LSCM Summit 2018

Simon Wong
CEO
LSCM R&D Centre
What Can We Do?
1. Better Equip Logistics Industries
2. Big Data and AI Smart
3. Improving Connectivity
Warehouse AGVs

Multi-AGV Coordination One-man Pick-and-Place Station

Under Commissioning
Warehouse Smart Lifter

Force Sensing End-Effector

Multi-axis Controller
Robot Sensing
Robot Sensor

Two important features for next generation intelligent robots:

• Skin-like sensing
• Temperature sensing
Robot Whisker

• Open-loop optical fiber
• Flexible for installing on different robot arms
• Adjustable sensitivity

Photo courtesy of iheartcats.com
Robot Vision

Dynamic Vision Sensing

Moving-hand Detection for Safety Purpose
Robot and Sensor Integration for Repetitive Tasks

By Human Operators

Vision Sensor

Force/Touch sensor

Under Commissioning
Context-aware Movement Analytics with AI and Vision

Activity Tracking and Posture Analysis

WRONG POSTURE DEMO!
Large-scale Site Supervision with Vision and AI Analytics
Future Warehouse
Big Data and AI Smart
AI Approach for Asset Management

Video-based Trolley Management System for Better Customer Service Hong Kong LSCM Technology
Big Data Approach for Dynamic Resources Management

The 20 important factors:
- RHO_JAT
- Est. number of passengers
- Travel time from stand to carousel
- Est. number of bags
- ETO_hour
- ETO_dayofmonth
- Humidity
- Wind
- Barometer
- Temp
- ETO_dayofweek
- Airline_Emirates
- Airline_British Airways
- Origin_Asia/Shanghai
- Origin_Asia/Tokyo
- weather_Passing clouds
- weather_Scattered clouds
- Origin_Asia/Ho_Chi_Minh
- Airline_Hong Kong Airlines
- weather_Clear

BigARM

Multi-source Data Fusion

- Unknown Factor Prediction
- Feature Selection
- Correlation Discovery

Decision Making
- Dynamic Task Allocation Algorithms
- Reinforcement Learning Models

Airport Operation Process

Multi-source data

Big Data Analytics and Optimization

Applications

72.9 million passengers in 2017 (1150 flights daily)
AI and Vision Approach for Smart Traffic Control

Vehicle Type Detection

Camera

Detector

Traffic Data from Multiple Video Analytics

Real-time Traffic Control

Queue Length Monitoring

Signal Control Commands to Traffic Lights

With Smart Control

Without Smart Control

Video courtesy of: 有钱买靓车但买唔到技术 Tesla 塞爆大潭水塘, 2017.05.08, https://youtu.be/FvASBd7xvRA
Improving Connectivity
HK-Zhuhai Trade Facilitation Platform (eTFP)
Scalable Service Platform: Enrich the trade eco-system with value-add services
Core Features

- E-Port Declaration Form
- Validation Secured Channel
- Status Enquiry
- E-Port News

- Intelligent Search
- Domain Specific Translations
- HS Code Details
  - Tax Rate
  - Permit Requirement
  - Success Rate Analysis

- House of Knowledge Base
- ZhuHai E-Port Connectivity
- HK – Zhuhai Trade Facilitation Platform
- Big Data Analytics - HS Code
- AI Multi-National Form Translations
- Provider Search & Quotation
- Shipping Order Workflow

- Customs Procedures
- Trade & Logistics Glossary
- Trade Development News

- Service Providers Search (Freight, Warehouse, etc.)
- Request for Quotations
- Message Center to Collaborate

- Factory / Trader → Freight Forwarder → Buyer
- Booking & Tracking

- Trade & Customs Declaration forms for: Mainland China, HK, Vietnam, etc.
AI Multi-national Form Translations

One Single Cargo Data

Convert to different formats and languages
### Big Data Analysis

Provide reference for Harmonized System (HS) codes

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<th>HS Code</th>
<th>2009110000</th>
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<tbody>
<tr>
<td>Chapter</td>
<td>第二十章(蔬菜、水果、坚果或植物其他部分)</td>
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<td>Goods Chinese</td>
<td>冷冻的橙汁（未发酵及未加酒精的,不论是否加糖或其他甜物质)</td>
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<td>Description</td>
<td>Orange juices, frozen, unfermented and not containing added spirit, whether or not containing added sugar or other sweetening matter</td>
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<td>General Import Duty</td>
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<td>Export Duty</td>
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<tr>
<td>Export VAT</td>
<td>16%</td>
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#### Customs Declarations

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<th># of Cases</th>
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<th>Last Case</th>
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<td>2018/10/01</td>
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<td>Import - Failed</td>
<td>3</td>
<td>2017/11/22</td>
<td>2018/07/21</td>
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<tr>
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<td>2018/01/03</td>
<td>2018/09/24</td>
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<td>2018/03/03</td>
<td>2018/06/12</td>
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</table>
eBRAM

e-Belt & Road Arbitration and Mediation
Domain Knowledge Specific Translation

ABOUT ARBITRATION

**Arbitration**
Arbitration is a method for resolving disputes between parties in private as an alternative to litigation in the courts.

May be agreed by the parties before or after the dispute arises. The arbitration agreement is usually incorporated as part of the contract from which the dispute arose. However, even when there is no arbitration clause in the contract in dispute, an arbitration agreement can also be made after a dispute has arisen if the parties prefer not to go to Court. If there is no arbitration agreement, mutual agreement is necessary, as one cannot force another party to "arbitrate" a dispute if there is no arbitration clause.

**Litigation or Arbitration**
Parties to a contract usually refer their disputes to arbitration because there is an arbitration clause in the contract. If parties have agreed to go to arbitration, with very limited exceptions, they cannot repudiate the agreement by going to Court unless both parties agree. Under the Hong Kong Arbitration Ordinance (Cap. 609), if one party to an arbitration agreement commences legal proceedings in any Court against the other party, the latter may insist on arbitration and apply to that Court to stay the proceedings commenced. The Hong Kong Court will only refuse to stay the proceedings if the arbitration agreement is ineffective, e.g. if it is not in writing, null and void, inoperative or incapable of being performed.

关于仲裁

仲裁是一种解决当事人之间争议的方法，以此作为在法院进行诉讼的替代方案。争议发生之前或之后，各方当事人可以达成协议。仲裁协议通常是作为争议产生的合同的一部分合同的一部分，然而，即使在有争议的合同中并无仲裁条款的情况下，如当事人不愿出庭，亦可在争议发生后订立仲裁协议。如没有仲裁条款，除须相互协议，因为如没有仲裁条款，一方不能强制另一方“仲裁”争议。

诉訟或仲裁

合同当事人通常将争议提交仲裁，因为合同中有仲裁条款。

如果当事人同意进行仲裁，但例外情况非常有限，除非双方当事人同意，否则不得通过上诉的方式否定仲裁协议。根据《香港仲裁条例》第609条的规定，如仲裁协议一方在任何法院对另一方提起法律程序，则该方将坚持进行仲裁，并适用于该法院，以待该法律程序开始进行香港法院只有在仲裁协议无效的情况下，才会拒绝继续进行该等法律程序，例如，合

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## ОБ АРБИТРАЖЕ

### Арбитраж

Арбитраж является методом разрешения споров между частными лицами в качестве альтернативы судебной процедуры в судах. Арбитражное соглашение может быть составлено сторонами до или после возникновения спора. Арбитражное соглашение обычно включается в состав договора, из которого возник спор. Однако, даже в случае отсутствия арбитражного соглашения в стороннем договоре арбитражное соглашение может быть также заключено после возникновения спора, если стороны предпочитают не идти в суд. В случае отсутствия арбитражного соглашения необходимо взаимное согласие, поскольку не может быть принуждение другой стороны к арбитражу, если нет арбитражного соглашения.

### СУДЕБНОЕ РАЗБИРАТЕЛЬСТВО ИЛИ АРБИТРАЖ

Стороны договора обычно соглашаются свои споры на арбитраж, поскольку в договоре имеется арбитражное соглашение. Если стороны согласились пойти в арбитраж, с очень ограниченными исключениями, они не могут отказаться от соглашения, идя в суд, если обе стороны не согласны. В соответствии с Гонконгским арбитражным законом (Cap. 609), если одна из сторон арбитражного соглашения начинает судебное разбирательство в любом суде против другой стороны, последняя может настаивать на арбитраже и обращаться в этот суд для того, чтобы присутствовать к разбирательству. Гонконгский суд будет отказываться от процедурных действий только в том случае, если арбитражное соглашение оказывается неэффективным, например, оно не является письменным, недействительным, недисписбным или не может быть исполнено.
eKYC
Know Your Customers
eKYC - Open Credit Rating and Business FootPrint

Pay a third party for:
- Supplier identification, supplier screening, and/or factory auditing
- Supplier management & production follow-up along the way
Pros: one-time fees; full transparency & control
Cons: upfront costs for sourcing.

Purchase direct:
- Use your own team
- Resort to 3rd parties only for what you are not good/efficient at (QC inspections, freight forwarders+)
Pros: full control; cheap if you reach a certain scale.
Cons: requires a good organization.

Order Size ($)
Large order
Purchase from a trademark:
- Finds a manufacturer
- Pays the manufacturer
- Makes a margin on a delivery order
Pros: speed; low cost.
Cons: supply chain remains hidden; costs in long term.

Small order
Find a commissioned agent:
- Finds/Introduces a supplier
- Has a commission, if necessary
- Costs paid when supplier is paid
Pros: speed; low cost.
Cons: seldom professional; is often paid by (and defends) supplier.

Involvement from Importer
Low
High

Enterprise E1
Enterprise E2
Enterprise E3
Enterprise E4
Rater R1
Rater R2
Blockchain Technology and Data Analytics

Potential Raters
1. Banks
2. Industrial Associations
3. Insurance Companies
4. Testing & Certifications Companies
5. Peers
6. Trade Show Organizations
...
Connectivity is our Strength
China’s current challenges:

1. Trade conflict
2. International market competition
3. “Sandwich trap”
4. Global warming
5. Global resources procurement
6. Regional conflict
<table>
<thead>
<tr>
<th>Mainland China</th>
<th>Hong Kong</th>
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<tr>
<td><strong>Current</strong></td>
<td><strong>Future</strong></td>
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<tr>
<td>Export &amp; Import Model</td>
<td>International Trade Framework</td>
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<td>Technology Acquisition &amp; Adoption</td>
<td>Technology Quantum Leap</td>
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<td>Business Management System</td>
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<td>USD/EURO Based Payment</td>
<td>RMB Based Payment</td>
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“3T” Strategy

Trust

Transcontinental

Teamwork
拼船出海
GBA
Mainland
GBA
Mainland

Hong Kong

Safer
Farther
Wider
THANK YOU VERY MUCH