

The background features abstract geometric shapes in shades of blue and grey. In the bottom left corner, there is a faint, stylized image of a hand pointing at a bar chart and a line graph on a document.

NICE Holdings Investors Relations Book

/ 4Q 2018 /

Disclaimer

This material is prepared for your conveniences and all predictive information such as forecasted figures contained in this material are solely based on internal forecast and environments study. Therefore, please be aware that the contents in this material are subject to further changes due to any unexpected changes in economic environments or business conditions at any time.

This material is prepared as the reference material for your investment decisions. NICE Holdings shall not offer any assurance and assume any responsibilities whatsoever with regard to the contents in this material.

NICE Holdings expects that all investment decisions should be made by independent and unprejudiced rationale of each wise investor.

NICE



I. Overview

II. Business Introduction

III. Investment Points

IV. Financial Performance

Since 1986, NICE Group has maintained the solid business performance as Market Leader in Financial Infra Service Industry.

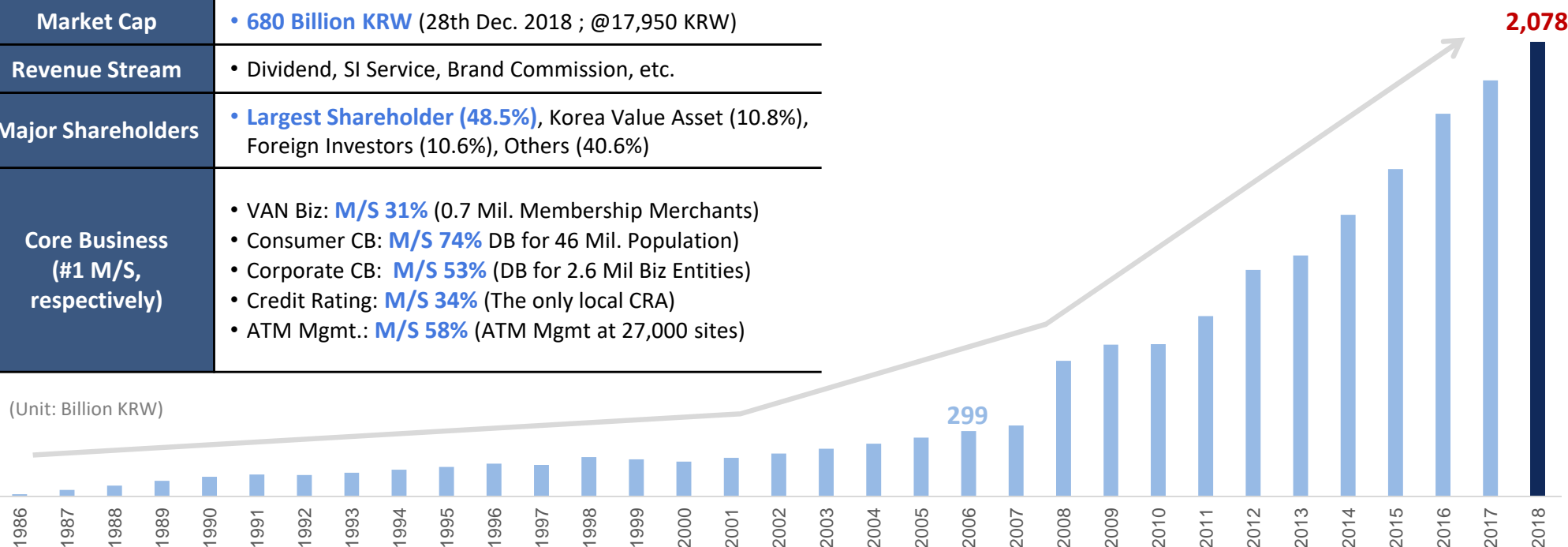
Overview of NICE Group

► Fact Sheet of NICE Holdings

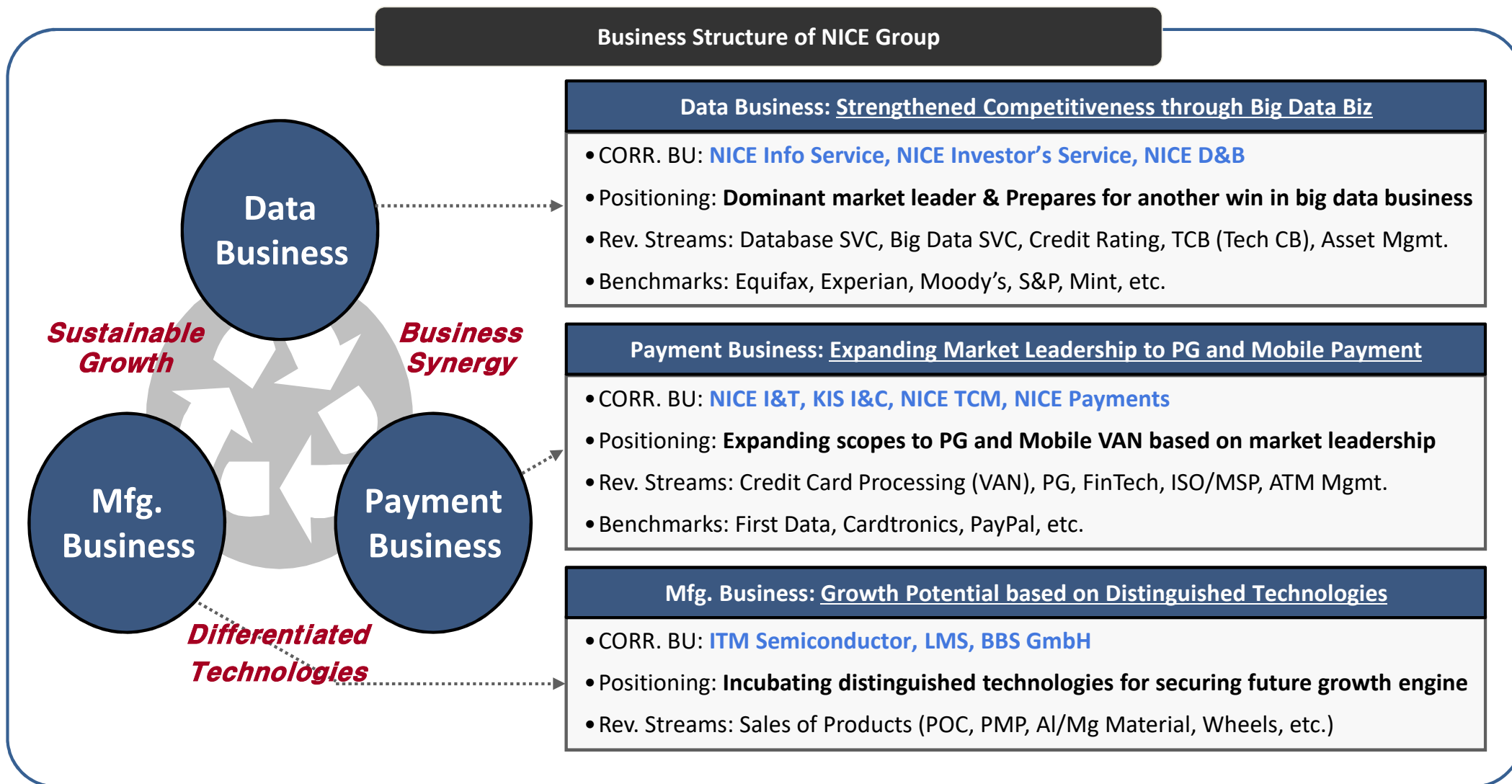
CEO	• Mr. Young Choi
Listed Date	• February 4, 2004 (KOSPI Listed)
Paid-In Capital	• 18.9 Billion KRW (37,882,300 shares)
Market Cap	• 680 Billion KRW (28th Dec. 2018 ; @17,950 KRW)
Revenue Stream	• Dividend, SI Service, Brand Commission, etc.
Major Shareholders	• Largest Shareholder (48.5%) , Korea Value Asset (10.8%), Foreign Investors (10.6%), Others (40.6%)
Core Business (#1 M/S, respectively)	<ul style="list-style-type: none"> • VAN Biz: M/S 31% (0.7 Mil. Membership Merchants) • Consumer CB: M/S 74% DB for 46 Mil. Population) • Corporate CB: M/S 53% (DB for 2.6 Mil Biz Entities) • Credit Rating: M/S 34% (The only local CRA) • ATM Mgmt.: M/S 58% (ATM Mgmt at 27,000 sites)

- **5-year Growth Rate (CAGR) =12.7%**
- **7-fold Revenue Increase since 2006**

(Unit: Billion KRW)



NICE Group consists of 3 business divisions
including Data Business, Payment Business and Manufacturing Business.



I-3. Biz Performance Overview

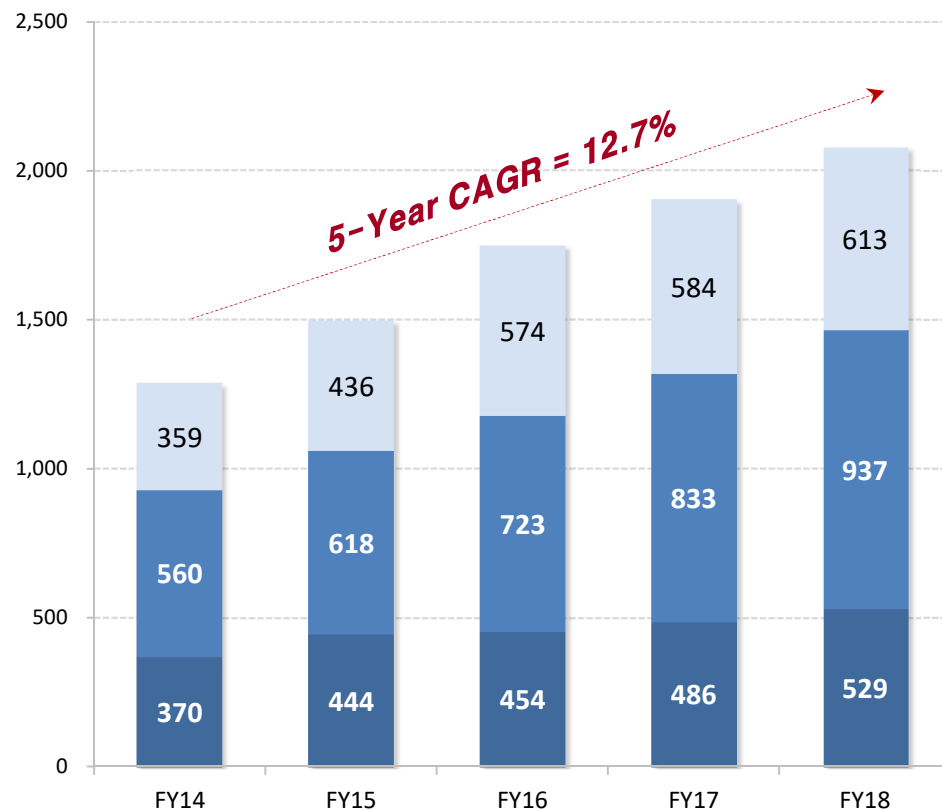
NICE Group has achieved the solid business performance
as each business division has shown noticeable growth in revenue and operating profit.

Trend of Biz Performance (2014-18)

► Revenue

(Unit: Billion KRW)

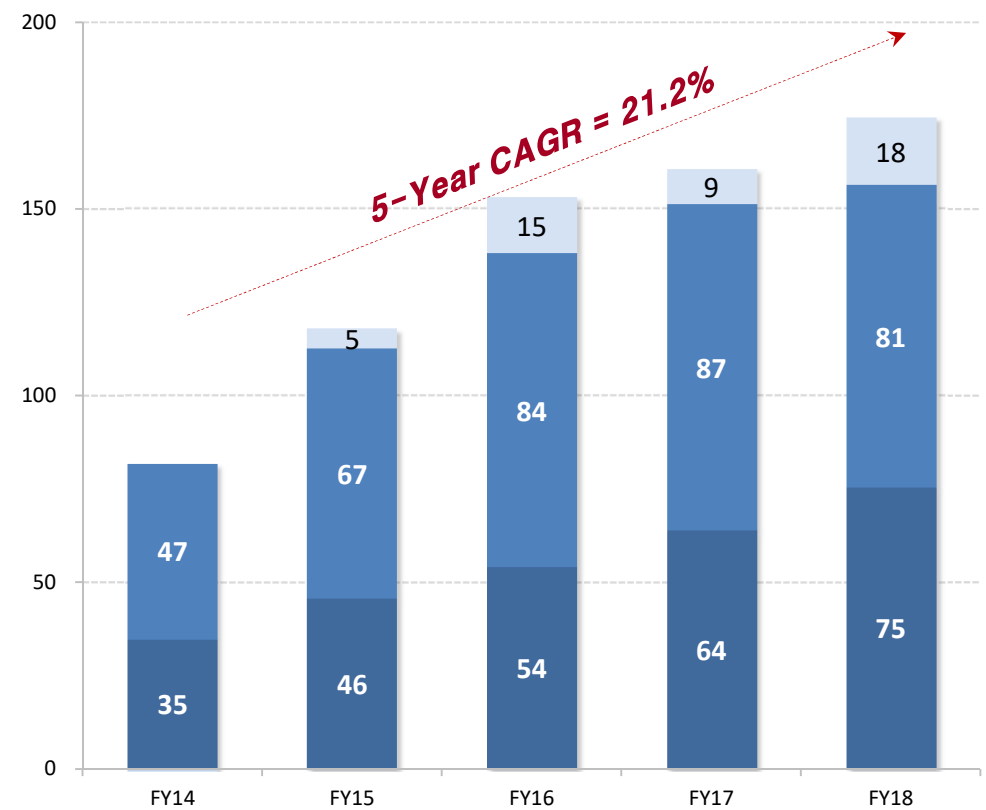
Mfg. Biz Payment Biz Data Biz



► Operating Profit

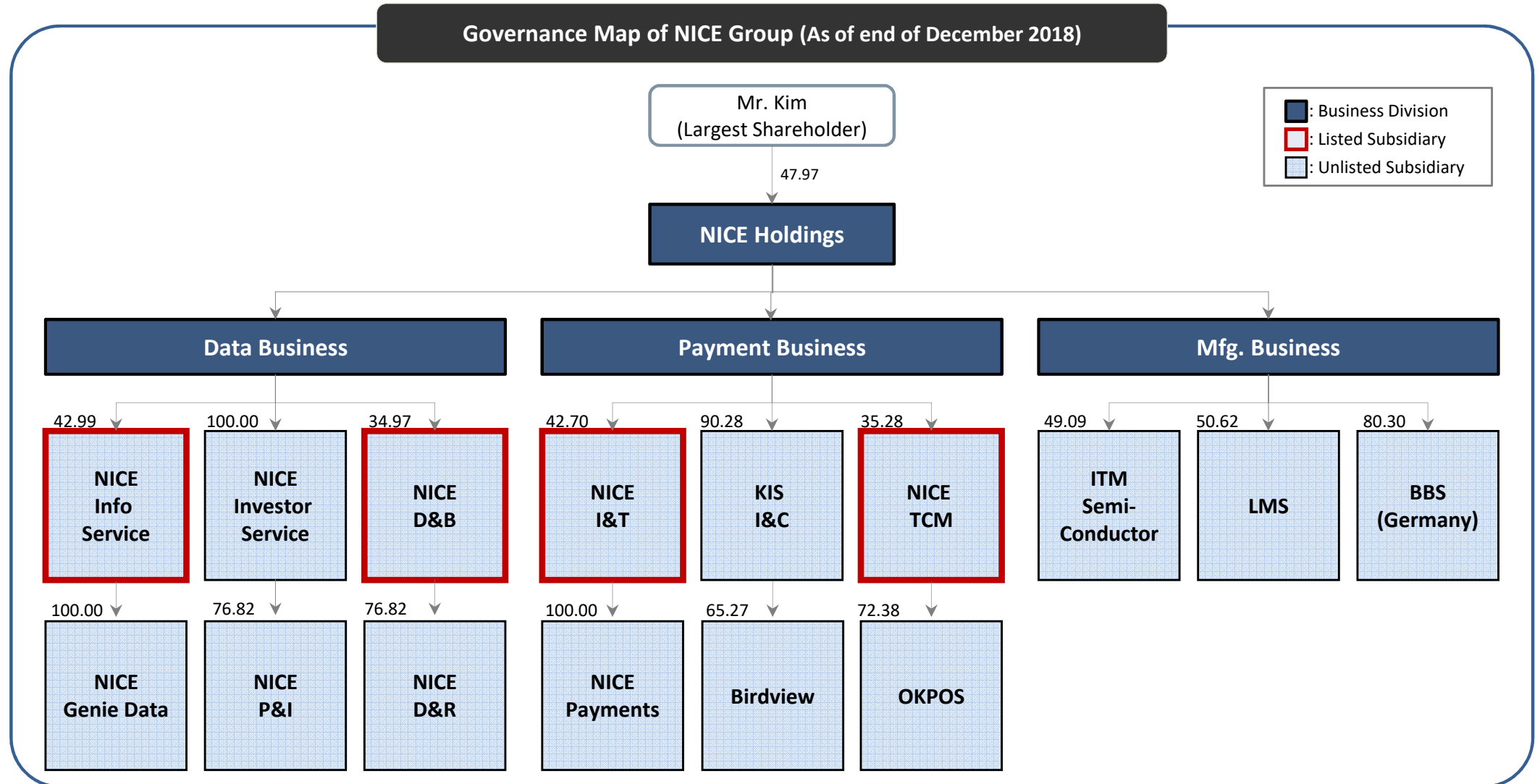
(Unit: Billion KRW)

Mfg. Biz Payment Biz Data Biz



I-4. Governance Structure

NICE Holdings strategically deploys its subsidiaries
to corresponding business divisions in the most efficient fashion.



I. Overview

II. Business Introduction

III. Investment Points

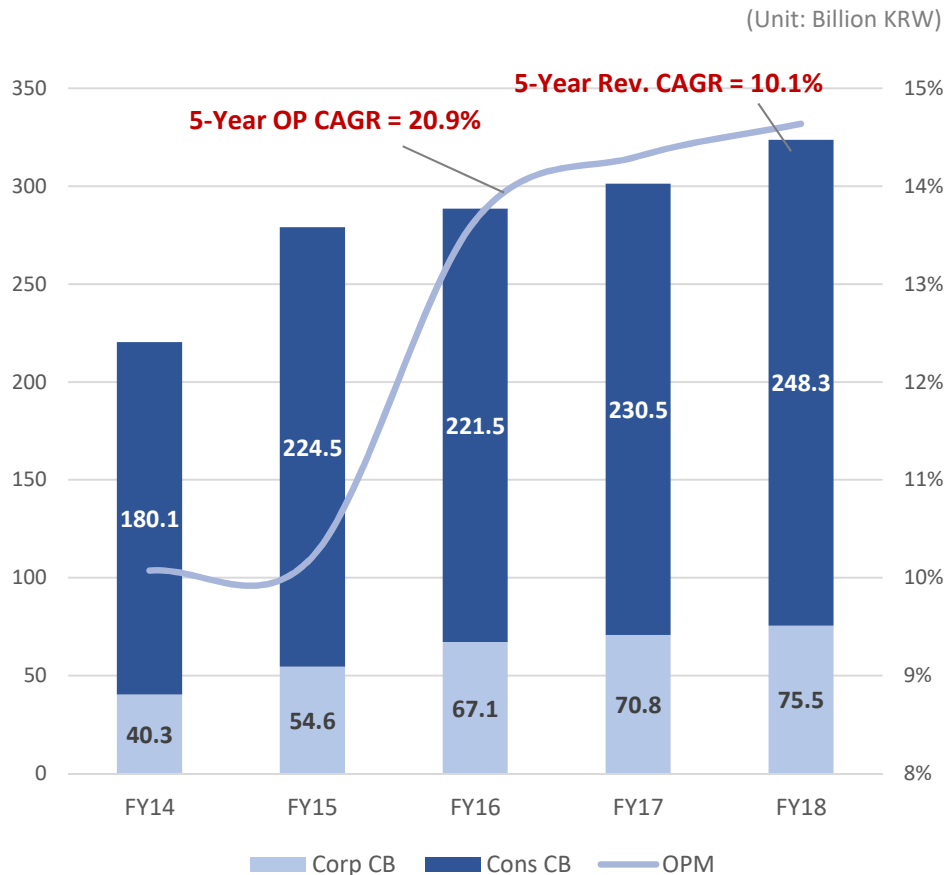
IV. Financial Performance

As a market leader in credit information business, NICE Info Services is the Only Entity which provides the Full Service from Credit Bureau to Big Data.

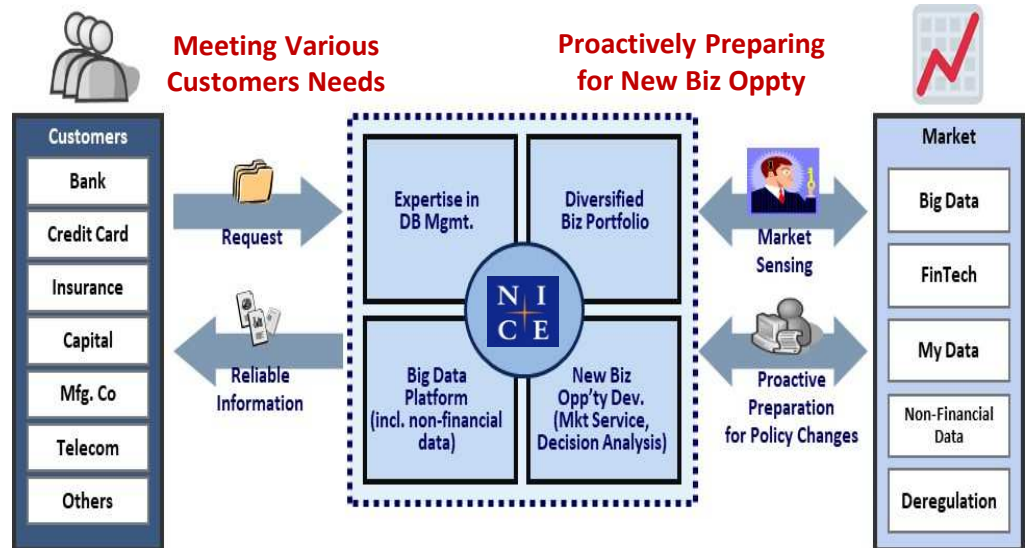


Introduction of NICE Data Business (NICE Info Service)

Strong Business Performance



Business Offering of NICE CB



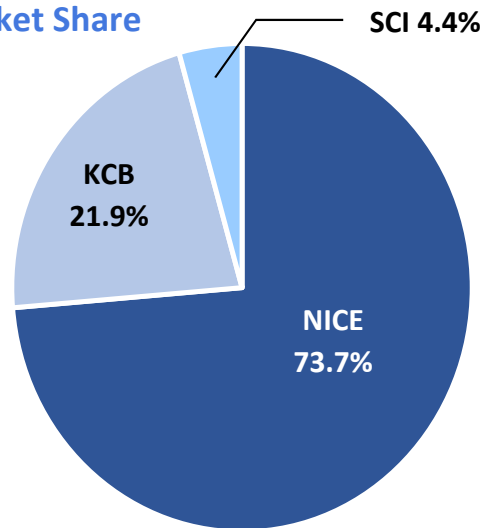
Company	Cons CB	Corp CB	Big Data
NICE	O	O	O
KCB	O		O
SCI	O		
KED		O	
ECREDIBLE		O	

Dominant market position in Consumer CB business
with the highest growth in Revenue (8.4%) and OPM (13.4%)



Market Dominance in Consumer CB

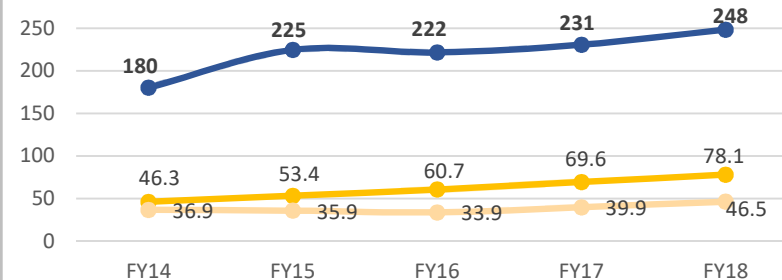
Market Share



- Accumulated credit information of **38 million economically active population**
 - Largest & Most reliable database in Korea
- Highest level of data security
 - The only business CB entity that owns and operates its own IDC (Internet Data Center) to secure the highest security standards

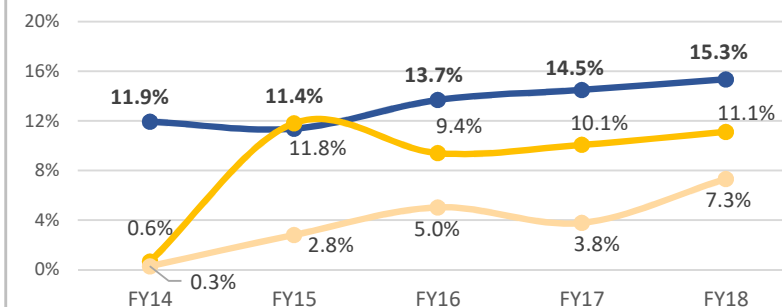
Stable but Dominant Revenue Growth

(Unit: Billion KRW)



- Dominant Market Position
- 5-Year CAGR: **8.4%**
- Gap with competitors will be widened through developing new biz opportunities such as big data analysis.

Steadfast and Highest OPM (>15% in FY18)



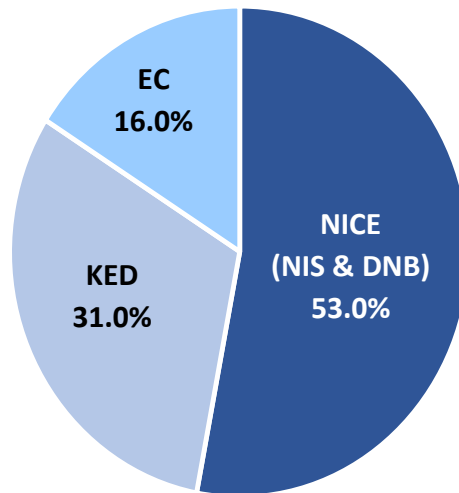
- Maintained industry high OPM
- 5-Year Avg: **13.4%** (competitors' = 6.9%)
- Highest profitability will be maintained by delivering incomparable service quality.

Securing the market leading position in Corporation CB business with the solid performance in Revenue (18.2%) and OPM (15.5%)



Leading Position in Corporate CB

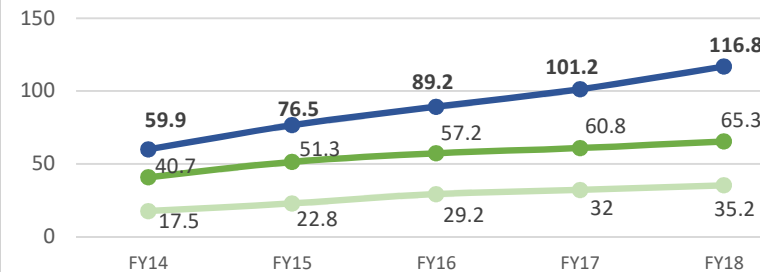
Market Share



- Leading corporate information provider in Korea with access to **1.5 million local corporate credit information**
- Implemented the business process of 'Collecting → Analysis → Added Value' for **competitive advantages in Big Data Business**
 - Industry-specialized Service (Public, Distribution, Finance, Credit Card, Mfg., etc.)

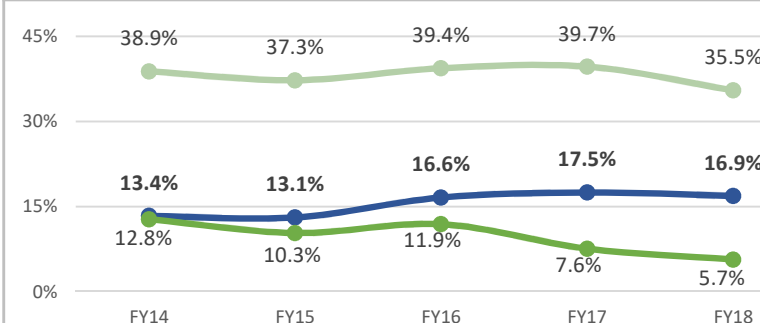
Stable Revenue Growth based on New Biz Development

(Unit: Billion KRW)

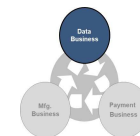


- Proven expertise in DB management
- **5-Year CAGR: 18.2%**
- Solid growth in revenue will be maintained through continuous value-added services.

Maintaining Stable OPM (5-year Avg. > 15%)



- Maintained modest operating margin
- **5-Year Avg: 15.5%**
- Higher OPM of ECREDIBLE is not significant considering its restricted biz scope and small revenue size.



Business Expansion to Big Data and FinTech accelerated by Government Policy of Deregulation on Information Utilization (during 2019)

New Biz Opportunities through Deregulation

Utilization of Big Data in Financial Sector

- Clarification of legal basis for analysis and use of Big Data
- Strengthened Market Leadership of CB (Credit Bureau) SVC provider
- Advanced Personal Credit Evaluation based on Big Data analysis

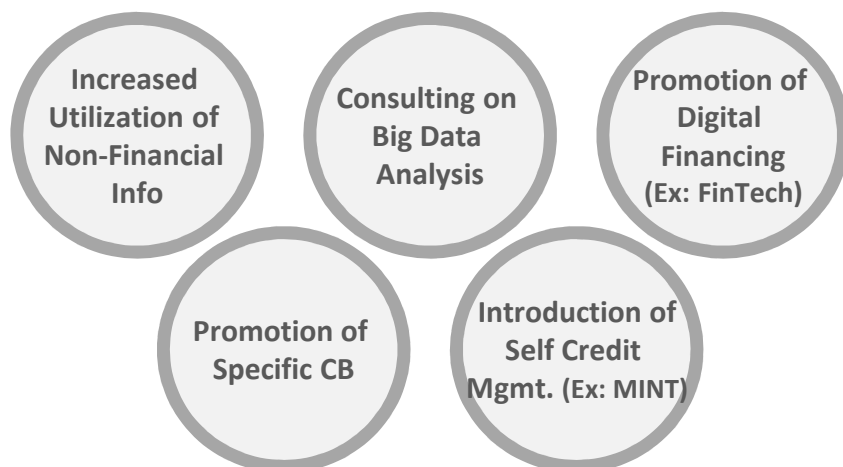
Strengthened Competitiveness of Data Biz in Financial Sector

- Vitalization of Credit Info Industry
 - Introduction of non-financial CB
- Introduction of 'My Data' Industry
 - Promotion of Collective Asset Mgmt.

Institutionalization of Self Information Flow

- Upgrade of Consent for Information Offering
 - Simplification of consent procedure
 - Phase-In Introduction of Opt-Out
- Self-Determination Right of Personal Info
 - Guarantee of interpellation and right of objection
 - Right to Data Portability of Personal Credit Info

► Major Impacts by Deregulation



Implications

① **Government Regulation on
Utilization of Information**



② **Market Expansion**



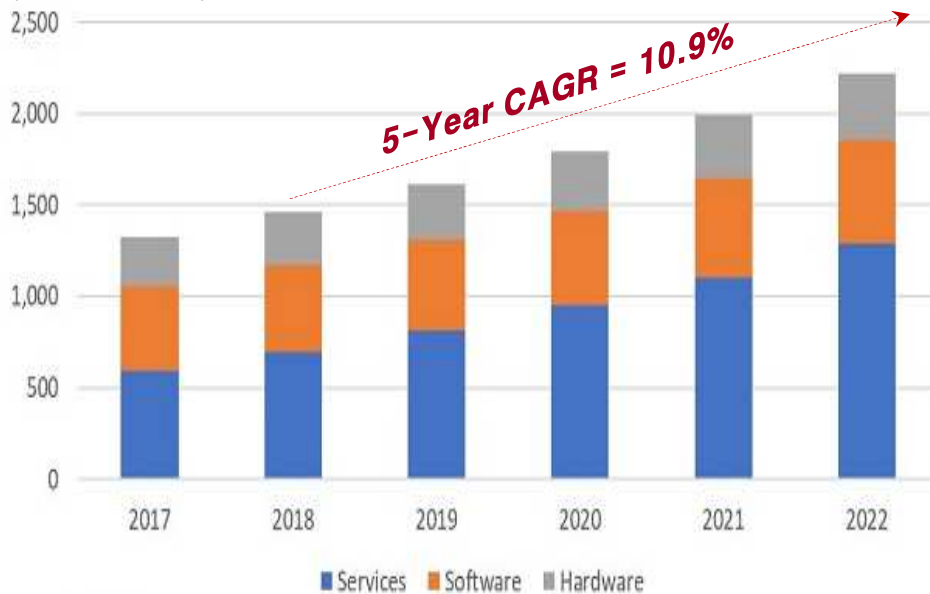
With the forecasted market size of approx. 1.9 billion USD,
NICE has prepared for securing the First Initiatives in the Big Data business.



Preparation for Big Data Business

► Forecasted Mkt Size of Big Data Biz in Korea

(Unit: Billion KRW)

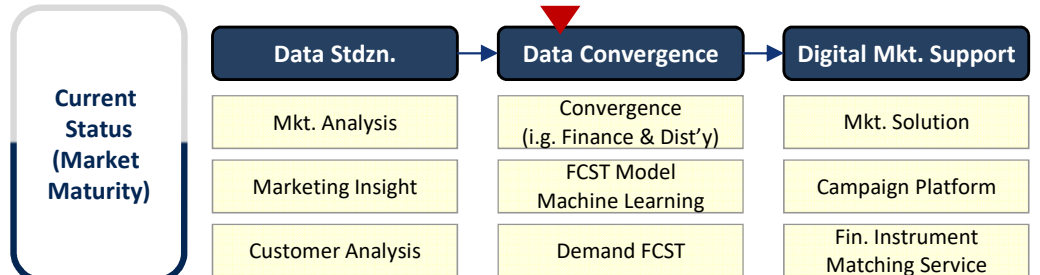


Source: IDC, 2019

- Forecasted 'Big Data' market size is **1.9 Billion USD** with growth rate of **5-year CAGR 10.9%**.
 - Service segment will lead the growth with 16.6% per annum.
- Strong demands **AI, personalized marketing and related services**
 - More biz opportunities are expected with the gov't deregulation

► NICE Offering on Big Data

As of 1Q 2019



Business Environments

- **Deregulation on Big Data Business** (during 2HY of 2019)
- **Accelerated Cross-Industry Convergence** (competition level ↑)

Business Strategy

- **Digital Transformation***
- **#1 Consulting Agent for Convergence Big Data Business**

Strategic Projects

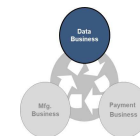
- **Digital Transformation Biz**
- Mkt Analysis Platform, Genie Data i, Smart City Consulting
- **Consulting on Big Data Marketing SVC and Marketing Process**

Long-Term Strategy Direction

Convergence Big Data #1 Player

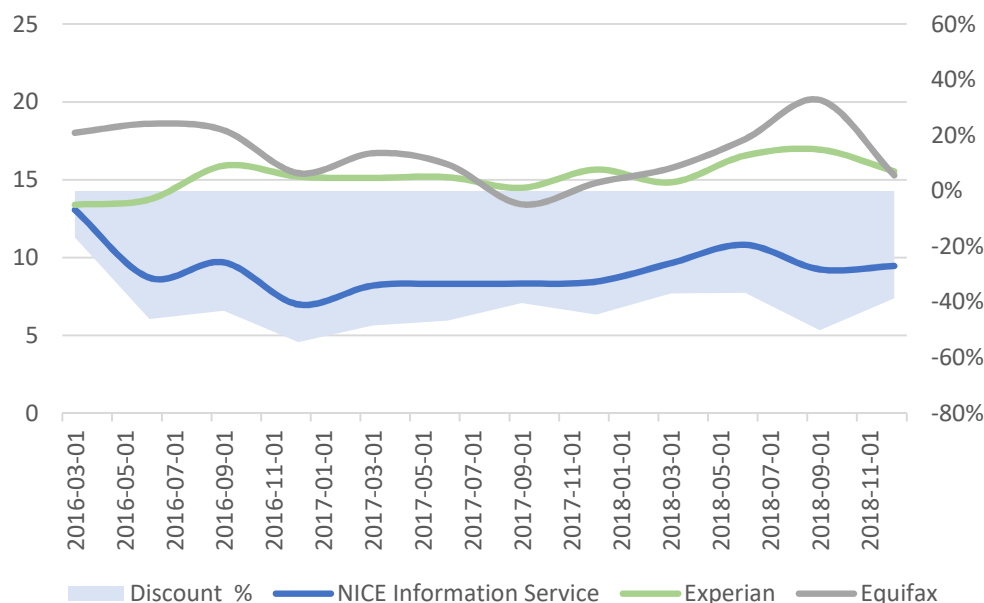
Note: Digital Transformation is the novel use of digital technology to solve traditional problems enabling inherently new types of innovation and creativity, rather than simply enhance and support traditional methods.

Highly Growing & Cash Generative Data Business will lead to improvement in valuation index for NICE Info Service.

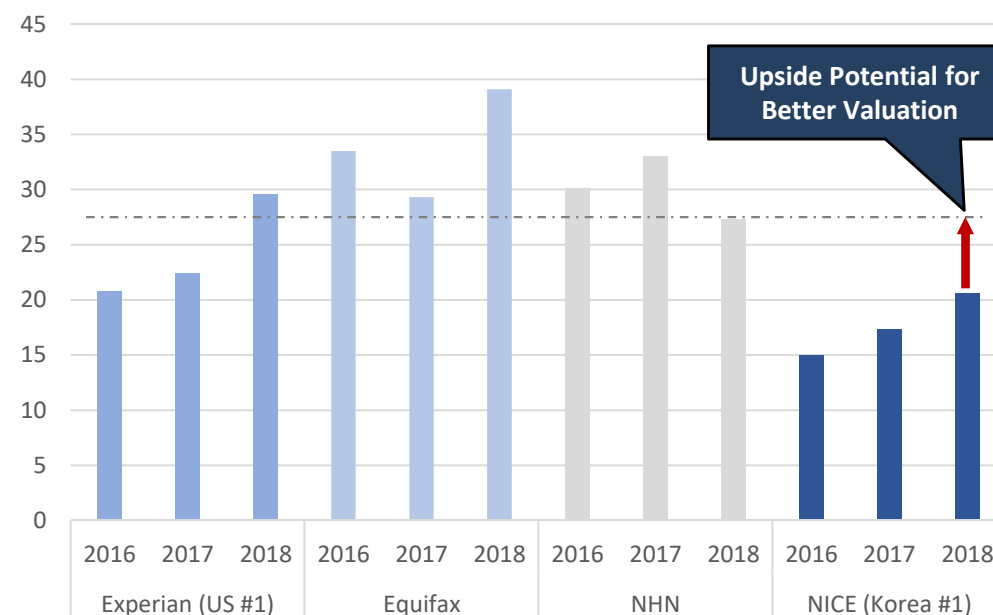


Under-Valuation of NICE Data Business

▶ EV/EBITDA Comparison with Global CB Companies



▶ PER compared by Global CB Companies & Benchmark



- Despite of stable margin and sufficient cash flows, **the market discount compared with international peers**
 - NICE trading on ~9x EV/EBITDA vs. Peers on 15x due to **legal restriction (in marketing and big data analysis) which will be lifted during FY19**
- When comparing PER with peers and NHC (a leading online info provider), **improvement in valuation index for NICE INFO is expected**
 - When those restrictions are deregulated, big increase in profit is anticipated due to sales leverage effect

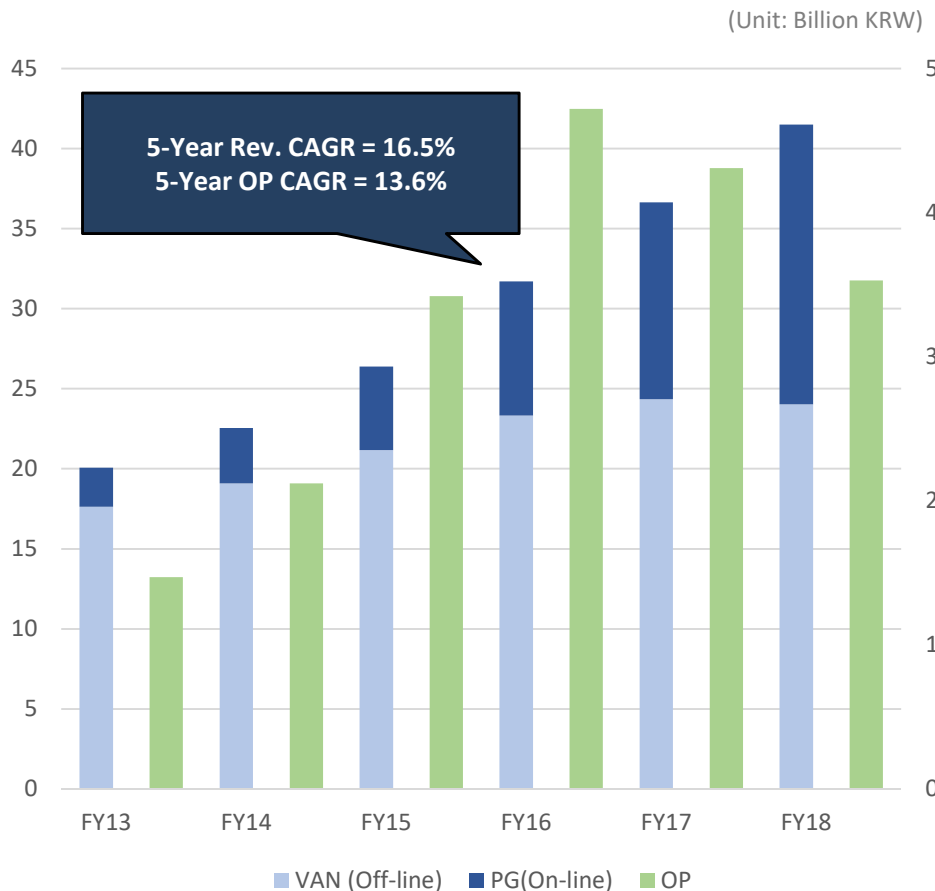
II-2. Payment Business

With the Complete Service Offering including Off-line, On-line and Mobile Payment, NICE maintains the market leading position with the solid performance.



Introduction of NICE Payment Business (NICE I&T)

► Strong Business Performance



► Business Offering (VAN & PG Biz)



► Business Offering (Mobile Payment Biz)



Payment Environments in Korea including extensive use of credit cards and rapid growth in e-Commerce business favors NICE Payment Business.

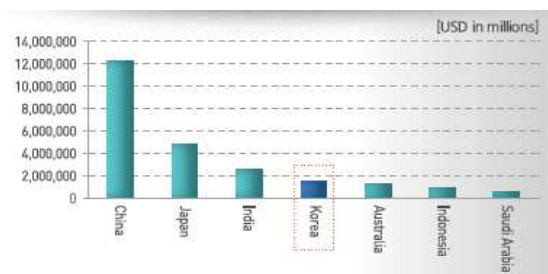


Favorable Market Condition for NICE Payment Business

Favorite Market Conditions for Payment Biz in Korea

1

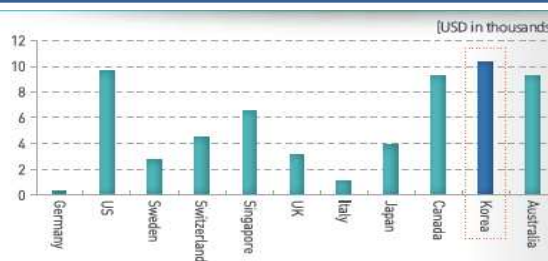
Strong Growth of National Economy & Payment Business



- **4th Largest Economy in Asia**
- Continued economy growth expected
- **Local Payment Biz to continue to grow**
- O2O Mobile Payment and Income-driven growth strategy by government

2

Extensive Use of Credit Card Payment



- **> 80% Population use credit card (1st option)**
- Use credit cards as the primary method
- **New pay methods to depend on the legacy system (VAN Infrastructure)**
- Extremely difficult and inefficient to build new payment systems

3

Rapid Growth in e-Commerce Biz



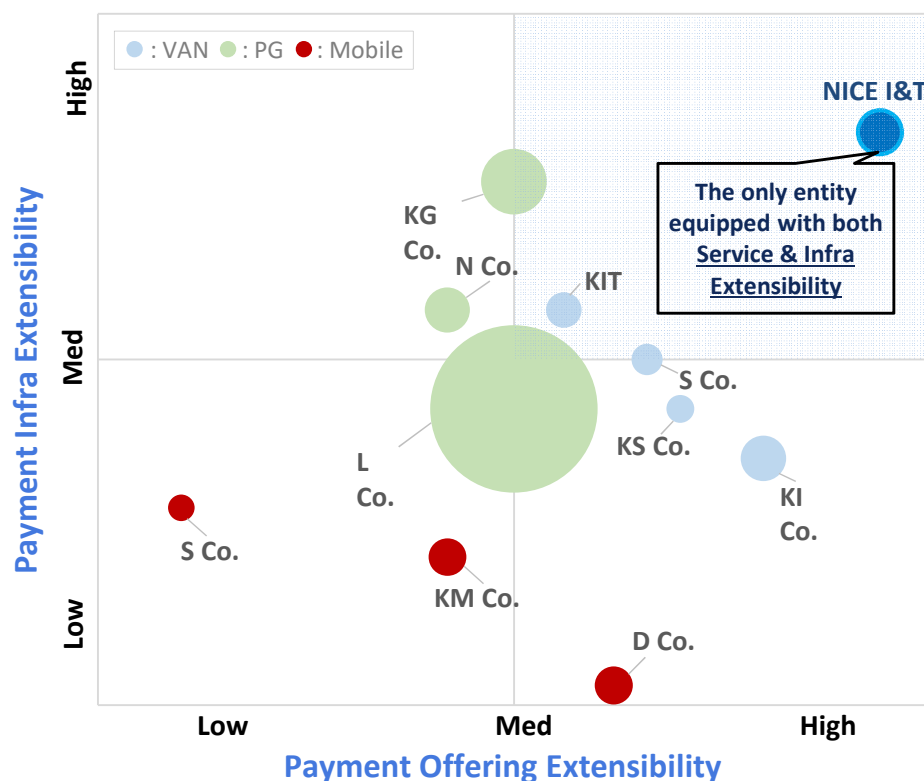
- **Move toward 'cashless society'**
- Need for the advanced payment system
- **Rapid growth of e-Commerce market**
- Due to increasing O2O payment utilizing FinTech (Mobile penetration: 91.9%)



NICE Payment Entities (NICE I&T, KIS I&C) occupies the Competitive and Distinguished Market Positioning accelerating further growth in the future.

Competitive Market Positioning of NICE Payment Business

► Distinguished Market Positioning in Payment Business



Payment Offering Extensibility

- Definition: **Degree of securing most optimized payment business offering** (whether an entity is able to provide various kinds of payment methods including off-line, on-line and mobile payment business)
- Classification:
 - ✓ High: full service line incl. VAN, PG and FinTech biz operations
 - ✓ Medium: some of payment methods can not be provided
 - ✓ Low: single service line is provided and/or service quality is not reliable

Payment Infra Extensibility

- Definition: **Degree of securing related business functions to maximize efficiency of operation of payment business** (whether an entity establishes SCM such as manufacturing devices, providing POS solutions, constructing nation-wide sales organizations, etc.)
- Classification:
 - ✓ High: fully extensible incl. H/W (POS), S/W (Solution) and sales network
 - ✓ Medium: some of functions are not internalized or outsourced
 - ✓ Low: most functions need to be outsourced (high dependency on partners)

Note1: Sizes of bubbles are proportional to entities' revenues but some are adjusted for visual representation.

Note2: This assessment was conducted based on interviews of SMEs (Subject Matter Experts).

Note 3: Revenue of LG UPLUS is for the whole operation including payment business and others.

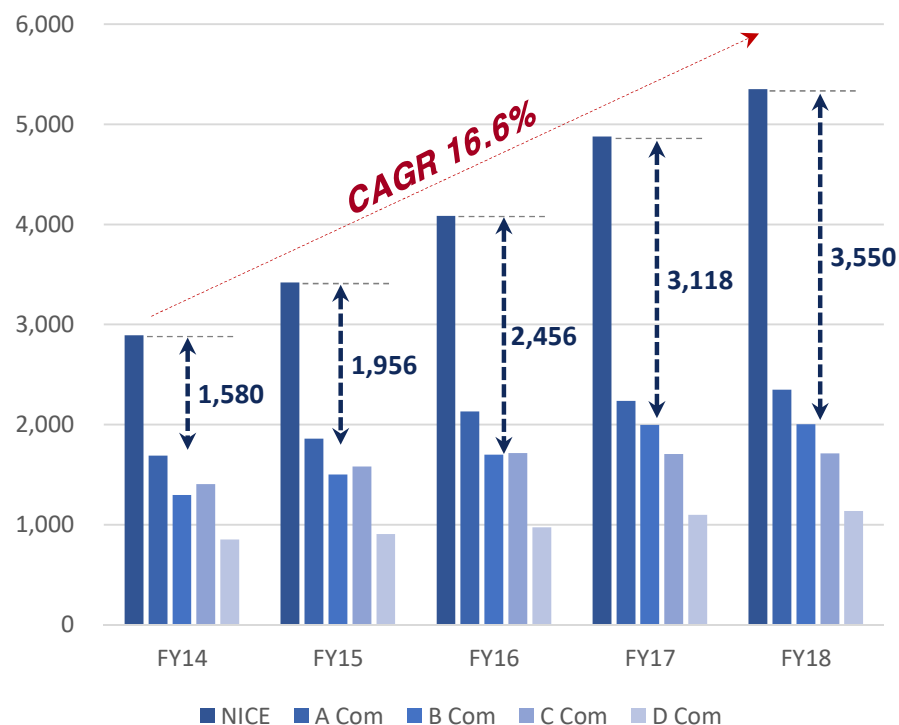
Combining favorable market conditions, competitive positioning and incomparable service quality, NICE maintains the Largest Market Share in Payment Business.



NICE Business Structure: Payment Business Division

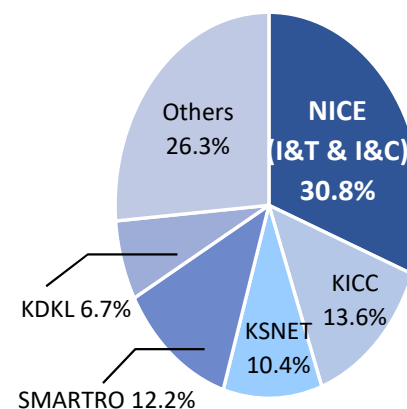
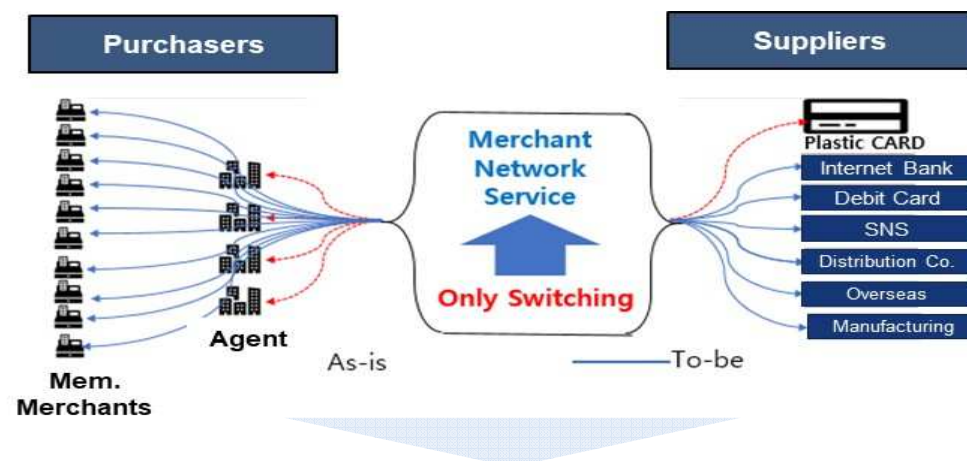
► Development of # of Credit Card Approval

(Unit: # of Transaction)



Note 1: # of NICE Transaction is combined numbers for NICE I&T and KIS I&C.
 Note 2: Gap in # transaction is difference between NICE transactions and average transactions of competitors.

► Market Share based on Increased Customer Base



- Maintains the leading market share in regulated and highly-segmented business
- Expanded business association with credit card, ICT, distribution, manufacturing, etc. (better MOT)
- Extended contact points with agents based on diversified service & service improvement

Due to dependency of NICE Payment Infra, number of Online & Mobile Transaction has dramatically increased as more competitors have entered into the market.



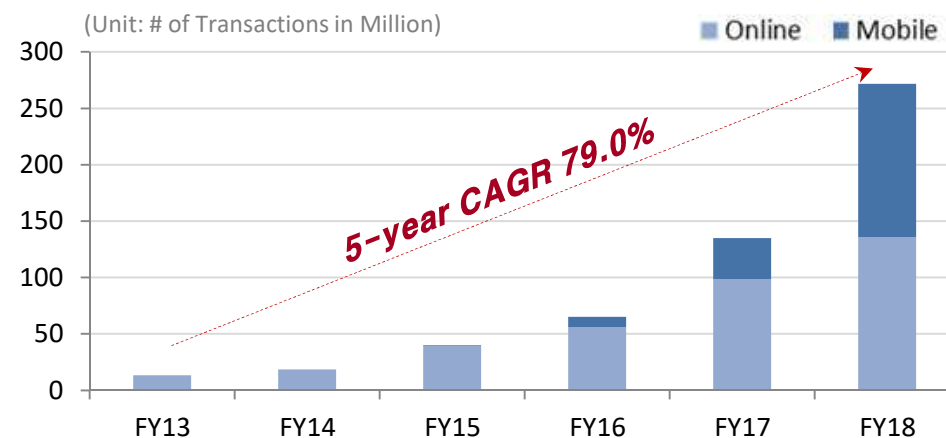
NICE Business Structure: Payment Business Division

► NICE Payment Infra for all Payment Services



- **Most Payment Services** including Samsung Pay, KAKAO Pay, Coupang, SSG, ALIPAY, WeChat pay **use NICE Payment Infra.**
- Zero Pay (promoted by Seoul Muni. Gov't) also use NICE Payment Infra.
- **Leading Mobile Payment Business** by **leading a role in Developing and Providing Shared App Card Module.**

► Rapid Growth of Online/Mobile Biz



- As more payment players enter into the market, **# of Online & Mobile payment transactions has significantly increased.**
- Annual growth rate of # of Online Transactions ('13~'18): **65.8%**
- Annual growth rate of # of Mobile Transactions ('13~'18): **469.0%**
- Transaction portion of Mobile & Online in FY18: **8.6%**

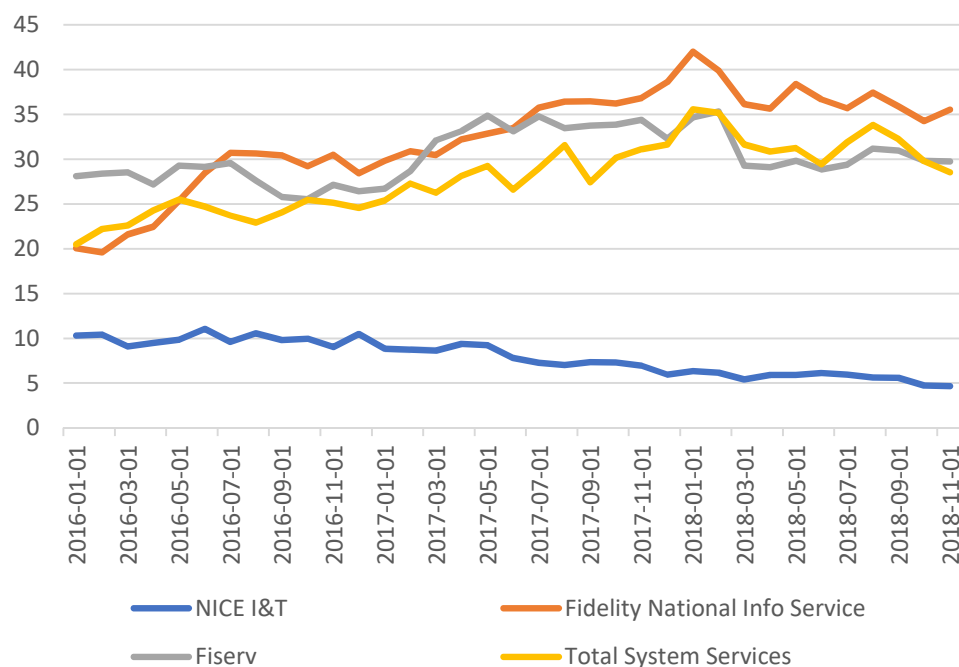
FY13	FY14	FY15	FY16	FY17	FY18
1.0%	1.0%	1.9%	2.6%	4.5%	8.6%



Considering robust generation of cash and sufficient cash holding,
Appropriate Re-valuation in the market is expected for NICE I&T.

NICE Business Structure: Payment Business Division

► Material Discount to Int'l Payment Processing Peers (PER)



► Key Figures & Index Comparison with Local Competitors

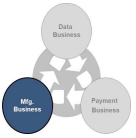
(Unit: Billion KRW)

Figures	FY16	FY17	FY18	CAGR
Total Asset	377	494	545	20.3%
Cash & Cash Equivalent	95	141	154	27.1%
Retained Earning	142	174	201	19.2%
Total Equity	152	181	206	16.5%
Year-End Market Cap.	331	229	197	-22.9%

Company	PER		PBR	
	FY17	FY18	FY17	FY18
NICE I&T	6.5	6.2	1.21	0.9
K PG Co.	173.3	10.8	1.7	1.3
N PG Co.	32.4	15.2	3.2	2.2
K VAN Co.	18.9	14.5	2.8	2.0

- Despite of stable margin and sufficient cash flows, **PER of NICE I&T has been significantly lower than int'l payment processing peers**
 - Low valuation because of **the government intervention, but no more downward fee adjustment** (Strong performance proves its presence)
- **PER and PBR of the local competitors are x12.8 and x1.6 respectively, while those for NICE I&T are x6.2 and x0.9 → Investment Attraction ↑**
 - Considering robust generation of operating cash and sufficient cash holding, **appropriate re-valuation in the market is expected.**

Driving Growth & Securing Sustainability by Future-oriented & Trend-oriented Business Portfolio



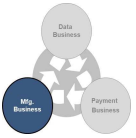
Future-Oriented Business Portfolio of Mfg. Division

► Development of NICE Manufacturing Biz



- **Sustainability for differentiated technologies, market dominance and long-term growth**
 - **ITM Semiconductor** (Global M/S #1 in Battery Protection IC), **BBS**(Global #1 Premium Alloy Wheel), **LMS** (Light Non-ferrous Metal [Patented Al & Mg] Manufacturer specialized for EV, Birdview (#1 Cosmetic Information Mobile platform, 'HwaHae'), **rePAPER**(Eco-friendly paper coating material)
- **Driving Themes: Electrification, Eco-friendly, Weight-lighting, Well-being**
 - (Growth) Driving Future-oriented & Trend-oriented business portfolio instead of conventional horizontal/vertical biz integrations
 - (Sustainability) Composition of business tolerant to market changes and easy to horizontal expansion

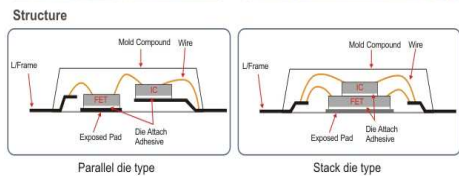
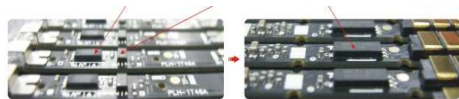
Core competence including small size, low cost and high reliability, makes **ITM Semiconductor #1 Suppliers in the global BMU component market.**



Introduction of ITM Semiconductor

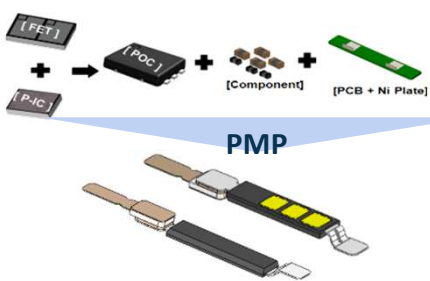
► Key Products (Global #1 Manufacturer for the component)

POC (Protection One Chip)



- POC is **two in one solution** which combine **Protection IC and MOSFET** as a one package for Li-Ion and Li-Polymer battery.
- ITM has **the largest M/S in the global market.**

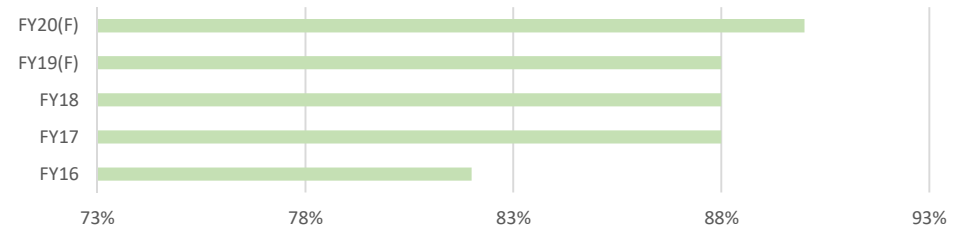
PMP (Protection Module Package)



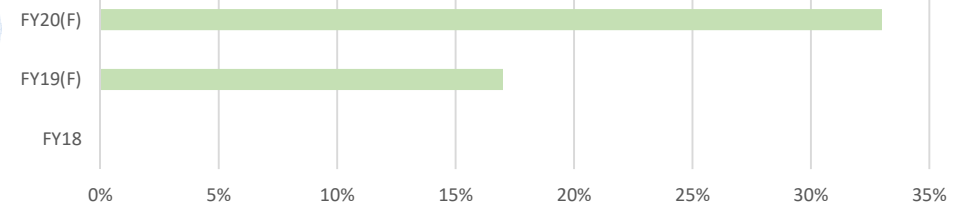
- PMP is an **innovative protection module for Li-Ion and Li-Polymer battery** replacing traditional PCM
- ITM is **the only product of this component.**
- Reduced component size allows **more flexibility in functions & design.** (50%↓ in size)

► Dominant M/S in BMU(Battery Mgmt Unit) of Mobile Handset

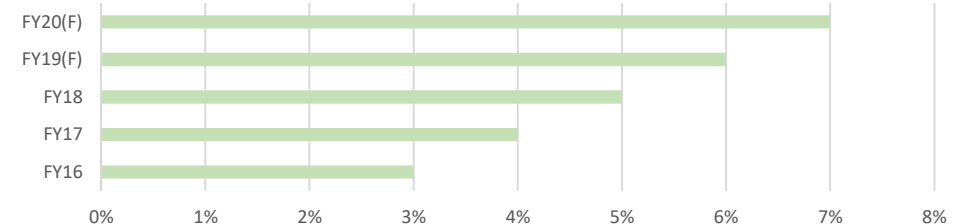
• M/S in Domestic Handset Makers (Market Dominance)



• M/S in Handset Makers in North America (Rapid Expansion)



• M/S in Handset Makers in China (Gradual & Steady Approach)



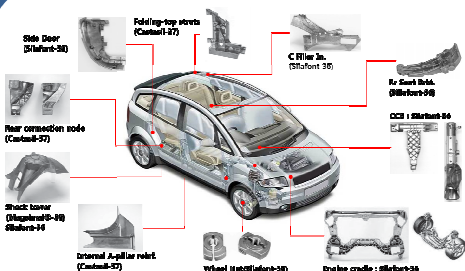
With the accumulated expertise in automotive aluminum parts,
LMS will expand into automotive parts for EV with targeted revenue of 260 Mil USD.



Introduction of LMS (Light Metal Solution)

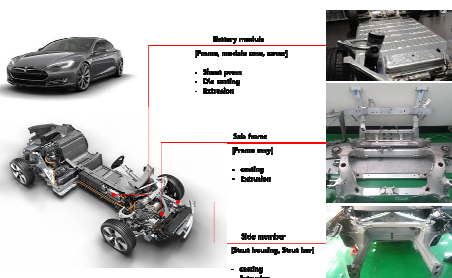
► Key Products (Proven Expertise in Aluminum Parts)

Automotive Parts



- 10+ years of experiences to produce and deliver automotive parts to global automotive manufacturers → **Know-how for Process Optimization**
- Patented Al & Mg Material → **Automotive Parts with Improved Properties**

Battery Case for EV



- Integrated Production Line (Casting → CNC/Press → Surface Treatment) in Vietnam → **Proved Quality System & Cost Competitiveness**
- Manufacturing Expertise → **Yield Rate higher than 70%** (30% higher than competitors)

► Strategy of Business Expansion to EV Battery Parts

4

Action Plans

- 1st CAPEX Investment of 22 Mil USD & 2nd Investment to be executed ('19-'22) of 30.8 Mil USD → **Integrated Production Line for EV Parts Delivery**
- Targeted Profitability: **15% OPM**

3

Business Forecast

- Total Order Book of LG Chem is 8.8 Billion USD/year → **Battery Portion is 10% (0.88 Billion USD/year)**
- Targets for 20% of Battery Delivery: 176.2 Mil USD
- **Total Target for LMS: 264.3 Mil USD**

2

Differentiated Points

- Accumulated Knowhow in **Process Optimization**
- **Cost Competitiveness** (Integrated Production Line in Vietnam)
- **Excellent Quality Management** (Yield Rate < 40%)

1

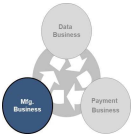
Current Preparation

- **Supplier Registration** completed (SDI, LG Chem, SK Innovation in process)
- **Order book of 105 Mil USD** from 3 Local Secondary Cell Manufacturers (as of end of FY18)

II-3. Manufacturing Business (continued)

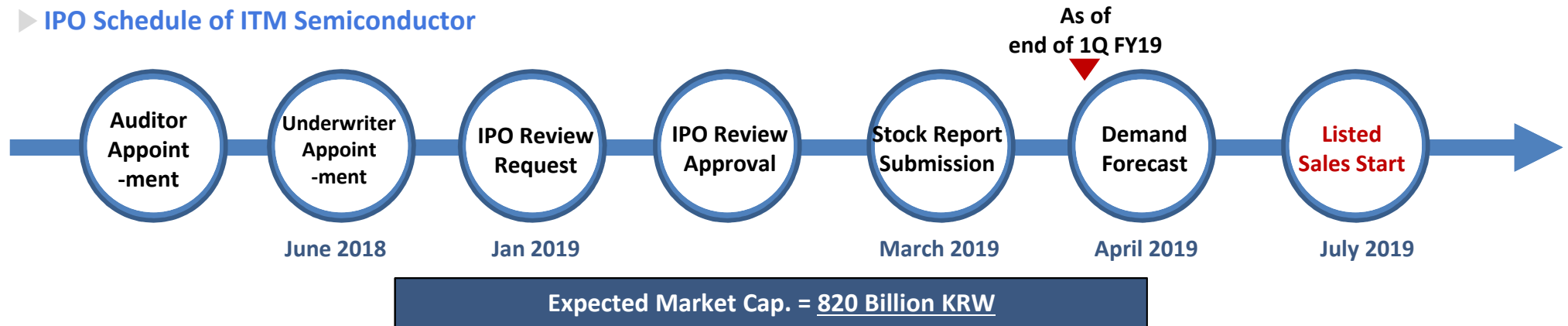
ITM Semiconductor & LMS are preparing for IPO

as their market competitiveness have been recognized by market.

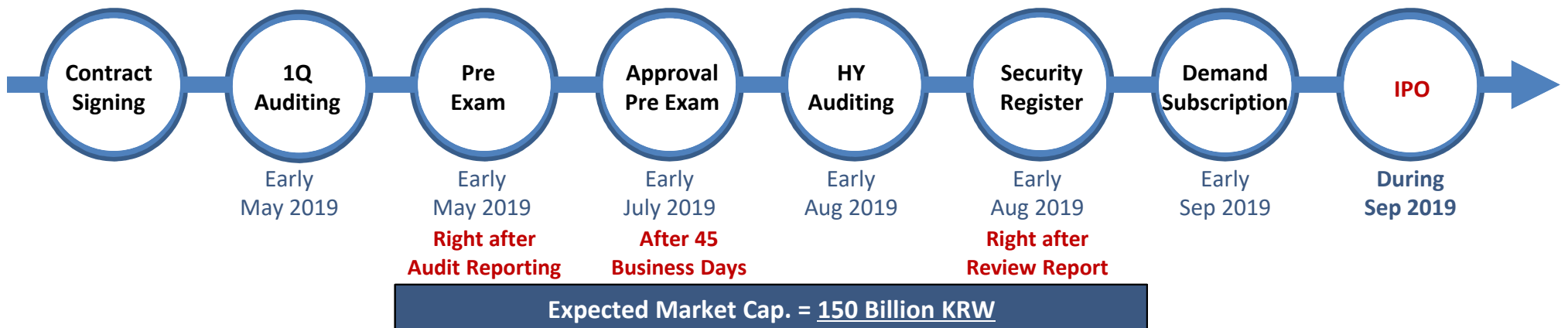


Value-Up through IPO

► IPO Schedule of ITM Semiconductor



► IPO Preparation of LMS



I. Overview

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IV. Financial Performance

III-1. Low Share Price compared to Asset Value

PBR as of December 2018 is 2.02, but adjusted PBR is 0.78 in which acquisition cost is replaced with either stock price or net asset value.

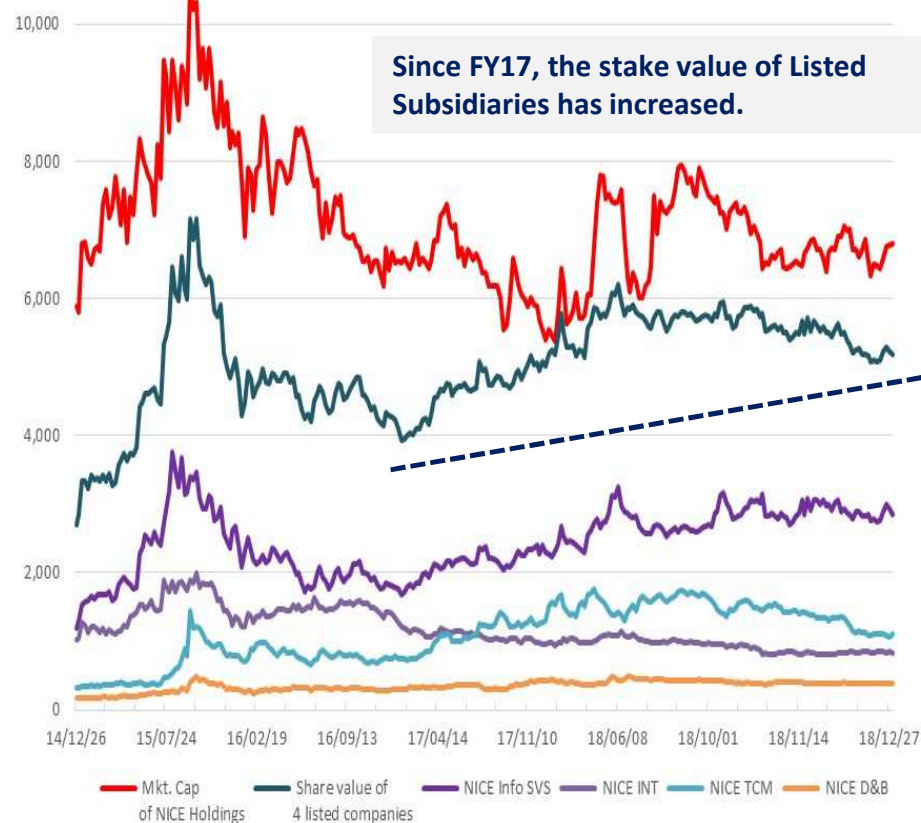
PBR adjusted with Stock Valuation Gain

(Unit: 100 Million KRW)	End of FY15	End of FY16	End of FY17	End of FY18
A. Market Cap (Treasury Stock excluded)	7,818	6,326	5,266	6,800
B. Net Asset (Separate F/S)	3,110	3,251	3,256	3,363
C. Adjustment				
G/L of Valuation of Securities (Listed) (Note 1)	4,079	3,211	4,138	4,128
G/L of Valuation of Securities (Not Listed) (Note 2)	569	722	850	1,176
D. Adjusted Net Asset (=B+C)	7,758	7,184	8,244	8,668
E. PBR(=A/B)	2.51x	1.95x	1.62x	2.02x
F. Adjusted PBR(=A/D)	1.01x	0.88x	0.64x	0.78x

(Note 1) Stock Price at Base Date – BV (Acquisition Cost)

(Note 2) Net Asset Value at Base Date – BV (Acquisition Cost)

Mkt. Cap of NICE Holdings & Stake Value of Listed Subsidiaries

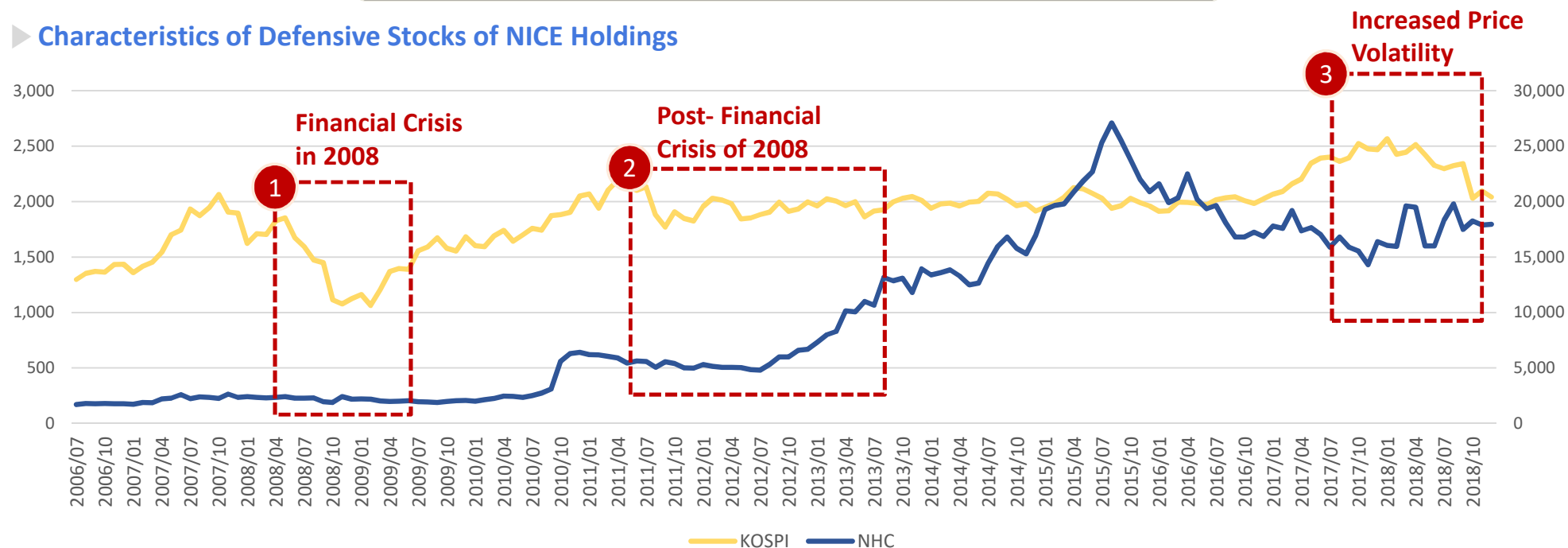


III-2. Characteristics of Defensive Stocks

Stock of NICE Holdings have characteristics of Growth Stock and Defensive Stocks, so investors can expect solid investment result either during recession or economic boom.

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Characteristics of Defensive Stocks of NICE Holdings



Periodic Classification		KOSPI	NHC	β
08/04~09/06	Financial Crisis in 2008	-23.9%	-10.7%	0.45
11/05~13/07	Post- Crisis in 2008	-10.7%	+95.4%	-8.92
17/08~18/12	Increased Market Uncertainty	-13.6%	+6.8%	-0.50

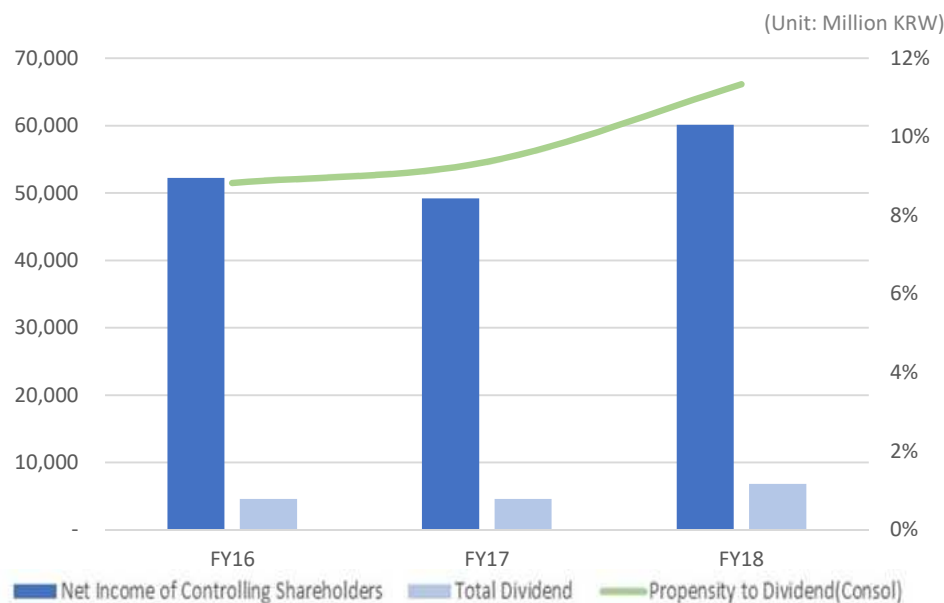
- Solid Stock Price Protection when market uncertainty increased ($\beta < 1$)
- Growth Engine (Core Business) accelerated stock performance during up-phase periods.
- Less Stock Plasticity based on Solid Business Performance
→ Better Stock Performance (especially during recession)

III-3. Gradual Increase of Propensity to Dividend

NICE Holdings plans to gradually augment Propensity to Dividend
based on stable profit structure and increased sources of dividend payment

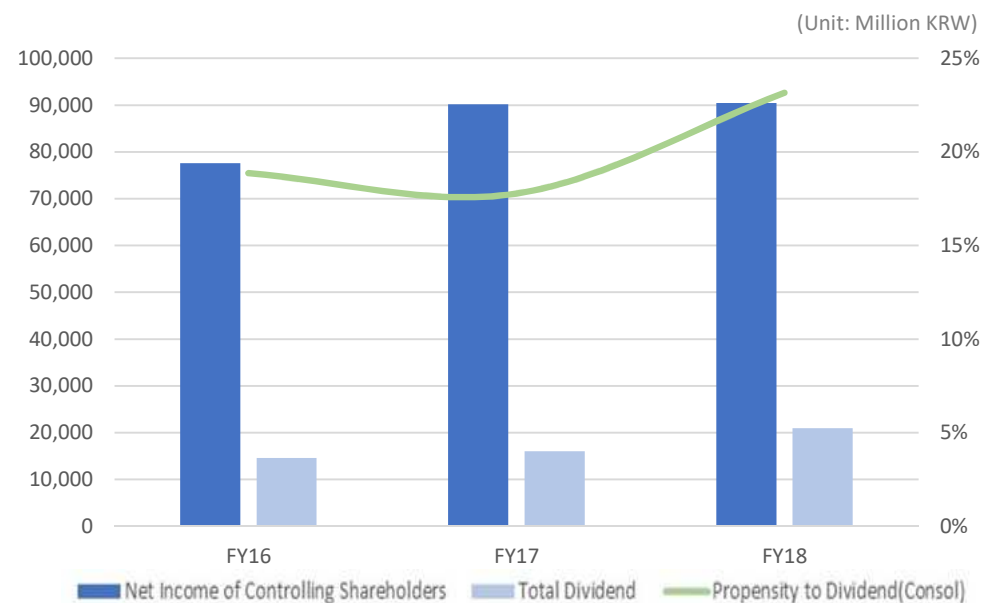
Dividend Payment & Propensity to Dividend (2013-2017)

► Dividend Policy of NICE Holdings



(Million KRW)	FY16	FY17	FY18
DPS	130	130	180
EPS	1,473	1,388	1,604
Dividend Paid	4,610	4,610	6,819
Net Income	52,231	49,225	60,139
Payout Ratio	8.8%	9.4%	11.3%

► Dividend Policy of 4 Listed Subsidiaries Combined



NIS	FY16	FY17	FY18
Dividend	7,891	8,370	11,359
Div. Rate	27.9%	27.3%	29.7%
Propensity	1.9%	1.6%	1.8%

DNB	FY16	FY17	FY18
Dividend	5,729	6,414	9,300
Div. Rate	22.6%	23.0%	24.8%
Propensity	1.6%	1.2%	2.1%

NIT	FY16	FY17	FY18
Dividend	3,366	3,325	3,946
Div. Rate	11.1%	9.1%	12.9%
Propensity	2.1%	1.5%	2.1%

TCM	FY16	FY17	FY18
Dividend	2,081	2,862	3,366
Div. Rate	15.7%	17.4%	27.2%
Propensity	1.3%	0.9%	1.2%

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IV-1. Performance (Classified by BU)

(Unit: Billion KRW)	Name of Subsidiary	2018			2017		
		Revenue	Operating Expenses	Operating Profit	Revenue	Operating Expenses	Operating Profit
1) Credit Card VAN	NICE I&T, KIS I&C, NICE Payments	698	(643)	55	635	(573)	63
2) Corporation/Individual CB	NICE Info Service	328	(281)	47	304	(263)	42
3) CD/ATM	NICE TCM, NICE CMS	253	(228)	25	194	(173)	20
4) Credit Rating	NICE Investors' Service	37	(28)	9	36	(27)	9
5) Collecting Service	NICE Credit Service	62	(60)	2	62	(61)	1
6) Manufacturing	LMS, BBS, etc.	253	(280)	(28)	238	(250)	(13)
7) Equity method	Equity method (NICE D&B, Magnum PEF, etc.), NICE Infra, etc.	25	0	25	4	0	4
8) Others		78	(77)	1	72	(71)	1
9) Removal of inter-subsidiary income		(120)	114	(7)	(95)	90	(4)
Sub Total		1,612	(1,484)	128	1,450	(1,328)	123
Net Finance Income		0	0	(7)	0	0	(4)
Other Non-Operating Income		0	0	13	0	0	6
Income from Continuing Operations before Taxes		1,612	(1,484)	134	1,450	(1,328)	124

IV-2 Comprehensive Income Statement

(Unit: Billion KRW)	Consolidated		
	FY18	FY17	Changes
I . Gross Profit Revenue	1,611.9	1,450.1	161.8
1. Revenue from rendering services	1,243.0	1,110.7	132.3
2. Valuation Gain/Loss by Equity Method	24.6	4.0	20.6
3. Revenue from Dividend	0.0	0.0	0.0
4. Revenue from Sales of Goods	344.3	335.4	8.9
II. Operating Expenses	-1,483.6	-1,327.5	-156.1
III. Operating Income(Loss)	128.3	122.6	5.7
IV. Financial Income(Loss)	-6.9	-3.9	-3.0
V . Non-Operating Income(Loss)	12.5	5.7	6.8
VI. Income Tax Expenses	-34.6	-31.7	-2.9
VII. Profit(Loss) from continuing operation	99.3	92.7	6.6
VIII. Profit(Loss) from discontinued operation	0.0	0.0	0.0
IX. Profit (Loss) (VII+VIII)	99.3	92.7	6.6
(Profit/Loss attributed to owners of parents)	60.1	49.2	10.9
v Earning per Share (KRW)	160.4	138.8	21.6

