

Revolutionizing the Consumer Experience

Present

Future

STRATEGY

Team
Availability

Brought to you by:
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Present

Strengths

Providing quality products and services to consumers

Weaknesses

Artificial Intelligence powered service offerings compared to Competitors

Opportunities

Implement tried and tested innovations from parallel industries doing similar initiatives

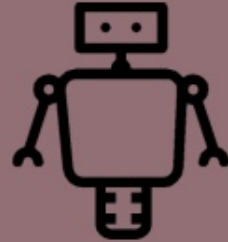
Threats

Possible outrages due to mismanagement of data

Current Developments within the industry

Proposed Solution

>Automated
Concierge Services
- Hilton Worldwide
Hotel's AI- Based
concierge Connie



Relies on IBM's Watson AI for
computing intelligence
Uses travel database WayBlazer
Gives real-time
recommendations for visit-
worthy sites and attractions
Answers customer queries on
the spot
Learns from frequent customer
interactions to refine its
responses
Provides excellent care and
support as a robotic concierge.

>Utilization of AI based
software services to
service customer needs
-Wynn Las Vegas
integrating Amazon
Echo to its hotel rooms.



Digitize its 4,748 hotel rooms in
order to offer their guests
tremendous control over
multiple facilities using their
voice.

Controlling room lighting,
temperature, TV, draperies.

Proposed Solution (three aspects)

Implementation of Machine Learning, Data Analytical, NLP (Natural Language Processing) Chatbot to drive momentum in improving existing functions/aspects in Melco Hospitality Sector



(Innovation)
Cutting out
Unnecessary
Middlemen

- Implementing relevant Chatbot and price calculation algorithm.
- Price comparison to that of competitors and compute best price for end consumers to pay for Melco Hotel chain bookings.
- Increases their likelihood of purchasing from the main provider of the service (Melco), instead of cutting the third parties (Agoda, Hotels.com) a slice of the economic pie.



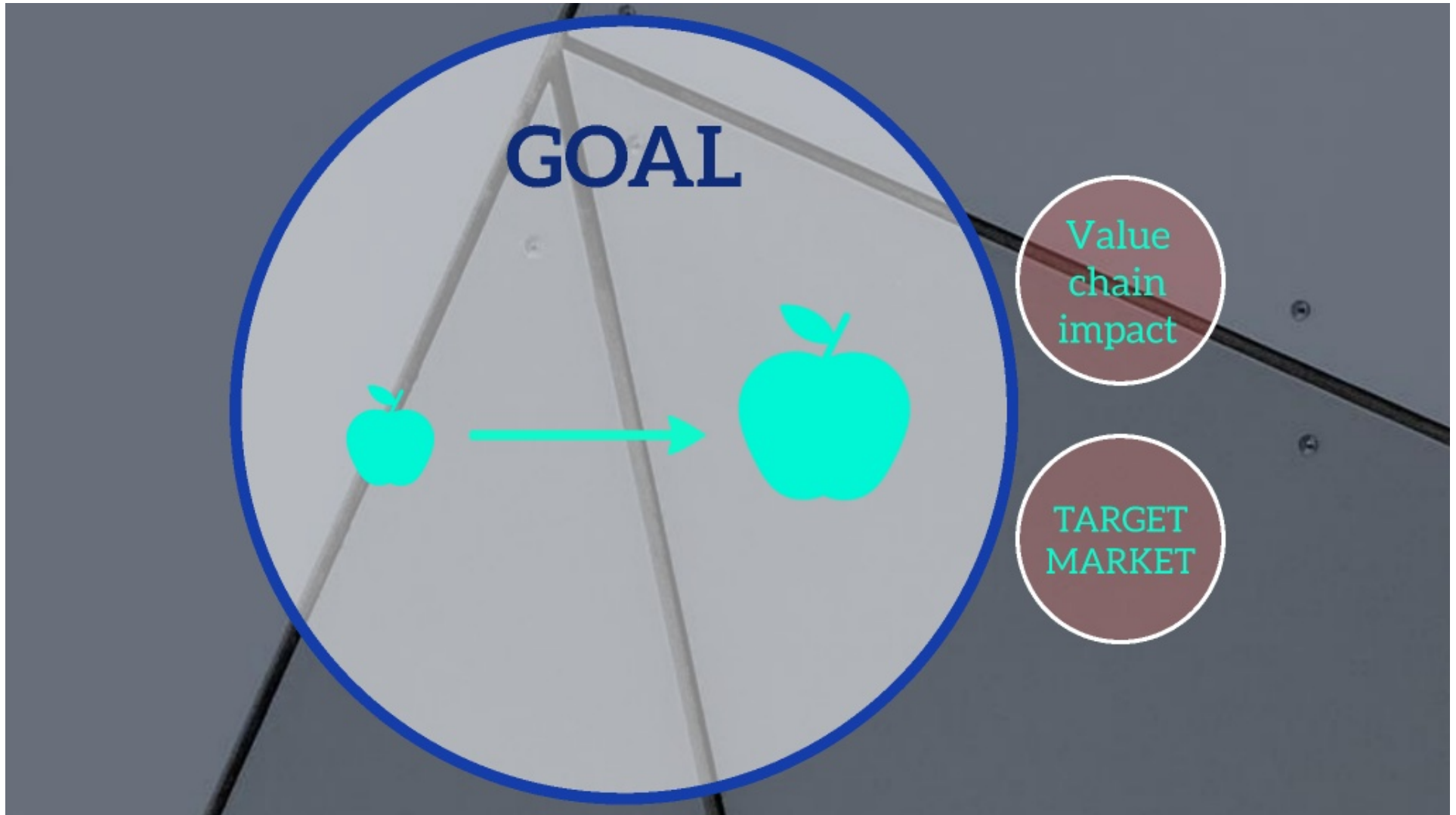
(Ethical Considerations)
Securing user data

- Use of blockchain ledger technology to secure user data and that relevant regulatory authorities can have insights to accredit ethical use.
- User assurance of privacy with the advent of conscious consumerism and need for privacy.



(Preciseness)
Purpose-driven
Ideation

- The understanding that:
- In-depth customer service
- Properly harnessed customer insight,
- Utilization of the benefits of AI (Artificial Intelligence) to be the the best way to increase brand value
- Ensures customer retention and attain greater market share for Melco.



Impact on Melco's Value Chain

Identification of Marketing and Sales, and Service sector in Melco's value chain to be disrupted and improved upon vastly.



- Proposed Solution being better able to offer competitive pricing of stays than competitors, with complementary marketing campaigns to encourage customers to book direct with Melco.
- Increase direct sales volume and reduce needed marketing costs if customers develop loyalty with AI led initiative of improving hospitality.
- Service levels would be improved to a whole new level which previously was a limitation due to technology being a tool utilized by us (Melco) to service them (consumers).
- Self-Service for the technologically savvy customer
- attending service staff can better address the needs of other customers not too familiar with such developments.

Top 10 US Accommodation Websites, Ranked by Total Visits, Q4 2015 & Q4 2016

millions and % change

	Q4 2015	Q4 2016	% change
1. Airbnb	61.7	87.8	42%
2. Booking.com	66.5	82.3	24%
3. Marriott	61.0	70.7	16%
4. Hotels.com	52.4	65.7	25%
5. Hilton	42.9	46.7	9%
6. IHG	29.3	32.5	11%
7. Vrbo.com	26.2	28.9	10%
8. Choice Hotels	20.9	23.6	13%
9. Trivago	13.9	20.6	48%
10. Starwood Hotels	18.5	18.8	2%

Note: represents activity tracked by SimilarWeb, broader industry metrics may vary

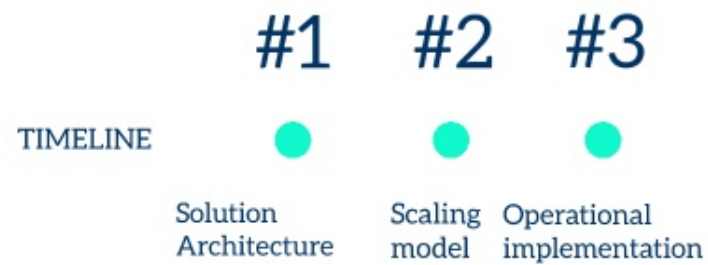
Source: SimilarWeb, "2016 Highlights Report U.S.," Jan 18, 2017

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www.eMarketer.com



Strategy



Technicalities of
solution
architecture

Scaling Model
and Proposed
Algorithm

Operational
Implementation

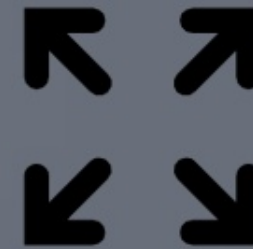
Solution Architecture

Contextual Aspect:

NLP Chatbot
Offers competitive pricing
Individualized user
experience and service
provision through ML
Booking Calendar AI, ML
Face Detection AI
Block-chain Hyper-ledger



Scaling Model & Proposed Algorithm (Structural Aspect)



Chatbot-- (Utilises)
Recurrent Neural Network
(Recommended System (LSTM-
GRU))
Expectation Maximization
TF-IDF vector
One hot encoded vector

Face Detection--(functionality
enabled by)
One short learning
convolution neural network
Max pooling
Gradient descent
Back propagation

(With the aim of)
Viable elimination of third
parties in booking.
Introducing Blockchain
technologies to secure user data
obtained from third parties and
users
Microsoft Azure to scale our
Data.
Best available price prediction
and formulation by AI ML
algorithm so that user could get
best price experience.

APIs/SDKs----

Microsoft IoT Hub
Face API
Translator Text API
Machine Learning Studio
Hyperledger



Operational Aspect

Requires End to End Machine learning project Development on:

Microsoft Azure:

Azure API/SDKs for data storage and scaling.

IBM Hyperledger securing data.

A team of engineers and Data scientists along with an DBA Administrator.

Projected execution:
1 month time to implement.



Team Availability

Jameson : Yes
Sadashiv: **Yes**