山东万博科技股份有限公司文件

发起人反馈暨高层会议简报

首先，作为本次评估发起人，非常感谢主任评估师 Raghav 先生以及所有 ATM 成员的辛苦工作，也感受到了本次评估过程的严谨和专业习性。本次是公司第三次 CMMI5 级评估，通过对评审发现结果的了解，本次评估是发现改进机会最多的一次评审，这为我们公司后续改进提供了更多的改进来源，我感到非常高兴。基于这些评审发现的评估，并且充分听取了评估参与者的反馈，我们认为这些改进建议与公司现状的符合程度超过 95%，这些建议项，为公司后续项目管理、研发实施方面提供改进方向。

我们对所有改进建议进行逐一分析，认为这些改进建议能够为公司商业目标达成提供帮助，按照公司的商业目标，我们收获了如下建议机会：1）项目机会管理意识不够强，后续需要增强对于项目机会管理的培训，增加项目经理对机会的理解，更好的为公司创造价值。2）目前公司文档和代码以 SVN 库管理为主，人员使用效率较

低，需要将文档和代码分开管理，同时代码管理考虑使用 Git 工具，提升代码分支管理能力。3）公司实施的培训，不仅要关注技术类、市场类的培训，同时，也要增加各个岗位工作流程的培训，建立周期性培训机制，以更好提升员工工作效率。4）目前，单元测试质量原因分析抽检样本数据偏少，后续有必要增加样本量，并且数据尽量使用最新项目数据，有利于提高数据准确性。5）对项目数据质量加强检查，考虑进一步完善数据质量检查单，增加对数据访问权限、数据传输权限、数据存储安全的检查。6）进一步增加统计分析方法的培训，尤其对于使用散点图分析方面，以便在回归因子分析时，准确找到数据点远离回归中心线的原因，找出问题，提高回归方程的精准度。7）EPG 识别的革新工具，有必要在单元模块级进行验证，证明有效性在进行试点和推广，以避免使用新工具带来的成本风险。

我们认为本次评估建议对组织管理、项目管理、工程实践三个方面最有帮助。在组织管理方面，EPG 会持续优化优化过程基线和模型，提出改进机会，推广更多的工具，提升组织整体效能；在项目管理方面，我们会继续完善风险、机会管理库，添加更多的分类，针对项目、行业收集更有针对性的风险，帮助项目经理更好的识别风险，进一步提高团队风险管理意识；我们也会引入更多的外部培训，提升开发人员的开发水平，提升产品竞争力;在工程实践方面，单元测试推广工具方面的建议，有助于进一步提升团队的代码质量和交付能力，提升生产效能，确保实现公司商业目标的达成。

在后续的工作中，针对各项建议组织专项会议，对每个实践域的改进建议进行根本原因分析，找出最优的解决方案，并制定行动计划。按照改进计划开展试点执行，并采集数据，分析改进措施的有效性，为持续改进提供数据支撑。高层也会对项目团队和 EPG 提供更多的支持，随着中国疫情政策的放开，在外部先进技术的引进如三维数据可视化、大数据、人工智能等先进技术，我们会有针对性的培训预算。另外在办公电脑及服务器上，我们也会提供预算，采用云服务器的方式，提供更接近用户配置的服务器。

山东万博科技股份有限公司
2023 年 1 月 8 日

主题词：

| 山东万博科技股份有限公司 | 2023 年 1 月 8 日印发 |

拟文部门：研发部　　　校对：康良亭　　　打字：杨爱江

SPONSOR FEEDBACK —EXECUTIVE SESSION BRIEFING

As the sponsor of this appraisal, I would like to start by extending my gratitude to Mr. Raghav, the lead appraiser, and all the ATM members who have worked so hard for this appraisal, and I also feel the rigor and professionalism. As this is the third CMMI Level 5 appraisal, I am very satisfied to learn from the findings of the appraisal and that it is the one with the most improvement opportunities, providing more sources of improvement for our company's subsequent improvements. With these findings, and after receiving feedback from the participants, we believe that these improvement proposals are 95% and above in line with the current conditions of the company, and that these proposals give us a direction for follow-up improvements in project management and R&D operations.

We have analyzed all the improvement proposals one by one and concluded that these improvement proposals are capable of helping the company reach its business objectives. As per the company's business objectives, we have harvested

the following proposed opportunities: 1) The awareness of project opportunity management is not strong enough, and the subsequent training for project opportunity management needs to be enhanced to increase the project manager's understanding of opportunities and better create value for the company. 2) Documentation and code of the company are currently managed by SVN library management is the main focus, the efficiency of personnel use is low, need to separate the management of documents and code, while a Git tool is considered for code management to improve the ability to manage code branches. 3) The training implemented by the company should not only focus on technical and marketing training, but also increase the training of the workflow of each position and establish a cyclical training mechanism to better improve the efficiency of employees. 4) At the moment, the sample data for unit test quality causal analysis is small, it is essential to increase the sample size subsequently, and to use the latest project data as much as possible to help raise the data accuracy. 5) Strengthen the inspection of project data quality, consider further improving the data quality checklist, and increase the inspection of data

access rights, data transmission rights, and data storage security. 6) Further increase the training of statistical analysis methods. In particular, for the use of scatter plot analysis, in the regression factor analysis, accurately find the reason why the data points are away from the regression centerline, identify the problem, and improve the accuracy of the regression equation. 7) There is a need to validate the innovative tools for EPG to identify and prove the effectiveness in piloting and promoting on the unit module scale, in order to avoid the cost risks associated with the use of new tools.

We see the proposals of this appraisal as most helpful regarding three dimensions: organizational management, project management, and engineering practices. Regarding organizational management, EPG will continue to optimize process baselines and models, propose improvement opportunities, promote more tools, and improve overall organizational effectiveness; in project management, we will continue to improve the risk and opportunity management library, add more categories, collect more targeted risks for projects and industries, help project

managers better identify risks, and further improve team risk management awareness; we will also introduce more external training to improve the development level of developers and enhance product competitiveness; in engineering practices, unit testing promotion tools are recommended to help further improve the team's code quality and delivery capabilities, enhance production effectiveness, and ensure the achievement of the company's business objectives.

During the follow-up, dedicated meetings will be scheduled for each of the proposals to identify the root causes for each practice area, find the optimal solution, and develop an action plan. Pilot execution will be conducted following the improvement plan, and data will be collected to analyze the effectiveness of the improvement measures and provide data support for continuous improvement. The senior management will also provide more support to the project team and EPG. With the relaxation of China's epidemic policy, we will have a dedicated training budget for the introduction of external advanced technologies such as 3D data visualization, big data, artificial

intelligence and other advanced technologies. Also on office computers and servers, we will provide budgets to adopt cloud servers to provide servers closer to user configurations.

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Jan 8th, 2023