Servicio de Impuestos Internos

Automatic Messaging System



What is our automatic messaging system?

Our automatic messaging system is one of the components of our Electronic Receipts Control Model and its function is to send emails to the taxpayer who meets the conditions to be tagged with an alert.

In which context we developed it?



Due to the COVID-20 pandemic and the difficulty of on-site tax inspection, *Servicio de Impuestos Internos (SII)* needed to find a solution that allowed to control the issuance of electronic receipts in near real-time (NRT).





Definition of Alerts

Messaging System

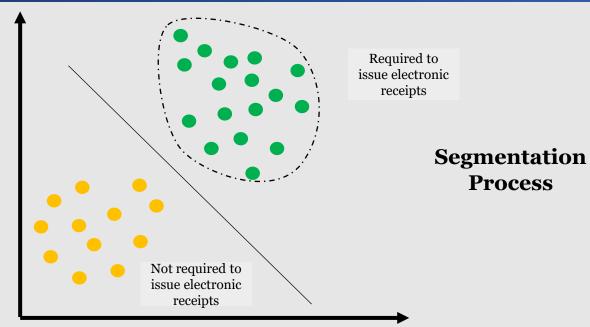
Data Visualization

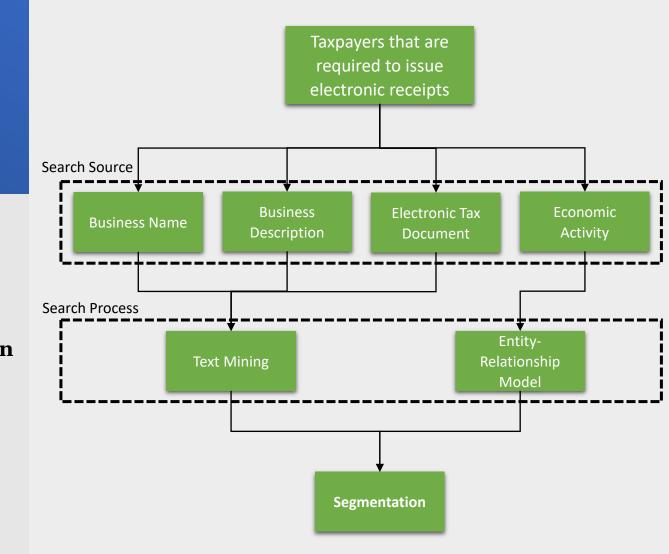
Automatic Messaging System

Electronic Receipts Control Model

The whole control model starts with the classification of taxpayers required to issue electronic receipts and taxpayers who are not.

Then, those taxpayers clustered in the first group, are segmented again by their business activity.





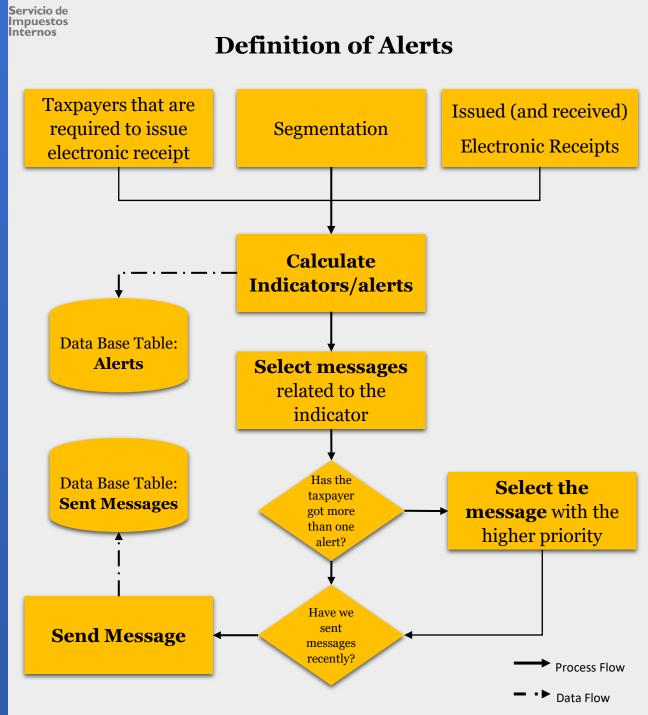
Servicio de Impuestos Internos

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Electronic Receipts Control Model

After knowing who are the taxpayers obligated to issue and declare electronic receipts, there are some alerts, based on mathematical algorithms, that allow to monitor and detect anomalous patterns in the electronic tax documents issuance.

A taxpayer who meets the alert criteria is considered a potential target for an SII message.



Automatic Messaging System

Electronic Receipts Control Model

Finally, using all the data generated by the system and with the aim of generating knowledge, a dashboard to visualize the information has been created.

This report allows tax officials to monitor the evolution of the different alerts by time or geographic location, among others.

SAS® Visual Analytics - Explorar y visualizar **Reporte Control Boleta Electronica** 2 🖪 り 🤆 🗄 🚺 General Boleteros **Boletas** Afectas **Boletas Exentas** Comp. Pago Electrónico Control Alertas CRG 🔻 Comuna 🔻 Periodo 🔻 Alerta 🔻 Tamaño 🔻 Regional v Distribución tempora Evolución montos por Periodo 28.095 50.794 cantidad alerta 32.135 97.483 30.533 91 965 202208 30.438 73.847 Periodo 10.589 Distribución por DR DES REGIONA cantidad alertas Evolución montos por DR D. R. ARICA 4.783 11.476 cantidad alerta 6 5 7 3 D. R. ANTOFAGAST 11.113 28.521 6.245 DES_REGIONAL 16.858 43 517



Data Visualization

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