

Q&A

**What are the benefits
for businesses looking to add
Elixir to their existing Ruby tech
stack?**





Exploring Migration

Many businesses have built their systems on Ruby programming language. Its user-friendly approach and flexibility have made it a popular choice for years.

But it does have its limitations.

Its complex codebase can be slow, making it expensive for businesses to support and maintain. It also struggles to handle multiple tasks at once, making it difficult for businesses looking to scale their operations.


Elixir is becoming a popular solution for businesses looking to address Ruby's limitations. It shares a similar syntax to Ruby but shines in scalability.

It is fast and capable of handling multiple tasks simultaneously, making it a great choice for modern web applications.

To explore the true impact of Elixir on businesses, we have asked this question to our team experts:

"What are the benefits for businesses looking to add Elixir to their existing Ruby tech stack?"

Let's explore their insights.



Evolution and Efficiency



Erik Schön
Managing Director & Business Development
Erlang Solutions Nordic

Elixir brings you the best of two worlds: the awesome developer experience from Ruby/Ruby-on-Rails and the rock-solid quality, security and scalability of the Erlang virtual machine, originally developed for infrastructure critical for society like telecom.

Today, services in Fintech, streaming and messaging are also critical for society and that's why we see businesses like TV4 Media modernizing their video streaming platform using Elixir.



Francesco Cesarini
Founder and Technical Director
Erlang Solutions

Why are we seeing a lot of migrations from Ruby to Elixir? In my view, it is because of the Elixir toolchain, its package manager, libraries and frameworks. They were in many cases built by developers active in the Ruby and Rails communities, bringing with them what really works well in Ruby.

So it is not only the Ruby syntax, which helps, but also familiarity with the approach allowing developers to work in the way they know best and feel comfortable with. This really reduces the barrier to entry of any migration to Elixir.

Transition and Reliability

It combines the joy of programming, which comes with Ruby together with the strengths of Erlang and its ecosystem, giving you scalability and reliability at no extra cost.



Zoltan Literati
Business Unit Lead
Erlang Solutions Budapest

We have had several cases in the past where we assisted customers in moving from Ruby to Elixir. These types of transitions share a few common traits: although no one specifically approached us to shift from an object-oriented to a functional programming paradigm, their primary motivation was usually rooted in scalability bottlenecks and high infrastructure costs. Elixir can address both of these issues.

Therefore, if someone has a forward-looking mindset and can anticipate these challenges in their technical product, it might be wise to consider switching to Elixir before the problems become critical.



Márton Veres
Delivery Manager
Erlang Solutions

When speaking with various tech companies, a common theme emerges. Many initially built their systems as Ruby monoliths, which eventually became challenging to maintain. As a result, these companies have started experimenting with Elixir. They find that it offers a better opportunity to write clean, maintainable code, ultimately simplifying long-term maintenance and enhancing overall system reliability.

Adoption and Integration

It combines the joy of programming that comes with Ruby, with the strengths of Erlang and its ecosystem, giving you scalability and reliability at no extra cost.



Mladen Miliksic
VP, EMEA
Erlang Solutions

To date, much of the rapid Elixir adoption has originated from the Ruby community. Engineers combine the need for the core capabilities of scalability, fault tolerance and expansive concurrency offered by Elixir with a friendly, Ruby-like syntax. This allows for an effective, fast-paced learning curve.

Adding Elixir to an existing Ruby tech stack requires a strategic commitment from development teams. They need to delve into, understand, and fully leverage the Elixir-underlying Erlang virtual machine (BEAM) to benefit from it.

Treating Elixir in the same vein as Ruby will not yield its full, potent effects. Therefore, a thorough understanding of Elixir's potential for various use cases and broader business goals is essential.

Additionally, focusing on acquiring, maintaining, retaining, and continuously improving skills in any Elixir development environment will foster and ensure quality outputs.

In your organisation, next to the use of Ruby, Elixir will evolve into its own community and engineering devotion. Success will lie in offering its opportunities to people keen on exploring and mastering them.

This should allow both "Rubyists" and Elixir engineers to cross over from one technology to the other, and back again, efficiently and in the best interest of the business.

This effort will also need to be harmoniously coupled with an unbiased, technical recognition of the strengths and weaknesses of each part of the stack. Applicability and suitability to problem resolution should remain the principal guiding light for when one or the other language is used.

BEAM Mastery for Devs



Brian Underwood
Software Engineer
Erlang Solutions

Ruby and Elixir have some stylistic similarities, but understanding the BEAM is the most important thing any Ruby developer would need to do when starting to use Elixir.

There should also be an understanding of functional programming in the BEAM. This [talk from José Valim](#) is a great start.

Another fundamental to get familiar with is Phoenix LiveView since it is a fundamentally new way to write full-stack web applications.

A learning curve is Ecto. It is a big departure from ActiveRecord. Not just because it uses the repository pattern, but because it is, first and foremost, not a database library.

Finally, LiveBook is vital to get familiar with. Developers should learn how it can be used to introspect and experiment with running Elixir systems.



To conclude


Migrating from Ruby to Elixir can significantly transform your business operations. It addresses current system limitations and allows you to enhance scalability, productivity, and cost-efficiency.

Whether your existing Ruby tech stack is struggling to keep up with your development needs or you're proactively seeking to future-proof your infrastructure, Elixir offers a compelling solution.

By incorporating Elixir, businesses can tackle their most pressing challenges and unlock new potential.

We hope the advice from our experts has served as a guide for smooth and effective integration.

Embrace this opportunity to evolve your tech stack and drive your business forward.



About Erlang Solutions

We are the world-leading experts in resilient, fault-tolerant and scalable technologies. We've worked with some of the world's most ambitious companies. Including, Pepsico, Kivra, Siemens and more.

Our team of experts leverages Elixir's powerful features, such as its concurrency model and fault-tolerant design, to deliver robust and innovative solutions.

Erlang Solutions is committed to advancing the Elixir ecosystem through active contributions to open-source projects, community engagement, and providing top-tier consulting and development services to help businesses harness the full potential of Elixir.

