Boost Value of Traditional Financial Businesses with Technologies

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Ping An’s five core technologies extensively applied to business

**Five core technologies**

- **Biometrics**: Face/voiceprint/micro expression
- **Big data**: Enormous data; over 26,000 dimensions; over 500 data experts
- **AI**: Machine learning/NLP/Robot engineering technology
- **Cloud**: Finance cloud/health cloud/government cloud/corporate cloud
- **Blockchain**: Asset trading/health care/digital currency/financing & lending

**Extensive applications**

- **Customer development**
- **Channel management**
- **Customer services**
- **Risk management**

**Value Promotion**

- ✓ Increase efficiency
- ✓ Cut costs
- ✓ Enhance risk management
- ✓ Improve experience
Technologies have penetrated all the core parts of traditional financial services

- Smart segmentation of life insurance customers
- Precise, smart investment advising for securities customers
- Carry out various financial companies within the Group
- Agency risk management
- Life insurance underwriting/claim risk models
- Driving risk factors
- Smart auto claims risk management
- P&C insurance risk identification system
- Credit card & Puhui risk models
- SAT sales model revolution
- Selection of outstanding sales agents
- Dynamic management of agent activities
- Remote training for agents
- Carry out various financial companies within the Group
- Life Insurance Intelligent customer services
- Superfast auto insurance claims
Refined customer development – Life Insurance (1/2): Focus on customer demands; acquire huge numbers of customers online and offline in various scenarios; frequently interact with customers to know them, form a comprehensive customer view, and segment customers.
Refined customer development - Life Insurance (2/2): Segment customers on the basis of the customer view; generate products, services, channels, and contact opportunities smartly; directly contact customers or send leads to sales agents.

Smart generation of products/services/channels/opportunities:
- **Products**: (600+)
- **Channels**: (online+offline)
- **Services**: (300+)
- **Opportunities**: (full policy cycle)

Differential customer development:
- Directly contact customers
- Send leads to sales agents
- Products/services meeting customer demands

12-month lead conversion rate: >20%
Proportion of repeat buyers: ↑67%

Note: 12-month lead conversion rate = converted leads provided in past 12 months/converted or still useful leads.
Refined customer development has also been carried out in various financial companies within the Group.

### Customer profiling

- **Basic information**
  - Gender
  - Age
  - Occupation

- **Funds & wealth**
  - Financial assets
  - Loan
  - Housing information
  - Non-financial assets

- **Social network**
  - Circles
  - Communities
  - Hobby groups

- **Investment appetite**
  - Product appetite
  - Risk appetite
  - Time appetite
  - Channel appetite

- **Marketing information**
  - Activities
  - Information appetite
  - Location tracking

### Customer segment

- **Investment newcomers**
- **Stock investment experts**

- **New customers**
- **Potential HNW customers**
- **HNW customers**

- **High income and high expenditure**
- **Low income and low expenditure**
- **Low income and high expenditure**

### Leads push

- **Smart traders and bullish stocks**
- **Smart allocation plans**

- **Customer acquisition through social networking, precision marketing**
- **Asset management, social finance**
- **Private placement recommendation**

- **Fund + Fixed investment + MMF**
- **Fixed income + P2P**
- **P2P + MMF + Fixed investment**

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**Example**
Refined channel management and sales (1/4) – Life Insurance SAT sales model revolution: Disrupt the traditional sales model by allowing agents to segment and interact with customers in real time under the “SAT” model.

Innovative “SAT” sales model

- **Agent app**
- **Customer app**
- **Renyimen (Magic Gate)**

Social platform

Innovative “SAT” sales model

- **WeChat friends**
- **Agent**
- **Social platform**

Group Subsidiaries

- Insurance products
- Asset management products
- Banking products
- Medical services
- Study-abroad services
- Tourist services

Financial products

Asset management products

Banking products

Medical services

Study-abroad services

Tourist services
“SAT” model has been adopted by many companies within the Group

- **Property & Casualty Insurance**
  - Social circles
  - Sales agents

- **Bank's retail**
  - Social circles
  - Wealth managers

- **Bank's auto finance**
  - Social circles
  - Relationship managers

- **Trust**
  - Social circles
  - Private banking and wealth managers

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**T1**: Remote support for sales agents
**T2**: Remote services for customers
**T3**: Remote sales for customers

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**T1**: Remote support for sales agents
**T2**: Online breakpoint services
**T3**: Management of potential wealth customers

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**T1**: Management of existing customers
**T2**: Remote services for customers

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**T**: Remote services and sales for customers
Intelligent channel management and sales (2/4) – Life Insurance agent selection and management: Build a dynamic cycling system of “profiling + features + screening” to select agents

Profile groups with high retention/lapse

- High-retention
  - Character rating
  - Personal features
  - Training performance
  - Career aspiration
  - Customer resources
  - Risk assessment
  - ...

- High-lapse

Group features

Identify personal features of prospective agents

- Prospective agents
  - Character modeling
  - Facial analysis
  - Face/wifi-based attendance/human-machine interactive tests
  - Work records
  - Jin Guan Jia registrations + SAT behavior analysis
  - Micro-expression/credit records/face recognition/health records
  - ...

Model-based screening

- On board
  - Suitability evaluation
  - Competency evaluation
  - Decisive evaluation

- Lapsed

Screening Results

Automatic learning and profiling iteration
Intelligent channel management and sales (3/4) – Life Insurance activity management: Provide intelligent group training; dynamically plan and manage agents’ growth paths; give relevant suggestions

- Personal dynamic profiling models (50+)
- Group dynamic profiling models (70+)
- Key group analysis models (14+)
- Per capita productivity 20%
- Retention rate 30%

- Set/suggest a path
- Set goals
- Monitor closely
- Review problems
- Push action messages
- Personal optimal path and growth suggestion models (7+)
- Personal dynamic analysis models (6+)

- Adjust the path
- Preset optimal growth path
- Flexibly matched with highly aligned goals
- Dynamically review the growth trail
- Adjust the path in real time
- Quick diagnosis
- Precise judgment
- Precisely push messages

- Onboarding
- Full membership
- Actual growth trail

- Agent
- Personal profiling
- Full member profiling
- Potential excellent performer profiling
- Excellent performer in cross-selling
- Excellent performer
- Customer manager
- Mentor
- Supervisor
- Excellent performer in cross-selling

- Monitor
- Review
- Push messages

- Daily cycling

- Per capita productivity
- Retention rate

- Personal optimal path and growth suggestion models (7+)
- Personal dynamic analysis models (6+)
Intelligent channel management and sales (4/4) – Life Insurance training management: Build three online training models; automatically allocate resources; recommend personalized courses to agents; comprehensively manage training effects

- 3 online training models
  - Training camp: Online teaching + local camp
  - Petrol station: Online teaching + self-learning
  - Micro-classroom: Self-learning

Training support platform
- Course system: Online courses + micro-classes + real cases + offline teaching
- Resource system: Mentor pool + training rooms
- System support: Pocket-E + Zhi Niao + ETS

Intelligent course recommendation
- Highly aligned with agents’ training demand

Automatic resource allocation
- Best matching of students, mentors, facilitators and workplace

Intelligent management during training
- Content monitoring/online tests/courseware sharing

Effects
- 100% coverage
- No attenuation of training effects
- Personalized provision of courses
- Lower costs

Agents’ training demand + Agent capability assessment model

Management model:
- Facilitator
- Mentor
- Workplace
- Students

Voiceprint/image recognition (Filter sensitive data)

Human-machine interaction

Cloud storage
Intelligent customer services (1/2) – Life Insurance

Intelligent customer services: Intelligent recognition of customers and demands; precise risk rating; 99% of business activities conducted online.

**Intelligent recognition of customers and demands**

- Real-time recognition
  - Voiceprint
  - Face

- Demand capture + intelligent recommendation
  - Voice interaction
  - Label
  - Best action

**Precise risk rating**

- Risk profiling:
  - Health
  - Medical
  - Finance
  - Credit
  - Blacklist
  - Social network

- Risk assessment:
  - Risk monitoring models
  - Relational network models
  - Anti-fraud models

**Automatic business processing**

- Online self-service:
  - Self-processing
  - Automatic review
  - OCR
  - Image recognition
  - Decision tree
  - Hospital network
  - Electronic signature

- Online outlets:
  - Online assignment
  - Video processing
  - Grid-based assignment
  - Video conference
  - Label match
  - Same-screen view
  - Agile scheduling

- Onsite manual:
  - Life Insurance outlets
Intelligent customer services (2/2) – Motor Insurance superfast claims: Use image recognition and remote video technologies to realize superfast investigation via real-time, dynamic, intelligent grid-based management

### Intelligent dynamic grid

- **Internal case data**
  - Hot-spot
  - Location
  - Time

- **External basic data**
  - Job assignment
  - Real-time traffic data
  - Weather

- **Relevant variables**

### Smart maneuver platform

- **Smart engine**
  - Where is the customer?
    - H5 + handset + street view

- **Precise job assignment**
  - Who should be sent?
    - 1st choice: those with no current workload
    - 2nd choice: those with shortest time left

- **Precise job assignment**
  - How should he/she go there?
    - Best path + best road condition

### Effects

- **Time to accident site**
  - 5-10 min

- **Superfast claims NPS**
  - 77%

- **Best brand and No.1 service brand in China’s auto insurance industry**
  - 7 consecutive years
Precise, efficient risk management (1/6) – Agent quality management: Identify high-risk agents and high-risk behaviors; give warnings of high-risk groups and manage risks in time.

Before joining PA: Screening to identify high-risk agents
- Face recognition and verification
- Micro-expression interview
- Credit record screening
- Verification with public security authorities

After joining PA: Detection of high-risk behaviors
- Internal credit rating rules
- External risk warning
- Risk behavior identification model

Risks managed by branches and monitored by HQ
- Risk distribution map
- Risk management effect map
- Dynamic visual views
Precise, efficient risk management (2/6) – Life Insurance underwriting/claims risk models:
Use automatic underwriting rules + prediction + correlation models to identify risks, improve risk fields and models, and enhance risk management

772+ risk fields

Underwriting rules + prediction models + group correlation models

- Define risk ratings
- Point out risks to help review
- Intervene quickly to enhance efficiency

Automatic underwriting rules
- Underwriting: 1000+ underwriting rules and 200+ automatic underwriting rules
- Claims: 500+ automatic loss verification rules

Prediction models
- Underwriting/disease risk/accident risk/critical illness risk prediction…

Correlation models
- Assess exceptional correlations based on social data…

Risk monitoring

Exception warning automatically triggered by system
Multi-dimensional data: tier-2/tier-3/outlet/department/group/agent data
Risk map: nationwide risk status of single KRIs (tier-2/3 branches)
Overall risk warning: KRIs by tier-2 branch by time period

Risk fields updated
Risk model iterated and improved
Precise, efficient risk management (3/6) - Motor Insurance Driving risk factor: Build a leading driving risk factor system and increase precision of auto insurance pricing

Driving risk factor system (180+ factors)

- **Level 1**
  - Behavior
  - Basic data
  - LBS
  - Vehicle condition

- **Level 2**
  - Character
  - Habit
  - Gender
  - Age
  - Credit
  - Time
  - Place
  - Maintenance
  - Vehicle age
  - Vehicle type

- **Level 3**
  - Investment habit
  - Consumption habit
  - Driving habit
  - Driving at night
  - Driving in rush hours
  - Driving when tired
  - Leisure & entertainment
  - Workplace
  - Residential environment
  - Dining place

- **Level 4**
  - Phoning when driving
  - Breaking speed limit
  - Changing lanes
  - Park visits
  - Pub visits
  - Gym visits

Dynamic optimization

- Historical claims data
- Accident questionnaires
Precise, efficient risk management (4/6) – Intelligent auto claims risk management: Use intelligent anti-leakage and anti-fraud models to precisely identify auto insurance claims risks
World leading image-based loss verification technology, already provided to 7 external insurers

**Image-based loss verification**

1. **Smart vehicle type recognition**
   - 100,000+ pictures for recognition of vehicle type

2. **Image flow cleaning**
   - Fuzzy reminder and PS recognition

3. **Part division and grouping**
   - 100,000+ pictures for each part
   - Covering 100% of visible parts

4. **Automatic identification of loss extent**

5. **Automatic precise pricing**
   - Covering
     - 85% of spare parts
     - 98% work hour items
     - Local prices at 42 institutions across the country

6. **Intelligent anti-leakage**
   - 500+ risk factors
   - 30000+ risk rules
   - 100+ risk models
   - 85% prevention rate of anti-leakage rules
   - 60% prevention rate of anti-fraud rules

**Effects**

- **Loss verification accuracy**: 92%
- **One-click loss verification**
- **Within seconds**

Scratch, Dent, Abrasion, Cracking
Precise, efficient risk management (5/6) – Property & Casualty Insurance risk identification system: China’s first, world-leading Digital Risk System for disaster risk rating, disaster warning, and loss reduction.

**Risk identification system**

**DRS (Digital Risk System)**
— a digital risk identification system based on physical space

- Geography
- Insurance
- Catastrophology
- Meteorology

- China’s first, world-leading
- 1.2bn physical space units
- Over 60 years of disaster data
- Over 14bn records
- Over 12 years of claims data

**Application scenarios**

- **Risk rating**
  - Natural disasters
  - Environmental pollution
  - Agricultural planting

- **Disaster warning**
  - Warning map (typhoon…)
  - Real-time broadcast
  - Customized warnings

- **VIP-specific exclusive maps**
  - Exclusive risk maps for VIP customers

- **Product-specific exclusive maps**
  - Exclusive risk maps for governments and partners
Precise, efficient risk management (6/6) – Credit Card & PuHui's smart risk management: Build a risk management model to improve the risk identification capability

Use big data to build a risk management model

**Big data factors**
- Basic information
- Credit rating
- Transaction behavior
- Assets & wealth
- Geographic location
- Other data

**Smart models**
- Data verification model
- Chain-type clustering model
- Income calculation model
- Limit calculation model
- PBoC rating model
- Micro-expression lie detection model
- Customer data anti-fraud model
- Group anti-fraud model
- Relational network model
- Device anti-fraud model

**Anti-fraud models of Credit Card**
- Multi-dimensional: Phone, IP, GPS
- Multi-layer: customer and social networks

**Smart review models of PuHui**

**Credit Card NPL Ratio**
Top 3 in terms of the lowest NPL ratio in the industry

**Effects**
1.18%
Better than industry performance

Risk identification ratio of PuHui
Thanks