

OBSERVE & REPORT

Jordanian tech company Ciapple is jumping into the data mining fray with an artificial intelligence platform that's turning heads internationally. **By Molly Anders**

For many outside the information technology sector, the term "artificial intelligence" invokes an ominous, almost sinister sort of feeling. For those in the IT sector, it's a hot-button phrase that—in industry terms—means business. Companies are constantly on the hunt for additions that will put them ahead of the game, whether it's the savviest design scheme, the newest security measure, or the trendiest gadgets on the market. Artificial intelligence, a concept long-entrenched in fictional, Big Brother-enabled worlds, now stands. Some companies are interested because of the tangible advertising advantage, and for some it's just the pathological need for the next big thing. Regardless of the reason, AI is bringing business into the next dimension.

Locally grown organization Ciapple, an emerging IT company founded in 2009, was recently named most promising Jordanian start-up at a conference in Marseilles, France hosted by Medventures, a regional marketplace and service platform. Currently incubating in iPark, Ciapple offers monthly customer retention and marketing strategy reports to small-to-medium enterprises (SMEs), based on data acquired through artificial intelligence. With an internationally-recognized business plan, Ciapple is already changing the way domestic organizations, like clients Bayt.com and the Ministry of Water and Irrigation, think about data mining technology.

"Ciapple worked for Bayt on a project that enables our system to discover "interesting" connections between the job titles

entered by job seekers and employers in our database of five million CVs," said Omar Tahboub, Vice President of Engineering at Bayt.com. "We look forward to leveraging Ciapple's technology to offer 'smart' job and CV searches." Though Ciapple originally planned to use the technology in the fast moving consumer goods (FMCG) market, the company claims their technology was easily applied to Bayt.com's job hunting needs, and could be customized to fit any number of industries.

We started from nothing, now we have two Ciapple-original products

After initial success, Ciapple's founder and General Manager Hussein Al Natsheh learned early that he needed a partner. Karima Aoukili arrived soon thereafter, taking on the role as Marketing and Business Development Partner. "My other side," Al Natsheh calls her. "He [Al Natsheh] has the technical background because he's an engineer, and I have the business background," Aoukili explained, "we're quite complimentary."

Report cards

As clients of Ciapple, businesses are offered two kinds of reports that are generated using Ciapple's original software. "The first report is on customer retention,

which gives companies the opportunity to reveal the non-complaining, dissatisfied customers," said Aoukili. The software detects dissatisfaction by examining the customer's patterns and usage of the company's online services. With this data, Ciapple then formulates a strategy for the business to keep the customer from leaving. Based on browsing habits and site activity, Ciapple attempts to examine to what degree companies can preserve the customers, and whether their grievances can be appeased through targeted services. Ciapple offers clients consulting options to expand on recommendations; an element of the Ciapple package that puts its head and shoulders above the piecemeal AI capabilities of the past.

"The second report is a cross-selling report. These target non-consumers, and show which products to market to which customers based on shopping trends," Aoukili added. It's a familiar tactic, responsible for the "suggested items" section on big shopping sites. Ciapple uses the technology in a more targeted way, aimed at web-users that, although browsing the website, haven't necessarily purchased its goods or services. Ciapple's software keeps track of the potential customer's search trends, and uses the data to market more appealing products. Any online shopper forced to put up with inane, often distracting ads, can appreciate the special attention. "This saves a lot of money on unnecessary advertising, which is also just annoying to the customer," Al Natsheh explained.

The technology isn't new. As the Ciapple team pointed out, big shot online shopping companies like Amazon.com have been using the technology for years. For these companies, AI technology meant purchasing expensive software, and employing specially-skilled analysts to compile the

These reports give clients advice about which customers to target with which products

data. Smaller enterprises—often with only 10-20 full-time staff—couldn't afford the cost. The goal of Ciapple, Al Natsheh explained, is to make this technology more accessible to smaller companies, and less exclusive to Amazonian markets. "We're trying to give this same, high-end product to small-to-medium enterprises (SMEs), who cannot afford full-enterprise technology," Al Natsheh told *Venture*. To make this possible, Ciapple had to market itself as a full-service operation. "The SME doesn't have to hire an analyst to do it, or even buy the software. We do it all ourselves, and provide them with the report," Al Natsheh said.

"In terms of companies developing solutions using artificial intelligence and algorithms based in the Middle East, there were none that we knew of [before Ciapple]. However, there were a lot of companies using European and American vendors, using Microsoft Oracle Solutions for example, but we're trying to develop the technology here," Al Natsheh said, "fully made in Jordan." Finding local vendors to commercialize the product will be a key step in making artificial intelligence a ubiquitous tool in the market, and will push Jordanian businesspeople to stake their claim in the technology, ideally for the long term. After first shoring up the AI market, Ciapple can create a regional client base, building a healthy foundation for international expansion. But this initial step—gaining ground in the Middle East—could help Ciapple become a key player in this regional, technological game of catch-up.

And in terms of progress, they're beginning to make a mark. Ciapple was named "Best Jordanian Start-up" and listed in the



Ciapple's founder and General Manager
Al Natsheh partners with Marketing and
Business Development Partner **Youssef Al-Natsh**

top 100 start-ups in the Mediterranean region by Medventures, the reputed marketplace and service platform. The recognition also pushed the team to re-examine possible shortcomings in their business model. "We received some very valuable feedback from the Medventures jury, for polishing and enhancing the business plan," Al Natsheh explained.

Jumping hurdles

In its young life, Ciapple has already encountered its fair share of obstacles, some more innate than others. As stated, the idea of artificial intelligence naturally meets with some resistance in practical application. In this age of frighteningly porous privacy standards, and with online identity fraud a growing issue, especially in the Middle East, new data-mining technology seems

risky, especially to SMEs. The insecurity that comes with such technology isn't only rooted in a small budget or a lack of technical expertise on staff, it's the knowledge that—compared to the big online players like Amazon—SMEs simply can't insulate themselves. Fewer resources are often associated with higher vulnerability, and thus SMEs have shied away from investing in the higher-end technology trends.

The big players also had their reservations, often prejudicial. "Initially, we tried to work with the Telecom industry—Zain, Itisalal in Abu Dhabi," said Al Natsheh. "Unfortunately we couldn't secure a deal because they were very concerned about the privacy of their data." It wasn't that the telecom companies didn't have faith in the legal measures, or didn't trust the technology. Their problem was with Ciapple. "Because we were just a start-up, and be-

"Because we were just a start-up, and because we were a Jordanian-based company and not international, they were afraid," said Al Natsheh. Eventually the issue strengthened their reasoning that building relationships with smaller enterprises would benefit not only the unexposed segment, but would give Ciapple—a still-embryonic endeavor—a sturdier foundation for building partnerships.

"It's not easy doing business here," Al Natsheh said of his experience, "on the other hand, once you manage it, it's easy to grow." The team anticipates that the biggest challenge will be national policies—a complaint among new and established businesses alike. "From my point of view, the national regulations are a problem," Al Natsheh told *Venture*. "Income tax is 25 percent for start-ups in the service industry in the first year." Not only that, but to be eligible to bid on most requests for proposals (RFPs), companies must be at least five years old. For start-ups like Ciapple, the limitations make setting up shop in another country a tempting alternative. "Many companies we know register outside before setting up business here," Al Natsheh added. Even with recent legislation—some of which increases incentives for foreign investors and implements tax exemptions in certain industries—the hurdles that start-ups face, both locally and internationally, are here to stay.

Forward thinking

Like any motivated business, Ciapple has plans for international expansion. With the Greater Middle Eastern market on the horizon, and Europe beyond that, the Ciapple team hopes to structure its services along the industrial spectrum, "banking, insurance, tourism, accommodation, airlines... all these targets are industries we will focus on," Aoukili said.

The Ciapple team also has a new product in the pipeline, with a target client base that's very close to their hearts. "[Our product] will help other start-ups, other new engineers in using 'systematic innovation' techniques," said Al Natsheh. "Systematic innovation," or TRIZ, as it's sometimes called, "is a technology to accelerate innovation in companies, studying patterns of consumers—more than 400,000 patterns—so that we can anticipate issues in a company innovating new products." Operators of TRIZ can draw

from a wealth of business and consumer information—around fifty years worth, to be exact—in order to anticipate certain marketing and industry-specific hurdles. "Sony, Samsung, companies like this have been using the technology for years, but we would like to bring it to the developing world," Al Natsheh said.

Ciapple will apply TRIZ technology to enterprises in a variety of industries, offering recommendations in the form of consulting reports. These clients will have

the insight of generations of other companies on their side, using their triumphs and failures to their advantage. It's another instance when SMEs, particularly in the Middle East, could have a leg up. "We want to be able to approach organizations in the Middle East with this technology, so that they can get the lead in this emerging knowledge-based economy," Al Natsheh added. Wherever their next project leads them, the Ciapple team is likely to keep raking accolades and turning heads. ●