

Delivering Resilient Projects Analytics, Artificial Intelligence & Intelligent Automation

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The estimated revenue that comes from the Artificial Intelligence Market, incluing software, hardware and services, according to the International Data Corporation (IDC) is around US\$ 327,5 billions.

Still according to IDC, the forecast for these revenues in 2024 floats around the US\$ 500 billion.In Latin America the investment in infrastructure in public cloud (laaS) will get to US\$ 8,5 billions in 2024. In Brazil, the forecast for AI expenses is US\$ 464 millions, according to IDC Predictions Brazil 2021. A large amount of this comes from consultancy services and business.

This paper aims to identify de determinants for delivering resilient projects, along the same line of the information above. References are made to the "Five ques tions for a Successful Al project" (Gartner, 2020) study.

IN WHAT FORMS IS ARTIFICIAL INTELLIGENCE FEASIBLE?

According to Kai-Fu Lee in his best-seller "Al Super-Powers: China, Silicon Valley, and the new world order, 2018" there are "The Four Waves of Al". In summary, Kai-Fu Lee highlights **"The complete AI Revolution will take a little time and will ultimately wash over us in a series of four waves:** Internet AI, business AI, perception AI, and automation AI. Each of these waves harnesses Al's power in a different way, disrupting different sectors and weaving artificial intelligence deeper into the fabric of our daily lives." Kai-Fu Lee (2018) also highlights **"The first two waves - internet** AI and business AI - are already all around us, reshaping our digital and financial worlds in ways we can barely register. They are tightening internet companies' grip on our attention, replacing paralegals with algorithms, trading stocks, and diagnosing illnesses."



WHAT IS CONSIDERED TO BE BUSINESS CASES FOR THE USAGE OF ANALYTICS AND AI?

Kai-Fu Lee shows an interesting perspective for use cases in some industries: "First-wave AI leverages the fact that internet users are automatically labelling data as they browse. Business AI takes advantage of the fact that traditional companies have also been automatically labeling huge quantities of data for decades. For instance, insurance companies have been covering accidents and catching fraud, banks have been issuing loans and documenting repayment rates, and hospitals have been keeping records of diagnoses and survival rates. All of these actions generate labeled data points - a set of characteristics and a meaningful outcome – but until recently, most traditional business had a hard time exploiting that data for better results." Kay-Fu Lee also states: "These startups sell their services to traditional companies or organizations, offering to it their algorithms loose on existing databases in search of optimizations. They help these companies improve fraud detection, make smarter trades, and uncover inefficiencies in supply chains. Early instances of business AI have clustered heavily in the financial sector because it naturally lends itself to data analysis. The industry runs on well-structured information and has clear metrics that it seeks to optimize."

IDC Financial Insights further details for the Financial Services sector "By 2022, 40% of In-Branch Transactions Will Be Initiated as prestaged Transactions or Appointments for Specialists That Start on Digital Platforms and Fulfilled on Bank-Owned Technology and Locations". **"With the growth**

and acceptance of consumer and corporate-provided wearables, by 2024, 15% of consumer payments worldwide will be authenticated and/or transacted via wearable device."

Use cases for Insurances, according to IDC Financial Insights "By 2022, 25% of global tier one insurers will be on a path to new core insurance systems". We highlight the following business cases for insurance: i) Improve the Customer Journey and use of analytics to Know Your Customer (KYC), Next Best Offer (NBO) & Next Best Action (NBA) strategies, with the objective of increasing margins in the sales of services and products. Also, use of Artificial Intelligence for the identification and prevention of Churn; ii) Helping Revenue Assurance Team with use of Artificial Intelligence to Fraud Prevention, with the goal of cost reduction. iii) Intelligence Automation to improve business experience, for example, using Robot Cognitive Automation with chatbots, or virtual insurance agents, and connect with Process Mining, with results to improve the brand and growth revenue.

According to IDC Retail Insights **"By 2023, 80% of retailers will offer contactless payments and app-based scanand-pay systems in-store, increasing conversion rates by 40% and customer retention rates by 30%."**. We selected some use cases according to the "Marketing Mix" methodology and its P's (McCarthy and Kotler): Product, Price, Place, Promotion Process, People and Customer Perception. The Price Optimization use case is of great importance in the strategy of retail companies, which combined with demand forecasts, customer knowledge, its components will provide the construction of scenarios to maximize revenue or market share strategy advance. Use Cases for Customer Insight relate to the customer's journey through the experience of a service or product, Artificial Intelligence's capabilities will provide positive impacts on loyalty and improve cross-selling margins. The Chargeback challenge can be optimized with the Intelligence Automation approach: using RPA, with advanced AI algorithms for fraud prevention, and constant monitoring of business processes. This results in cost reduction and brand value in the market.

According to IDC (2021) "The Analytics and Intelligent Automation Services program looks at the entire life cycle of services related to the deployment of analytics, artificial intelligence (AI), and intelligent automation technology solutions. Analytics, AI, and intelligent automation are distinct yet increasingly interlinked technologies as customers strive to make people and processes more efficient and discover new ways to conduct business in the digital era. This research examines the business service that companies are building to help their customers adopt analytics, AI, and intelligent automation as well as how these technologies being leveraged in service delivery. Coverage extends across the entire life cycle of analytics, AI, and intelligent automation services offered by business and IT service providers, including information and data management, BI and analytics tools and applications, advanced analytics, big data, AI, and robotic process automation."



DO YOU HAVE ROBOT-AUTOMATED APPLICATIONS IN YOUR BUSINESS?

WHAT WOULD BE THE OUTCOMES AND BENEFITS TO ENHANCE ITS PRODUCTIVITY AND COMPETITIVENESS?

According to Forrester Research (2021), more than 5 million BOT's will be in production in large companies. Since we're talking about finance, it's possible to automate up to 80% of the most common banking processes. According to a survey released by TI Inside, the Brazilian banking sector will reach around US\$ 1,2 billion in investment in digital transformation by 2023. The interaction without the Delivering Resilient Projects: Analytics, Artificial Intelligence, and Intelligent Automation need for fixed hours and the speed in the return of credit proposals are examples of satisfaction that automated processes with RPA can generate in these customers. Credit Union, taking advantage of this idea, obtained a reduction of 830 hours per year in manual interventions to correct erroneous information in the registration of its members. According to Gartner, by 2021, 90% of medium and large companies will have at least one process supported by RPA. From the gain in back office and middle office tasks, to automation in the final corporations' business, such as insurance, finance, health and telecommunications, all industries and public sectors are benefiting from the referred proposal, including driven by the current pandemic scenario. In large companies, the investment in RPA reaches around US\$ 20 million, while in medium-sized companies this value is around US\$ 5 million.

HOW TO ENSURE BUSINESS CONTINUITY, AND SPEED UP PROCESSES?

According to Simon Sinek (2020) "The game of business fits the definition of an infinite game. We don't know all players, and new players can join the game at any time. All players establish their own strategies and tactics, and there is no set of fixed rules that everyone has agreed to, other than the law. Unlike a finite game, there is no predetermined time for the beginning, middle or end of business." Furthermore, Simon Sinek (2020) highlights: "The benefits of infinite mindset, the true value of a business is not measured by the success it has achieved based on a set of arbitrary metrics in arbitrary periods. The true value of a company is measured by the desire others have to contribute to its continued success, not just as long as they (the company's members) are still here, but well beyond its presence. Infinitely minded players want to leave their organizations better than when they started."

We believe that people are key to ensuring the delivery in resilient projects in Analytics, AI and Intelligence Automation, they are the players with infinite thinking. Some of these professionals are already known, for example, Scrum Master, Data Engineer, Data Scientist, BI Consultant, and Product Owner. We can include the Designer Strategy (responsible for Design Thinking activities) and the Psychologist as players to help spread the infinite mentality culture.

At the end of this discussion, we highlight some conclusions to mitigate project risks in Analytics, Artificial Intelligence & Intelligence Automation.

Initially, the clear definition of the business application considering large volumes of data, which have many repetitive human activities, and rules for sustaining and maintaining the project.

The Solution Architecture and Analytical Governance capabilities are critical to ensuring the delivery of business projects, and the positive impacts on companies' margins.



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SOURCES

Competição Analítica – Vencendo através da nova Ciência, Thomas H Davenport and Jeanne G. Harris.

O jogo Infinito, Simon Sinek

Al Super Powers. China, Silicon Valley, and the New World Order, Kai-Fu Lee



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