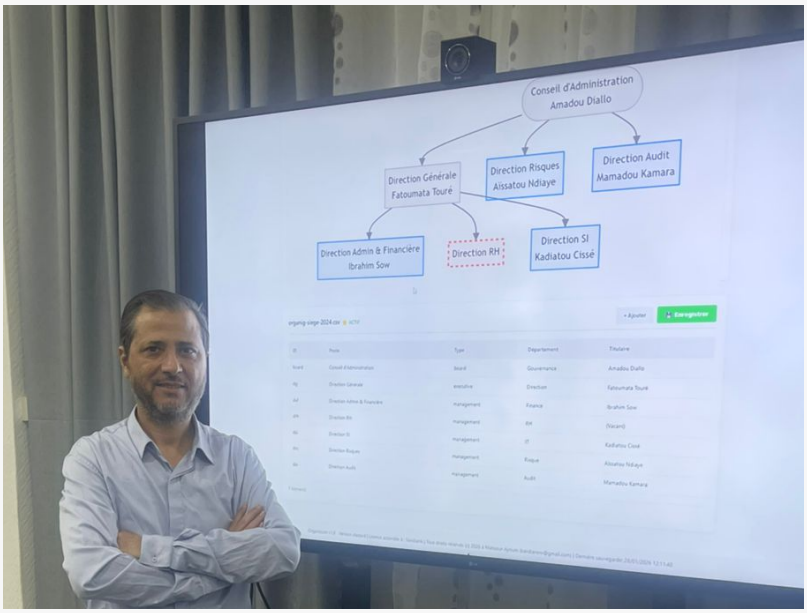
# Using the Ring Programming Language and Softanza Library at ESPA□MT and SONIBANK

*From Classroom to Enterprise: The Ring Programming Language and Softanza Library Power Education and Banking in Niger*



Mansour Ayouni (Creator of Softanza)

NY, UNITED STATES, February 25, 2026 /EINPresswire.com/ -- The Ring programming language is an innovative and practical general□purpose, multi□paradigm dynamic language for developing applications and tools. It is free, open□source, and rapidly gaining adoption worldwide. Two major institutions in Niger are now benefiting from the power of Ring and the Softanza (StzLib) library, each in a distinct and impactful way. ESPA□MT has officially adopted Ring and Softanza as its standard educational environment, while SONIBANK has successfully deployed a professional□grade enterprise application built using these technologies. Both initiatives were carried out in collaboration with Mansour Ayouni, author of Beginning Ring Programming (Apress) and creator of the Softanza library. Softanza is a foundational library for developing business applications using Ring and has been under continuous development for more than five years. The library contains over 300,000 lines of Ring code, and the Ring compiler can process it in around one second on modern machines. Ring uses a compiler/virtual□machine architecture in which programs are compiled to bytecode and then executed by the Ring virtual machine, with both components integrated into a single program.

In a landmark move for technology education in Niger, ESPA□MT has adopted the Ring programming language and the Softanza library as its standard educational environment for more than 1,500 students, all teachers, and over 14 academic disciplines. The long□term partnership was formalized in Niamey, where Mansour Ayouni appeared alongside Oussmane Ali Salé, the General Director of ESPA□MT and a visionary leader in the country's educational transformation. This adoption positions ESPA□MT as one of the first institutions in Africa to

integrate Ring and Softanza at a full-school scale, establishing the language as a modern, accessible, and forward-looking tool for engineering and technology education.

Oussmane Ali and Mansour Ayouni

Organizium, a professional enterprise application built entirely with Ring and Softanza, has been delivered to SONIBANK, one of West Africa's leading financial institutions. Designed for auditing organizational structures, modeling and analyzing enterprise performance, mapping and simulating business workflows, and evaluating compliance with ISO standards and financial-sector best practices, the software is powered by the Softanza Graph Module and its advanced components. After six months of development, SONIBANK's Human Capital and Organization teams described Organizium as the best solution they have ever seen, outperforming several international vendors.

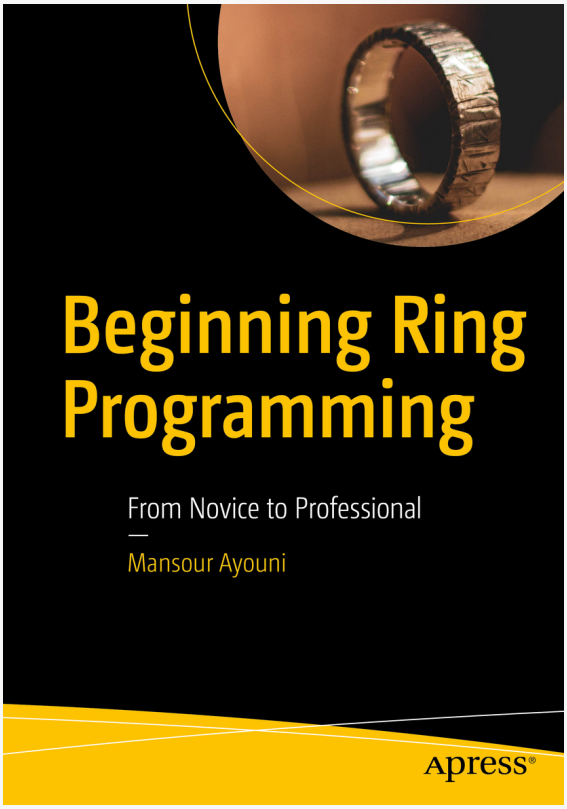
> Mansour Ayouni has played an extraordinary role in spreading Ring. His creativity, especially through the development of the Softanza library, demonstrates what is possible when talent meets vision"
>
> *Mahmoud Samir Fayed, Creator of the Ring Programming Language*

Following the delivery of Organizium, SONIBANK will train three developers in the software's architecture, the fundamentals of the Ring language, and advanced Softanza (StzLib) capabilities. Meanwhile, ESPA-MT's adoption of Ring and Softanza will empower a new generation of students to master modern programming concepts through a lightweight, expressive, and accessible language. Together, these parallel initiatives demonstrate how African institutions can reduce reliance on expensive proprietary tools, build high-quality software locally, leverage open-source ecosystems, and foster innovation through education and community engagement. Ring and Softanza are proving that powerful, enterprise-grade solutions can be created using tools that are simple, elegant, and accessible.

About the Ring programming language

Ring is a dynamic programming language that emphasizes Natural Language Programming and Declarative Programming paradigms, encouraging developers to think differently about programming and to approach problem-solving in more effective ways. Many developers have begun learning and using the language, and their feedback has been a key driver behind its

progress and success. The language is lightweight, embeddable, and cross-platform, running on desktop, web, mobile, and even microcontroller environments. It features a deterministic, safe, and flexible scope-based memory management system that incorporates escape analysis and optional reference counting with cycle detection. Ring is specifically designed for developing applications, tools, and domain-specific languages (DSLs). The language emerged from years of research and experimentation using PWCT (Programming Without Coding Technology), a visual programming environment created to simplify software development. Ring was originally prototyped and shaped through PWCT's flexible architecture, and today the cycle continues as Ring is being used to develop PWCT2, the next generation of the visual programming system. This evolution reflects a unique and powerful ecosystem in which tools are used to build one another, demonstrating a philosophy of innovation, self-sufficiency, and continuous improvement at the heart of the Ring community.



Beginning Ring Programming (Apress)

Ring Team
Ring (free open-source project)
email us here