Pitch deck | Power Price Intelligence Platform

Product Sense Case Study, 2024

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AGENDA

#1	Product Landscape – Why and for Who (Target Audience)
#2	Proposed Phased Solution Development
#3	Platform Core Features
#4	Go to Market (incl. high level AI Deployment Plan)
#5	Proposed Investment and ROI (incl. recap, assumptions, risks, sources and follow-up)

1. Product Landscape – WHY and for WHO (TARGET AUDIENCE)

CONTEXT

Power prices fluctuate rapidly due to multiple factors, such as global events, economic shocks, and supply-demand imbalances.

KEY CHALLENGES AND GOALS

Traders often miss out on opportunities or suffer losses because they rely on hindsight to explain past price spikes by manually reviewing newsfeeds or researching causes.

Business Impact: Delayed reactions lead to suboptimal trading decisions, directly affecting **profitability**.

Objective: Empower traders with Realtime, accurate data insights to anticipate events and react faster to price fluctuations



Gerald Oliver, Power Trader

Problems he faces

• Not enough quantifiable data to measure market dynamics, relies mainly on manual data feeds, difficult to compare cross-border data due to language barrier
• Not skilled in creating complex forecasting algorithms to determine optimal price for peak periods

WHY he uses our Platform?

- Present actionable weekly findings and Quick alerts to set accurate prices and **maximize profits**
- Define price-up plans based on benchmarking and deliver revenue optimization strategies



Leah Henry, Commercial Head

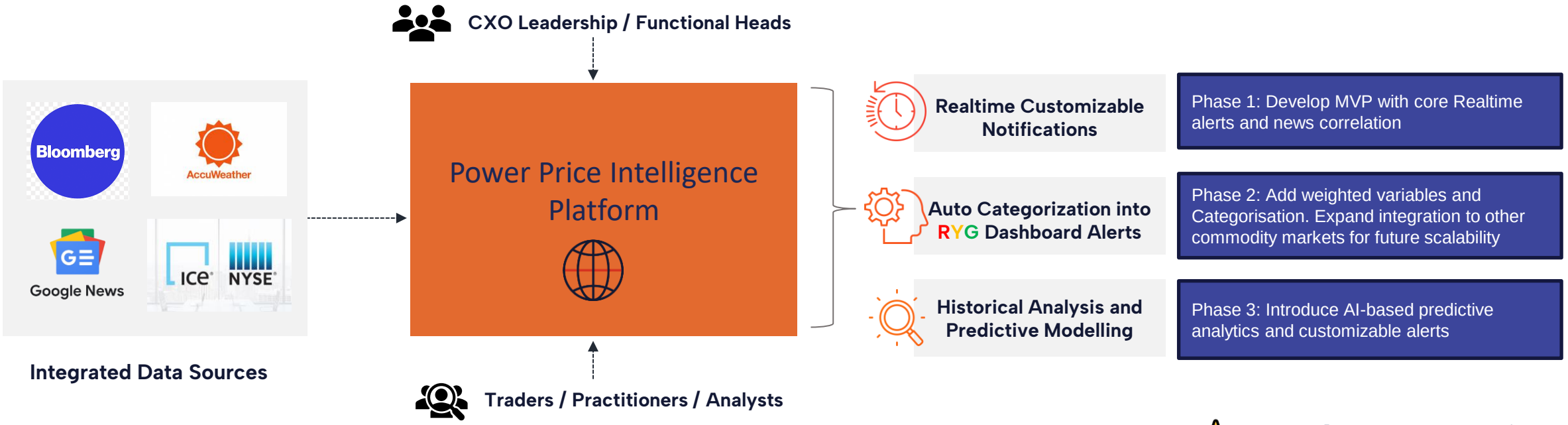
Problems she faces

• Inconsistent data from multiple sources, leading to unclear risk assessments and delayed decision-making
• Not skilled in creating complex forecasting algorithms to determine optimal price for peak periods

WHY she uses our Platform?

- Wants a scalable package to **reduce overdependencies** on single source of truth and make accurate forecast based decisions
- Implement **effective risk mitigations** to protect from losses and improve response times

2. Proposed Phased Solution



Vision – Data-driven Platform collects and processes publicly available information about global news, events, market movements, weather and trending searches into Actionable Insights and Realtime Alerts to enable faster, informed decision making, increasing the probability of Profitable Trades and minimizing Risks.

Market Study

Competitor Examples: **QuickSignals, WoodMackenzie, Enverus** – are leading Energy Market Analytics providers with advanced solutions in the Industry. Shell should consider Build than Buy to tailor to specific needs, maintain data security and ownership, long term cost efficiency.

North Star Metric

Revenue Loss – Track the impact of Trades informed by Predictive Insights against $ revenue losses saved.
Secondary success criteria can be WAUs (Engagement) and Average Reaction Time (Responsiveness)

3. Power Price Intelligence AI Platform – Core Features

General Availability Features

1. Pre-defined Interactive **Realtime** Dashboard
2. Global News, Weather and Trading **Integration**
3. **Historical Price Analysis** and Impact Assessment (Weighted variables) based on Regression models
4. **Auto Categorization** into **RYG** Dashboard and **Event to Price correlation**
5. Global Trading Scorecards and Custom Reporting with Actionable Insights and **Profitability Analysis**
6. Notification Intelligence, **Alerts**, Downloads
7. User Management and **Access Control** for Trading and Commercial Teams

Customizable Features

01 **Predictive Price Analytics** option to predict future power price fluctuations based on historical data trends (timeseries forecasting)

02 News **Sentiment Analysis** to gauge positive / negative news impact on prices and **Text Classification** to categorize news into relevant topics

03 **Automated Price Recommendations** for optimal trade actions (buy / sell / hold) based on risk assessment, trade strategy and events

04 **Data as a Service** – Manage your own data, setup Configurable Price Alerts based on KPI Targets and data extraction to external systems

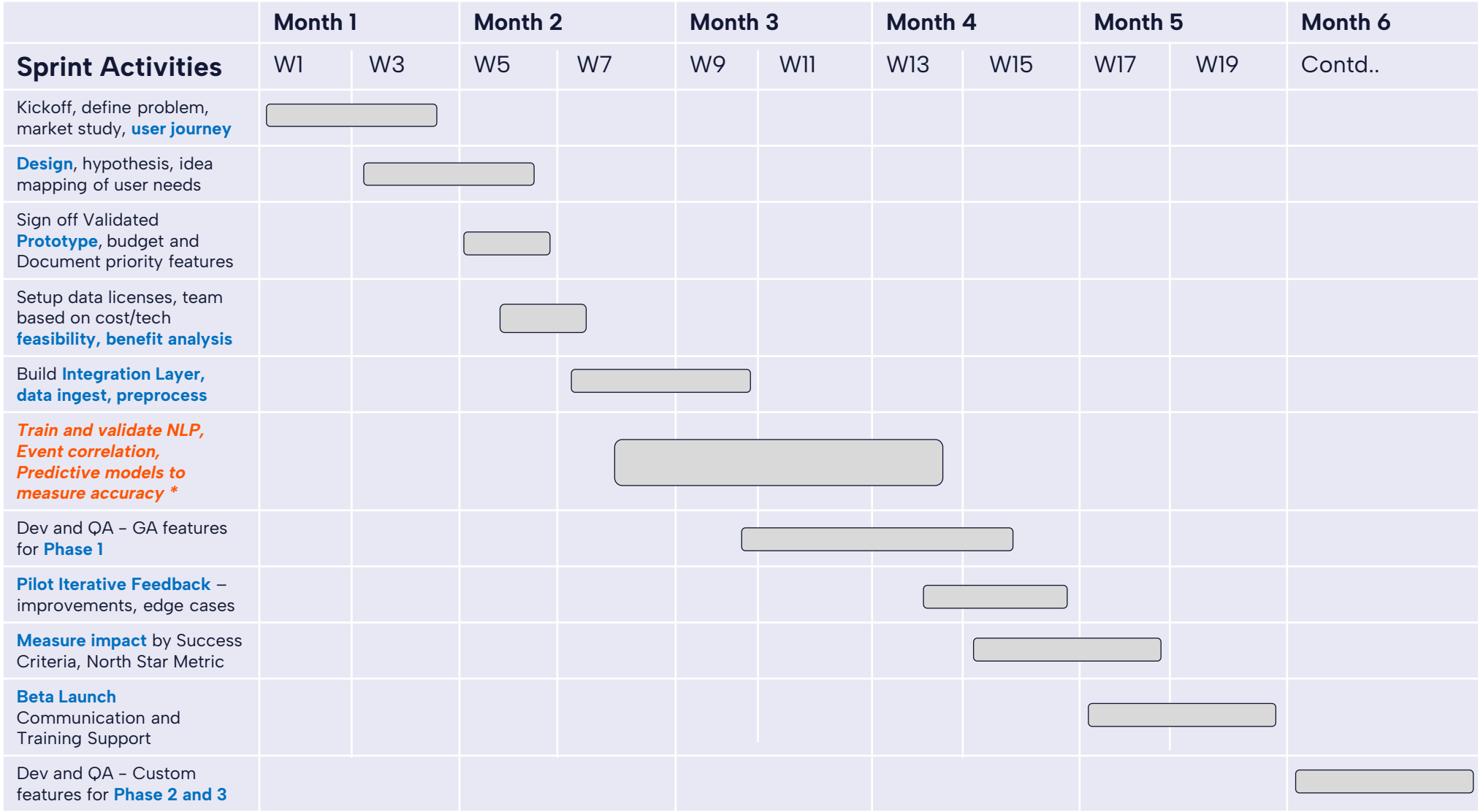
✅ Validating product with Users

-> Involve Power Traders in **Focus Groups in Design phase** to assess workflow relevancy
-> Incorporate **continuous feedback** from pilot Traders during post Development phase.
-> Measure impact on business performance and **KPIs** (defined in prev slide)

4. Go to Market (incl. AI Deployment Plan)

TIMELINE VIEW of Product Roadmap activities to ensure iterative and phased development remains user-centered, QA-compliant and well communicated

*** Potential ML Models**
NLP based text classification and Sentiment Analysis, Time Series Forecasting and Regression models to ascertain event-price relationship need to be fine-tuned continuously post deployment



5. Proposed Investment, ROI and Recap

Initial Strategic Investment Requested (Scope, resources and timeline)

$250K SGD over 6 months for Pilot development, data acquisition, and AI modelling to be recovered by projected profits and revenue loss protection over next 6-12 months

Key Use of Funds (Budget needed=S$250K)

1. $125K Data licensing (market, weather, news) and Integrations (trading sites)
2. $50K Development resources (engineers, data scientists and Infra costs, Mkt/Training)
3. $75K AI Capabilities (designing, testing, and deployment)

Return on Investment

1. Revenue Impact - Potential to increase trader profitability by X% due to better decision-making.
2. Reduce losses from unanticipated price spikes and improve trade timing.
3. Long Term Scalability - Expand to other commodities or integrations to increase Shell's market positioning

Considerations and Assumptions

1. Data Availability – **Timely, high quality and within budget** third-party data integrations
2. Building inhouse AI models need to be **accurate** and **actionable** to meet exact demands of Shell Trading teams
3. **Future** synchronization with existing Shell IT Systems with Open API

Follow up Actions

1. **Data Quality, Security, Compliance, DevOps** to be assessed for each **AI methodology**
2. **Detailed PRD** to be shared for signoff from all functions and approval by Budget Holder
3. Commit to monthly **Product and Budget review with Steering Committee** - key Users, Stakeholders and Commercial GM

Risks

1. **Technical** risk - implementing data sync across devices which can be addressed by building a robust integration layer to handle large volumes of data collection.
2. **Business** risk - low adoption or concerns on reliability of data accuracy. We need to Test and Validate outcomes with Pilot Users and ensure a smooth Training/Support plan after each phase of Development.

Why we need to solve this NOW?
Urgency = HIGH: As power price volatility is increasing due to global instability and unpredictable events, which can lead to significant financial losses or missed profit opportunities for traders. Without real-time, data-driven insights, traders are reacting late to market fluctuations, making it critical to implement a solution that helps them stay ahead and maximize profits now.

What would be considered a SUCCESS? Traders consistently using the Platform's insights to make informed decisions, resulting in faster reaction times to price fluctuations and increased profit margins, while reducing missed opportunities and mitigating risks from unexpected market events.
North Star Metric for Shell: Revenue Loss saved
Success Criteria for Traders: Avg Response Time

Sources

https://blog.yesenergy.com/yeblog/power-traders-can-access-real-time-energy-data

https://www.bloomberg.com/professional/insights/data/using-bloomberg-automated-news-stories-to-predict-market-events/

https://www.spglobal.com/commodityinsights/en

THANK YOU