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Let's Grow Curacel



Case Catalyst 2025
Proposal for Curacel

Executive Summary



Key Question

How can Curacel leverage LLMs to automate insurance operations while ensuring compliance with AI regulations in emerging markets?



Inefficiencies

Manual Claims Processing

Workforce Skill Gap & Strain

Lack of communication & handling

Rigid product structures & packages



Solutions

Partial-Automation by GPT 4 Standard + Claude 3 Opus

Full-gear automation through Agentic AI

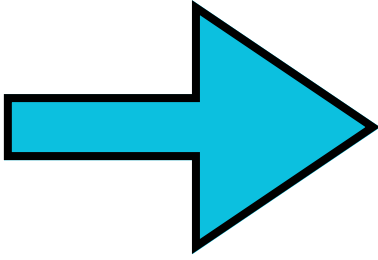
Comfortable client communication through LaMDA

Strategic entry into Saudi Arabia & similar markets



Our Plan

First Step
Due to Egypt's lack of formal AI regulations, we propose starting expansion in Saudi Arabia while simultaneously focusing on GPT-4 and Claude 3 development.



Saudi Arabia Cost of Expansion
\$421,000 - \$773,000+

Total LLMs Integration Cost
\$500,000 - \$1,500,000+

Insurance Inefficiencies in Emerging Markets

Manual Claims Processing

Insurers still rely on outdated systems, causing errors, delays, and fraud. As Dr. Tokunbo of Lifeworth notes, manual document retrieval was slow and inefficient before Curacel. Time wasted is money lost.

Workforce Skill Gap & Strain

In emerging markets, the already scarce insurance staff often lacks training, and human limitations like vacations/ time-off hinder 24/7 claims processing, reducing efficiency.

Limited Communication & Handling

Claims often lack transparency and personalization—rejections rarely include reasons, and insurers are hard to reach. This erodes trust and slows adoption in already skeptical markets.

Rigid Product Structures

Insurers in emerging markets often offer rigid, one-size-fits-all policies that overlook local and socio-economic differences—hindering scalability and limiting adoption due to lack of tailored options.

What This Means for Curacel

The most ideal way to increase client retention and acquisition would be to give them a product they don't already have. To do so, it would be imperative to work upon the inefficiencies mentioned

Key Data

- In MENA, **10%** of insurance claims are **fraudulent**, but only **20%** get detected.
- In MENA, **average claim cycles take 8–14 days**

LLM Integration Proposal

GPT 4 Standard + Claude 3

GPT 4 will drive automation across claims review by extracting structured insights from unstructured formats (e.g. Doctor Notes). This LLM excels at detecting anomalies and frauds. Claude 3 summarizes takeaways making it a great tool to provide reasoning for claim related decisions.

LaMDA

Offers conversational capabilities ideal for low-bandwidth, low-literacy environments. When embedded into WhatsApp or SMS workflows, LaMDA enables natural, human-like claims submission and onboarding —enhancing user comfort across underserved markets.

Agentic AI

Will enable fully autonomous claims processing. From intake to resolution, agentic systems can handle document validation, fraud flagging, and user communication in real time—reducing turnaround time and operational strain. In turn, freeing humans to complete more valuable tasks.

Model	\$/Token (1 Token = 4 Characters)	Development Cost
GPT-4 Standard	\$0.00003 - \$0.00005	\$20k - \$100k
Claude 3 Opus	\$0.000015 - \$0.000075	\$80k - \$150k
LaMDA	\$0.00000003 - \$0.0000009	\$100k - \$300k
Agentic AI	\$0.00001 - \$0.00003	\$300k - \$1M+

Compliance Snapshot: Saudi Arabia vs. Egypt



Saudi Arabia

Mature & High Regulation Market

Well defined frameworks, but high compliance burden

SDAIA (Saudi Arabia & AI Authority)

Oversees AI Ethics, enforces ethical AI principles like fairness, transparency, and human oversight

PDPL (Personal Data Protection Law)

Requires SDAIA approval before any personal or insurance data be transferred cross-border

NCA (National Cybersecurity Authority)

Imposes essential cybersecurity controls on data handling, encryption, and access control

CST & STC Cloud

Enforces data localization: Curacel must use local cloud providers like STC or AWS Riyadh

Why it Matters?

High-risk classification of Curacel's AI will demand proactive documentation, audits, and approvals. However, this clarity allows Curacel to scale confidently once compliance is achieved.



Egypt

Emerging & Transitional Market

Regulations exist by lack full enforcement - offering flexibility

IP Law No. 151/2029

Covers personal data rights, but the EDPC enforcement body is not fully functional yet

MCIT National AI Strategy (2019)

Outlines goals around responsible AI: Not fully enforced though, leaving compliance ambiguous

NTRA Cloud Licensing and Telecom Law No. 10/2003

Requires NTRA cloud/data licenses if using non-domestic data cloud hosting - complicating compliance navigation

Digital Infrastructural Regulations

NTRA may view cross-border SaaS data flows as a threat to national security, further conflicting operations.

Why it Matters?

Though Egypt offers regulatory flexibility in the short-term, legal grey zones do exist which leave uncertainty in terms of what the future holds for Curacel's SaaS.

Merits of Expansion

Saudi Arabia

Total Gross Written Premiums (2025) : US \$19.27 Billion

Total GWP CAGR : 2.82%

Penetration (% of Total Non-Oil GDP) : 1.87

Penetration CAGR (%) : 4.3 (\$19.27 B / \$453 B)

Additionally,

- Has a structured set of regulations regarding AI Usage. allowing for stable long-term growth
- Saudi's Vision 2030 sets a strong foundation for Curacel

Egypt

Total Gross Written Premiums (2025) : US \$4.85 Billion

Total GWP CAGR : 3.89%

Penetration (% of Total GDP) : 0.56 (\$2.38 B / \$421.85 B)

Penetration CAGR (%) : 5.5

Additionally,

- The NCAI to increase funding for AI focused companies
- Vision 2030 includes providing AI training to the majority of the active workforce.

Despite the Balanced Potential,

We advise Curacel to consider expanding only to Saudi Arabia for the following reasons:

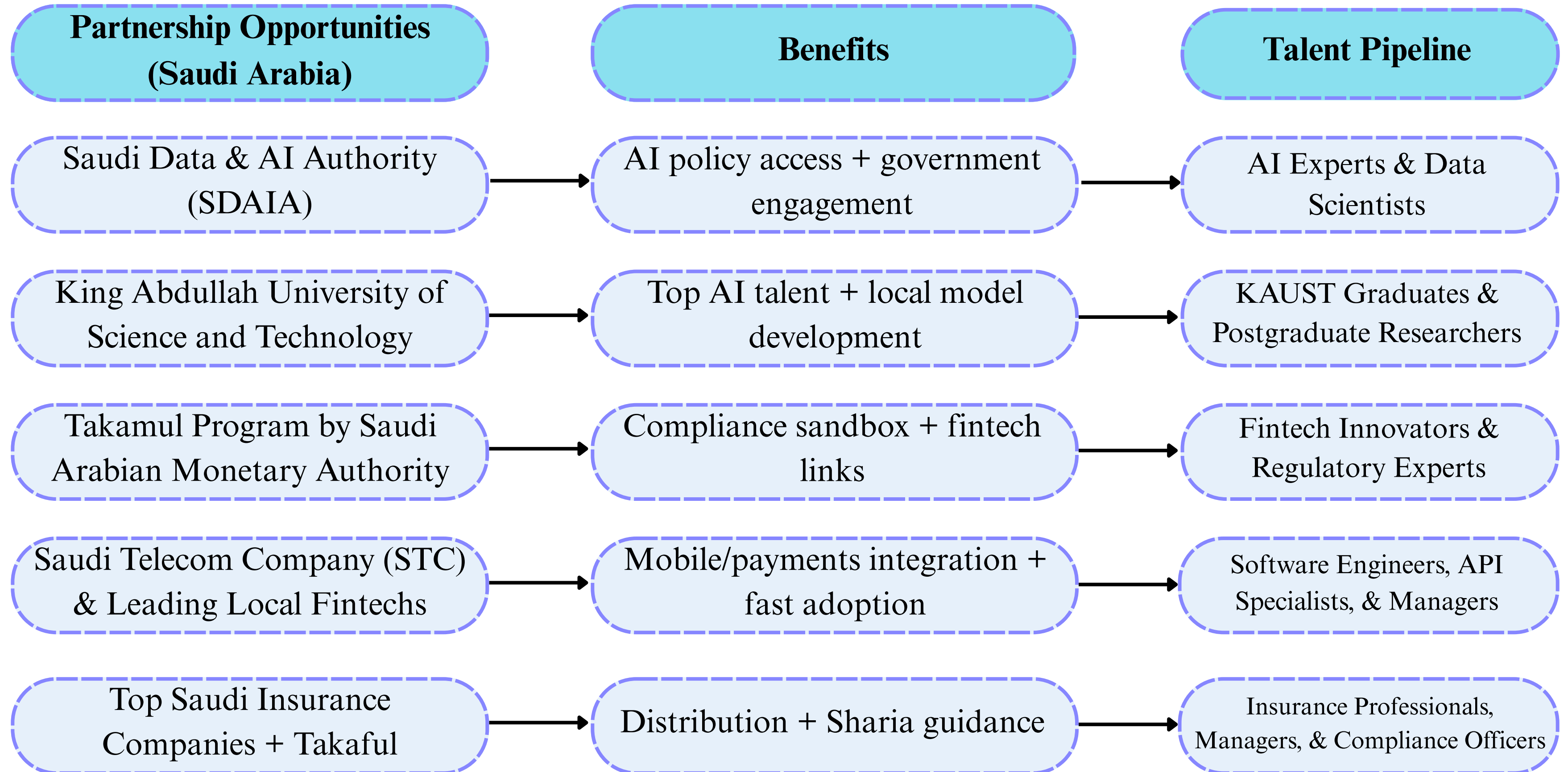
- Curacel already has **prior experience** in Shari'a influenced markets, hence, making it easy to operate around Islamic Principles
- Saudi Arabia is **centrally placed**, offering a geographically strategic chance to expand to the rest of the Middle East
- High government support (Vision 2030) for AI projects - has allocated over \$40 billion to AI-related ventures

AND Egypt still continues to develop legal frameworks regarding AI Usage. This leads in long-term uncertainty for Curacel and its operations in Egypt due to unpredictability.

Solutions to Regulatory Challenges

Objective	Actions	Estimated Cost
Identify Legal Gaps	<ol style="list-style-type: none"> 1. Identify a Saudi-based law firm to help with local regulatory 2. Conduct a gap analysis against PDPL, SDAIA Ethics, and ECC 3. Consult a local or big four compliance advisor 	Legal Advisory: \$50,000 – \$75,000 Initial Gap Analysis: \$25,000 – \$50,000
Localize Sensitive Data	<ol style="list-style-type: none"> 1. Host data on Saudi-based cloud providers (STC Cloud, Oracle Riyadh) 2. Design separate data environments for Saudi operations (storage, backup) 	Cloud Infrastructure Setup: \$30,000 – \$50,000 Cloud Hosting: \$60,000 – \$100,000+ /annum
Ensure Transparency & Consent	<ol style="list-style-type: none"> 1. Implement a Consent Management System (CMS) for AI data usage 2. Localize privacy policies in Arabic & English 3. Train customer support to handle data access and revocation requests 	Policy Localization and Translation: \$10,000 – \$30,000 CMS Implementation: \$8,000 – \$15,000
Strengthen Cybersecurity	<ol style="list-style-type: none"> 1. Conduct local security audit 2. Implement encryption, access logs, breach alerts 3. Set up regular penetration testing 	Initial Audit & Control Setup: \$15,000 – \$25,000 Annual Pen Testing & Compliance Maintenance: \$10,000 – \$20,000
Appoint Compliance Leadership	<ol style="list-style-type: none"> 1. Hire a local Data Protection Officer (PDPL requirement) 2. Assign an AI Ethics Oversight 3. Register with SDAIA & relevant regulators 	DPO Salary or Retainer: \$30,000 – \$50,000/year AI Ethics Oversight Salary: \$20,000/year

Local Partnerships & Talent Pipelines (Saudi Arabia)



ROI Potential Analysis

International Expansion

Saudi Arabia and Surrounding MENA Region

High return potential, but only in the long-term

Access to a High Potential Market

With multiple partnership opportunities and a government which slowly transitions focus to AI, growth is almost certain for Curacel.

Rasan Technology Case

Rasan is an Insuretech company which, like Curacel, focuses on AI integration into insurance. Rasan's profit margins near 28%.

Centrally Placed - Offering Geographic Benefits

Saudi Arabia is strategically located in the central of the MENA region. For the long-term, this makes it easier to expand to other countries in the region.

New Market Benefits

Entering new markets opens up chances to interact and grow through new partners and clients. This helps Curacel grow exponentially once breakeven is met.

What to look at?

- International expansion often takes a couple of years to reach breakeven and start generating positive return.
- This makes the investment high-risk, high-reward but in the long-term

Large Language Models

GPT 4, Claude 3, LaMDA, Agentic AI

High return potential, mostly in the short-term

Shortened Claims Processing Time

As per our estimates, integration of LLMs would cut processing times by 30% - 50%.

Increased Volume

Integrating LLMs can increase claims volumes by 25% - 50% which will increase revenue for the company.

Client Acquisition

By using LLMs, verticals such as the Curacel Health, Extract, Pay, Agent and Grow will automate, offering a high end service - ultimately having the potential to increase overall client acquisition/ retention.

Flexible Development Opportunities

There is no fixed way as to how Curacel can develop and integrate LLMs. This allows for flexibility around the high development costs.

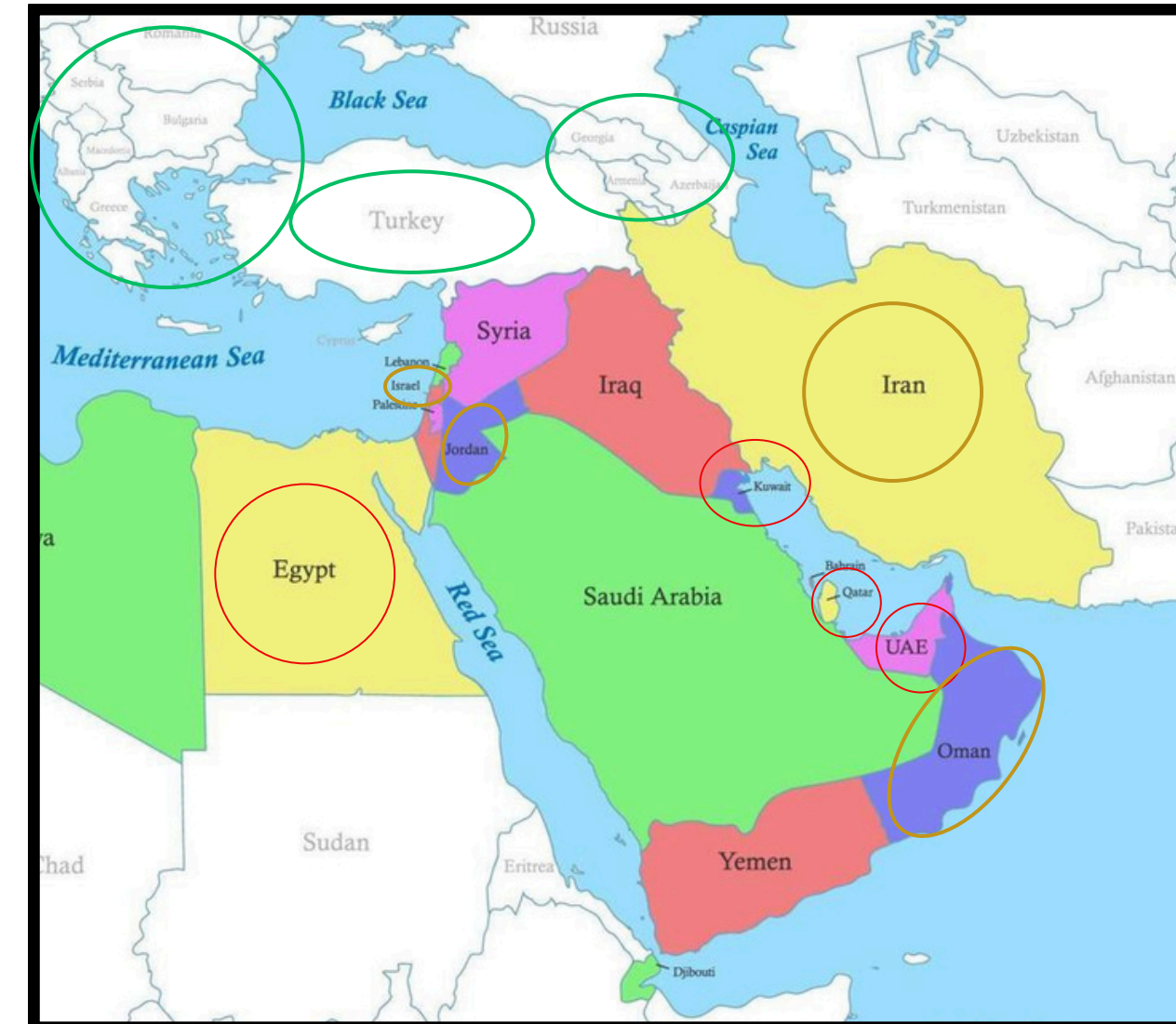
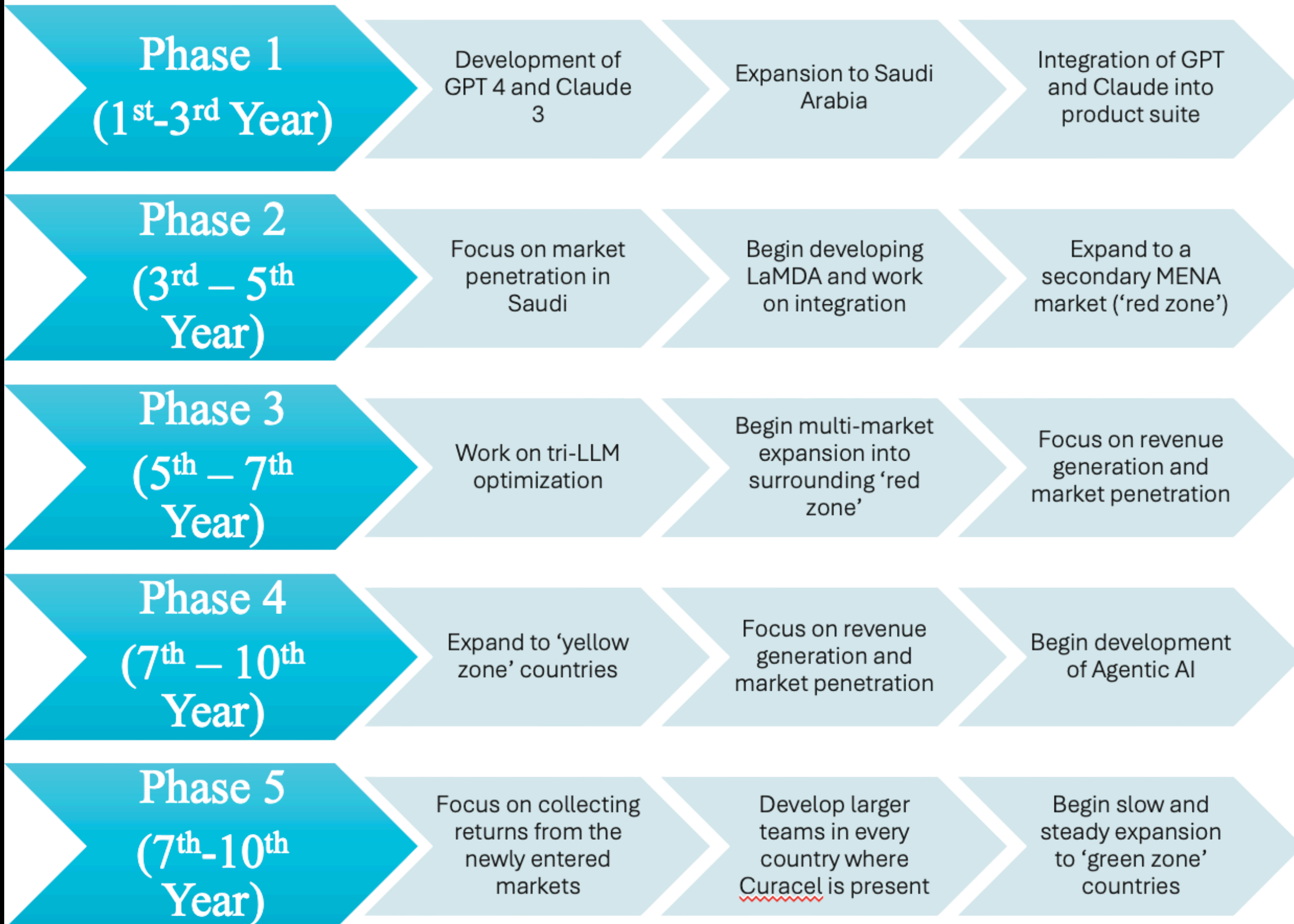
What to look at?

- As per our estimates (after analyzing similar precedents), an upward amount of \$750,000 can be saved per year as a result of shortened claims processing, increased volume, and increased clientele.



BUT WHY CHOSE
JUST ONE?

Our Phased Rollout Plan



Red Circled: Priority expansion markets ("Red Zone")

Yellow Circled: Later-phase opportunities ("Yellow Zone")

Green Circled: Long-term, non-MENA targets ("Green Zone")

LET'S MAKE
CURACEL THE
GO-TO FOR
INSURERS



Appendix 1

LLM Phased Development & Integration Plan

Phase 1: Develop & Integrate GPT4 + Claude 3 (1st- 2nd Year)

1. Appoint a team to start developing GPT4 and simultaneously practicing model hardening.
2. Integrate GPT4 into the SaaS and slowly start bringing the cost per claim up by at least 5-10%
3. Start developing and integrating Claude 3

Phase 2: Customer Acquisition & LaMDA Development (3rd -7th Year)

1. Focus on customer acquisition and retention through the newly improved SaaS
2. Start the development of LaMDA once sufficient funds have been collected
3. Simultaneously, continue running tests and assessments on the previously installed LLMs
4. Fully integrate LaMDA and start collecting user inputs for the team to efficiently enhance the installed LLM Model
5. Start focusing on fund generation and liquifying assets for future projects

Phase 3: Agentic AI Installation and Full Automation (Post 7th Year)

1. By now, we predict Curacel to have already saved millions of dollars through the partially automated software. Now, it would be time to entirely automate and revolutionize
2. We will begin developing, researching, and integrating Agentic AI.
3. By now, we also hope for newer softwares like GPT5, or even GPT 6 to have come out which our team will focus on updating as well- keeping our SaaS up to date.

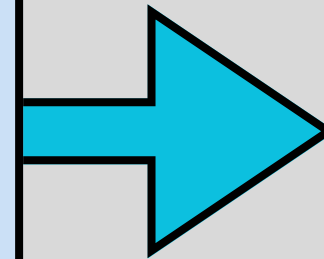
*We assume Curacel has hired a much larger team specifically for LLM development by now

Appendix 2

Saudi Arabia Phased Expansion Plan

Phase 1: Expansion into Saudi Arabia (1st-3rd Year)

1. Fulfill compliance and establish presence
2. Partner with local organizations, hire local talent, build trust, and deepen market penetration.
3. Start LLM development for Curacel.

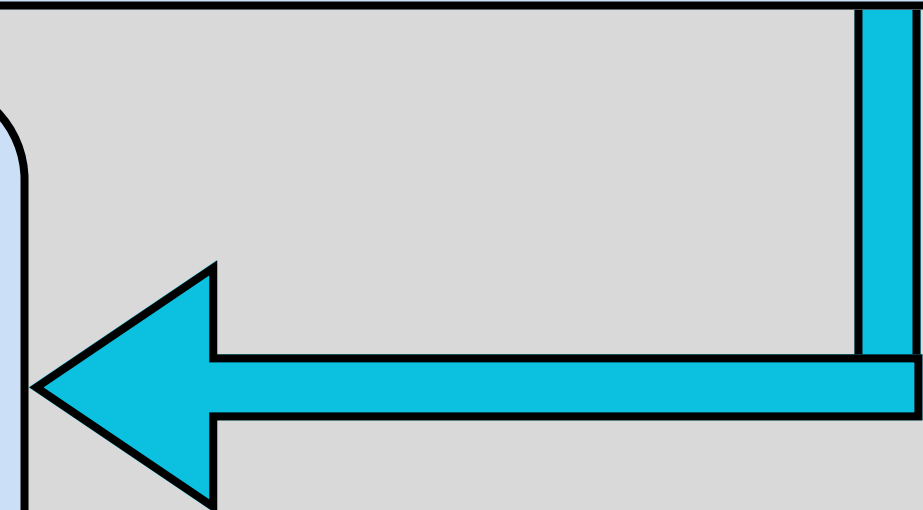


Phase 2: Expansion into 'red' zone countries (3rd-7th Year)

1. Focused on expanding to MENA markets which have high fintech CAGRs.
2. By then, target country 'Egypt' should hopefully have a formalized set of AI Regulations aside from just data localization laws, allowing Curacel to advantageously sail through the Egyptian Market.
3. Will also focus on establishing international recognition for Curacel, allowing us to increase market penetration and provide quality services in a broader spectrum of markets.
4. During this phase, we will also hire specialists to run intricate assessments on the AI Software and other products.

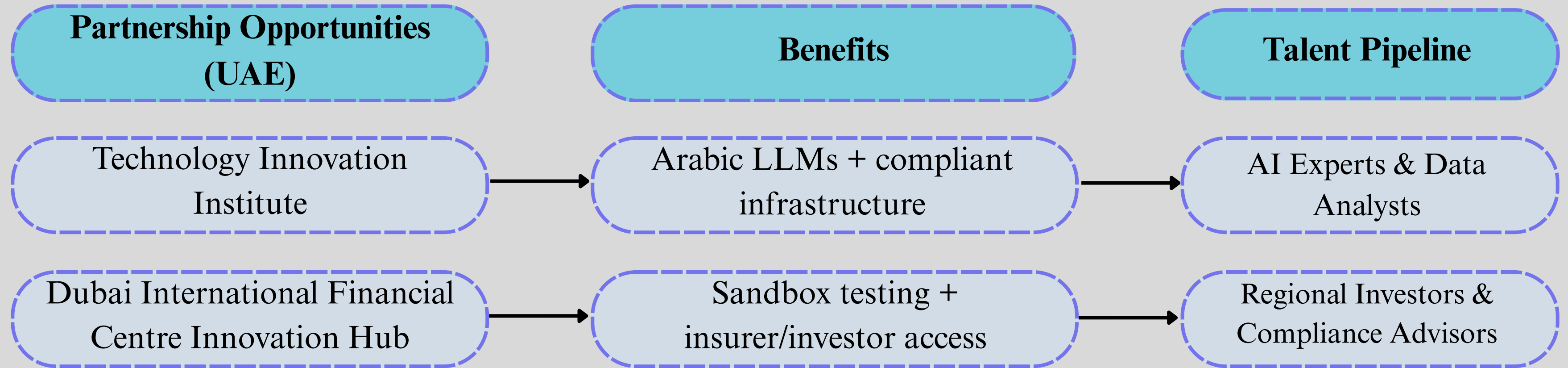
Phase 3: Expansion into 'yellow' and 'green' zone countries (Post 7th Year)

1. During this time, we will focus on penetration through the Market Penetration Strategy (from Ansoff Matrix) + Active maintenance and software updates to the SaaS
2. Entirely focused on raising profits, and active expansion into the rest of MENA + potentially the mediterranean region.



*We may even consider an IPO for fund raising during this phase.

Appendix 3



Curacel has pre-existing partnerships with businesses such as Truq Corp. & Talstack who make use of Curacel Grow. We believe revenue diversification is imperative for any business, and we propose Curacel to consider partnering with local ride-sharing businesses to add on to revenue streams.

Appendix 4

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