



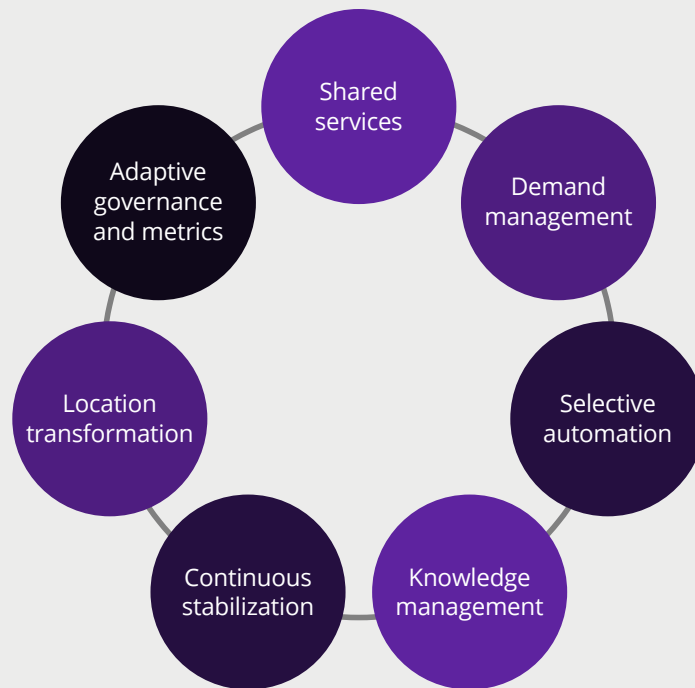
# Managing a large scale of applications

by Balaji Venkatramani Solution Lead, Engineering Processes

It's a common scenario for client organizations to have a large portfolio of legacy applications in conjunction with modern applications. These legacy applications need to be effectively and efficiently managed while their modernization initiatives progress over a period of time. Clients often engage with IT vendors to leverage their capabilities in managing such a large scale of legacy applications.

In our experience, managing such an application portfolio requires focused solutions to ensure stability, continuous efficiencies and cost optimization.

There are seven core solutions for IT vendors to successfully manage a large scale of applications and meet client objectives.



## 1. Shared services

Driving effort optimization while still ensuring business satisfaction is key for legacy portfolios, as they still serve critical business functionalities.

Adopting a shared services approach enables the availability of required expertise and effort for a larger set of applications with efficiency.

Shared services can be implemented in the following scenarios:

- Shared teams for specific services, such as service desk, application support and code fixes on failure
- Horizontal teams to drive continuous improvements (e.g., ticket reduction, knowledge management and automation)

## 2. Demand management

A key requirement for effectively managing legacy applications is to reduce discretionary demand and fulfil only mandatory demand. This requires a robust demand management function to continuously drive demand optimization.

Key demand management solutions, which need to be implemented include:

- Establishing guidelines on classification of demand into categories such as:
  - Discretionary or mandatory
  - Support change or development change
- A process for identifying alternate approaches to meeting discretionary demand without implementing the change
- Establishing a forecast mechanism to proactively match available capacity with demand and drive knowledge management initiatives based on the forecast
- Robust governance to track compliance of the established process, ensuring continuous stakeholder satisfaction and efficiencies

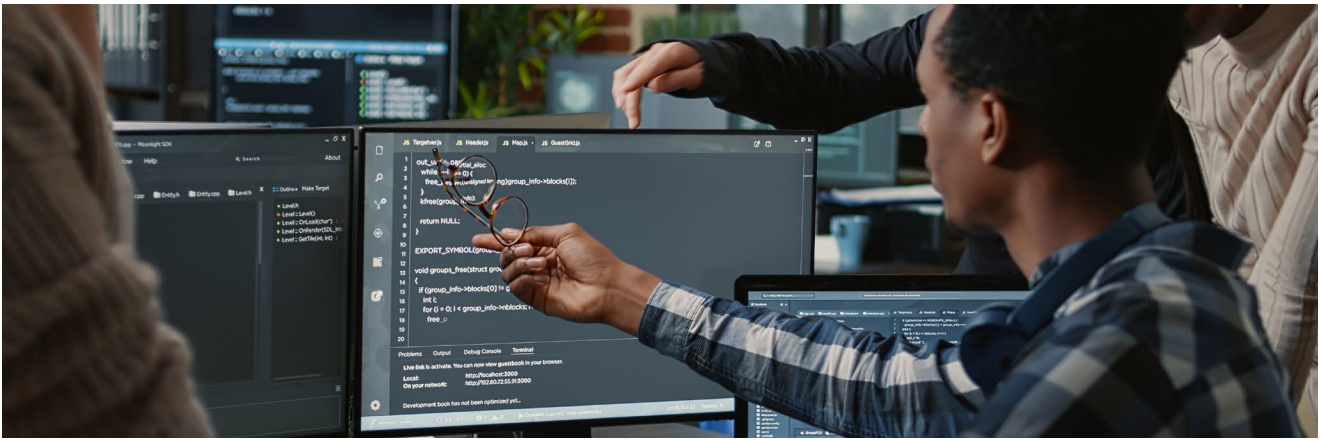
## 3. Selective automation

Automation initiatives can enable significant effort optimization and complexity reduction in managing a large scale of applications. However, the cost of automation may not align to the business significance of the legacy applications and cost optimization objectives of the portfolio.

Focusing on selective automation is the solution in this scenario.

Key criteria to invest in automation may be based on the following factors:

- Business criticality of specific legacy applications
- Expected timelines for replacement modern platforms to go live
- Frequency of occurrence of repetitive issues and associated effort
- Complexity of fixes for repetitive issues
- Complexity of implementing the automation
- Impact to business satisfaction



## 4. Knowledge management

Ensuring timely availability of the requisite knowledge to address issues is key for organizations with a large scale of legacy applications.

Key challenges to ensuring this availability include:

- A large number of applications with a limited support team in the form of shared services
- A lower frequency of critical issues or change occurrence, leading to less exposed knowledge
- Diverse knowledge requirements across a variety of technologies and domains
- Minimal or out-of-date knowledge documentation with key person dependencies

Investing selective effort in establishing robust knowledge management processes aligned to the requirements of the applications is key.

Key solutions to address these challenges include:

- Tactical knowledge capture, as and when gained while addressing specific issues or changes
- Collaborative knowledge recording and sharing platforms to publish such tactical knowledge
- Reverse-engineering legacy applications to develop knowledge artefacts
- Establishing knowledge-sharing communities with a defined agenda

## 5. Continuous stabilization

Reducing demand, especially to address issues and disruptions to business functionality, is key to optimizing effort on legacy application management. This can be achieved by transformation initiatives to address the root cause of such issues and eliminating them from recurring.

A shared team of experts needs to be established to implement business case-driven transformation initiatives to eliminate critical, complex and recurring issues. This leads to a stabilization of the portfolio, effort reduction, increased business satisfaction and cost optimization.

Such stabilization initiatives require:

- Effective capture of events, logs and knowledge for associated issues. This can be enabled by leveraging industry best-in-practice tools to record such information
- Continuous analysis of captured information, identification of root cause, and focused projects to eliminate corresponding issues
- Measuring effectiveness of such stabilization initiatives in terms of effort, complexity and cost reduction with the help associated metrics



## 6. Location transformation

The presence of expert teams co-located with the client at high-cost locations is often driven by the business criticality of the applications, as well as data confidentiality requirements. This can impact the cost optimization objectives of the program.

Transitioning expert roles to low-cost locations for such critical legacy applications requires focused effort in the following areas:

- Implementation of offshoring solutions, such as data obfuscation
- Establishing support teams aligned to client time zones
- Implementing automation and stabilization initiatives to manage the demand
- Enabling a robust knowledge management process to ensure requisite knowledge in low-cost locations
- Transitioning expert roles to nearshore locations
- Establishing secure and compliant delivery centers in low-cost locations

Location transformation is a focused exercise to ensure there is no impact to service levels while still achieving the cost and efficiency objectives of the program.

Consolidating teams at low-cost locations also enables the implementation of efficiency improvement initiatives on a larger scale.

## 7. Adaptive governance and metrics

It's essential to continually identify transformation needs, and also govern their implementation to achieve program objectives for such a large scale of legacy applications. Having a robust governance process and objective metrics allows us to achieve this transparency and drive continuous optimization.

The process and metrics also need to be aligned to specific phases and needs for the applications.

Examples of an adaptive approach include:

- Metrics customized to the nature of the applications:
  - Stability metrics for business-critical applications
  - Effort metrics for complex applications
  - Schedule metrics for applications on a decommissioning path
- Governance effort aligned to criticality and complexity of applications
- Status reports customized to program objectives and stakeholder needs

Enabling stability, efficiency and effectiveness in the management of a large scale of legacy applications requires custom solutions aligned to business criticality, application complexity, life cycle stage of the application, stakeholder needs, and the cost objectives of the client. Implementing such focused solutions ensure significant client satisfaction and the relieving of their premium bandwidth for more strategic initiatives.

## About **the author**



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Balaji is a senior director with Luxoft India. He leads engineering process solutions, globally, across lines of business and is responsible for delivery strategy for the APAC region. During his 22 years in the IT industry, Balaji has driven large-scale technology solutions and transformation initiatives in Silicon Valley technology companies, as well as service partnerships with global financial clients. He has extensive experience in knowledge transitions, transformations, Agile, DevOps, big data and analytics, cloud and program management.

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