- Development:1

1. **Requirements Analysis**: Start by understanding the specific quality requirements for your products or services. What are the critical quality parameters? What standards and regulations must be followed?

2. **Data Collection**: Identify the sources of data that can be used for quality control. This might include sensors, customer feedback, production logs, and more.

3. **Automated Testing**: Develop automated tests for various stages of production or service delivery. This can include unit tests, integration tests, and end-to-end tests.

4. **Statistical Process Control (SPC)**: Implement SPC techniques to monitor and control quality in real-time. This can involve the use of control charts and statistical analysis.

5. **Root Cause Analysis**: Develop automated tools for identifying and addressing the root causes of quality issues. This might involve techniques like the 5 Whys.

6. **Documentation and Records**: Automate the creation and management of quality-related documents, including quality plans, inspection records, and corrective action reports.

7. **Quality Management Software**: Consider using or developing quality management software that can streamline processes, manage non-conformances, and provide real-time quality insights.

8. **Supplier Quality Management**: Implement automated processes for evaluating and monitoring the quality of materials and components from suppliers.

9. **Regulatory Compliance**: Ensure that your automated quality management system complies with relevant industry and regulatory standards. This might involve automated audits and reporting.

10. **Continuous Improvement**: Build in mechanisms for continuous improvement by analyzing data and using automated alerts and notifications for quality issues.

11. **Training and Change Management**: Train your workforce to use the automated quality management tools effectively and manage the cultural shift that automation can bring.

12. **Scalability and Integration**: Ensure that your system can scale as your business grows, and that it can integrate with other systems such as ERP (Enterprise Resource Planning) software.

13. **Security**: Implement strong security measures to protect sensitive quality data and prevent tampering.

14. **Cost-Benefit Analysis**: Continuously assess the costs and benefits of your automated quality management system to ensure it's delivering value.

15. **User Feedback**: Encourage feedback from users and stakeholders to make iterative improvements to the automated system.

Automated quality management development is a complex process that involves both technical and organizational considerations. It's important to plan and implement it carefully to achieve the desired improvements in product or service quality.