When migrating from a monolithic architecture to microservices, the 7R patterns provide a framework to evaluate and plan the transition. The 7R patterns are:

**Rehost (Lift-and-Shift):**

* Moving applications to a new infrastructure without significant changes.
* Suitable for quick migration with minimal risk.

**Refactor (Re-Architect):**

* Making changes to improve the design and performance without altering functionality.
* Involves reworking parts of the application to better fit the microservices model.

**Replatform:**

* Moving the applications to a new platform, making minimal changes to leverage the benefits of the new platform.
* Example: Moving from on-premises to cloud infrastructure.

**Repurchase (Replace):**

* Replacing the application with a commercially available software-as-a-service (SaaS) solution.
* Suitable when the application is not a core differentiator, and an off-the-shelf solution meets business needs.

**Rebuild:**

* Redesigning and rebuilding the application from scratch.
* Suitable for applications that require significant changes to meet new requirements or to align with modern architectures.

**Retain:**

* Keeping the application as it is and deferring any changes.
* Suitable for stable applications that are not worth the investment in migration efforts.

**Retire:**

* Decommissioning the application entirely.
* Suitable for applications that are no longer needed or have been replaced by other solutions.

By evaluating each application in the monolithic system against these patterns, organizations can determine the most suitable approach for each component, ensuring a smoother and more efficient migration to microservices.