Since discovering the problem was the first step in resolving it, eliminating the delay between when the problem occurred and when the problem was detected would bring a company one step closer to fixing what went wrong. That was also true for anomalies that represented opportunities to be seized. For example, an unusual growth in mobile app installations might be due to a celebrity share on social media that had gone viral

Business intelligence (BI) could be described as an infrastructure that collected and analyzed the data produced by a company’s activities. BI could include data mining, process analysis, performance benchmarking, and descriptive analytics. BI usually aggregated the data generated by a company and presented it in dashboards, reports, performance measures, and trends that guided management decisions

Traditional BI tools were typically retrospective and covered limited metrics. As a result, data analysts

I waThe struggle to get a real-time, comprehensive view of the business. A human monitoring a dashboard of a few data points might be sufficient for real-time notification. However, this approach was not scalable to thousands or even millions of metrics in real time. BI tools’ lack of granularity presented an obstacle; small events important to the business were often overlooked

To achieve real-time anomaly detection at large scale, it was necessary to use machine learning algorithms. Anodot’s automated anomaly detection system utilized artificial intelligence (AI) to process each data point once to create a model, which in turn was used to predict the value of the next data point. If the next data point differed significantly from what the model predicted, it would be flagged as a potential anomaly.

“unsupervised” machine learning algorithms. The algorithms learned what normal was, and then applied a statistical test to determine if a specific data point was an anomaly. This was crucial for detecting “unknown unknowns,” that is, detecting anomalies which would likely go unnoticed. Once the anomalies were found by these multiple algorithms, an additional layer of machine learning worked to discover the relationships between metrics so that the flood of discovered anomalies could be distilled down to a much more manageable number of correlated incidents.

There are two key innovations in Anodot. One is in building a system that can analyze all of the data, while being robust and not creating a lot of false positives, and being able to handle a lot of different peculiarities of the data. The other thing is helping with the root cause investigation by correlating anomalies. Multiple errors are usually a result of one root cause that we can detect.”

The variety often resulted in long and difficult onboarding processes, considerable churn, high friction, and limited value. The team realized they should enable their customers to use Anodot by themselves, at least for the basic use-cases. They decided to choose specific, clear and valuable use-cases, and offer a simple solution to crucial customer problems

About two years ago, we realized that the most time-consuming stage of the onboarding process was the data collection, so we developed a product within the product, a data collection mechanism. You don’t need to write any code, it’s only a few steps and you can send us your data. This is one of the key enablers to simplify and shorten the onboarding process.”

the company developed a tool to collect and analyze customers’ feedback on alerts: a ‘thumbs up’ or ‘thumbs down’ icon in the interface indicated if the alert was useful

Anodot faced a tradeoff between providing complexity and ease of use. Cohen explained, “It’s very easy to create a product where you give the users all the knobs. So we create a cockpit with 1,000 knobs, and users can do anything they want with it, but now it’s so complicated that at the end of the day you don’t do much with it. You get these power users that know how to turn the knobs, but most users will just back away and not do it.

Our system is not user-friendly enough, and it can complicate adoption. If you could just look at it and understand immediately how it works, it would be easier to add more use-cases and more users. That is one of our main challenges.

an internal analysis found a gap between the technology’s capabilities and customer usage; adoption was low as customers were daunted by the integration process and initially saw limited value. To sharpen its messaging, Anodot adjusted its mission from ‘autonomous analytics’ to ‘business monitoring.’

Even though Anodot’s tool supported many use-cases, not all of them were easy to comprehend by prospective customers. The variety often resulted in long and difficult onboarding processes, considerable churn, high friction, and limited value. The team realized they should enable their customers to use Anodot by themselves, at least for the basic use-cases. They decided to choose specific, clear and valuable use-cases, and offer a simple solution to crucial customer problems.

Anodot decided to focus their efforts on telcos and digital companies. In choosing two main verticals, Anodot decided to avoid other opportunities such as Internet of Things (IoT), Artificial intelligence for IT operations (AIOps), healthcare, and industrial companies. The main reason for avoiding these verticals was their data maturity, meaning these companies were not collecting enough data, and sometimes were not doing so in real time. Meanwhile digital companies often had digital maturity, having already implemented sophisticated means of data collection and processing

There were challenges in selling to Internet companies. These digital businesses were quick to buy and adopt new technology, but did not pay as much as big enterprises. Company size was an important factor. Small companies, or companies with low volume of data did not get enough value from Anodot’s tool for the price they were required to pay. Not enough data meant few alerts, resulting in very few business insights. Anodot was aware that smaller companies could grow with time and have more data, but still decided not to target them in early stages, because the onboarding process for a new customer was still too expensive.

focus on specific customer verticals and use-cases