Sony

Electronics Products & Solutions Segment

Senior Executive Vice President
Officer in charge of Electronics Products & Solutions Business
Sony Corporation

Representative Director and President
Sony Imaging Products & Solutions Inc.

Shigeki Ishizuka

EP&S Organization

Shigeki Ishizuka
Senior Executive Vice President
Officer in charge of Electronics Products & Solutions Business

Ichiro Takagi
Senior Executive Vice President
Deputy Officer in charge of Electronics Products & Solutions Business

Imaging Products & Solutions Business
Digital Imaging Professional Medical

Mobile Communication Business
Smart Phone Internet Service

Home Entertainment & Sound Business
TV Audio / Video

Sales & Marketing Platform
Manufacturing / Logistics / Procurement / Engineering Platform

Sony Corporation
### EP&S Basic Policy

**Electronics Products & Solutions Segment**

**EP&S**
- Maintain financial discipline and accountability in each business
- Create new customer value that exceeds the confines of each business by leveraging technology
- Maximize growth and eradicate opportunity loss through operational efficiency
- Nurture next generation talent and deploy personnel across business units

<table>
<thead>
<tr>
<th>HE&amp;S</th>
<th>IP&amp;S</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TV</strong></td>
<td><strong>DI</strong></td>
<td><strong>Smartphone</strong></td>
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<tr>
<td>Maintain a stable</td>
<td>Establish top brand</td>
<td>Become profitable in</td>
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<tr>
<td>business foundation</td>
<td>position in overall</td>
<td>FY2020</td>
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<tr>
<td>based on large panel</td>
<td>camera market</td>
<td>• Reduce OPEX by</td>
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<tr>
<td>premium product</td>
<td>Maintain No.1 position</td>
<td>completing</td>
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<td>strategy</td>
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<td>transformation in</td>
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<tr>
<td></td>
<td>revenue basis</td>
<td>FY2019</td>
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<tr>
<td><strong>V&amp;S</strong></td>
<td><strong>Medical</strong></td>
<td>• Strengthen product</td>
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<tr>
<td>Consistently grow</td>
<td>Aim to expand the</td>
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<td>sales and profits</td>
<td>business over the</td>
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<td>through greater</td>
<td>mid to long term</td>
<td>from the Sony Group</td>
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<td>product and technology</td>
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<td>competitiveness in</td>
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<td>growth categories</td>
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<tr>
<td>**Professional</td>
<td>**Professional</td>
<td>**Internet Service/</td>
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<tr>
<td>Solution**</td>
<td>Solution**</td>
<td>IoT**</td>
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<tr>
<td>Expand the B2B</td>
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<td>Strengthen recurring</td>
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<tr>
<td>solution business</td>
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<td>services</td>
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<td>by leveraging EP&amp;S</td>
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<tr>
<td>products</td>
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### EP&S Business Foundation

**Electronics Products & Solutions Segment**

#### Business Foundation (Key Strategies)

1. **Sony Brand (B2B&C)**
   - Strengthen products & services under the Sony brand

2. **Customer Real-Time Benefit**
   - Create customer value with "time"

3. **Differentiation by Technology**
   - In-house technology
   - “Light to Display/Sound/Communication”

4. **Strengthen Solutions Business**
   - Sony Network Communication, Professional Product Solution Group

#### Customer Value

- **1. Sony Brand (B2B&C)**
- **2. Real-Time Benefit**
- **3. Differentiation by Technology**
- **4. Strengthen Solution Business**
Home Entertainment & Sound Business (HE&S)

TV Business

Maintain Stable Business Foundation Based on Large Panel Premium Product Strategy

- **Immersive Picture Quality**
  Regardless of Panel Source

- **High Quality Sound**
  That is Part of Visuals
  Immersive and Realistic

- **Easy Hands-Free Operation**
  For both Broadcast and Internet

Further Evolution of End-to-End Supply Chain Management from Procurement to Manufacturing to Sales
**Video & Sound Business**

**Consistently Grow Sales and Profits Through Greater Product and Technology Competitiveness in Growth Categories**

Audio market 10% annual growth, lead by the headphone market(1)

- **Strengthen Premium Products**
  - **Best-in-Class Noise Cancelling Headphone (1000X series)**
  - **Premium Home Speaker**

- **Launch of 360 Reality Audio**
  - (Evolution of Sound Technology)
  - Sony’s leading spatial sound technology creates the New Experience of Being Engulfed by Sound
  - Pursue partnerships with studios, labels and content providers

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**Imaging Products & Solutions Business (IP&S)**

* Source: Sony

Sony Corporation
Digital Imaging Business

Establish top brand position in overall camera market
Maintain No.1 position in mirrorless on amount basis

Strengthen Camera Lineup
- Full-size APS-C
- Basic
- Resolution
- Speed

One Mount Strategy
- The Five Fundamentals
- Full-size × APS-C seamless compatibility

Strengthen Lens Lineup
- Fundamental lens launched and further expansion

Medical Business

Aim to expand the business over the mid to long term

Surgical Imaging
- Business expansion in the 4K & operating room solutions space
- Launched in 2015 4K Surgical Endoscopy System
- Acquired in 2016 Operating Room Solution eSATURNUS

Life Science
- Expand lineup and increase recurring business
- CAGR 10%+ from FY18
- Launched in 2018 Cell Sorter MA900
- Disposable Sorting Chip

Contributing to the Medical Field with Imaging Technology
Turn positive in FY18
Mobile Communication Business (MC)

Smartphone Business Transformation

Withdrew from certain Regions and Conducted Sales, Engineering and Manufacturing Review

- Non-Focus and Defocused Regions
- Focus Regions (Japan, Europe, Taiwan, Hong Kong)
- Reviewed Sales, Engineering and Manufacturing

- Sweden (Engineering)
  - Reduced focus on mobile
  - Shifted R&D focus to communication technology and new businesses

- UK (European Business Sales)
  - Merged sales & marketing functions with Sony Europe

- China (Factory)
  - Ceased Production

- Japan (Headquarters)
  - Reduced outsourced design
  - Transferred corporate functions to Sony
Smartphone Business Transformation

Complete Structural Reforms in FY2019
Reduce OPEX by 50% and Overall Cost by 57% in FY2020 vs FY2017 Actual

Overall Cost

- Impairment
- Operating Loss
- Profit Margin
- One time transformation cost
  44 billion yen

FY2017 Actual
FY2018 Actual
FY2019 Plan
FY2020 Plan

Smartphone Business Competitive Products

2019 Flagship Model
Leveraging Leading Technology from the Sony Group

Image Processing Algorithm from α series
- AF/AE following 10fps burst mode
- Eye AF

Professional Monitor-Level Picture Reproduction
- 4K OLED
- BT2020 color space
- 10-bit HDR

High Quality Picture Technology from BRAVIA
- XT for mobile engine
- HDR remaster

Supervised by Sony Pictures
Mixer for 3D Sound Design
- Dolby Atmos

VENICE Cinematography experience with "Cinema Pro"
- Adopted VENICE color Look

21:9 Wide Screen Format for Mobile Gaming

Immersive gaming in 21:9 format such as:
- Fortnite
- Arena of valor

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Solution Business

Create new customer value that exceeds the confines of each business (B2B&C)

1. Large Display Solution
   New Visual Experience with Large Displays, from Consumer to B2B

2. Personal Entertainment Solution
   Merge Sound and Communication Technologies to Create New Value
Create new customer value that exceeds the confines of each business (B2B&C)

**3G Solution**

**Pursuing Real-Time Benefit in Various Applications**

- **Capture**
  - Live content transmission with 5G (wide bandwidth / low latency)

- **Create**
  - Low cost, live content creation solution with 5G (MEC / low latency)

- **Listen / Experience**
  - Real-time viewing and listening to content taken from multiple cameras

Applicable to sport, music live, movie, news distribution etc.

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Create new customer value that exceeds the confines of each business (B2B&C)

**4XR Solution**

**Create New Visual Experiences and VR Content by Leveraging the Sony Group’s Strength**

- **Provide Highly immersive VR content and solutions**

  - Provide highly immersive virtual experience of being in the same space as the artist
  - Site operation and post-production to highly leverage the Sony Group’s content creation know-how

Applicable to sport and various live events as well as music
Create New Value, Connect Creators and Users Through the Power of Technology

**FY2018 Review – HE&S**

<table>
<thead>
<tr>
<th>FY17</th>
<th>FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>1,222.7</td>
</tr>
<tr>
<td>Operating Income</td>
<td>85.8</td>
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</tbody>
</table>

**FY2018 Operating Income (vs FY2017)**

- **Positive Factor**
  - Improvement in the product mix reflecting a shift to high value-added models

- **Negative Factors**
  - Price decline
  - Negative impact of foreign exchange rate
  - Decrease in sales
  - Increase in OPEX (research and development expenses for competitive products)
FY2018 Review – IP&S

Electronics Products & Solutions Segment

<table>
<thead>
<tr>
<th></th>
<th>FY17</th>
<th>FY18</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>655.9</td>
<td>670.5</td>
<td>+9.1</td>
</tr>
<tr>
<td>Operating Income</td>
<td>74.9</td>
<td>84.0</td>
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</tbody>
</table>

FY2018 Operating Income (vs FY2017)

Positive Factors
1. Improvement in the product mix reflecting a shift to high value-added models
2. Improvement in OPEX

Negative Factors
3. Negative impact of foreign exchange rate
4. Decrease in sales

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FY2018 Review – MC

Electronics Products & Solutions Segment

<table>
<thead>
<tr>
<th></th>
<th>FY17</th>
<th>FY18</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>723.7</td>
<td>498.0</td>
<td>-245.7</td>
</tr>
<tr>
<td>Operating Income</td>
<td>-27.6</td>
<td>-97.1</td>
<td></td>
</tr>
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</table>

FY2018 Operating Income (vs FY2017)

Negative Factors
1. Decrease in smartphone unit sales
2. Increase in expense primarily for the write-down of excess inventory due to regional withdraw and clearing market inventory
3. Increase in restructuring charges

Positive Factors
4. Reduction in operating costs
5. Decrease in the impairment charge recorded against long-lived assets

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**FY2019 Forecast – EP&S**

Electronic Products & Solutions Segment

<table>
<thead>
<tr>
<th>Sales (bn yen)</th>
<th>Operating Income (bn yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,320.6</td>
<td>76.5</td>
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<tr>
<td>2,240</td>
<td>+44.5</td>
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<tr>
<td>121</td>
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</tbody>
</table>

FY2019 Operating Income (vs FY2018)

### Positive Factors

1. Improvement in the product mix reflecting a shift to high value-added models in TV and DI Business

2. Improvement in OPEX in MC Business

### Negative Factors

3. Decrease in sales

4. Negative impact of foreign exchange rate

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**TV Business: FY2018 Sales by Product Type & Region / Unit and Revenue Share**

- **Sales by Product Type**
  - 2K TVs
  - 4K TVs
  - Sales 791.8 bn yen

- **Sales by Region**
  - Asia Pacific
  - Japan
  - U.S.
  - Europe
  - Other

- **LCD TV Unite Share by Manufacturer**
  - Source: Sony / For the most recent year
  - #5

- **LCD TV Revenue Share by Manufacturer**
  - Source: Sony / For the most recent year
  - #3

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**Video & Sound Business: FY2018 Sales by Product Type & Region**

### Sales by Product Type
- **Home Video**
- **Audio Components**
- **Digital Music Players WALKMAN**
- **System Stereo**
- **Audio Others**
- **Audio Growth Category**
- **Headphones**
- **Sound Bars**
- **Wireless Speakers**

**Sales 363.6 bln yen**

*1: “Audio Growth Category” includes Headphones, Sound Bars and Wireless Speakers as its main products.

**Sales by Region**
- **Japan**
- **Asia Pacific**
- **China**
- **Europe**
- **U.S.**

**Sales 363.6 bln yen**

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**IP&S Sales by Business Category and Geographic Area**

### FY2018 Sales by Business Category
- **Medical**
- **Other**
- **Digital Imaging**
- **Still and Video Camera**
- **Professional**

**Sales 670 bln yen**

### FY2018 Sales by Geographic Area
- **Japan**
- **Asia**
- **North America**
- **Europe**
- **Other**

**Sales 670 bln yen**

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IP&S Key Product Market Share (Revenue Basis)

- **FY2018 Still Camera Market**
  - Market Size: 1,300 bln yen
  - Sony 24%

- **FY2018 Video Camera Market**
  - Market Size: 300 bln yen
  - Sony 29%

**Components of Video Camera Pie Chart**
- Video cameras for consumer (POV + Conventional)
- Video cameras for business (Prosumer + Professional)

*1 Premium DSC = DSC with large (1/1.7 inch and over) image sensors or high zoom (20X and over)

(Source: Sony)