



strategy institute for eHealth



## Topic: Investments in Big Data and AI

**Impact of Big Data Analytics on Healthcare**  
**Luxembourg, 04.10.2017**

## 1) Syte Insights

## 2) Investment and AI

## 3) Outlook

# Syte started 15 years ago and went consequently global in three sectors

Syte portfolio services

## Advisory

- **Strategy consulting**
- **Innovation hub building**
- **Digital Health implementation**

## Financial Transaction

- **Targeting**
- **Valuation**
- **Mergers / Acquisitions**

## Artificial Intelligence

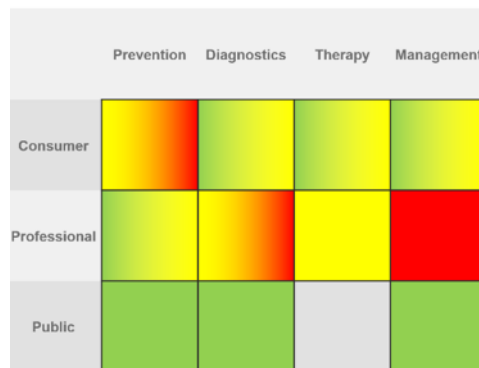
- **Data mining**
- **AI piloting**
- **AI roll out**

# Current Syte Digital Health publications about investments (> 600 ventures), global hubs (>25 centers) and AI (>50 Segments)

## Latest Syte Publications

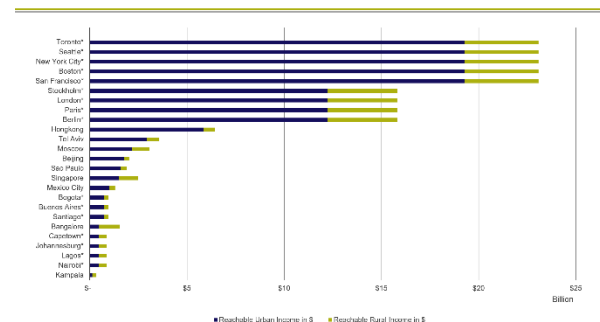
### Investment Strategies

Relative share of recent investment deals



### Global Hub Comparison

Digital Health Startups Market-Reach varies nearly by factor 70 depending on their location  
Comparison of potential Market-Reach of significant Health Hubs



### Artificial Intelligence

Average funding per artificial intelligence category



### Digital Health investments:

- Investment trends (Top 30 strategic and financial investors)
- Analysis of respective 600 latest healthcare start up investments
- Conclusions for key funding fields, current medical and business focus areas and investment strategies

### Global Digital Health Hubs:

- 25+ Hubs on all continents
- Benchmarking through a global ranking based on quantitative scoring showing success drivers and development trends
- Conclusions regarding growth of competitiveness, internationalization strategies for startups und investment allocation

### Artificial Intelligence segments:

- Definition and categorization of AI data analysis methods (e.g. supervised/unsuperv. learning)
- Medical science data background and consequences for applications
- Ranking of techniques based on medical and revenue impact in healthcare

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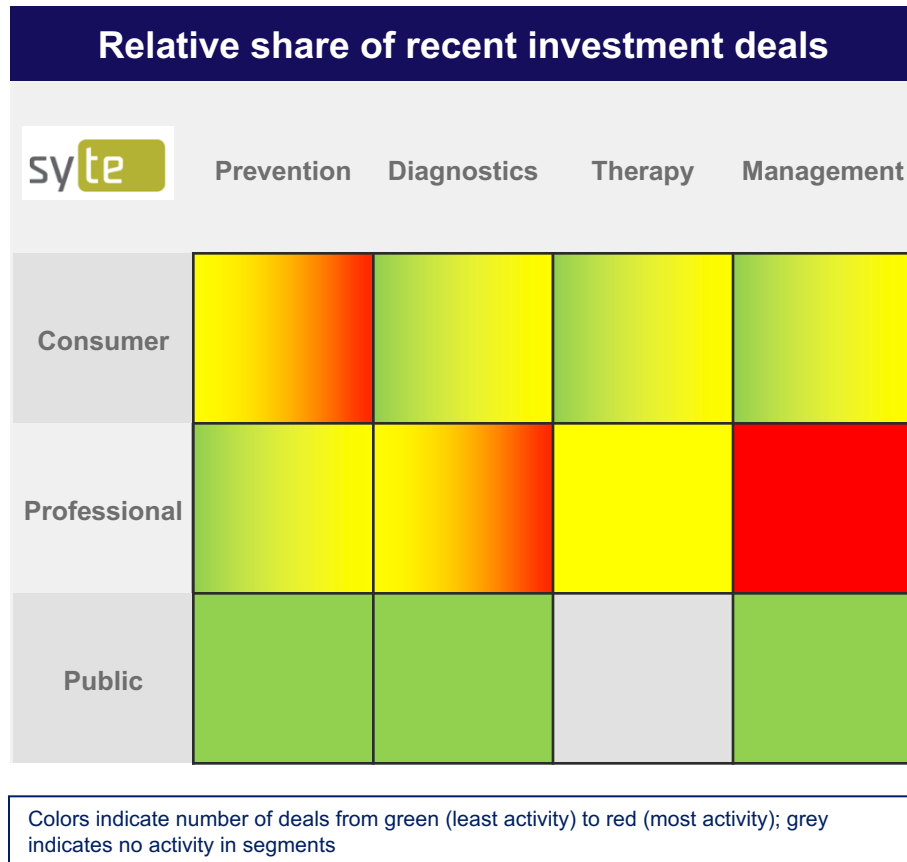
# Syte structures the Digital Health landscape into medical application fields, respective payers and according segments

## Terminology



# Investment studies revealed three key investment segments in the Digital Health landscape

## Heatmap of current investments



**Implication**

Peaks:

- Payer **Professional** as **hottest area** across all **payers** (70% of total deals)
- Field **Management** as **hottest area** across all **application fields** (44% of all deals)
- Combination of field Management and payer Professional as **key investment field** with **40% of total deals**

**The three most relevant segments “Prevention / Consumer”, “Diagnostics / Professional” and “Management / Professional” saw over 70% of the total relevant investments**

# AI and Big Data companies require a specific valuation approach due to their very different types of company assets

Syte Insights: Enterprise Valuation

AI and Big Data companies:

- Mainly **intangible assets**
- Major **value driving factors**:



Data

+

syte



Algorithm

+

syte



Team

Conventional valuation approaches do not reflect these factors holistically

How to derive the **Real Enterprise Value** from these characteristics?

- Intangible assets
- Growth dynamics
- Specific Value of Data, Algorithm and Team

<https://agentmail.com.au/wp-content/uploads/data-numbers-ss-1920.jpg>; <http://graduatedegrees.online.njit.edu/wp-content/uploads/2015/08/Algorithms-In-Computer-Science.jpg>

<http://emc4u.de/wp-content/uploads/2015/08/team1.jpg>

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The document is incomplete without oral explanations. Further information: [justus.wolff@syte-institute.com](mailto:justus.wolff@syte-institute.com)



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# **A clear Digital Health/AI hub strategy is a highly relevant success factor in the global run on Digital Health and AI**

## **Luxembourg opportunities**

### **Takeaways:**

- 1) AI in the health industries is a major driver of growth**
- 2) AI investments are soaring and enterprise valuation can be steered**
- 3) “Data, algorithm and team” as leverage for an innovation hub structure**

### **Cases:**



**Singapore**



**Insurance and Pharma**



**University Hospitals**

### **Government:**

**AI and Big Data  
innovation hub drivers**

### **Corporates:**

**Data driven revenue gen.  
/ cost saving service models**

### **Hospitals:**

**Analysis of existing  
data sets in AI centers**

**Thank you very much**

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