



# A Comprehensive Checklist for App Modernisation Readiness



Are you still using the same systems you've had for years? Experiencing slower performance or increased downtime? Or perhaps there are hidden issues impacting you that you're unaware of. In this comprehensive checklist, we'll help you review your current systems and evaluate whether it's time to modernize your applications or legacy systems.

## Checklist Objectives

This checklist offers a fresh perspective on application modernization and helps you assess your current systems in ways you might not have considered. Is it a supplement for a full system review? No, but it's a good start to understand how your systems are holding up in today's modern environment and to test if you could be doing things better.

## Key to Success

The key to success with this checklist is communication and collaboration. As you work through each item, don't reflect alone. Ask your staff or fellow co-workers about their experiences and see how they align with your own. This collaborative approach will help you make educated decisions on whether each point affects your business.

## Building an action plan

Once you've completed this checklist, you should have a clear understanding of the strengths and weaknesses of your current system. From here, you can either choose to address these problems directly by directing time and resources into your in-house development team. Alternatively, you can take this information to an outside source or consultancy like Lynkz, who can use it as a starting point for a more in-depth review to provide you with the best options for moving forward.

## Important note:

For each checklist item, we have included a "Best Practices" section for you to compare against your solution. This information is the result of a collaborative effort between Lynkz Management and development teams, drawing on our extensive industry experience. Please use these practices as guidelines, keeping in mind that your specific requirements may vary based on your industry and business needs.

# Let's Begin!

## 1. Performance Issues

**Slow Response Times:** Is the application experiencing acceptable response times?  
Yes No

**Best Practice:** Most applications should respond with an average time to first byte of less than 800 milliseconds. Any response time above 1.8 seconds is considered a poor standard by today's best practices.

**Frequent Downtime:** Does your application have an acceptable level of availability across the year?  
Yes No

**Best Practice:** Typical minimum application uptime across the year is as follows:  
Non-critical applications: 99% or 3.65 Days of downtime per year.  
Critical applications: 99.9% or 8.7 Hours per year  
Highly-Critical applications: 99.99% or 52 Minutes per year

**Scalability Issues:** Can your application add more servers (Horizontal scaling) or more server resources (Vertical Scaling) under peak usage?  
Yes No

**Best Practice:** Applications with high levels of data typically require vertical scaling, applications with a high number of users normally require horizontal scaling.

## 2. Security Concerns

**Outdated Security Protocols:** Are your applications up to date with the latest patching levels?  
Yes No

**Best Practice:** Applications should be kept up to date with the latest library versions or to current level - 1.

**Security Testing:** Have your application had penetration test run on them in the last 12 months?  
Yes No

**Best Practice:** Penetration testing should be conducted every 12 months or at a major update.

## 3. User Experience

**Outdated User Interface:** Do you often hear praise about the usability of your application?  
Yes No

**Best Practice:** Your staff should be requesting new features and improvements to your application, if you hear regular complaints on usability then this indicates difficulty with the system and lost productivity.

**Lack of mobile support:** Is your application mobile responsive?  
Yes No **Best Practice:** 58% of web traffic in the modern internet is conducted on mobile devices, this means many developers have moved to mobile-first development to reach the widest audience.

**Poor Customer Feedback:** Is your application receiving positive feedback from customers?  
Yes No **Best Practice:** Customer feedback should be addressed and added to your development backlog, prioritised and deployed in line with your business objectives. Lack of addressing customer feedback can lead to customer loss and opportunities for competitors to exploit gaps in the market.

## 4. Maintenance and Support

**High Maintenance Costs:** Are your application maintenance costs low or steadily decreasing?  
Yes No **Best Practice:** Reviews of your technical architecture should be conducted at least every 12 months to ensure that the best infrastructure and billing settings are selected for your workloads.

**Dependency on Legacy Technology:** Is the application reliant on new technology that is easy to support?  
Yes No **Best Practice:** As of 2015 software development has focused on decoupled architecture to make modern applications fast, reliable and reusable. Doing so allows for greater agility of the application in response to change as the business requires.

**Limited Vendor Support:** Is vendor support for the technology still available?  
Yes No **Best Practice:** Review of your solution architecture every 6 months is recommended to ensure you are up to date with software patching levels, allowing your application to remain in support levels.

## 5. Integration Capabilities

**Data Silos:** Are there no issues with data silos, making it effortless to share information across systems?  
Yes No **Best Practice:** Consider using a data warehouse or ETL tool to bring your data to a centralised location, enabling better data analytics and business intelligence.



## 6. Regulatory Compliance

Yes

No

**Non-Compliance:** Is the application meeting current regulatory and compliance standards?

**Best Practice:** Regulatory compliance requirements change regularly. Your application and processes should be reviewed every 6 months for compliance with the relevant certifications you require (PCI, ISO27001, Etc.)

Yes

No

**Difficulty in Upgrading:** Is it easy to update the application to meet new regulatory requirements?

**Best Practice:** Applications designed in modern languages should be scalable and able to adapt with modular frameworks. Typically changes to your application to meet regulatory requirement should take a maximum of 3 months.

## 7. Innovation and Competitiveness

Yes

No

**Lagging Behind Competitors:** Is the application allowing your company to adopt new technologies or innovative practices?

**Best Practice:** Markets are constantly changing and new competitors are appearing every day. Your application should be able to be updated within a maximum of 3-6 months for any new features, depending on the size.

## 8. Cost Considerations

Yes

No

**Total Cost of Ownership:** Is the total cost of ownership (TCO) of the legacy system lower than modern alternatives?

**Best Practice:** TCO is calculated by adding the Purchase Price, Maintenance costs and Repair Costs together. You should be comparing your TCO to the cost of alternate infrastructure or application rebuild every 12 months to determine if you could be saving on operational costs over the life of the application infrastructure.

## 9. Strategic Alignment

Yes

No

**Misalignment with Business Goals:** Does the current system align with your long-term business strategy?

**Best Practice:** All of your business applications should align to compliance, control or a strategic business goal. If the application does not align with one of these, then you should consider whether it could be combined into another application to save on operational costs.

## The Results

Now that you've completed the previous steps, tally up all your 'Yes' results out of the 17 options. Then, compare your score with the scoring section below to see how you did.

### Advanced State (15/17 - 17/17)

If you've checked off most, if not all, of the criteria, your system does not require modernisation. However, keeping this checklist handy for regular reviews will help you stay on top of your application's needs and maintain a competitive edge.

### Optimised State (11/17 - 15/17)

Falling into this range indicates that your systems are mostly up to date with modern standards, but there are a few areas for potential improvement. Regular assessments will help you identify and address these areas efficiently.

### Modernising State (07/17 - 11/17)

If you have checked roughly half of the criteria above, it might be time to explore modernisation options. Your systems might currently meet your business needs, but this could quickly change over the next year or so. Proactive planning now can prevent future disruptions.

### Transitional State (03/17 - 07/17)

Checking "Yes" for only a few of the boxes suggests it's clear time to develop a comprehensive modernisation plan. Continuing with your system in this state could lead to significant issues down the line, so addressing them sooner rather than later is crucial.

### Legacy State (0/17 - 03/17)

If you've checked "No" for most, if not all, of the criteria, immediate planning for the modernisation of your application is essential. Leaving your system in this state can negatively impact your staff, potential users, and clients, ultimately affecting your earning capability.

## So what now?

By addressing these key pain points, you'll have gained a clearer understanding of where you can enhance performance, improve security, and increase overall efficiency. The next step is to decide how to use this information. Identifying these problems is just the beginning. If you're ready to modernize your system to boost your competitiveness and ensure alignment with your long-term business strategy, please reach out to the Lynkz team. Let's embark on this journey together.

Additionally, if you found minimal or no issues, we recommend keeping this checklist handy. Regularly reviewing your solution can help you stay proactive and ensure your systems remain robust.