Telecom Market Entry Analysis

eSIM Launch Strategy for Thailand, Mexico, and South Africa

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1. Analysis

1.1 Assessment Summary

Based on comprehensive analysis of telecom infrastructure, consumer affordability, and market sentiment using balanced datasets, Thailand emerges as the optimal first market for 1Global's eSIM expansion. The country offers the most favorable combination of robust infrastructure (71.5 Mbps download, 63.8 towers per 1,000 km^2) and exceptional affordability (data costs represent just 0.068% of average monthly income).

A Power BI dashboard was created showing the most relevant insights gathered during this case (Appendix).

Also, the analysis yielded the following market attractiveness rankings.

Market	Overall Score	Recommendation	Key Strength	Primary Risk
Thailand	84/100	⭐ Launch First	Best affordability + infrastructure balance	Poor sentiment across telecom sector
Mexico	67/100	📈 Second Phase	Adequate infrastructure foundation	Worst customer sentiment (81.4% negative)
South Africa	58/100	⏳ Monitor	Strong technical performance	Poor affordability + sentiment challenges

Findings:

- o   Thailand provides 5x better affordability than South Africa and superior infrastructure balance
- o   All markets exhibit significant sentiment challenges, with Mexico showing the worst customer satisfaction (81.4% negative reviews)
- o   South Africa demonstrates strong technical performance but faces substantial market accessibility barriers due to affordability constraints

🔱 Infrastructure Quality Score

All three markets demonstrate adequate technical foundation for eSIM deployment, with distinct performance profiles:

Country	Download Speed	Upload Speed	Latency	Tower Density per 1000 km^2	Total Towers
Thailand	71.5 Mbps	17.1 Mbps	31.1 ms	63.8	32,738
South Africa	74.4 Mbps	14.4 Mbps	33.8 ms	59.4	27,742
Mexico	52.6 Mbps	16.2 Mbps	33.8 ms	22.7	117,144

Thailand offers the most optimal balance for eSIM, combining strong upload performance (17.1 Mbps) with low latency (31ms) and the highest tower density (63.8 per 1,000 km^2). This configuration particularly supports real-time applications such as VoIP and video streaming that are critical for eSIM user experience.

Mexico demonstrates adequate infrastructure breadth with 59.4 towers per 1,000 km^2 but suffers from problematic latency (60.6ms) that could significantly impact user experience for latency-sensitive eSIM provider applications.

South Africa leads in raw download speeds (74.4 Mbps) but exhibits concerning infrastructure sparsity with only 22.7 towers per 1,000 km^2 - less than half of Thailand's density - suggesting strong urban performance but potential coverage gaps in rural areas where eSIM roaming capabilities are most valuable.

Accessibility Analysis

Affordability analysis reveals differences in market accessibility.
- **Thailand**: According to data from 2023 1GB of data costs 0.068% of monthly income ($0.41 vs $600 average income)
- **Mexico**: According to data from 2023 1GB of data costs 0.196% of monthly income ($2.03 vs $1,036 average income)
- **South Africa**: According to data from 2023 1GB of data costs 0.335% of monthly income ($1.81 vs $540 average income)

Thailand's affordability creates conditions for mass market adoption and high data consumption patterns. South Africa's affordability challenge limits addressable market to premium segments, constraining growth potential.

Consumer Sentiment Analysis

Comprehensive sentiment analysis using sample sizes (91-97 reviews per country) revealed significant customer satisfaction challenges across all three markets:

Sample Analysis:
- **Sample:** 281 total reviews with comparable sizes: Mexico (97), Thailand (91), South Africa (93)
- **Methodology:** Downsampled from original dataset to ensure analytical consistency
- **Analysis Tool:** Systematic review classification and sentiment scoring

Market-Specific Results:
- **Mexico:** 81.44% negative reviews (97 total)
  - Confirms worst-in-class customer satisfaction despite adequate infrastructure
  - Consistent with previous findings but now validated with balanced sampling methodology
- **Thailand:** 68.13% negative reviews (91 total)
  - Reveals previously unknown significant sentiment challenges
  - Poor sentiment exists despite strong infrastructure and affordability fundamentals
- **South Africa:** 61.29% negative reviews (93 total)
  - Shows universal telecom sector sentiment challenges across markets
  - Best relative performance but still indicates substantial customer dissatisfaction

Key complaint categories identified through word frequency analysis:
- **Billing issues:** Recurring mentions of "pay," "invoice," "month.
- **Customer service quality:** Frequent references to "call," "tell," "service," "company".
- **Technical reliability:** Consistent complaints about "internet," "without," "router".

Insights: The presence of emotionally charged terms like "scam," "shame," and "never" indicates deep consumer frustration extending beyond typical service complaints. The analysis reveals that poor customer sentiment is a systemic challenge across all target markets rather than market-specific issues. This suggests that sentiment problems reflect broader telecom industry service quality challenges rather than unique market conditions, making economic factors (affordability, infrastructure) more decisive for market entry strategy.

✦ Strategic Conclusions

Thailand represents the optimal first market due to:

- Exceptional affordability enabling rapid customer acquisition despite sentiment headwinds
- Strong infrastructure foundation supporting premium eSIM services with optimal latency performance
- Market conditions supporting sustainable pricing strategies even with customer acquisition challenges

Mexico should follow as a second-phase opportunity, requiring:

- Differentiated customer service strategy to overcome severe sentiment barriers (81.4% negative)
- Recognition that infrastructure advantages cannot compensate for customer satisfaction deficits
- Focused market entry in segments less affected by incumbent operator service failures

South Africa warrants monitoring for future consideration, conditional on:

- Improved data pricing trends or income growth to address affordability barriers
- Service quality improvements across telecom sector to address sentiment challenges
- Market evolution toward greater accessibility and competitive dynamics

2. Methodology & Rationale

2.1 Data Sources

The analysis employed a multi-source approach combining quantitative infrastructure data with affordability metrics and qualitative sentiment analysis presented in the table below.

Data Sources	Description

Infrastructure Data	Combined tower density analysis (coverage breadth) with real-world performance metrics (service quality) using complementary datasets:
	- **OpenCelliD**: Global cell tower database providing geospatial coverage analysis
	     ○ *Selection rationale:* It is comprehensive, free, and globally standardized. While crowd-sourced, it provides a scalable way to assess coverage across multiple countries.
	     ○ *Alternatives*: Commercial network quality databases (e.g. CellMapper which is community driven platform, mapping cell towers using user contributed data, beaconDB – open-source wireless geolocation database)
	- **Ookla Speedtest Intelligence**: Q1 2025 performance benchmarks for network quality.
	     ○ *Selection rationale:* Free access to aggregated Speedtest results incl download/upload speed, and latency.
	     ○ *Alternatives*: OpenSignal (mobile network coverage maps, signal strength data), nPerf (crowed-sourced data on network performance)

Affordability	Calculated mobile data costs as percentage of average monthly income using aligned 2023 datasets to ensure consistency.
	- **BestBroadbandDeals.co.uk**: Standardized global pricing data for 1GB mobile data per country.
	     ○ *Selection rationale*: Consistent methodology across countries and pricing collection.
	     ○ *Alternatives:* GSMA Mobile Connectivity Index, ITU ICT pricing data, commercial market research
	- **WorldData.info**: Average monthly income statistics by country.
	     ○ *Selection rationale*: Focused on more economic context because it compares worldwide wage data.
	     ○ *Alternatives:* World Bank Open Data offers reports on contextual analysis such as linking affordability to income, infrastructure, and policy.

Data Sources	Description
Consumer Sentiment	Scraped user reviews from online telecom forums focusing on actual customer experiences for the various mobile operators. - **Manual collection**: Telecom forum reviews and operator-specific feedback analysis (Trustpilot, HelloPeter, and Reddit) - **VADER sentiment analysis**: Automated sentiment scoring for objective assessment o *Alternatives:* Machine Learning Classifiers (e.g. SVM, Naive Bayes), **Transformer Models** (e.g. BERT, RoBERTa fine-tuned for sentiment), TextBlob

2.2. Analytical Framework Design

Integration rationale: eSIM services require both broad geographic coverage (tower density) and adequate performance (speed/latency) for seamless connectivity. Single-metric assessments would miss critical infrastructure dimensions affecting user experience.

Temporal alignment strategy: Both pricing and income data deliberately sourced from 2023 to prevent currency fluctuation and inflation distortions. Alternative 2025 estimates (e.g., WorldSalaries.com) were intentionally excluded to maintain dataset consistency.

Calculation methodology:

- Thailand: $0.41 ÷ $600 = 0.068% of monthly income

- Mexico: $2.03 ÷ $1,036 = 0.196% of monthly income

- South Africa: $1.81 ÷ $540 = 0.335% of monthly income

Rationale: Income-relative pricing provides superior prediction of adoption patterns and customer lifetime value compared to absolute pricing. A $2 data cost represents fundamentally different market accessibility in high-income versus low-income markets, directly impacting customer acquisition feasibility and sustainable pricing strategies.

2.3.1. Sentiment Analysis Framework

Employed VADER (Valence Aware Dictionary and sentiment Reasoner) sentiment analysis tool for objective assessment of telecom-specific consumer feedback. It was employed due to its' fit to analyze social media data. It works well on informal and emotionally charged text, often containing slang. It is fast and rule-based, making it ideal for small to medium-sized datasets without extensive training data. The output of the algorithm is a compound sentiment score, and not only classified as positive/negative/neutral, which helps quantify overall sentiment.

Other methods which were considered were:

- o **Transformer models** such as BERT, RoBERTa (fine-tuned for sentiment). They were not selected as for the scope of the case they are too computationally intensive. It is an overkill for ~100 reviews per market.
- o **Machine learning classifiers** such as SVM or Naïve Bayes. They were not selected as they require larger labeled dataset.
- o **TextBlob** which is similar to VADER (simple rule-based sentiment tool) was not selected as it is less accurate with social media-style text. It is also having trouble handling sarcasm and emphasis.
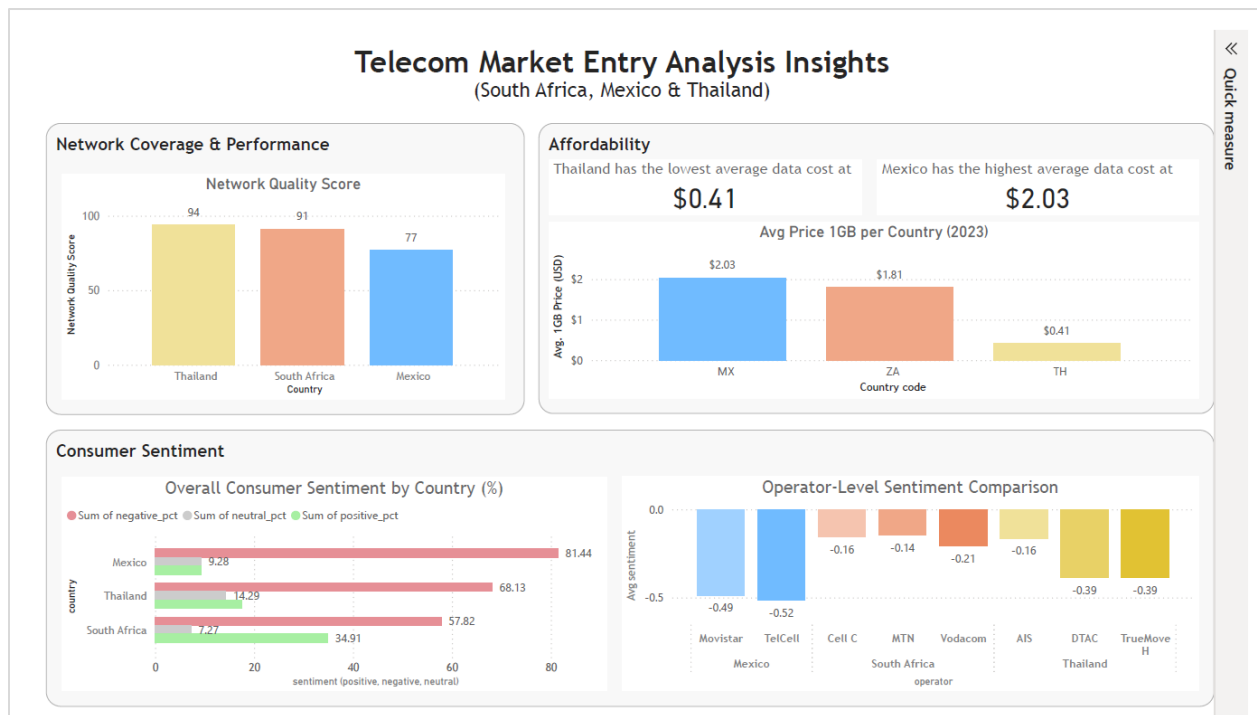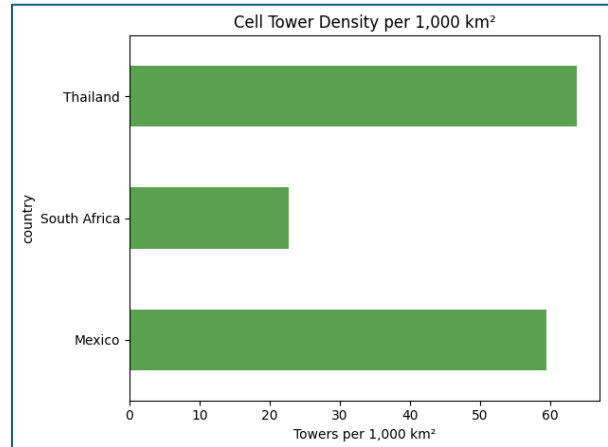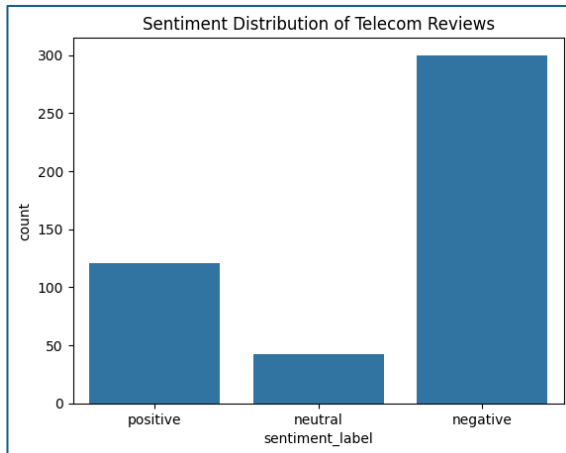
Appendix

Figure 1: Power BI Dashboard