

## Leveraging Automation to Optimize Key Administrative Processes for Microsystem's Customers

Since 1978, Microsystem has been a provider of IT services and consulting for large organizations in Chile.

Microsystem supports customers in their growth and digital transformation and specializes in delivering solutions for intelligent management of information and business processes, covering the entire information value chain: operational back-office, front-office and customer interaction, electronic and physical document management processes, process automation software, and analytics solutions.

### The challenge.

As part of its mission to streamline customers' back-office operations, Microsystem is constantly searching for solutions that allow them to increase business process efficiency and performance.

In 2018, the company began providing its customers with different automation technologies, including robotic process automation (RPA), with the aim of reducing the manual workload from repetitive, high-volume, and often error-prone tasks.

Microsystem went a step further when it realized that many of its customers had common issues that could be solved with "standardized" automation solutions. They focused on identifying an automation platform that would allow them to develop common components quickly and easily, while at the same time tailoring the automations to each customer's own requirements and systems.

### The approach.

Microsystem chose the Appian Low-Code Platform for its speed and power. Appian RPA capabilities enable fast and agile development for simple actions and component creation for more complex actions. Thus, Appian RPA offers the best of both worlds: the agility of low-code development coupled with a wide range of customizable components.

Although Microsystem's initial focus was on RPA technology, they found in Appian a complete automation solution that helps them create applications faster with low-code and allows them to combine people, technologies, and data in a single workflow to maximize resources and improve business results for their customers.



#### Industry:

IT services and consulting, BPO

#### Headquarters:

Santiago, Chile

#### Process focus:

Back-office processes

#### Website:

[microsystem.cl](https://microsystem.cl)

#### Number of employees:

+250

## The solution.

Microsystem's vision is to provide "packaged" automations—solutions that solve a common business problem and can be easily adapted to the needs of different customers.

The first process to be automated was **posting electronic invoices**, which has become Microsystem's flagship solution as it is a common service for the vast majority of their customers.

Microsystem has automated the complete accounting cycle with Appian. Bots download the documents from the billing portal where the customer receives the invoice from the suppliers, process the XML and pdf documents by applying predefined business rules, and record the information into the customer's enterprise resource planning (ERP) system.

The business rules validate certain fields such as the supplier's identification number or company name, data against the purchase order, or dates. These are detailed business rules that a given invoice must comply with in order to complete the entire cycle until it is automatically posted by the bots.

The automation of electronic invoice accounting is benefiting several large Microsystem customers in major industries, including banking, telecommunications, and retail. The basis of the process is standard, although the business rules and the integrated systems can change depending on the customer.

This process has opened the door for automating other back-office processes where large volumes of information are processed, including the following:

- **Supplier normalization.** Several bots process spreadsheets with data from up to 3,000 suppliers and compare them against the customer's ERP system records for validation.
- **Branch balance extraction.** A daily task that is typical in the banking industry in which a bot verifies daily amounts related to a given day's activity and moves the data from one system to another. This is an ideal scenario for RPA, as financial institutions work with legacy systems where integration is particularly complex.
- **Bank reconciliation.** Bots access bank portals on a daily basis, review all transactions that have taken place, consolidate them, and enter them into the ERP system so they can be contrasted with the recorded bank movements.

Microsystem's automation experts are constantly looking for new applications that benefit their customers and are working on numerous new automations.



Appian's scalability of processes is achieved by easily integrating new developments and pre-existing libraries, which allows us to have shorter development cycles and the possibility of reusing components.

Ricardo González, RPA  
Development Manager

## The implementation.

The power and flexibility Appian offers to Microsystem's developers allows them to easily reuse components of several processes, resulting in rapid development of a new automation—often in only one week. In the implementation of its solutions, Microsystem closely orchestrates and monitors the processes to provide its customers a complete vision of bot activity and the impact of automation on the business. Appian makes it easy to keep people in control of processes with two key features:

1. Microsystem has implemented an effective **exception management system** on the Appian platform. In the automated posting process, for example, invoices that do not pass validations based on predefined rules are sent to the customer through an automatic report detailing the documents that could not be processed and the reason. The customer can reply to the email providing the information that allows the bot to reprocess the pending invoice. With this feature, Microsystem has increased the rate of automatic posting for cases that the system detects as exceptions, which are resolved by the bot based on the customer's response.
2. The client receives detailed **activity reports** describing the activities performed by the bots, the status of the documents, and any other information relevant to the client, including the time saved by automation.

## The results.

Microsystem currently has 70 bots deployed in production. Eight different types of processes have been automated for their customers. A typical bot requires one week to be developed. The **set of automated processes** has resulted in the following:

- Up to 2,500 documents processed per month per client/process.
- Up to five different systems integrated in the same process.
- Up to 25 users interacting simultaneously with a process.
- Process time reduction of up to 90% (from 16 hours before automation to two hours today).
- Average savings of 5–15 hours of manual work per day.

The **electronic invoice posting process** has resulted in the following:

- 5,000 invoices posted monthly.
- Average time savings of eight hours per day.
- Approximately 70% of incoming invoices processed without human intervention.
- Exception management has resulted in a 30% increase in invoices processed.



Process automation has generated not only cost savings for our customers, but has also helped to optimize tasks and free up time for our employees, thus allowing them to perform more valuable tasks.

Rodrigo Gómez, RPA  
Sales Director

More information on  
[appian.com/rpa](https://appian.com/rpa)