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RSNA Analyst meeting

Chicago, November 30, 2004

Healthcare Business Group

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Philippe Houssiau

General Manager

HealthCare Business Group

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Today's presentation

- The healthcare transformation
- Market characteristics
- Agfa's healthcare strategy
- Acquisition of GWI AG
- Agfa's competitive advantage
- Portfolio
- North America



Healthcare Transformation

Societal and medical trends

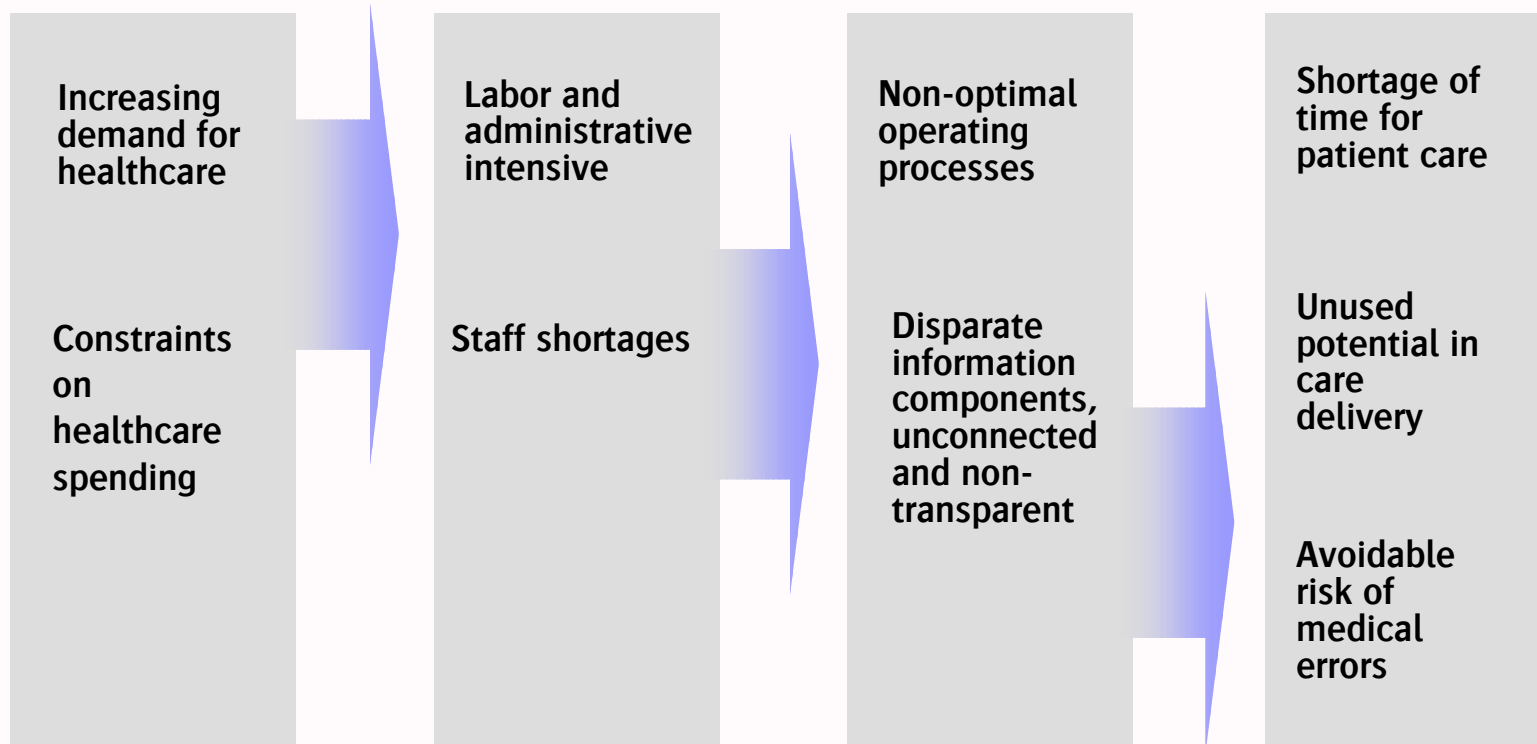
- Increased life expectancy and lower birth rate
- More chronic diseases
- Increased need for screening
- Move to outpatient care and minimal invasive treatments
- Budgetary pressures on medical care

Today's medical environment

- Complexity of the medical practice
- More sophisticated, IT based tools and equipment
- Increased communication between healthcare professionals
- Regulation forcing IT adoption
- Medico-legal requirements
- Need to avoid errors and failures



Healthcare drivers



Limited patient care time

- The average hospital devotes less than 20% of its time to patient care

Source: Booz Allen
HealthCare

% of personnel Time & Cost by activity	
Medical - Technical - Clinical	16%
Hotel - patient services	8%
Documentation - medical	19%
Documentation - institutional	11%
Scheduling - coordinating	14%
Transportation - patients	3%
Transportation - staff	3%
Management supervision	7%
Ready for action - idle time	19%
Total	100%

Are hospitals prepared for the challenge ?

Average hospital struggles with:

- process complexity
- process redundancies
- internal competition for patients

Staff members interacting with colectomy patient (4 day stay)	
Nursing	27
Dietary	10
Ancillary Services	6
Central Transport	5
Environmental Services	3
Other Support	2
Total	53

Routine Chest X-ray	Steps	Minutes
Medical Clinical Activities	6	21
Transportation	8	42
Communicate & Coordinate	12	26
Clerical tasks incl. data entry	14	51
Total	40	140
Usual turnaround time		240

Providing in-room respiratory care	
Patient available at 1st attempt	55%
Patient available at 2nd attempt	29%
Patient available at 3rd attempt	12%
Patient available at 4th attempt	4%
Total	100%

Source: Booz Allen HealthCare

Staff shortages & salary issues

Staff & salary challenges

- Increasing salaries
- High pressure working conditions
- Staff shortages
- Resistance to change
- Training costs

Employees by category (450 bed hospital)

Managers & supervisors	147
Admin. prof. staff	100
Clerks & secretaries	455
Nurses and technicians	1,196
<u>Laborers</u>	<u>425</u>
TOTAL	2,323

Typical Hospital Cost structure

Salaries, wages, benefits	53,2%
Supplies	15,6%
Drugs & Blood	5,7%
Depreciation	4,8%
Other	4,4%
Purchased services	4,1%
Professional fees	3,5%
Utilities & insurance	3,0%
Interest	3,0%
Maintenance & rentals	2,7%
Total	100,0%

Source: Booz Allen
HealthCare



Opportunities

- Reign in exploding cost of healthcare
- Increase productivity
- Further reduce medical errors
- Benefit from IT convergence
- Complement medical practitioner's experience with information systems
 - Real-time access to data and information to support decision making
 - Aid in detection



Expectation

- In an ideal world an enterprise-wide network
 - Compiles, cross-references and integrates data from all sources
 - Single source of up-to-date, current information
 - Presents this data in a simple format
 - Allows clinical staff to see the effectiveness of treatments, drug therapies and surgical procedures
 - Connects patient and treatment data with financial data yielding valuable cost analyses and resulting in overall cost reduction

**Hospital IT enables:
better patient care, higher productivity, controlled outcomes**



Healthcare IT market characteristics

- High growth rates
- Customer pressure for integrated systems
- Market heavily fragmented – awaiting consolidation
- Not one pan-continental or global provider
- Under investment in hospital IT

**Market is in need of a strong and trusted healthcare partner
to spearhead transformation**



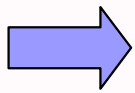
Healthcare IT: high growth rates

- Departmental: €7.5 billion, CAGR 5%
 - 12% growth in PACS/RIS
- HIS/CIS: €8.2 billion in 2004 to €13 billion in 2009
 - Of which CIS/EMR: €4 billion in 2004 to € 8 billion in 2009, i.e. CAGR 15+%

Use install base as platform for growth in hospital IT



Healthcare IT Market Characteristics



Hospital IT is one of the key drivers to increase efficiency and improve patient care. However there is an **under investment in IT.**

<u>IT Expenses</u>	<u>% revenue</u>
Healthcare	3%
Financial Services	7%

Source: Health IT World 2003



Agfa's healthcare strategy

Radiology solutions

- Grow with radiology
 - Provide imaging information systems and services

Departmental solutions

- Develop presence in clinical departments
 - Provide image management and information systems and services

Healthcare Enterprise IT solutions

- Grow mainly by acquisition
 - Provide community wide systems and services, Hospital Information Systems (HIS) and Electronic Patient Record (EPR)

• Imaging Technologies

- Leverage Intellectual property and expertise
- Innovate through ventures and partnerships
 - Provide leading edge healthcare imaging technologies and computer aided detection tools

Radiology solutions

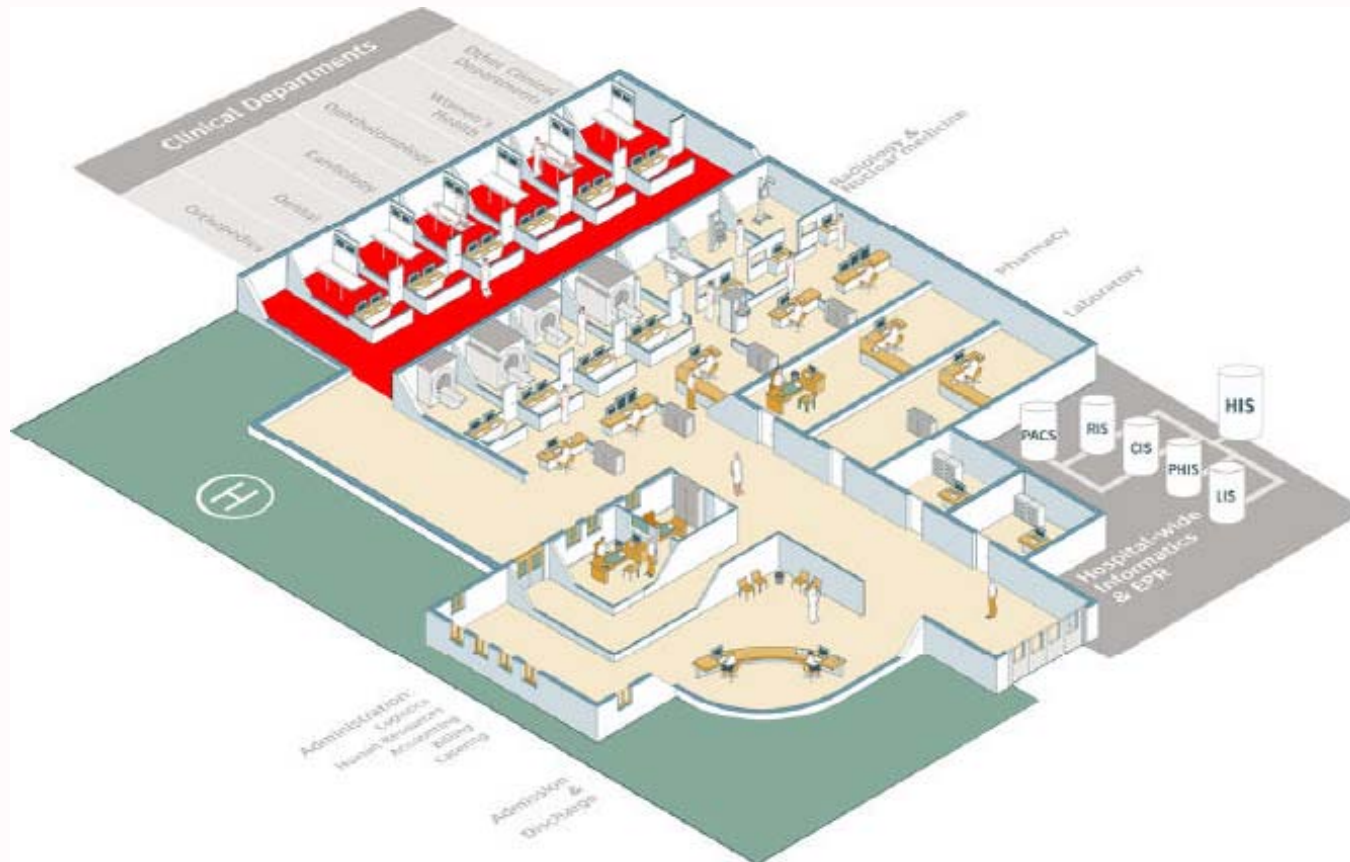
Image management tools, e.g. PACS (Picture Archiving and Communications Systems), manage archiving, distribution and retrieval of diagnostic images.



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Departmental solutions

Work-flow systems, which are computer-based solutions for planning, follow-up and communication of patient data.



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Hospital-wide solutions

Electronic Medical Record (EMR):
contains all patient data from
different hospital departments
and other healthcare facilities

Hospital Information Systems
(HIS): e.g. administration, billing,
logistics, HR, catering



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Imaging technologies

Clinical application tools enabling doctors to improve diagnosis and medical care.



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Agfa acquires GWI AG

- A decisive step in the transformation of Agfa into a globally active healthcare Information Technology organization
- Now a leader in healthcare IT in Europe
- Strategically empowers Agfa to help transform tomorrow's healthcare

**Agfa takes the lead in the converging
European healthcare IT market**



Who is GWI?

- Internationally active healthcare technology company
- Leading company in Germany
- Revenue forecast of € 118 million in 2004
- Systems installed in over 2,000 medical institutions
- Strong brand: the ORBIS® software offers comprehensive clinical solutions and administrative systems for hospitals and care providers
- Great people, products and operating model
- 890 employees (770 FTE) in Germany, Austria, Switzerland and France



Powerful combination

AGFA HealthCare

Connectivity & integration to **diagnostic modalities and information systems**

Domain know-how in **key hospital departments** and imaging centers – **vertical** approach

Strength of a **worldwide organization**

Worldwide sales & services organization

Worldwide customer base – market share

GW

Connectivity & integration to **hospital & public information systems**

Domain know-how in **administrative and clinical hospital IT** – **horizontal** 'holistic' approach

Strong **methodology** in **project IT business**

Software architecture built for future vision

Customer base at enterprise level in Europe

GW's ORBIS® is a complete information system and has **over 70 applications** for hospitals and other healthcare facilities, including nursing, wards, operating theater, anesthetics, intensive care, radiology, laboratories, pathology, cardiology and other clinical departments, blood banks, out-patients, all administrative functions and financial affairs

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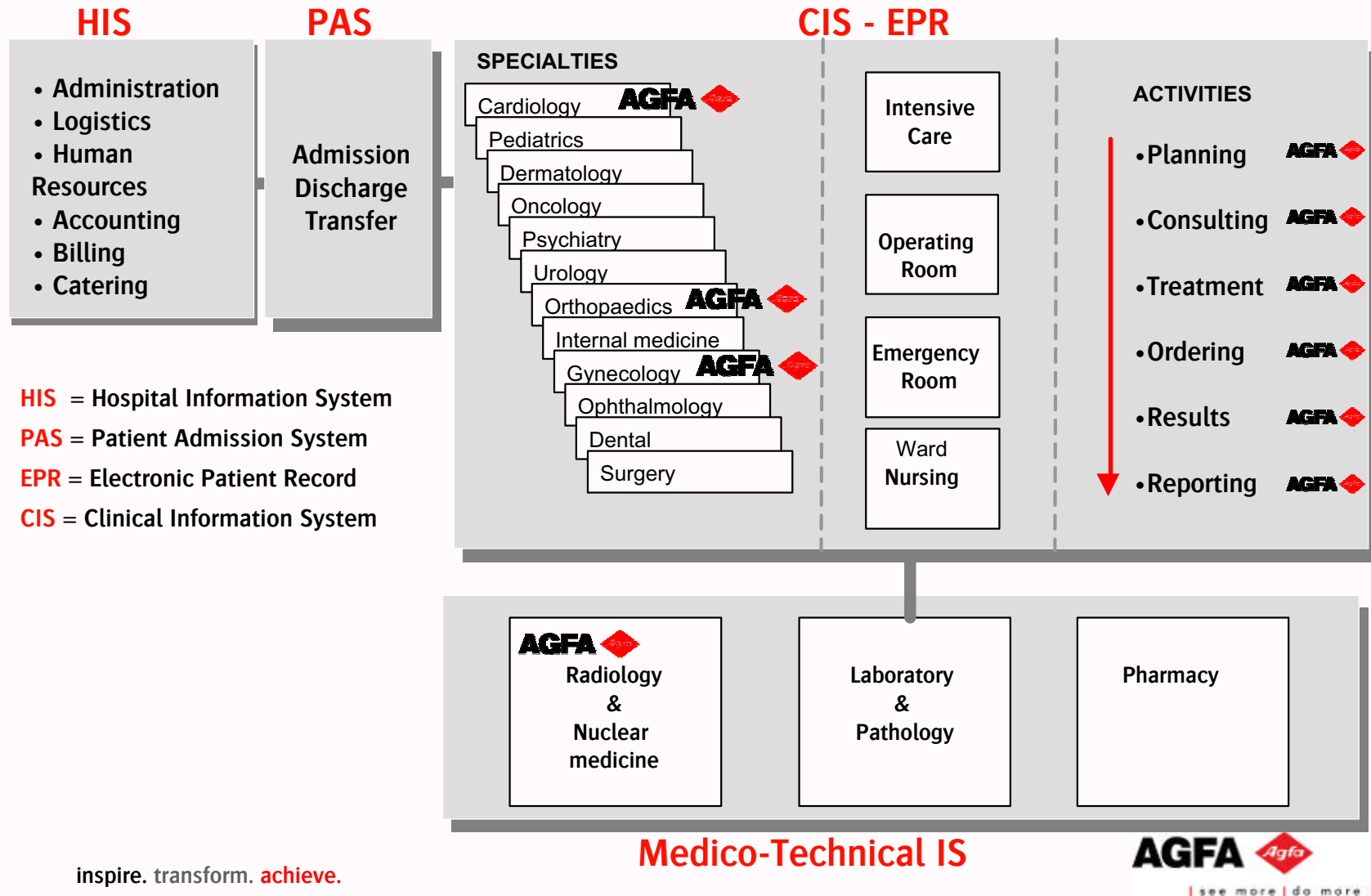




Agfa's competitive advantage

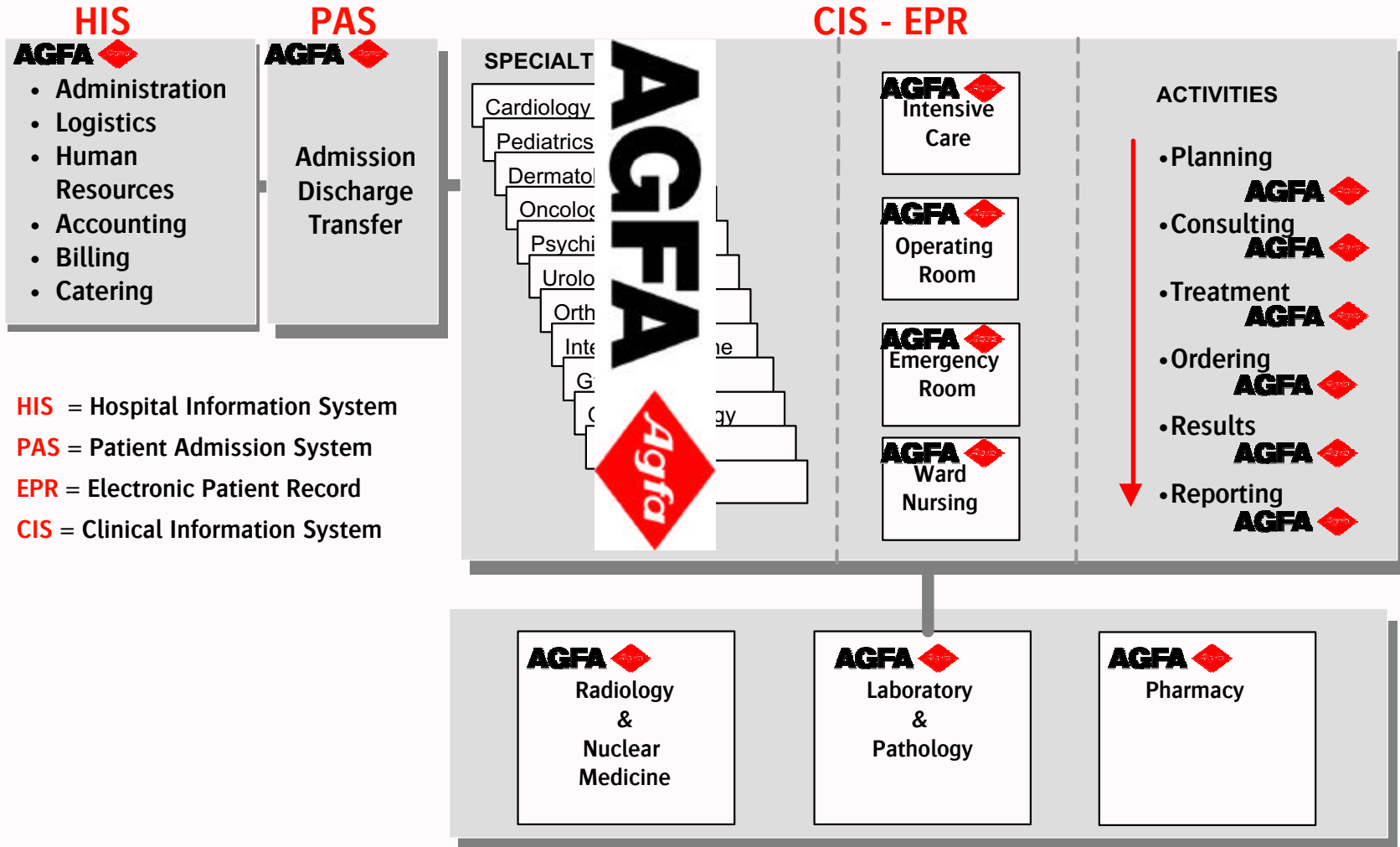
- Customer access
 - One out of two hospitals in the world is a customer
 - In-depth knowledge of clinical applications and work-flows
- Connectivity masters
- Neutral integrator
- Technology leader
 - Clinical application tools to improve diagnosis and medical care
 - Image processing
 - Treatment planning
 - Computer Aided Detection

Agfa's healthcare presence yesterday



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Agfa's healthcare presence tomorrow



HIS = Hospital Information System
PAS = Patient Admission System
EPR = Electronic Patient Record
CIS = Clinical Information System

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Medico-Technical IS

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Agfa's unique position

- Strong & truly global provider with extensive digitization expertise
- As a pioneer and global leader in PACS RIS, Agfa offers proven expertise in developing and implementing information systems in and between hospitals across the world
- Agfa has an outstanding integration track-record and connectivity know-how.
- Agfa offers the critical mass to be a stable and secure partner for its customers and their IT investments



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Luc Thijs

Departmental Solutions

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Customer access

ENTERPRISE APPROACH

- Enlightened CEO/CFO/CIO/BoM
- Integration of the 'departments' into a coherent interoperable environment
- Achieve quality of care and increased control of outcomes at enterprise level
- Administrative and Clinical impact
- Top-down decision
- Commitment to projects with a 3 to 7 year span, affecting entire organization
- Best common platform across the enterprise

DEPARTMENTAL APPROACH

- Inspired head of a department or a discipline
- Achieve quality of care and increased control of outcomes within discipline or department
- Mainly clinical impact
- Mostly bottom-up initiatives
- Commitment to projects with a 1 to 2 year span, affecting a subset of the organization
- Best in class platform with comprehensive functionality for a department or a discipline



What makes Agfa truly unique

- Recognized by customers and competitors as leading system's integrator – **one out of two PACS installations worldwide utilizes Agfa technology to 'connect'**
-
- 1990 – Matrix: connectivity to modalities for printing
 - 2000 – Mitra: connectivity to modalities, PACS, RIS & HIS
 - 2001 – Quadrat: connectivity to above plus ...
 - Laboratory information systems (LIS)
 - Billing, authentication, scheduling systems
 - Dictation systems, Document archiving systems



Connectivity & Integration

- Reduces **risk for errors** and **repetition** at the level of data entry
- Allows for **comprehensive view of all patient data**, no matter when, where and how they were generated or stored
- Allows for **simultaneous access to new information** in different locations, promptly upon its generation
- Allows for **automated generation of exception warnings**, e.g. drug allergies, and other **decision support information** across different platforms
- Facilitates **tracking of patients and allows for better scheduling** across the Enterprise workflow, potentially reducing lengths of stay
- Allows for **intelligent mining** of interdisciplinary data to understand effectiveness of treatment across larger populations
- Allows for better **management transparency & control** at activity level, e.g. productivity measurements, capture of all billing
- Enables **Continuous Quality Improvement** programs and **Patient Safety** programs

Connectivity & Integration

Agfa Systems	Connect to	Type of interface
<ul style="list-style-type: none"> ● Imagers 	<ul style="list-style-type: none"> ● Diagnostic Modalities (CT, MR, NM, PET, US, R&F, ...) 	<ul style="list-style-type: none"> ● Analogue / Digital ● Dicom / IHE
<ul style="list-style-type: none"> ● Picture Archiving & Communication Systems (PACS) 	<ul style="list-style-type: none"> ● Diagnostic Modalities ● Radiology Information Systems 	<ul style="list-style-type: none"> ● Dicom / IHE ● HL7 /IHE
<ul style="list-style-type: none"> ● Radiology Information Systems (RIS) ● Electronic Patient Record (EPR) 	<ul style="list-style-type: none"> ● Diagnostic modalities (... EKG, Hemo) ● PACS ● Hospital Information Systems (HIS) ● Patient Administration Systems (PAS) ● Laboratory Information Systems (LIS) ● Scheduling Systems ● Billing Systems ● Authentication Systems ● Dictation Systems ● Voice Recognition Systems ● Film Archiving, Document Archiving ● Other Clinical Information Systems (CIS) 	<ul style="list-style-type: none"> ● Dicom / IHE / proprietary ● Dicom / IHE ● HL7 / proprietary ● HL7 / proprietary ● HL7 / proprietary ● HL7 / proprietary ● HL7 ● LDAP ● HL7 ● HL7 ● HL7 / Proprietary ● HL7



Portfolio: New

For better market coverage

- Entry-level PACS-RIS solutions > targeting smaller hospitals (M3) and imaging centers (M4)
- Multi-site PACS-RIS solutions > targeting Integrated Delivery Networks (IDN's) and the trend to hospital consolidations

Extensions beyond radiology

- Integrated cardiology solution with planning, reporting and image management functionality
- Additional functionality on orthopedic workstation
- Mammography workstation



Portfolio: Enhancements

Computed Radiography (CR)


- Renewal of the entire CR portfolio > higher throughput, enhanced image quality, new applications (extremities, radiotherapy, ...)

Hardcopy Imagers

- Renewal of the hardcopy printer portfolio > centralized and decentralized dry network printing

PACS - RIS

- New releases > more applications, enhanced web technology > enablers of a better workflow



Portfolio: Pipeline

Computed Radiography

- New detector technology based on 'Needle-IP' > alternative to DR at different price-point

Imaging Technologies

- MUSICA 2 image processing
- Virtual colonoscopy
- Computer Assisted Reading of nodules in the lungs and polyps in the colon
- Orthopedic measurements – automated atlas based comparison



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Bob Pryor

North America

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