Publicis Media & ICT

Partnership
Product Co-Development Opportunity

Institute of Computing Technology (ICT) Chinese Academy of Sciences

Cradle of Chinese Computer Science Technology
"Chinese Western Point Academy"

Mission :
- Provide service for national defense
- Promote national economy
- Accelerate technology innovation

Founder：Hua Luogeng
- Mathematician
- Academician of the Third World Academy of Sciences
- Academician of Chinese Academy of Science
- Foreign Academician of the US National Academy of Sciences
- Academician of the Federal Republic of Germany Bavarian Academy of Sciences
- Standing Committee Member of the China National People's Congress (NPC) , from 1st session to 6th session.

ICT Academician：华罗庚(Hua Luogeng)、胡世华、冯康、夏培肃、**李国杰**、陆汝钤、**倪光南、方滨兴**、刘韵洁等二十余人

1956

ICT was founded
- ICT was founded by Hua Luogeng
- Support atomic and hydrogen bombs and Chinese first satellite.
- Cradle for Chinese computer undertaking

1958

Zero Breakthrough
103 machine was China's first digital electronic universal calculating engine ,marking computing technology in China is no longer a blank paper

1967

"Star-bombs" Contributer
109 machine had made important contributions to the development of China's first generation of nuclear weapons

1981

150-AP high speed data processor was developed ， starting the service in oil exploration area

Institute of Computing Technology (ICT)
Chinese Academy of Sciences

Industrialization Representative : Chuanzhi Liu

Leader & Founder of Lenovo Group, Famous Chinese

Entrepreneur and Investor, Member of Tarzan

(Chinese Top Entrepreneurs Association), Co-

Chairman of Global CEO Development Conference

ICT Awards :

➢ **47** of National Science and Technology Awards

➢ **172** of other Science and Techonology Awards

Business Transformation of ICT Tech

1984

Lenovo

✓ **Lenovo Group Ltd.** is a Chinese multinational technology company.
✓ Lenovo was the world's largest personal computer vendor in 2015

1996

Sugon

✓ Leader of Chinese High Performance Server Industry. Known as Chinese IBM.
✓ Primarily Serving Government and Military Institutions

2008

Loongson

Developed **first 100% China-made CPU**,which is now widely used in Information and Military Defense

2010

Golaxy

✓ Model Corporation in Chinese Big Data Industry
✓ Appointed Business Transformation Platform of ICT Net Work Data Science and Technology Research.

CCF Task Force on Big Data

China Computer Federation Established CCF TFBD in 2012

The rapid development of IT industry makes big data an issue faced by all the people on earth. In order to effectively meet the challenges and take full advantages of opportunities of Big Data, China Computer Federation established Task Force on Big Data, including more than 200 members who come from Chinese top academies, Chinese advanced research institutes and related industry companies.

CCF TFBD Mission：

- Discuss scientific and technical issues of Big Data. Promote the construction and development of Big Data Industry.
- Establish a platform for academic communication, technical cooperation and data transaction.
- Provide strategic advice and suggestions to the relevant government departments

Honorary Director：Guojie Li（ICT Director，Academicians of Chinese Academy of Engineering）
Director ：Hong Mei（Vice President of Shanghai Jiao Tong University, Academician of Chinese Academy of Sciences）
Chief Secretary : **Xueqi Cheng**（Director of Net Work Data Science and Technology Laboratory in ICT. The President of Golaxy Data Technology, Inc）

ICT's Big Data Industrial Distribution
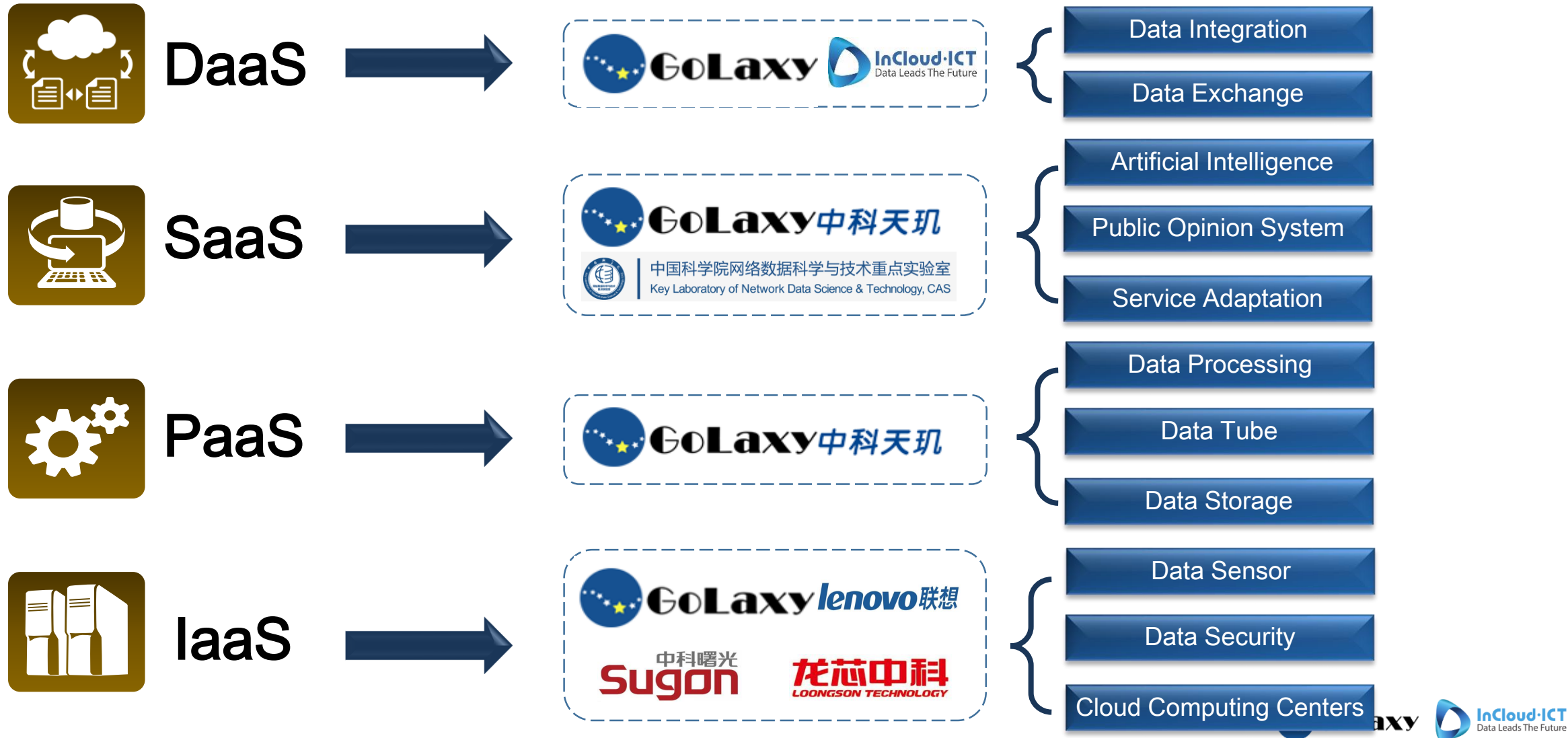
Golaxy Data Technology, Inc

Golaxy was founded by ICT as a High-Tec Enterprise in 2010. Rely on the Network Information Research Laboratory and a professional and experienced developer team, Golaxy has unique and advanced strength in the Big Data industry.

Value

- Customer Orientated, Big Data Driven
- Explore the Data Value, Serve the Country, Benefit the People

Staff

- Golaxy data technology, Inc : 150+ employees
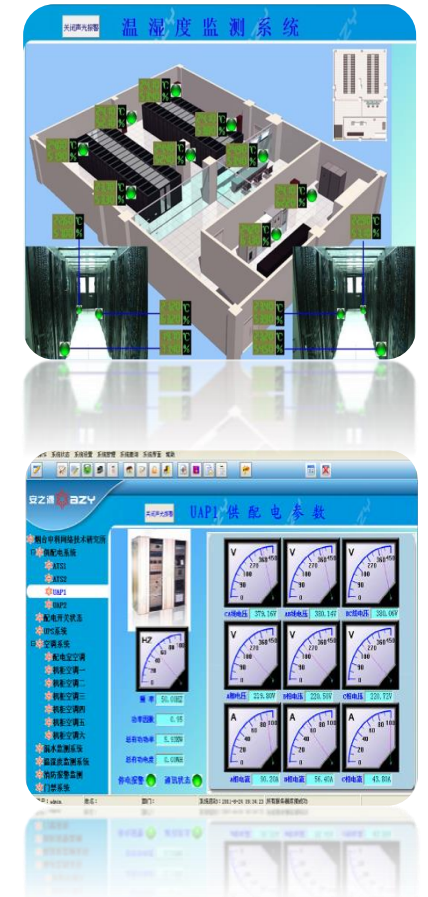- ICT's Network Information Research Center : 300+ engineers

Rewards

- **Network Public Opinion Monitoring**, **Big Data Information Analysis**, **Social Media Analysis Technology** were achieved First National Scientific Progress Technology Prize once and Second National Scientific Progress Technology Prize twice.
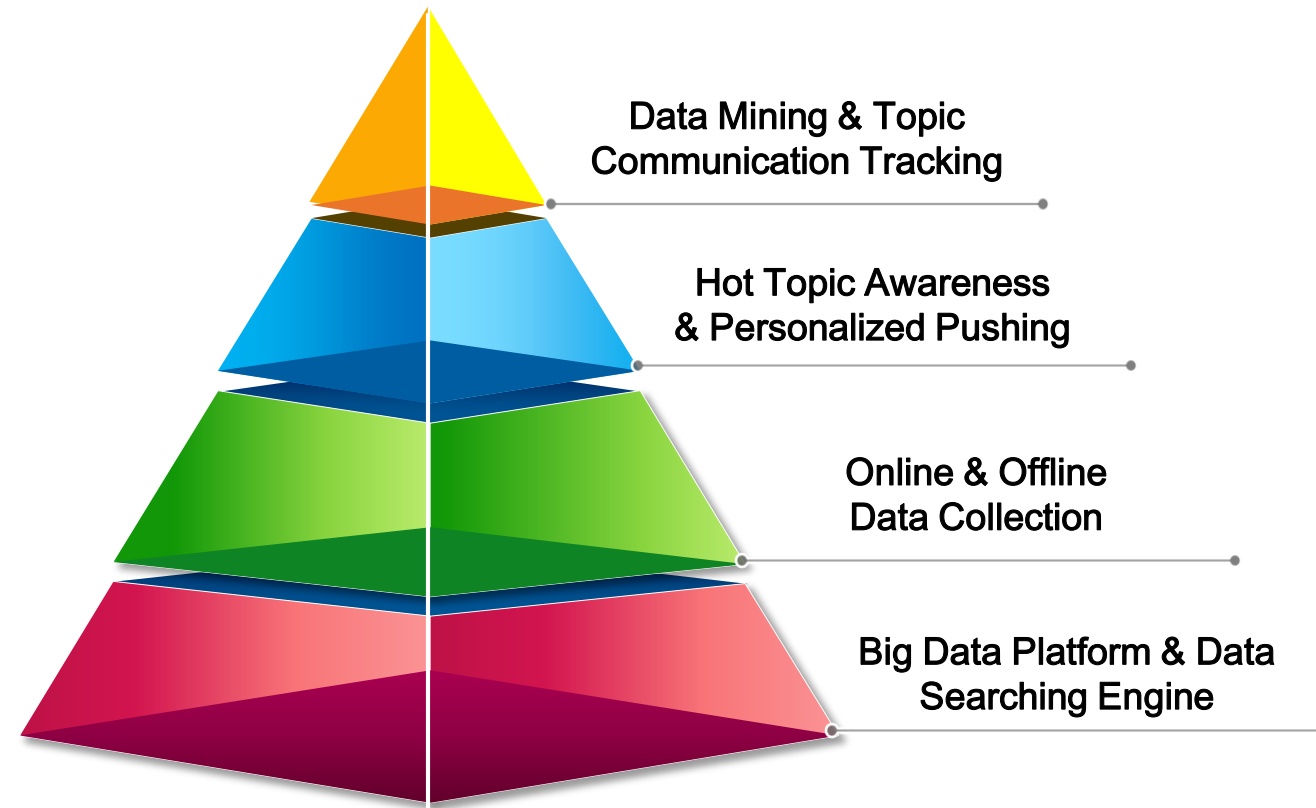- More than 10 Key Technologies won a variety of International Prizes

Network Data Center

Yantai Network Data Center

▸ 500 sq meters +data center room

▸ 1000+Server nodes

▸ 80 thousand billion times/second computational power

▸ PB storage capacity

▸ 1G Internet bandwidth

▸ Telecom level design standard

▸ Fulfill comprehensive system and environment monitoring

▸ 7 * 24 hours reliable service

Big Data Service Platform

Data Mining & Topic
Communication Tracking

Hot Topic Awareness
& Personalized Pushing

Online & Offline
Data Collection

Big Data Platform & Data
Searching Engine

- **Data Sources:**
  - 100+ Million Sources
  - Websites, APP, BBS, Blog, Douban, etc.
  - Weibo: Sina, Tencent, Twitter, Netease, etc

- **Data Collection Capacity:**
  - 60 million+ data collection per day
  - Personalized data source
  - History data collection

- **Data Collection Technology:**
  - Able to collect latest 5mins data
  - Able to implement personalized IaaS/PaaS/SaaS/DaaS service & product

Data Analysis System

Data Analysis Platform

Analysis Range: Web, Docs, Log, Weibo, Comments, etc.

Data Analysis System

Data Mining System
- Data Classify
- Data Aggregate
- Train/Predict
- Model Parameter

Pushing Engine System
- Personalization
- Machine Learning
- Precise Matching
- AI Feedback

Customer Analysis System
- Group Analysis
- Social Community
- Core Target
- Communication Path

Data Mining Algorithm
- Classification
- Sequence
- Text Mining
- Image Mining
- Correlation
- Cluster

Clients of Golaxy

ICT's IaaS, PaaS, SaaS, DaaS products in Big Data area have been widely applied in various industries, such as government management, national defense, scientific research, education, advertising media, industrial manufacturing, finance, etc. Following is a list part of ICT's important customers:

Case: Alibaba Taobao "Data Cube"

- **Background**

Taobao Data Cube: Data Managing Platform for Taobao

- **Challenge**

Achieve real-time and multidimensional query and statistics of 10+ billion records

- **Solution Technology**

– Golaxy Data Base and CCIndex+

- **Result**

  - **More Data**: The period time of data processing expanded from 7 days to 90 days

  - **Higher Efficiency**: Data average throughout rate increased by 7 times

  - **Faster Speed**: The 1s delay of Average Request Response Time was shortened by 57.4%

The Voice of Industry

Data Cube marked the transformation of Taobao from E– commerce to the vertical data services

The Revenue

After updated, the revenue of "Data Cube" had exceeded 100 million RMB

Show Case——Tencent Social Ads

- **Background**

Tencent Social Ads:

Digital marketing super platform based on Tencent social products.

- **Challenge**

Too much data processing with high costs (Ads cluster/variety/classification)

- **Solution Technology：**
  - Golaxy Dtube & DiD
  - Golaxy Data Base Cluster & Algorithm

- **Effect：**
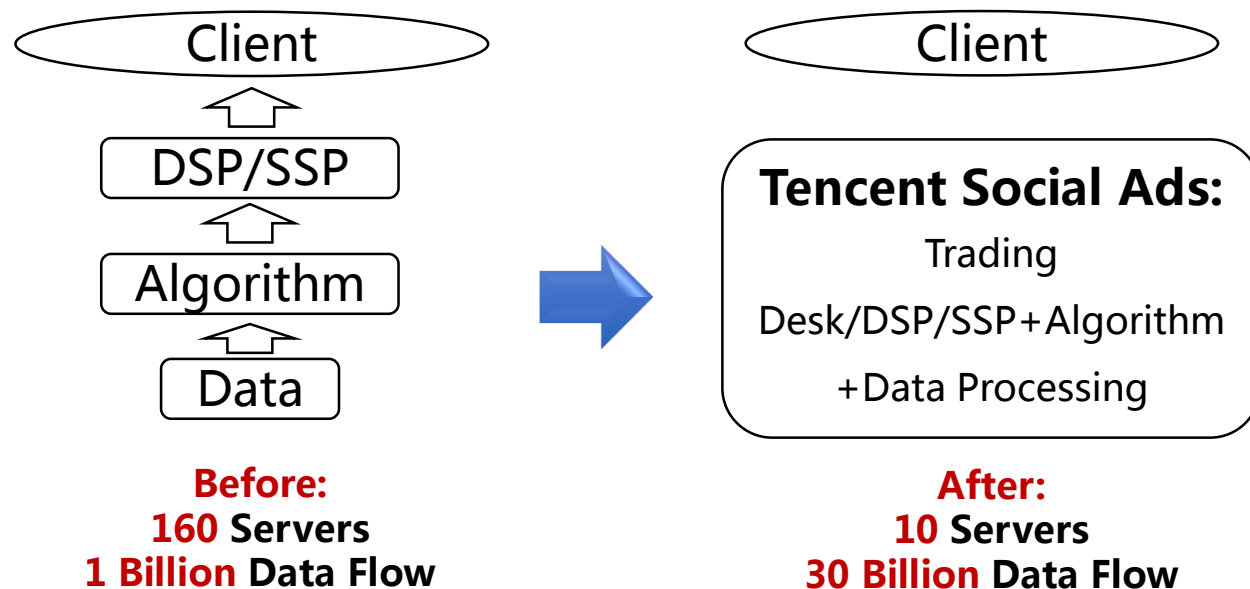
Data storage and searching performance raised 48 times

Data processing range expanded by 3 times

CTR increased 15%

Client

↑

DSP/SSP

↑

Algorithm

↑

Data

Before:
160 Servers
1 Billion Data Flow

Client

Tencent Social Ads:
Trading
Desk/DSP/SSP+Algorithm
+Data Processing

After:
10 Servers
30 Billion Data Flow

➢ The first day revenue after implementation boosted from 2 to 2.3 million

➢ Server deployment reduced by 16 times

Incloudict Data Technology, LTD

INCLOUDICT DATA TECHNOLOGY, LTD is subordinate company of ICT.

Its parent company is GOLAXY DATA TECHNOLOGY, INC

GOLAXY DATA

Golaxy was founded by ICT as a High-Tec Enterprise in 2010, relying on the Network Information Research Center with a professional team has a focus on Big Data technology more than 20 years.

Taolue Communication

Taolue is **the leader of China's voice industrial chain**, focus on radio media area, aim to accelerate radio media internet and build Chinese biggest radio station union.

Spearhead.tel

As a Public Company (300071), Spearhead is **the biggest local marketing services provider**, planning to build marketing ecosystem involved Digital marketing, experience marketing, content marketing, Big Data marketing, and public advertisement.

Sugon Nebula

Nebula is subordinate company of Sugon(603019), aim to **be domestic benchmark of Cloud & BigData platform builder.**

Incloudict Data Technology, LTD

InCloud Main Business： Marketing—Big Data—Public Opinion

DMP

| InCloud Media DMP | Enterprise DMP |

Data Assets Management & Operation

| Industry IDC Center | Marketing Data | Other Industry Data |

Public Opinion System & Analysis

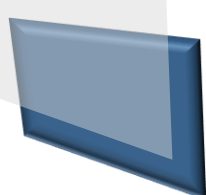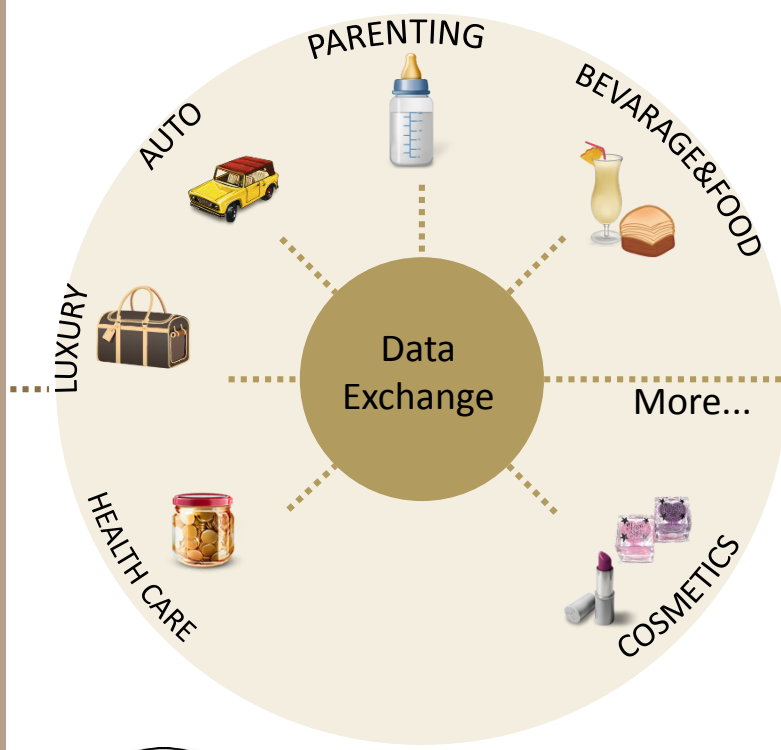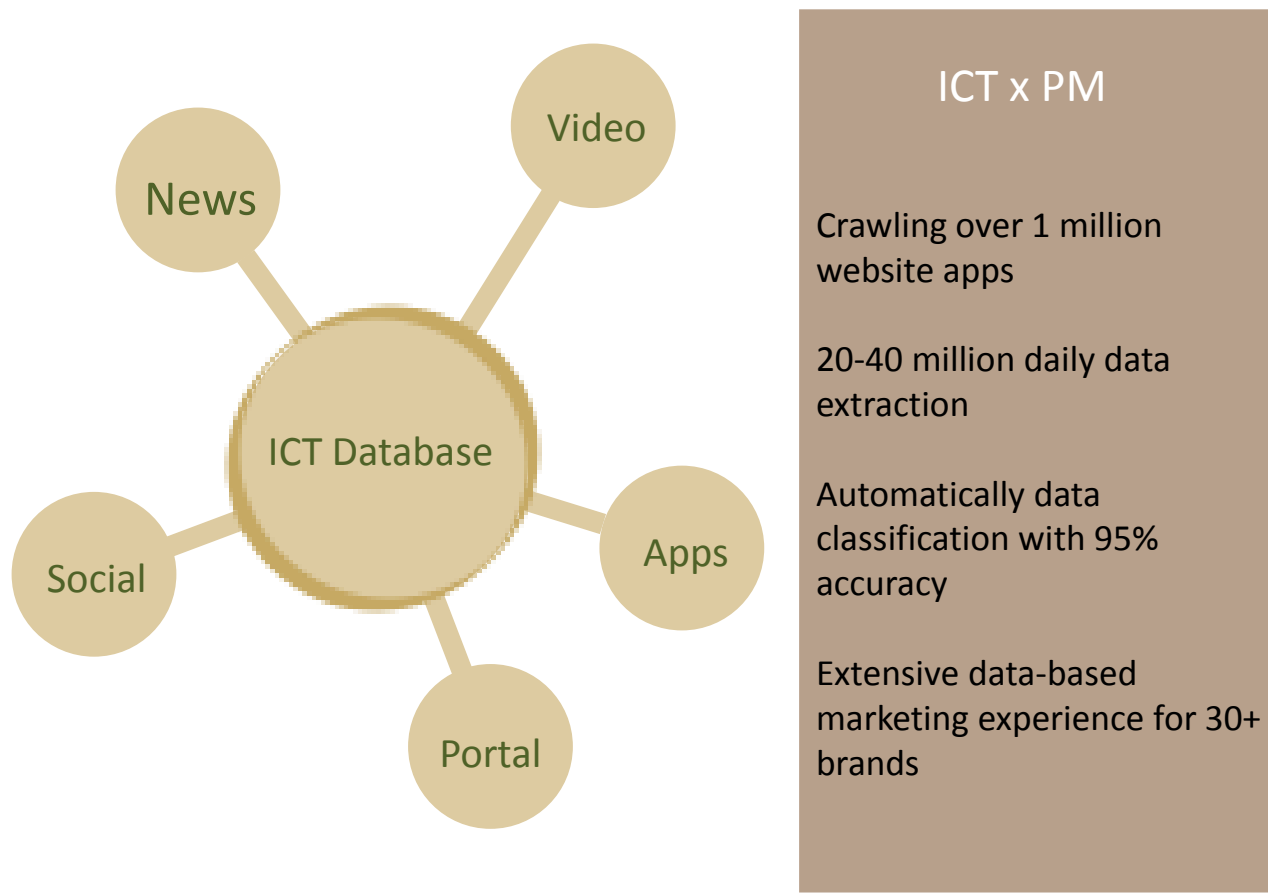| Gov Public System | Business Public Opinon System | Customized Public Opion Report | Industry Public Opion Report |

PM&ICT Product Development Plan

Data Exchange Platform

A centralised data marketplace to get clients connected with data from a variety of vertical industries

ICT x PM

Crawling over 1 million website apps

20-40 million daily data extraction

Automatically data classification with 95% accuracy

Extensive data-based marketing experience for 30+ brands

ICT Database
- Video
- News
- Apps
- Social
- Portal

Data Exchange
- PARENTING
- AUTO
- BEVARAGE&FOOD
- LUXURY
- HEALTH CARE
- COSMETICS
- More...

Select data across industries in any combinations and activate via PMP
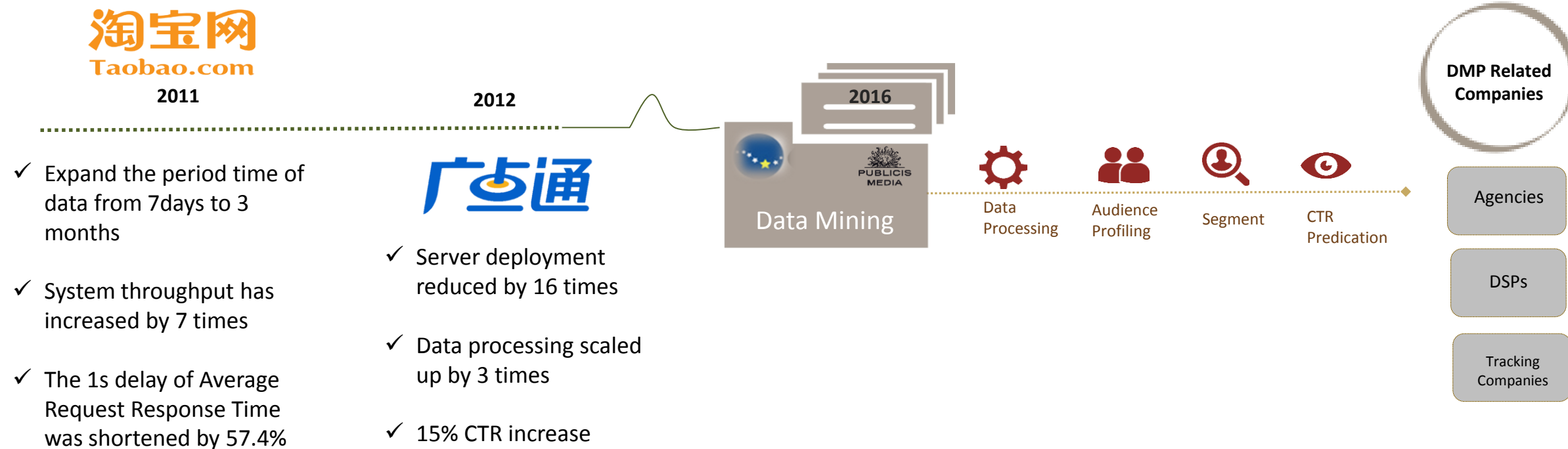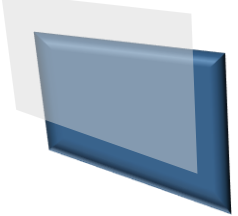
Big Data Association

Set up tagging system standards in advertising industry

深挖价值、服务国家、惠及大众

Data Mining Platform

An enterprise data solution that harness data mining to empower data-based companies to generate actionable business intelligence that can fuel marketing strategies

淘宝网 Taobao.com

DMP Related Companies

2011

2012

2016

Data Mining

Data Processing · Audience Profiling · Segment · CTR Predication

- ✓ Expand the period time of data from 7days to 3 months

- ✓ System throughput has increased by 7 times

- ✓ The 1s delay of Average Request Response Time was shortened by 57.4%

- ✓ Server deployment reduced by 16 times

- ✓ Data processing scaled up by 3 times

- ✓ 15% CTR increase

Agencies

DSPs

Tracking Companies

深挖价值、服务国家、惠及大众

Social Index Platform

Real-time social listening by crawling data holistically enables real time actions on social sentiment

AOD/SOCIAL

Drill down audiences' emotions changes upon brand/products based on advanced text analysis.

Tailor campaign objectives based on different social attitudes to generate brand lift

Score segments by engagement rates(e.g. who are advocate on social media), and advertisers can leverage high profile customers.

Content Evaluation

Evaluate TV series/program and film according to analysis of parallel IP content, casting popularity, and report on influence.

Develop influential topic and event on social media channels incorporate with marketing communications

Dynamic Creative

Discover behavioral triggers and predict the likelihood of customers to respond to an ad creativity

Theoretical support on creativity design by calculating direct and indirect impact factors

Dynamic creatives to activate segmentations to real personalized advertising
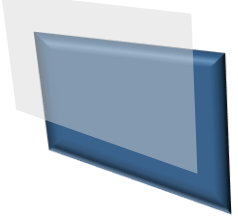
Project in progress – Hot IP Content Analytics

Predict the popularity of episode based on a comprehensive evaluation of multiple elements of the IP

A SuperNature-Themed Hot IP TV Series					
Code	Item	mention%		Positive%	Neutral%	Negative%
1	The Name of TV Series	16.9	225234	59.8	26.9	13.1
3	Production Company 欢瑞世纪影视传媒股份有限公司	0	346	36.7	26	37.2
6	Director——朱锐斌	0	21	71.4	28.5	0
13	Editors	0.1	1514	66.3	12	21.5
16	Producer——邓细斌	0	16	75	25	0
19	Author——萧鼎	0	1189	76.7	12.2	10.9
24	Case——李易峰/张小凡/小凡	31.8	423851	48.1	33.4	18.3
31	Makeup——造型/打扮/装扮	0.3	4972	42.5	51.4	5.9
34	Storyline	0.4	5403	73.7	14.1	12
35	Acting	1.2	16406	81	10.8	8.1
36	Themed Song/周董/周杰伦Jay Chow	0	450	42	48.4	9.5
40	Ads——OPPO	0.1	1536	60.6	33.2	6
43	Others	9	14.1	188468	35.6	39.1
44	Original Work/ Adaptation	14.9	0.8	11893	55	23.3
45	Trailer/Promotion/Publicity/Ranking/Interaction	0.6	37.4	497768	52.4	5
46	Update/Resources （VIP resources, download resources）	3.1	4.1	55108	59.4	26.4

Testimony

1、 Their data asset is very flexible to be adjusted to meet our various demands

2、 Able to offer us raw data，which is real data with high confidence

3、 Measurable sentiment index

4、 High accuracy of code classification

5、 Prompt response to our requirement

深挖价值、服务国家、惠及大众

Project in progress – How It Works
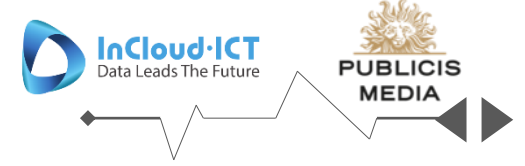
Collect Requirements from clients

- IP selection
- Tracking Range
- Tracking Period
- Data Dimension
- Code Dimension

Publicis Media & ICT Content Analysis

- Holistic Web Coverage
- Most Accurate Semantic Analysis of web text
- The strongest ability to crawl data
- Fastest data processing ability

Product Output

- Social volume
- Sentimental Index
- Weighing Factor
- Original Records

深挖价值、服务国家、惠及大众