Fueling efficiency for major power generation company

New Tachyonix solution streamlines approvals process, saving SPIC managers 57 hours per month.

SPIC BRASIL

Background

State Power Investment Corporation Limited (SPIC) is one of China's five power generation groups. Number 260 in the world's top 500 companies, the group covers 47 countries, and has 130,000 global employees and 64 affiliated companies.

About SPIC Brazil

SPIC Brasil is a company that invests in safe energy generation that respects the communities where it operates, enhancing energy throughout the country. Invests in innovation, generation and solutions focused on renewable sources that contribute to the energy transition, guided by a commitment to people and the environment. Globally, the Group is present in 46 countries, has more than 203 GW of installed capacity, with around 70% from renewable sources and 1.6 GW under construction. SPIC grows every year in Fortune magazine's annual Global 500 ranking, which shows the companies with the highest revenue in the world, being among the 260 best placed in 2022.

With assets totaling more than 3 GW in Brazil, it operates the São Simão Hydroelectric Plant, on the border between the states of Minas Gerais and Goiás, two wind farms in Paraíba – Millennium and Vale dos Ventos – and has a stake in the largest natural gas complex of Latin America, GNA (Gás Natural Açu), in São João da Barra (RJ). It also has a majority stake of 70% in two greenfield solar projects to be installed in the Brazilian Northeast that will together have 738 MWp. It employs more than 235 employees located in São Paulo (SP), Natal (RN), São Simão (GO) and Mataraca (PB). For more information, access the SPIC Brasil Annual Report available on the website.

> "At SPIC, we lead the world in scale, while promoting new business models like hybrid hydro-wind-solar, hybrid fishery-solar, hybrid agriculture-solar, desertification control with PV power, and more," says Marcos Trigilio, IT Manager SAP at SPIC. "Sustainability is the cornerstone of our development strategy – we are committed to creating a better future for the world through innovative, green, shared and smart development."

The Challenge

SPIC's work involves multiple large scale approval processes: for purchase orders, contracts, and measurement sheets. The scale at which this needs to be done posed a number of challenges. The range of data sources made it impossible to bring the necessary fields together in one place for analysis by the approval decision maker; there **was no facility for mass approvals**, so they had to be granted **one item at a time** - even if they related to the same supplier, project or items; **there were no filters** for selecting which specific document needed to be approved; and the relationship between the total values and **what is being approved was not clear.**

As SPIC underwent a **digital transformation to sustain its growth**, the need for a more efficient process became urgent when the company entered into a USD400 million agreement to bring solar power to two states in Brazil - Piaui and Ceara. Preparations for the new project alone had already **increased the administrative and operational workload of SPIC**'s internal teams. It was anticipated that in 2024, with the solar parks up and running, the volume of supplier payments needing to be made would grow by 400%.

"Our approvals process was unproductive and cumbersome," says Marcos Trigilio. "Managers would have to review each request individually, gather the relevant data, and then manually approve or deny it. With the new project about to go live, we anticipated a massive increase in the number of suppliers we would be dealing with, meaning more documents being created in SAP, each requiring approval. Our existing system just would not have been able to cope. We were sure there was another way – we just needed to find it."

The Solution

To streamline the process, Tachyonix developed **one worklist** and **three additional Fiori apps** for **mass approvals:** one for **purchase orders**, the second for **contracts**, and a third for **measurement sheets.**

The solution directs approval requests of all types into a single SAP system, where they are presented clearly on a built-in dashboard. Simple filters make it easy to find the exact request needed, according to criteria such as document number, company, supplier, approval status, value or currency.
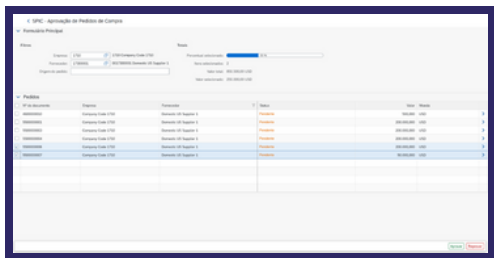

Figure 1 – purchase order requests

Within the screen for the approval request/s selected, information is available about the product being supplied, which part of the company it relates to, the quantity, unit price, net value and currency.
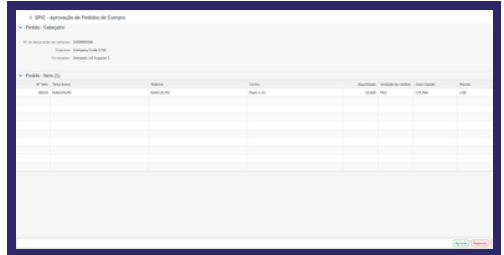

Figure 2 – specific purchase order details

Intuitive approval screens then display a summary of relevant data, for more efficient, faster, better-informed decision-making, at the click of a button.

Figure 3 – purchase order approval screen

All this is accessible from a mobile device.

The Results

Since rolling out the new system in November 2023 SPIC's managers are spending **80%** less time on approvals.

"We are delighted with the solution that Tachyonix created for us," says Marcos Trigilio. "All managers now have complete visibility of all relevant data, presented on an intuitive screen, making the decision-making process more agile. This new user experience has completely taken the headache out of approvals for Purchase Orders!"

TACHYONIX