Digital Transformation at Airports
AGENDA

● About Us

● Airport Digital Transformation

● Outcome

● Our Experience

● Annexures
About Us
Group Creds

- $5B in revenue
- 131,000 employees
- 37 nationalities
- 18 languages
- 90 countries
- 1,000 clients
- Award winning
Years we went from being a small start up to the largest independent agency.

We synthesize 10 specialisms (3 shown above):”

- Consulting
- Creative
- Content
- Commerce
- Cognition (analytics)
- Cloud
- Completeness (social, mobile, reviews, ratings, feedback)
- Channels
- Cohesion (integrations)
- Conversions

Acquired by TechM
2019

AWARDS WON RECENTLY

- Tata Cliq
- Titan
- MontBlanc
- Diesel
- Matthew Williamson
- Myla Seduction
- India Agency Awards 2019
- Agency CEO of the Year
- Himalayan Water
- MontBlanc
- Titan
- Tata Cliq
- Diesel
- Mia (Tanishq)
- Harvey Nichols - Best in show
- Reliance AJO
- Tom Daxon Smythson
- Myla Valentines
- Jay Strongwater
- Loma Jane
- Redbullshop.com (Peoples Choice)
- BORN Group website
- Harvey Nichols
- Mr. & Mrs Smith
- Kangaroos
- BORN Group Website
- Agency of the Year Malaysia
- Tata Cliq
- UK Bennett - Best re-design of the year
- Matthew Williamson
- Myla Seduction
- BORN Global Management Team
- BORN Creative Design
- Barcelo Horizon
- Shoppers Stop
- Digi
- Fastrack
- Love Bonito
- Titan
- Tetley
- BORN Website
- Featured as Company of the Year
- Agency of the Year Malaysia
- India Agency Awards 2019
- Agency CEO of the Year
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- Titan
- Tetley
- BORN Website
- Featured as Company of the Year
Customer Experience
- Strategy
- Connected experience across channels – web, mobile app, kiosk
- Rewards, Loyalty, Advocacy
- Owned channels vs affiliates
- Customer Acquisition
- Personalization
- Frictionless path to purchase
- Test for feedback
- Abandonment science
- Engagement science
- Owned data vs earned
- Reviews & ratings
- Curation of content
- Geo-fencing
- Custom application build

Physical Experience
- Product design
- Packaging design
- RFID Product recognition
- Digital Lounge
- Digital Transaction Zone
- Space design
- Engines & Machinery design
- Experience Zones
- Physical UX-UI
- Consumer research zone

Service experience
- Marketing Services
- Fulfilment Services
- Financial Services
- Workflows
- Process Improvement
- Consumer Behaviour research
- Audience management
- Ecommerce Services
- Research & testing
- Content Strategy
- Service Design
- Experience strategy
- Web And App Development

Operational experience
- Order orchestration between channels
- Sourcing, allocations, returns, fulfilment
- Financial and supply chain book of record
- Inventory master HR
- Customer book of record
- The foundation of a client centric organization
- Capture and use of data
- Seasonal and long term hiring
- Customer care services
- Seller support services
- Vendor management

Data experience
- Customer Intelligence
- Data integrity
- Predictive Analytics
- Text Mining
- Data Science
- Forecasting & Planning
- Data collection
- GDPR
- Analytics
- Insights
- Cognition
- Curation of content
- Geo-fencing
- Custom application build
What is CX?

CX = BX + BE + BR

- brand experience
- behavioral experience
- a book of record experience
BORN’s Stella© framework

Record behaviour in data vault to improve brand experience

Deliver it through channels

Build an immersive brand experience
Airport Digital Transformation
Objectives

Superior NextGen Omni-Channel Shopping Experience

based on 5 Key Principles:

1. Superior CX
2. Physical to digital footfall conversion
3. Increase GMV & ROI
4. Tenant onboarding and management
5. Agility and scalability
Challenges

**Business**
- High TCO
- Longer TTM
- Poor ROI

**Operations & Process**
- Lean inventory
- Seamless offline Operations
- Order Orchestration
- Fulfillment
- Onboarding processes

**Customers**
- Omni channel experience
- Lower conversion rate
- Contextual engagement

**Technology**
- Scalable Architecture
- Security
- Separation of Concerns
- Tightly coupled
Strategy to Execution

Our Approach

Vision & Strategy
Digital Platform Architecture
Digital Partner Evaluation & Selection
People & Process Re-engineering
Platform Implementation

Product Integrations
Merchant Partner Onboarding
Channel Onboarding

BUILDING THE CORE
DELIVERING THE VALUE
Platform and solution evolution
How Clients Select
- Beauty
- Electronics
- Fashion
- Food
- Wine and spirits
- Travel, health and others

**Domain**

**Digital Transformation**

**Technology**
BIG EXPERIENCES

Domain

Digital Transformation

Technology

Commerce
Content management system
Order management system
ERP
Pos
CRM
Analytics

Jagged Peak
IBM Sterling Commerce
Magento
fluent commerce

salesforce
IBM Watson
SAP Hybris (An IBM Company)
NETSUITE

sitecore
WordPress
Adobe Experience Manager
Drupal
Google Analytics
Domain

Digital Transformation

Technology

Strategy
Consulting
Customer experience
Omnichannel
Change management
## Guiding Principles - Airport Digital Transformation

### Potential options

<table>
<thead>
<tr>
<th>More control or less over heads</th>
<th>MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loosely coupled or Tightly coupled</td>
<td>ARCHITECTURE</td>
</tr>
<tr>
<td>Many, Many Two, Few</td>
<td>MARKETPLACE</td>
</tr>
<tr>
<td>Experience led content (owned and earned)</td>
<td>CMS</td>
</tr>
<tr>
<td>Stores, online, pwa, app.. more to come</td>
<td>ORDER ORCHESTRATION</td>
</tr>
<tr>
<td>Interact, Transact, React</td>
<td>COMMERCE</td>
</tr>
</tbody>
</table>

### MODEL
- Build – Custom
- Buy - COTS

### ARCHITECTURE
- Pure Headless
- Commerce Led
- Experience Led
- Side by Side

### MARKETPLACE
- Mirakl
- Vtex
- Unirgy (Magento)
- Shuup

### CMS
- AEM
- Bloomreach
- Sitecore

### ORDER ORCHESTRATION
- Fluent
- Vtex
- Deck Commerce
- IBM Sterling

### COMMERCE
- Magento
- Elastic Path
- SAP Commerce
- Salesforce
Guiding Principles - Singapore Airport
Potential Options

- many, many, two, few

experience led content (owned and earned)

stores, online, pwa, app.. more to come

attract, interact, transact, react

secure, scale, $200m+ site

this is a marketplace

cx is key

order orchestration

commerce

common services
Architectural models

Pure Headless

E-Commerce Led

Hybrid/Side-by-Side

Content Led

Where Sg Airport is on slider
Architectural Objectives

- Organized around business capabilities
- Loosely Coupled
- Independently deployable, scalable and secure
- Highly Maintainable & Testable
Base Architecture
Outcome
BORN’s Stella Framework

CX = BX + BE + BR

- **CX** (Brand Experience)
  - Web-Marketplace
  - Mobile
  - Partner Ecosystem
  - Social Media
  - Chat
  - Telemarketing
  - Information Desk
  - Loyalty

- **BX** (Behavioral Experience)
  - Personalization
  - Tenant Mgt
  - Brand Sites
  - Promotions
  - Traveller/Non Traveller
  - Sso
  - Flexible Delivery Options
  - Self Service
  - Product Bundling
  - Email & Sms
  - Returns/Rma
  - Flight & Trip Info
  - Rewards & Loyalty
  - Recommendations

- **BE** (Book of Record Experience)
  - Erp/Pos
  - Pim & Plm
  - Business Intelligence
  - Airline Information
  - Partner Mgmt
  - Id Mgmt
  - Revenue Mgmt
  - Crm/CSR
  - Loyalty
  - Marketplace
  - Travel Mgmt
  - Oms
  - Lease Mgmt
  - Contract Mgmt

**Big Experiences**
Our Insights

**Business**
- Change management
- Clearly defined Business streams
- Defining Visions, Key Objectives, KPIs for each Stream
- Roadmap and product backlog per stream
- Defining Requirements Prioritisation Matrix

**Operations**
- Site management
- Clearly defined checklists & SOPs
- Guided Business team
- Division of responsibilities between BizOps & TechOps
- Ease of onboarding and management of tenants
- Order orchestration

**Customer**
- Consistent and relevant experiences across all touchpoints at the right time.
- Increase LTV
## Business Benefits

### Organizational Goals

**Tangible**
- Acquire New Customers
- Increased Customer Lifetime Value
- Reduced Fixed & Variable Costs

**Intangible**
- Customer experience and advocacy
- Organizational effectiveness
- Reduced, legal, compliance and IT risk

### Business Capability

- Optimized & personalised CX with real-time insights and multichannel data
- Effective merchandising and timely marketing campaigns
- Seamless transaction experience
- Content - Create once publish everywhere
- Automate personalization rules
- Automatic trigger for tailored events
- Predict and forecast demand
- Streamlined processes and proven tools for advanced campaigns
- Consolidate legacy systems and support future digital innovation
- Improved brand consistency
- Centralized asset repository
- Assign SLA, security and compliance assurance to one trusted partner
### Key KPIs

<table>
<thead>
<tr>
<th>E-Commerce</th>
<th>Merchandising &amp; Products</th>
<th>Marketplace</th>
<th>Logistics &amp; Fulfilment</th>
<th>Customer Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 5 Brands by Revenue</td>
<td>Refund/Return Rate (RR)</td>
<td>Merchant Satisfaction</td>
<td>Perfect Order Rate</td>
<td>Average resolution time</td>
</tr>
<tr>
<td>Top 5 Categories by Revenue</td>
<td>Assortment range</td>
<td>Off-airport New Sellers Expansion Rate</td>
<td>On-Time Payments to Tenants</td>
<td>Customer satisfaction score (CSAT)</td>
</tr>
<tr>
<td>Site loading speed</td>
<td>Product rating &amp; reviews</td>
<td>Inventory Synchronization (In-airport)</td>
<td>Cancellation Rate</td>
<td>Avg. Complaint Resolution Time</td>
</tr>
<tr>
<td>Conversion Rate (%)</td>
<td>Promotions</td>
<td>Active sellers (%)</td>
<td>Total Processing Time per Order (Queue + Collection)</td>
<td></td>
</tr>
<tr>
<td>New Customer (%)</td>
<td>Product to Cart</td>
<td>Tenant acceptance rate</td>
<td></td>
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<tr>
<td>YOY Growth</td>
<td></td>
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</tbody>
</table>

- **Marketing**
  - New visitors vs. returning visitors
  - Bounce rate
  - Cross-selling rate
  - New Leads
  - Return on Ad Spend (ROAS)

- **Logistics & Fulfilment**
  - Perfect Order Rate
  - On-Time Payments to Tenants
  - Cancellation Rate
  - Total Processing Time per Order (Queue + Collection)

- **Customer Support**
  - Average resolution time
  - Customer satisfaction score (CSAT)
  - Avg. Complaint Resolution Time
Enabling them with a futuristic roadmap

**Objective**
- Enable the brand towards next wave of growth in B2C Marketplaces across segments
- Conceptualize a Product Management advisory to recommend the product functionalities for upcoming releases through
  - Gap analysis & benchmarking with market leaders
  - Optimizing current leakage points (Category, Product, User journey etc.)

**CUSTOMERS**
- Consumers & Marketplaces
- Consumers and brand
- Benchmark on regional Marketplace KPIs
- Baseline Marketplace KPIs
- Trend and sentiment analysis
- Social Listening
- Gap-Opportunity Matrix

**INDUSTRY COMPETITIVENESS**
- B2C Marketplaces in the region [MACRO]
- AS-IS Website Analysis
- Social Listening
- Trend and sentiment analysis
- Gap Analysis

**RECOMMENDATIONS**
- Proposed Product Functionalities
- Business Recommendations
Our Experience
BIG EXPERIENCES

Our Global Airports Clientele

BAA
Upgradation of ERP Applications & development of interfaces to 30+ applications

Aéroports de Montréal
Airport WiFi Optimization

Aena
Deliver application managements services on multiple SAP products

Dubai Civil Aviation Authority
Aeronautical & Commercial Billing system

Dubai Duty Free
Integrated Oracle Applications system

Harad International Airport
HIA Operations Catering Solution on JDE

Changi Airport Singapore
A digital transformation initiative to enable next-generation online & omni-channel shopping experience.

Cairo International Airport
Oracle E-Business Suite Implementation

Sydney Airport
Data Warehouse & Analysis for Airport’s Retail Business.

General Civil Aviation Authority
Development of Website, Mobile App & Intranet Design

Melbourne Airport
Indoor Positioning and Wayfinding

Suvarnabhumi Airport
Implement Integration Platform that connects to AODB, RMS and many other Airport Systems

Civil Aviation Authority of Singapore
Flight Schedule Mgmt. System and portals
Singapore Airport Airport Group
About Singapore Airport

- Singapore Singapore Airport is a major civilian airport that serves Singapore, and is one of the largest transportation hubs in Asia. The footfalls account to ~77 Million travelers per year.

- It serves more than 100 airlines flying to 380 cities in around 100 countries and territories worldwide, as of 31 December 2019. About 7,400 flights arrive or depart at Singapore Airport each week – about one every 80 seconds.

- It is currently rated the World's Best Airport by Skytrax for the seventh consecutive year since 2013. It is also the first Airport in the world to do so for seven consecutive years and is one of the world's busiest airports for international passenger and cargo traffic.
Business Challenge

Singapore Airport operates over 100 brands, ranging from luxury to daily needs products, creating some of the most exquisite experiences for the visitors & travelers. Therefore, BORN was given with the problem statement to deliver a seamless experience digitally across brands.

BORN, owing to its expertise in Content, Creative & Commerce, was awarded to build a digital e-commerce marketplace. Tenant management and retention became key to success for the transformation.

Following were the key challenges:

- The stores within the airport operate with a lean inventory across in-store and online purchases. There was a need for a single view across tenants that carry real-time, reliable inventory and therefore, become the central pillar of the transformation.
- Existing e-commerce was handled by a custom built platform that was not robust enough to cater to increasing traffic & had security issues.
- Brands have their own vendors for end to end content services this led to inconsistent quality of images and copy on iShop Singapore Airport.
Business Value

- A unified Marketplace that’s designed to provide a personalized shopping experience for Sellers (B2B), consumers (B2C), Enterprise users (B2E).
- Optimized Marketing effectiveness by 70% across engagement points.
- Improved operational efficiency by 80%, with faster time to market.
- Accelerated conversions (60%) while decreasing fallouts (30%).
- Grow revenues (80%) & increase sales through upselling & cross-selling.
- Respond swiftly to Singapore Airport needs & expectations from Tenants – both content & product.
About the Engagement

BORN was chosen as partner to enable Singapore Airport to develop and manage its next-generation omnichannel e-commerce marketplace to onboard and manage tenant products and services.

Engagement between BORN and SG Airport was to build and enable a curated marketplace and below are the scope of services:

- Creative Production
- Content Support Services
- Curated Marketplace implementation
- Brand microsites
- Componentized view using ReactJS
- CMS using Adobe Experience Manager
- Commerce implementation using SAP CX Commerce
- Analytics using Adobe Analytics
- Consolidation & Segmentation of data using Adobe Audience Manager
- Product Recommendations and Personalisation using Adobe Target
- Order Fulfillment using Fluent Commerce
- Managed Services
- Security Services
Engagement Objectives

Build an e-Commerce platform that,
- Enables business growth and aligns with Singapore Airport’s digital ambition
- Provides exceptional customer experience
- Allows integration of digital and physical channels providing a seamless Omni channel experience
- Lays the foundation to allow Singapore Airport to consolidate and simplify its content and commerce capabilities across channels.

Our Guiding Principles,
- Decoupled modular architecture
- Extensible to accommodate new features and channels
- Improve Business operations and efficiency
- Provide integrated solution unifying expertise across Creative, Content, Commerce.
- Provide content services to help tenants onboard to marketplace.
Evolution of Proposed Solution

Business Pain Points
- Higher TCO and longer time to market
- Unable to convert physical footfalls to online footfalls
- Poor ROI on Marketing efforts. Paid SEO not yielding desired results
- Purchase funnel not optimised, lower conversions and session times
- Poor page loading impacting conversions from China
- Search conversions too low compared to industry standard
- Poor responsiveness across tablets and mobiles

Application Limitations
- Monolithic architecture
- Longer development cycles - System & Processes
- Longer deployment and debugging cycle
- Custom built code for multiple channel
- Content Duplication, disjointed marketing, poor conversions
- Poor site performance - no separation of concern - CMS handling business logic
- Poor SEO ranking
- Poor caching technique - content and commerce mixed up

Proposed Solution
- Modular architecture
- Agile development
- Continuous builds/deployments, faster feedback
- Omni channel design, Headless architecture
- Content and Experience fragments
- Clea separation of concern - View, CMS, Commerce - Truly Headless aka PWA
- Infra, Architecture design and coding best practice together enable higher SEO rank
- Caching strategy for content and commerce, effective use of CDN
Digital Product Catalog

In addition to providing creative and commerce services, BORN extends its content services to support tenants improve the quality of product contents on marketplace and to increase tenants to seamlessly onboard to marketplace, BORN offers its expertise in content writing, photography, digital image processing, and translation services.

List of content services provided

- Product Photography
- Styled imagery and 360 degree imagery
- Image resizing, colour correction and post processing
- Web scraping
- Product copywriting
- Translations to Mandarin (Simplified) and Bahasa Indonesia.
- Tailor-made Marketing creatives with creation and adaptation of banners.
- Purpose built merchant portal with integrated workflow for raise request and track progress of content services
Thank you!

BOLD
BEAUTIFUL
BORN

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