并同意您本人和 SITARA Technologies 在 SITARA 的出版渠道上分享我们的评估成果，在 SITARA Technologies 认为合适的情况下宣传我们的评估成果。



EXECUTIVE SESSION BRIEFING: SPONSOR FEEDBACK

Overall findings

This CMMI Level 5 benchmark appraisal, conducted based on the CMMI V3.0 standard, is carried out through document reviews, personnel interviews, and quantitative analysis reviews. The company's full-dimensional management processes, including quantitative measurement modeling, project governance, risk management, process change, quality assurance, test verification, and data application, are comprehensively reviewed. Existing weaknesses and improvement areas in current quantitative model construction, dynamic data management, governance system implementation, risk prediction mechanisms, process iterative optimization, process quality control, historical data reuse, and test capability building are precisely identified. All appraisal findings are aligned with the organization's current project operations and process implementation reality. Through in-depth communication with the appraisal team, professional guidance on high-maturity process management is obtained, laying a solid foundation for the organization's quantitative management upgrade and overall governance optimization. Joint discussions on the issues identified in this appraisal are held by the company's senior management, the EPG process improvement team, and core project management, quality, and R&D teams. A unified consensus is reached, and the objectivity and practicality of the appraisal results are fully recognized. Subsequently, the findings of this appraisal will be fully absorbed, optimization directions will be identified based on the company's business status, various improvement activities will be steadily implemented, process management will be continuously standardized, the quantitative control system will be improved, and the organization's overall maturity and refined operational management capabilities will be comprehensively enhanced.

Lessons Learned

Engineering Process, Project Management, Support Process, and Process Management are taken as the four focus areas for a detailed summary.

Currently, overall productivity is mainly modeled and analyzed based on design productivity and coding productivity. The statistical detection of design problem density is dependent on related indicators such as requirement granularity, module size, and reusability rate. These indicators are generally dominated by lagging statistics, which can only reflect past process problems. The integration of proactive, forward-looking metrics is absent, so the upfront prediction of process risks and performance is not achieved. Moreover, most of the organization's current quantitative analysis models are constructed based on historical, fixed data. Dynamic revision and updates are not performed in conjunction with real-time project operation status and immediate measurement data, so the current dynamic changes of a project are not accurately reflected. In addition, the existing project monitoring and control system lacks built-in corrective actions corresponding to quantitative management, making it difficult to support the dynamic iteration and precise application of historical models. During the collection and analysis of quantitative data, although multiple project samples are selected to accumulate quantitative analysis data, a targeted subset of historical data is not filtered and adapted based on the business scenarios and implementation characteristics of the pilot projects. The insufficient matching of historical data with current project scenarios greatly reduces the reference value of data analysis and trend prediction, so effective support for project decision-making is not provided.

At present, organizational governance efforts are mostly focused on the implementation of strategic

planning. Tactical governance support for front-line project execution is insufficient. Governance and control requirements are not deeply integrated with daily dynamic risk monitoring and the actual operational status of projects, resulting in a disconnect between governance requirements and on-site execution. The sensitivity and implementation effectiveness of overall control are inadequate. Risk management and opportunity exploration are still dominated by post-hoc (review) and evaluation, so a proactive, forward-looking prediction mechanism is lacking. When exploring potential opportunities for performance improvement, the actual business returns generated by resource inputs such as manpower and cost during project review are not comprehensively considered. In the long term, a stable and resilient continuous improvement plan is difficult to establish, and the driving value of risk management for process optimization cannot be fully realized.

The focus of quality assurance work is excessively concentrated on the inspection and control of final product quality. Sufficient control is not exercised over process measurement rule formulation, data collection and application, and process indicator supervision. While immediate product quality optimization is emphasized, the importance of process defect correction and process weakness repair is neglected. Balanced and parallel implementation of process governance and product quality control is not achieved. At the level of test system construction, the mere introduction of unit testing tools is insufficient to substantially improve test effectiveness. Targeted training in testing skills and the cultivation of testing awareness are lacking. In addition, sufficient working hours are not reserved in daily project scheduling, so R&D personnel are unable to efficiently design complete and effective test cases. Consequently, unit testing becomes a formality, and its core function of upfront defect interception is difficult to realize.

Current process change management is detached from front-line implementation reality. System revision and process optimization are not fully coordinated with stakeholders at all levels. Pain-point feedback based on daily work practices from front-line practitioners is lacking, resulting in poor implementability of process change plans and an inability to align with actual work needs. During business goal analysis and formulation, excessive reliance is placed on macro indicators such as product quality, customer satisfaction, and after-sales data. Macro-level decision-making directions are formed through chart analysis, but the actual tactical needs at the front line during project execution are ignored. Process optimization and goal setting lack fine-grained consideration, so the improvement needs of all levels of the organization cannot be fully covered.

Relevance

The practical significance of implementing the CMMI Level 5 high-maturity capability model is very significant.

The construction of the quantitative indicator system is improved, the combined application of lagging indicators and forward-looking measurement indicators is balanced, and a dynamic, iterable quantitative analysis model is established. The organization's process prediction capability is effectively enhanced, quantitative management is embedded throughout the entire project lifecycle, and process optimization and performance improvement are driven by data. The overall governance framework is optimized, the two-way implementation of both strategic governance and tactical governance is balanced, and governance requirements are aligned with daily project control and risk monitoring. The level of refined management is comprehensively improved, and the efficient implementation of various management mechanisms is ensured.

The proactive risk management model is upgraded. Comprehensive evaluation is carried out by integrating resource input and business return. A full-process risk mechanism combining pre-action prediction, in-action control, and post-action review is established. The organization's risk resilience is strengthened, and a long-term, resilient continuous improvement system is built. Simultaneously, the two-way control of product quality and process quality is balanced, and process measurement supervision and process defect correction are strengthened. R&D and management behaviors are standardized at the source, and product risks derived from process problems are reduced.

The process change management is promoted to be organization-wide and scenario-based. The process iteration mechanism is optimized by incorporating hands-on pain points from the front line. Both macro-level objectives and tactical implementation needs are balanced. The barrier between policies and execution is effectively broken down, and process adaptability and execution efficiency are improved. The mechanism for screening and reusing historical data is optimized, and analytical data sources are precisely matched to project scenarios. Simultaneously, supporting test system construction is improved. Testing capability is strengthened from the multiple dimensions of tools, skills, and working hours, and R&D delivery quality and process stability are comprehensively enhanced. By fully implementing high-maturity management requirements, the organization's management foundation is further solidified, data-driven decision-making capability and comprehensive operational strength are strengthened, core market competitiveness is continuously enhanced, and solid support is provided for the long-term stable development of the enterprise.

Improvement Actions

After this appraisal, the EPG team will work closely with project personnel to conduct in-depth discussions and identification of the suggestions raised during the appraisal. Through meetings and data analysis, gap analysis materials will be summarized by us. These materials will be used as the core basis for the organization's process improvement at this stage.

The quantitative modeling management system will be comprehensively optimized. The structure of existing productivity analysis indicators is improved. On the basis of lagging statistical indicators, new forward-looking measurement indicators are added. The model dimension is refined, and the capabilities of proactive process analysis and risk prediction are strengthened. Simultaneously, a dynamic update mechanism for historical quantitative models is established. Model parameters are regularly revised by combining real-time project operation data and real-time measurement information. Quantitative management corrective actions are embedded in the project monitoring process, ensuring that data analysis is aligned with the dynamic status of projects, and the accuracy of model prediction and process control is enhanced. The application mode of quantitative data is continuously optimized. For pilot projects of different business types, subsets of historical project data are categorized, filtered, and matched. The targeting of data analysis is improved, and the practical value of historical data in trend analysis, risk prediction, and decision support is fully utilized.

The organization's overall governance system is improved. Both strategic governance and tactical governance are strengthened simultaneously. Governance and control requirements are closely integrated with daily risk monitoring and actual on-site project operations. Management requirements at the front-line execution level are refined, and the flexibility and effectiveness of governance work are enhanced. The overall risk management strategy is restructured. The traditional post-event evaluation model is transformed, and a proactive, predictive risk management mechanism is established. During

performance improvement opportunity identification and project review promotion, business returns corresponding to human and cost inputs are comprehensively evaluated. A long-term improvement plan is developed, and a resilient organizational improvement system is built.

The orientation of quality assurance work is adjusted. The balance between product quality control and process quality supervision is equalized. The definition, collection, analysis, and full-process application of process measurement are strictly standardized. While the quality of work products is optimized, process defect identification, correction, and closed-loop management are simultaneously promoted, achieving two-way quality and efficiency improvement for both products and processes. The full-process test management is optimized. Sole reliance on the introduction of testing tools is abandoned. Specialized training on testing skills is provided simultaneously. Project scheduling and working hour allocation are reasonably optimized, ensuring that R&D personnel have sufficient time to design standardized and effective test cases, so that the implementation quality of unit testing and defect interception capability are effectively improved.

The process change management mechanism is optimized. A collaborative, organization-wide process optimization model is established. Hands-on pain points and improvement suggestions from front-line practitioners in their daily work are widely collected, ensuring that process changes are aligned with actual execution scenarios, and the disconnect between process policies and on-site work is resolved. The business goal analysis dimension is reasonably adjusted. On the basis of macro-level indicator analysis, the actual needs at the tactical level, such as project execution and daily management, are also taken into account. Improvement goals and optimization plans are formulated by category and by level, ensuring that the organization's overall improvement work is promoted comprehensively and in a balanced manner.

Company senior management will provide full resource support throughout the process. Human resources, materials, and specialized training resources are coordinated and allocated in a unified manner, ensuring that various improvement measures are promoted in an orderly fashion. The EPG team will track the implementation progress of improvements throughout the process. Representative projects are selected for pilot verification. Improvement effectiveness is verified through data tracking and effectiveness reviews, and after maturity, improvements are gradually rolled out and implemented across the organization. This CMMI Level 5 appraisal will be taken as an opportunity by us. Our shortcomings will be deeply examined, various optimization measures will be fully implemented, and process management capability, quantitative control level, and R&D delivery strength will be continuously refined. The organization's high-maturity capability building will be steadily advanced, and high-quality, sustainable development of the enterprise will be achieved by relying on a standardized, refined, and data-driven management model.

Finally, we sincerely thank the appraiser and all the ATMs for their hard work and professional guidance. The findings and improvement suggestions raised in this appraisal are highly recognized by us. Subsequently, rectification and optimization will be seriously implemented, and continuous improvement will be used to drive overall capability upgrades.

I hereby authorize and agree that you and SITARA Technologies may share our appraisal results on SITARA's publishing channels and promote them as deemed appropriate by SITARA Technologies.

Zhengtian Technology Co., Ltd.

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April 27th 2026

