# **The Evolution of Change Management: From Customer Need to Continuous Improvement (v2.0)**

## **Part One: From Customer Need to New Product Development**

### **Chapter 1: The Voice of the Customer**

Sarah Chen, Senior Product Designer at Molex, begins her Tuesday morning by logging into her personalized homepage. The interface presents a clear workflow notification through ARIA-CM (Adaptive Requirements Intelligence Assistant for Change Management), Molex's AI-powered change management system.

"Incoming change from automotive customer," ARIA-CM displays. "Updated specifications for next-generation electric vehicle connector systems with integrated thermal management capabilities."

When Sarah opens the change notification, she immediately sees what specification has changed. The system's direct connection to both customer data and internal data clearly identifies impacts across drawings, tooling, testing, validation, costing, and customer quotations. All functions have real-time visibility into information related to changes, eliminating the wasted time and delays that once occurred when functions didn't receive change notifications.

This unified framework represents a significant evolution. Every single group within Molex now manages change to a common framework that they tailor to meet their specific needs, replacing the era when lack of standardization led to increased probability of errors. The change process is now known and understood across Molex, with a global uniform core change framework tailored to meet the needs of the business.

### **Chapter 2: Unified Process in Action**

Within hours, Sarah joins a virtual design workshop with the customer's engineering team. Customers and suppliers are directly involved in the process, connecting seamlessly with Molex facilities in Shanghai, Detroit, and Guadalajara. All the relevant stakeholders participate, all operating under the same change management process—eliminating the duplicate efforts that occurred when plants maintained internal/local change processes that duplicated corporate efforts.

The customer's lead engineer explains: "We need connectors that can adapt to varying thermal conditions while maintaining consistent performance." As he speaks, ARIA-CM captures these requirements accurately, comparing them to what was published and released earlier, ensuring the right changes are being thoroughly vetted.

The AI identifies specific metrics within minutes: • Thermal adaptation range: -40°C to +150°C • Response time to temperature changes: <50 milliseconds • Weight optimization target: 30% reduction • Redundancy requirements: Triple failsafe systems

When ARIA-CM identifies a potential conflict, it immediately leverages historic part information sources to say: "Based on lessons learned from previous changes, achieving 28% weight reduction instead of 30% would prevent thermal issues documented in PR-2847." This demonstrates how Molex now effectively leverages institutional part and product knowledge, getting maximum value from the system.

Sarah used ARIA-CM to send an immediate acknowledgement to every stakeholder that the change should be pursued. The decision rights of who can approve changes are clearly known and consistent, eliminating the confusion that once plagued the organization.

### **Chapter 3: Collaborative Design Environment**

Back at her workstation, Sarah enters her design environment where all functions contribute effortlessly throughout the change process. The days of different groups and functions being at different levels of adoption have been replaced by universal implementation.

All stakeholders passionately contribute to evaluate the impact of change. The thermal team in Shanghai sees heat dissipation impacts, while manufacturing in Guadalajara views tooling requirements—all coordinated effectively through a single source of truth for change related information, ensuring seamless coordination of activities between the various stakeholders in making the change.

As Sarah modifies the connector geometry by 2mm, the system shows her exactly how this change impacts every aspect of the product. Approved changes are instantly reflected in all appropriate documents and information sources, preventing the errors that once led to increased workload and churn in product development and manufacturing plants.

Sarah and her team can review this change simultaneously, with complete traceability summary flowing from request to implementation of change. They understand not just what changed but why, ensuring full awareness of the "reason for change" to all functional groups affected.

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## **Part Two: Managing Changes During Production Release**

### **Chapter 4: Integrated Validation and Learning**

Three weeks into design, Sarah initiates comprehensive validation. The system ensures accurate and complete notifications of changes are effectively communicated to appropriate groups, replacing the old reliance on weekly meetings and email communications.

When ARIA-CM identifies a potential issue with connector pin 7, it automatically generates a Problem Report, demonstrating how the PR process is used to track learning and changes rather than just filing a report. The problem management system now ensures the change process is seamlessly integrated into every functional group.

"PR-3892 created," ARIA-CM notes. "Historical analysis shows similar vibration patterns in 12 previous designs. Recommended solution: Adjust pin geometry by 0.3mm."

This bi-directional communication ensures the design change process is no longer uni-directional, with confirmation and feedback from manufacturing that change details are received and understood. The system includes an early warning system to notify upstream functions of changes or issues detected in production, allowing for proactive measures.

### **Chapter 5: Production Readiness with Clear Accountability**

Six weeks from initial contact, Sarah presents to the Change Review Board. The comprehensive design review process with clear accountability ensures that the creation, review and approval of changes are completed by appropriate individuals or individuals with the proper decision rights. There may be situations where the scope of the change is so simple that a single engineer could have the decision rights to approve.

The system clearly delineates the scope of the Product Development change management process from end to end, addressing the confusion about change management requirements before versus after production:

• Pre-production changes: Design flexibility with requests for change responded to with urgency • Production changes: Controlled process ensuring effectiveness of change is successfully implemented by all functional groups • Post-production changes: Strict governance preventing reputational damage from shipping incorrect revisions

"ARIA-CM, present the readiness assessment," Sarah requests.

The AI responds: "Design completion verified. Product Part changes effectively occur with all stakeholders aligned."

The system maintains a comprehensive change history that encompasses various documents related to changes, not just PRs, ensuring complete documentation throughout the process.

### **Chapter 6: Continuous Monitoring and Measurement**

The first production unit rolls off the line in Guadalajara. All information related to change is linked to all design data and production processes through the digital thread. Technician Maria Rodriguez sees revision levels that are clear and understood, with assembly instructions tailored to her role.

Two weeks into production, ARIA-CM's monitoring and measuring capabilities detect a pattern: "Assembly station 7 requiring 12% more insertion force than simulated." This proactive approach allows the system to identify everyone required to evaluate change and those whom the change needs to be communicated to, preventing issues from escalating.

The solution flows instantly through the unified system. Change information flows seamlessly across all departments, with automatic updates pushed out to all applicable areas, eliminating the scrambling for emails, department visits, and additional testing that once consumed valuable time. This prevents the high levels of scrap from procurement due to incorrect parts or unused inventory.

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## **Part Three: Post-Production Changes and Continuous Improvement**

### **Chapter 7: Managing Customer-Initiated Changes**

Three months into production, a major automotive customer requests modifications based on field performance data. This post-production change request demonstrates the system's ability to handle complex scenarios after a product has been in production for a period of time.

Options, variants, and configurations changes are concisely managed, while changes to product parts with shared features are masterfully handled. The transformation addresses the metrics issue—engineering is no longer incentivized to have fewer changes. Instead, the Product Part changes processes are scalable and highly efficient, supporting rapid iterative development that provides knowledge, risk reduction, and shorter development cycles.

When the customer approaches with performance enhancement requirements, ARIA-CM instantly accesses relevant knowledge from both customer feedback and internal performance data, demonstrating how the change process is interpreted and executed consistently across all groups and plants.

### **Chapter 8: Supplier and Internal Team Changes**

Six months into production, a key supplier identifies an opportunity to improve component reliability. The system seamlessly integrates this supplier-initiated change, demonstrating how external stakeholders participate directly in the change management process.

Similarly, when internal teams identify cost-saving opportunities based on production data, ARIA-CM facilitates the evaluation and implementation of these changes. The early warning system notifies all upstream functions, ensuring design teams can incorporate learnings into future products.

### **Chapter 9: The New Normal of Integrated Change Management**

One year later, Sarah reflects on the complete transformation. The project showcases how change management now works seamlessly across all Molex businesses and industries, handling changes throughout the entire product lifecycle—from initial customer need through post-production modifications.

Governance and process excellence have become reality. Every change request is thoroughly vetted, with modifications acknowledged by all stakeholders before implementation. The system applies lessons learned from previous changes automatically, while ensuring changes are successfully implemented across all functional groups with appropriate urgency.

The scalability achievements are remarkable. The global framework adapts to specific business needs while maintaining core consistency. Product change processes that once created bottlenecks now scale efficiently, with approved changes instantly reflected across all documents and systems. Customers and suppliers participate directly in the process, while stakeholders contribute passionately to impact evaluations. The change management system has integrated seamlessly into every function's workflow, with accurate notifications flowing to all affected groups.

Complete traceability extends from request to implementation, with changes originating from any part of the organization. Everyone maintains full awareness of the reasons driving each change. Configuration management happens effortlessly—shared features, revision levels, and variants are all handled with precision through the unified system.

The digital thread connects everything. Change information flows seamlessly across departments, with real-time visibility for all functions drawing from a single source of truth. As Sarah reviews the metrics dashboard, the results speak for themselves: 73% fewer change-related meetings, 94% of issues prevented before occurrence, and zero incorrect revisions shipped to customers in six months.

The system has evolved from a necessary process to a competitive advantage, enabling Molex to respond to market changes faster than ever while maintaining the highest quality standards.

### **Epilogue: Continuous Evolution**

As Sarah begins reviewing new opportunities, she works within a system that has eliminated every pain point that once plagued Molex's change management. The consistent process of change is now used reliably, even during the busiest periods, because the system supports rather than burdens employees.

When a notification arrives about a new customer opportunity, Sarah efficiently accesses all relevant information through the digital thread. The transformation from scattered communications to integrated workflows represents more than technological advancement—it's a fundamental shift in how Molex creates value.

In this environment, change isn't a disruption but an opportunity. Every requirement is traced, every modification flows with clarity, and the integrity of product information is maintained throughout the lifecycle. These capabilities have become the foundation for how Molex delivers innovative solutions while maintaining quality and efficiency across their global operations, ensuring no employee is "just trying to keep their heads above water" but instead thriving in a supportive, intelligent system that manages changes from initial customer need through post-production improvements.