**Phase 7: Post-Deployment Support & Continuous Improvement – Expense Approval System**

**1. Phase Overview**

Phase 7 focuses on **post-deployment support, monitoring, user feedback, and continuous improvement** for the Expense Approval System. After the system is live, this phase ensures that **expense requests, approvals, and email notifications function reliably**, while the system remains scalable, secure, and aligned with organizational needs.

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**2. Objectives of Phase 7**

- Monitor live system behavior for **expense submissions and approvals**.
- Provide **user support** for employees submitting requests and managers approving them.
- Collect **feedback** on approval times, notification clarity, and usability.
- Implement **enhancements** based on feedback, such as faster approval flows or email formatting improvements.
- Ensure **compliance** with company policies and maintain audit trails.

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**3. Post-Deployment Monitoring**

**3.1. Expense Request Flow Monitoring**

- Check that **new expense requests** correctly trigger ExpenseRequestTrigger.
- Confirm that **status updates** (Pending → Approved/Rejected) happen automatically via flows.
- Monitor **bulk expense submissions** to ensure triggers handle multiple records without errors.

**3.2. Email Notification Monitoring**

- Verify that **emails to managers** are sent when a request is submitted.
- Ensure **employees receive notifications** when their requests are approved or rejected.
- Track **dynamic email content** for accuracy (amount, type, comments).

**3.3. Performance Metrics**

- Average approval time per request.

- Number of pending approvals at any given time.
- Flow and trigger execution times to avoid Salesforce governor limits.

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**4. User Support & Issue Management**

**4.1. Common Issues**

- Expense requests not triggering approval flows.
- Emails not being delivered or missing content.
- Unauthorized status changes attempted by employees.
- Validation errors on amounts or missing fields.

**4.2. Resolution Process**

- Investigate trigger logs (ExpenseRequestTrigger) for failed executions.
- Check Flow interviews for errors.
- Verify field-level security and profile permissions for access issues.
- Apply **bug fixes** in Sandbox, test, then deploy to Production.

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**5. Feedback & Continuous Improvement**

**5.1. Feedback Collection**

- Gather input from employees and managers on:
    - Ease of submitting expense requests.
    - Clarity of approval notifications.
    - Timeliness of approvals.
    - Suggestions for multi-level approval or threshold-based routing.

**5.2. Planned Enhancements**

- Multi-level approval based on amount thresholds (e.g., >₹5000 goes to higher manager).
- Integrate with Finance/ERP system for **automatic reimbursement tracking**.
- Add **mobile-friendly interface** for submission and approval.
- Provide **dashboard for managers** showing pending approvals and trends.

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**6. Security & Compliance**

- **Field-level security** ensures employees cannot alter approval status.
- **Audit trail** tracks all changes to expense records.
- **Manager-only access** to approval and comment fields.
- Regular review of **profiles, permission sets, and sharing rules** to maintain data integrity.

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**7. Reporting & Analytics**

- Reports for:
    - Total expense requests submitted and approved.
    - Average approval times per department.
    - Most frequent expense categories.
    - Rejected requests with reasons.
- Helps identify **approval bottlenecks** and areas for process improvement.

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**8. Knowledge Base & Documentation**

- Updated **user manuals** with new enhancements.
- FAQs on handling **rejected requests** or **missing notifications**.
- Documented **post-deployment bug fixes and workflow changes** for future reference.

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**9. Lessons Learned**

- Real-time monitoring of triggers (ExpenseRequestTrigger) and flows prevents unnoticed failures.
- Feedback from **actual users** helps refine approval flows and email content.
- Bulk processing and validation rules are essential for large-scale deployment.
- Proper security ensures **compliance** and prevents accidental data manipulation.

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**10. Conclusion**

Phase 7 ensures that the **Expense Approval System continues running smoothly after deployment**. By monitoring triggers, flows, and notifications, providing support, and implementing user-driven enhancements, the system achieves:

- Faster and accurate approvals.
- Reduced errors and miscommunication.
- Enhanced transparency and user satisfaction.
- Scalable, secure, and compliant expense management.