

Market and Technology Analysis of Medical Imaging Devices in S. Korea

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Introduction of Medical Imaging Devices

- Medical imaging devices are apparatus for technique and process of creating visual representations of the interior of a body for clinical analysis. There are both radiation and non-radiation method

classification		Products
Medical imaging devices	radiation	X-ray camera, computed tomography, C-arm or O-arm, breast cancer diagnosis equipment, positron emission tomography
	non-radiation	MRI, OCT, ultrasound devices, endoscopy

<examples of main product of medical imaging devices>

Examples of Medical Imaging Devices



- Fluoroscopic machine
- digital C-arm X-ray system



- Angiography apparatus
- Blood vessel and cardiovascular x-ray image system



- computed tomographic imaging system



- Digital/general x-ray imaging system



- MRI



- Breast cancer diagnosis equipment



- Clinical imaging
- PET/CT

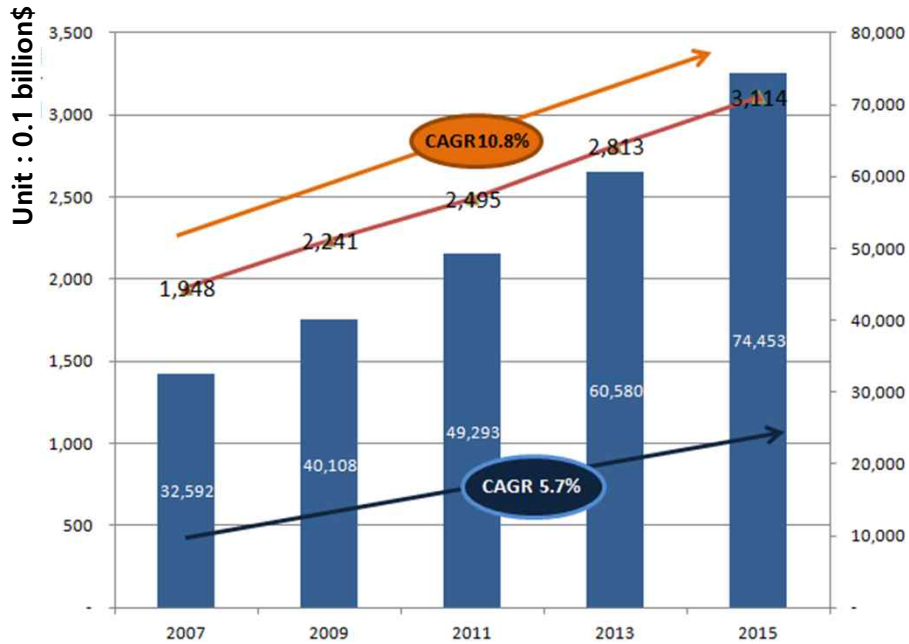


- Ultrasound devices
- Cardiac, gynecology, radiology

Characteristics of Medical Imaging Device Industry

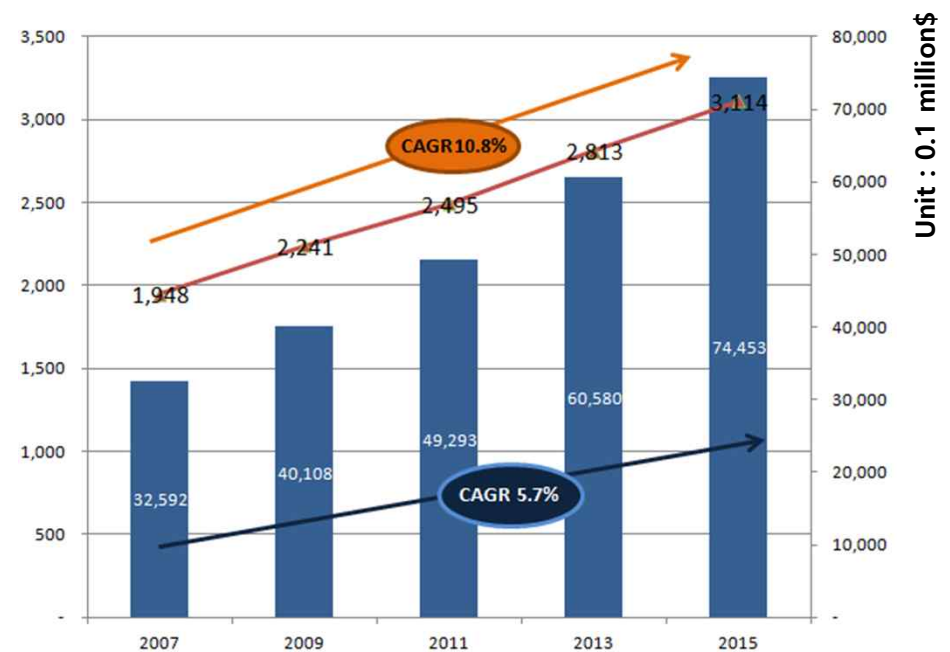
- This industry shows that there are limited buyers(hospitals) and the most critical point is safety and reliability, so that devices are regulated by FDA, TVU, CE marking, etc. There is a tendency for users to use existing 'famous' products and there are a number of different regulation and rules in countries by countries. The industry is characterized by granular medium-sized market and small quantity batch production.
- Imported products have been continuously increasing since the level of technology, capital strength, awareness/recognition of South Korea in the industry is somewhat low. There are many small and medium sized companies but not a global top one in South Korea. So, they mostly manufacture middle-low price products.

Global Market of Medical Imaging Devices



< global market size of medical devices ; global(orange) & S. Korea(blue)>

▪ source : Espicom, The World Medical Markets Fact Book 2009

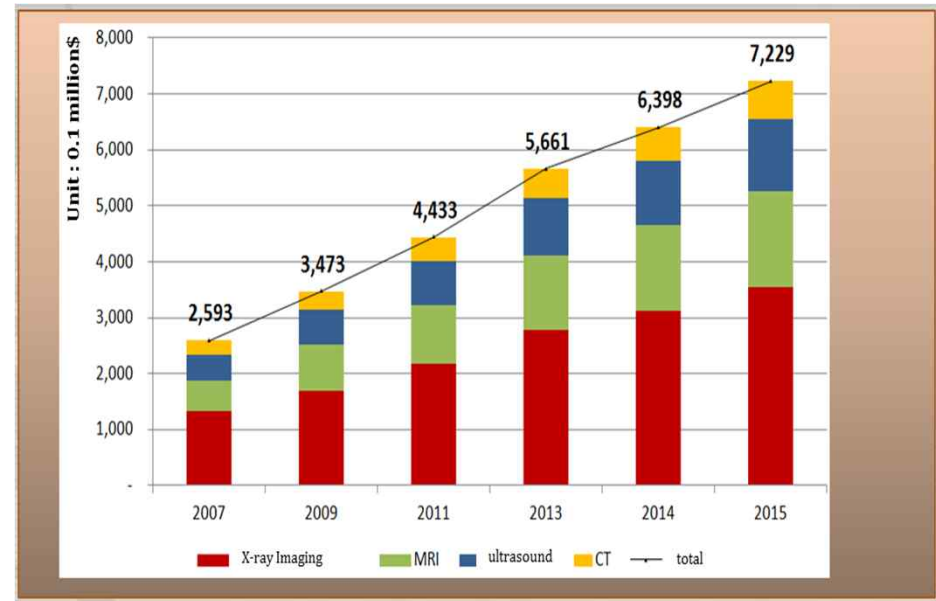
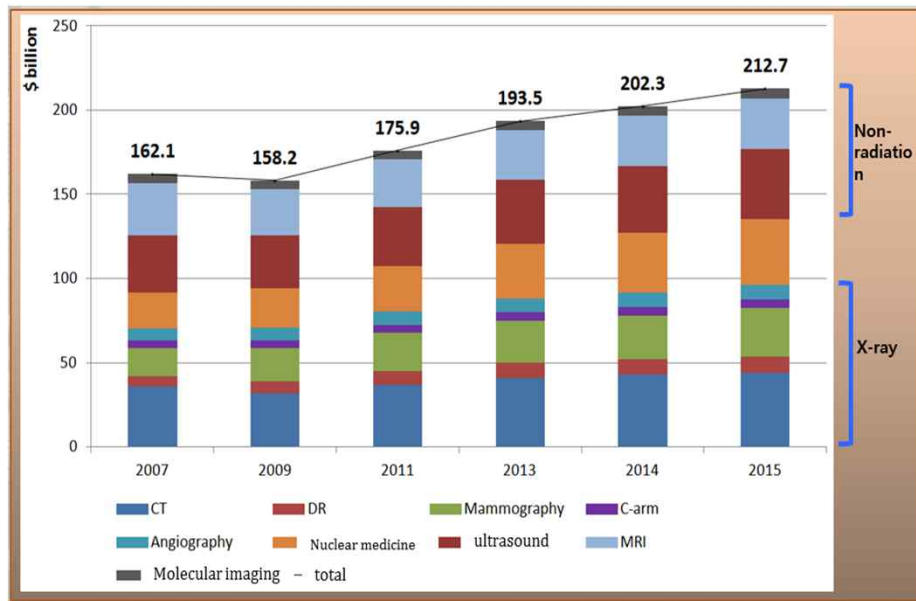


< global market size of medical imaging devices ; global(orange) & S. Korea(blue)>

▪ source : Medical Imaging Market Trimark Publication, 2007

Market Share over Product Classification of Medical Imaging

Market Size of Medical Imaging Devices in S. Korea



- source :
 - European Medical Imaging Outlook Market Segmentation, Frost&sullivan 2009
 - Medical Imaging Market Trimark Publication 2007.12
 - Fluoroscopy and Mobile C-arm, A global strategic Business Report , 2008.10

- Medical Devices of South Korea → occupies about 1.7 % of World market
- CAGR : 13.2% (cf. world market CAGR: 4.7%)
 - source : Association of Medical Device Industry : Production/Import/Export from 2005~2007

Technology Trend of Medical Imaging Devices

- Complex/fusion such as ultrasound-guided hifu, MR hifu, Tomotherapy, operation robot, MR-LINAC, PET-CT, PET-MRI.

- Mutually and organically integrated solutions become an answer to complicated diagnosis process due to multi-modality.

- Development of nuclear medicine imaging devices is noticeable.
- For example, PET/CT is a gold standard in oncology.

- to develop devices with low radiation and high resolution, so that the processes for diagnosis or treatment are minimized, as well as multi-modality imaging system development showing paradigm shift to personal medicine, molecular medicine.

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