SIEMENS

VISION
MEDICAL TECHNOLOGIES

CADVision Acquisition by Siemens
Critical success factors

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Contents

Computer Aided Detection (CAD) Market Overview

- Application of pattern recognition software that identifies suspicious features on clinical image
- Brings them to the attention of the radiologist
- The radiologist reviews the exam, then re-evaluates the CAD-marked areas of concern before issuing the final report
- Market Background on mid 1990's:
  - 25 % of cancers are missed during screening process
  - Uncertainty around detected lesions, leading to expensive additional reviews and unnecessary biopsies
  - Much higher cost of treating missed cancers at a later stage
- The market has gained momentum since 1998 by FDA approval of R2 system.
- The first application was screening mammography by general X-ray
- US reimbursement policies (Medicare/Medicaid) strongly encourage the use of CAD

CAD Market (Cont.)

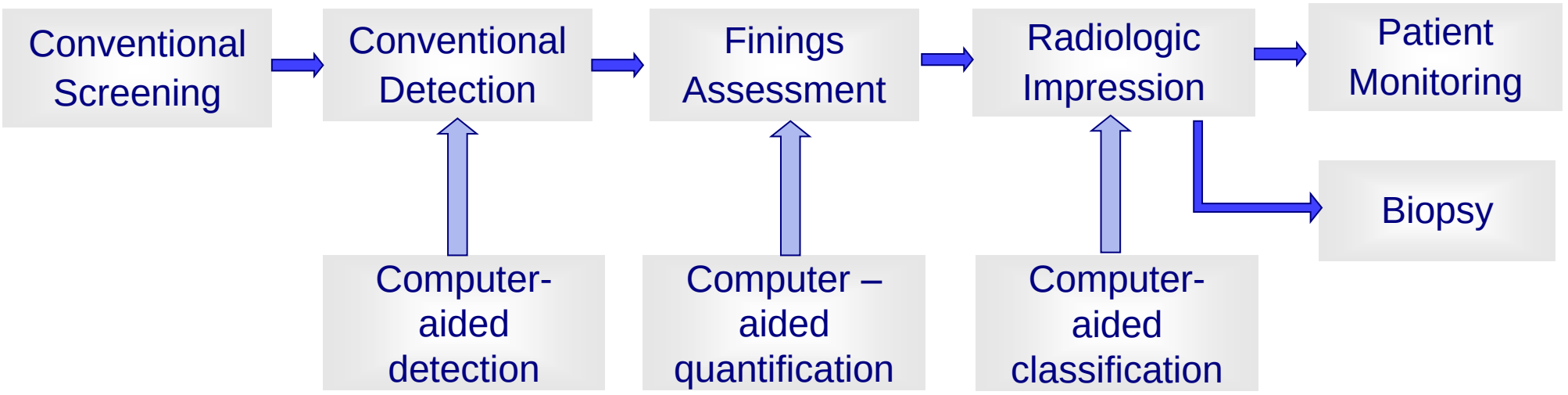
- CAD in the literature found to be reliable support for the radiologist's review
- Increases breast cancers detected by 20% (vs. manual reading)
- CAD consider to be fast, consistent and low variable cost
- Future CAD applications for various diagnostic applications using different modalities such as:
  - Mammography, general oncology (lung, colon), cardiovascular, neurological and musculoskeletal
  - X-ray, CT, MR and Ultrasound.
- The market can be described to be highly specific, dynamic and competitive with substantial growth potential
- CAD Market Expected to Reach USD 1.47 Billion Globally in 2020

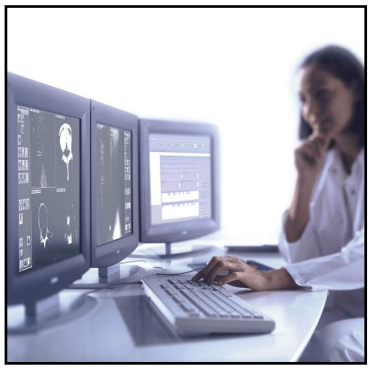
CADVision Medical Technologies Overview

- Founded in 1994 by Profs. Isaac Leichter and Philippe Bamburger of the Jerusalem College of Technology
- Offers a state-of-the-art CAD systems
- Specializing in developing intelligent Computer Aided Diagnosis (CAD) technologies to provide assistance to radiologists in detecting and diagnosis of breast cancer in mammography images
- Hi-Tech company operating in Jerusalem, Israel, employing 15 employees
- Acquired by Skaufoss (Norwegian VC) in 2000
- 3 patents issued, 3 pendding
- 3 peer reviewed papers at known journals
- 40+ scientific publications in major scientific journals, of which several presented at RSNA / ECR conferences

Radiology's workflow and CAD support

Conventional process & CAD Support





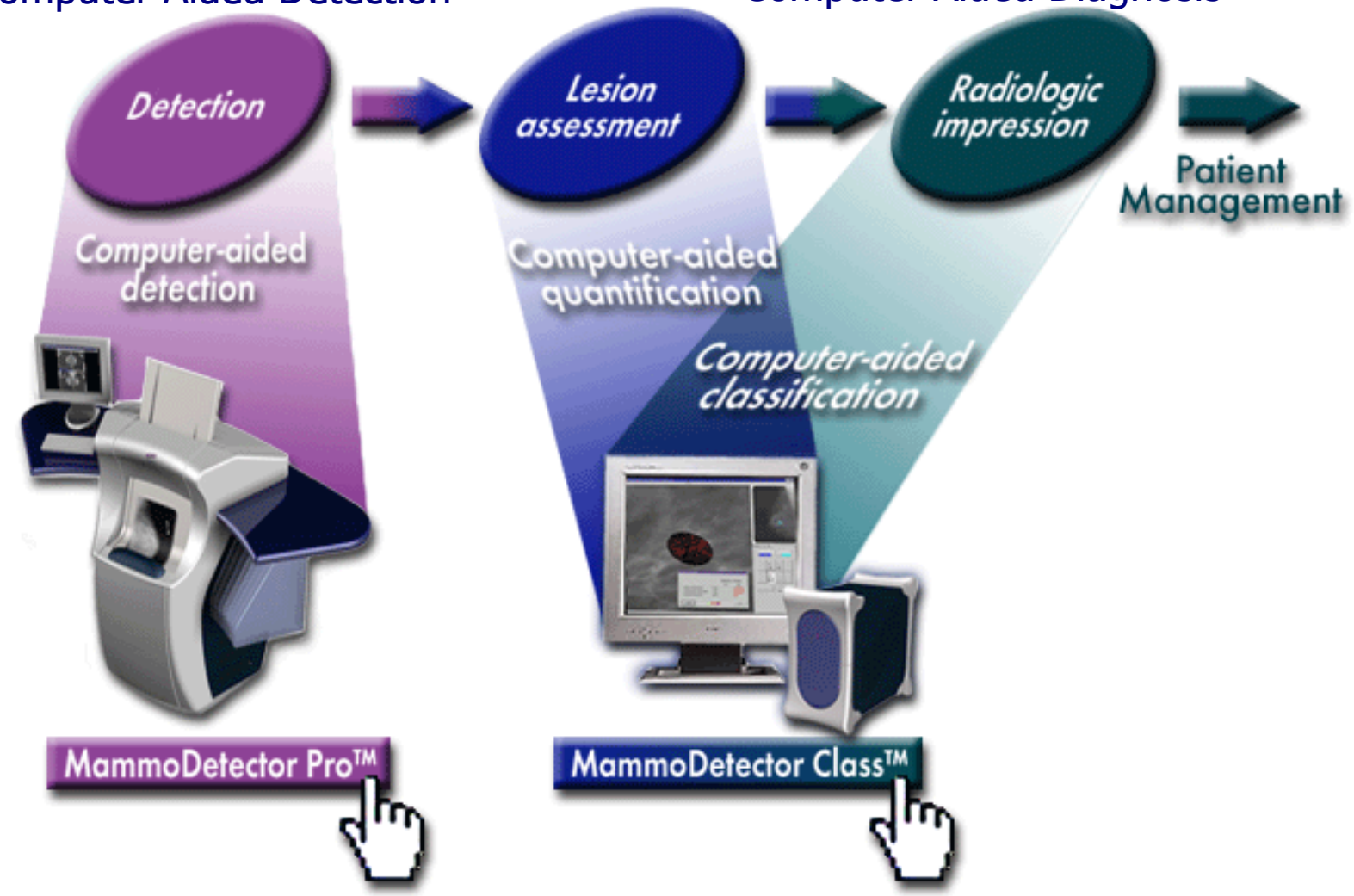
CADVision total solution

“First-Generation”

Computer Aided Detection

“Next-Generation” -

Computer Aided Diagnosis

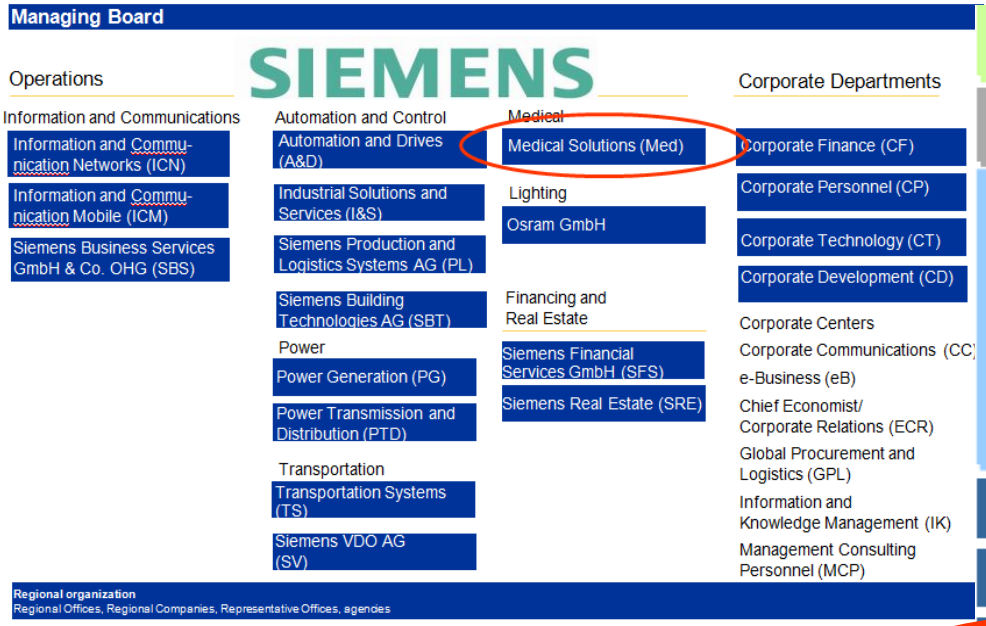


CADVision unique solution

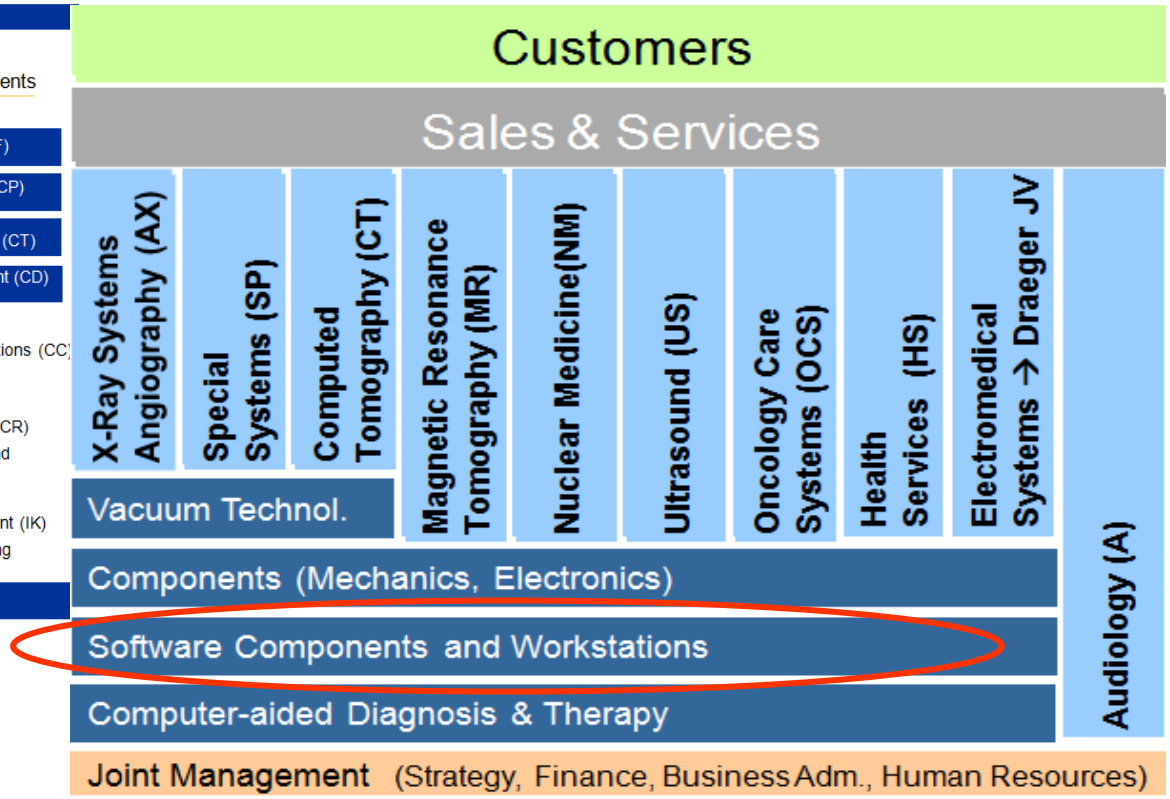
- CADVision was the first to submit FDA request for **Computer-Aided Diagnosis (CAD)**
- Pattern recognition software analyses a radiographic finding to estimate the likelihood that the feature represents a specific disease process (e.g. benign vs. malignant)
- Assists in classification of suspicious lesions
- High uncertainty around interpretation of lesions, leading to high level of unnecessary biopsies (4 out of 5)
- Reliable support for the radiologist's assesment and intrepetation
- Taking CAD bbeyond traditional CAD of detection abnormalities, but also classify the finding according to their level of malignancy

Siemens Overview

Siemens AG

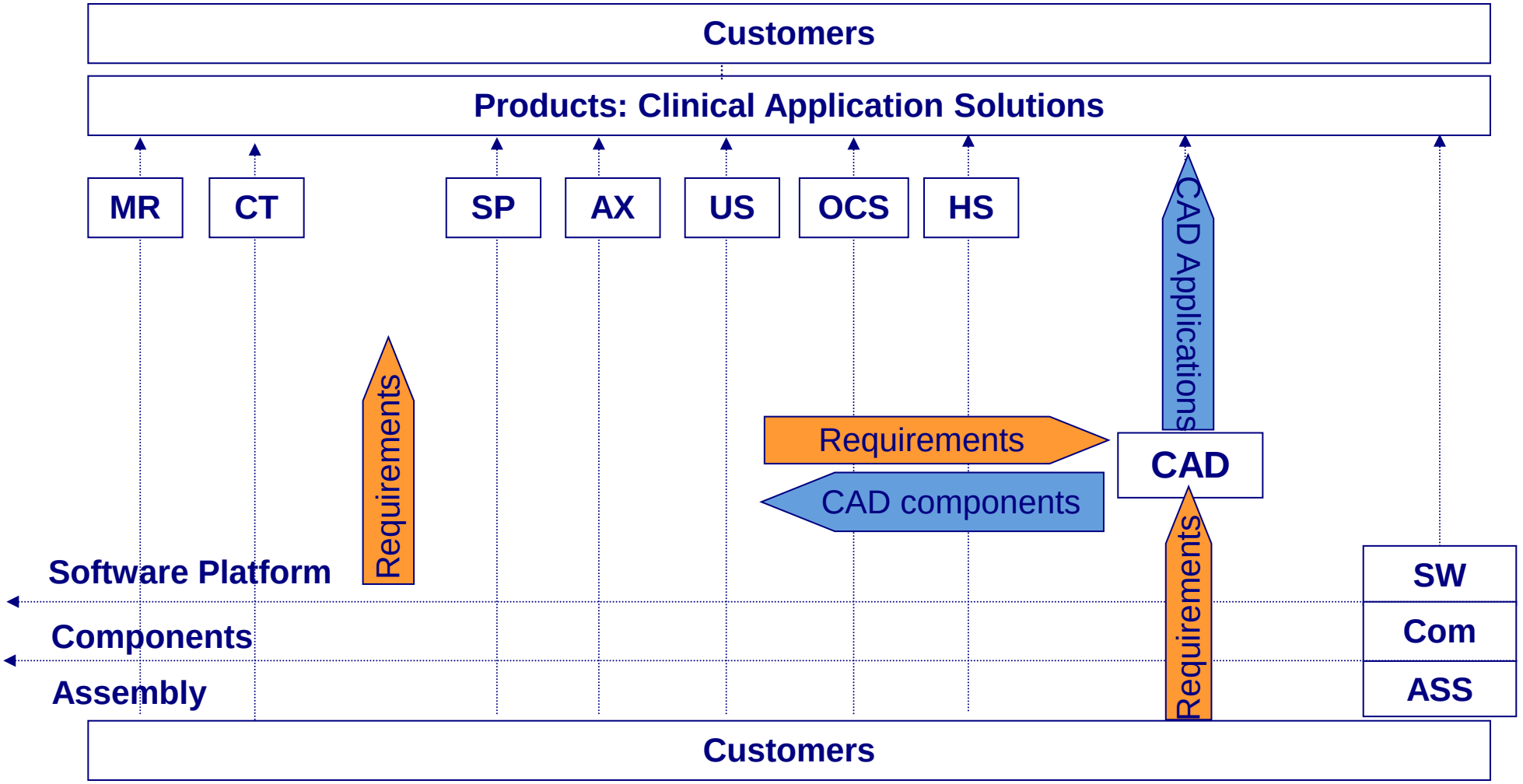


Siemens Medical Solutions



Note: CAD Division since 2001

CAD Solutions for all Modalities



Siemens Strategy for CAD

- Siemens main objective to sustainable #1 position in the medical device market
- Implement a sustainable CAD business strategy to become a dominant CAD player
- Complete CAD solution for all modalities and disease
- Go beyond traditional CAD => Built on three core competencies:
  - Unified CAD platform
  - Protected IP with freedom to operate
  - Integration of licensed algorithms or those from R&D partners
- Understanding Clinical Need: Disease Orientation and fulfill the needs
- Support the entire physician workflow
- Bring all relevant data to aid in clinical decision making
- Compete FDA compliant and integrate them into Siemens' solutions
- Business M&A's for bringing CAD Solutions to product

Siemens CAD Products mapping

Disease	CAD Application	Research	Product WIP	Product FDA	M&A
Breast	Mammography CAD				✓
	Breast MR		✓		
	Breast Ultrasound		✓		
Lung	Lung CT CAD			✓	
	Lung DR CAD				✓
Cardiac	CAD Diagnostic		✓		✓
	CVD Therapy	✓			
Colon	Colon CT CAD			✓	
Neuro	PET-CT-SPECT-MR Cancer follow -up	✓			
Onco Therapy	Overall	✓			
Multi-modality	Overall	✓			

The acquisition and establishment of SIEMENS Siemens Computer Aided Diagnosis Ltd.

Siemens Medical Solutions announced today that it has acquired CADVision Medical Technologies of Jerusalem

"This acquisition continues Siemens' focus on offering comprehensive healthcare solutions to our customers," said Hermann Requardt, Ph.D., executive vice president of Siemens Medical Solutions. "CADVision offers technologies that will further the development of our CAD product portfolio."
Siemens is in the process of developing CAD technologies for several imaging applications across multiple modalities.

Globes 14/7/2004

Strategy Analysis

Siemens

- Sustainable #1 position in the medical device market
- Implement a sustainable CAD business strategy to become a dominant CAD player
- Complete CAD solution for all modalities and diseases
- Go beyond traditional CAD

CADVision

- CADVision's strategy centers around three major activities:
  - completing FDA certification of the company's products
  - initiating sales and marketing activities
  - attracting partnerships with mammography systems manufacturers for the product marketing and the ultimate sale of the company
- Short analysis of the CAD market showed:
  - Other compatitors are either too big or have already been merged into larger companies
  - CADVision is the remaining "pure play" technology leader
  - CADVision is attractive acquisition target

Start with Strategy and find the mutual benefits

Long deep due diligence

- M&A team was assigned by Siemens with members from Germany & US HQ, covering financial, R&D and QA aspects
- Started on November 2003 at the RSNA in Chicago
- Ended on June 2004 in 100% equity acquisition
- Long Due Diligence process prior to investment,

includes the following activates:

- Interviews and multiple meetings with the Israeli team including R&D, Regulation, QA, Legal and accounting
- References
- Consult with experts (clinical, regulatory and
- Business Plan and forecast
- Demand high level of commitment by the Israeli team, and take responsibility
- High level of commitment by HQ

Mutual commitment of both management and teams

Joint plan with clear objectives and goals

- The plan derived from Siemens CAD HQ to subdivisions
- The overall objective to “Implement a sustainable CAD business strategy to become a dominant CAD player in the market”
- CAD multi-year plan with products timeline and milestones with the goal to release all products on Siemens platforms
- Plan for each CAD group at each location:
  - Multi-year plan and timeline
  - Annually plan with objectives associated with budget
  - Incentive plan for meeting milestones for management and senior employees

Complete long-term plan with clear objectives and goals

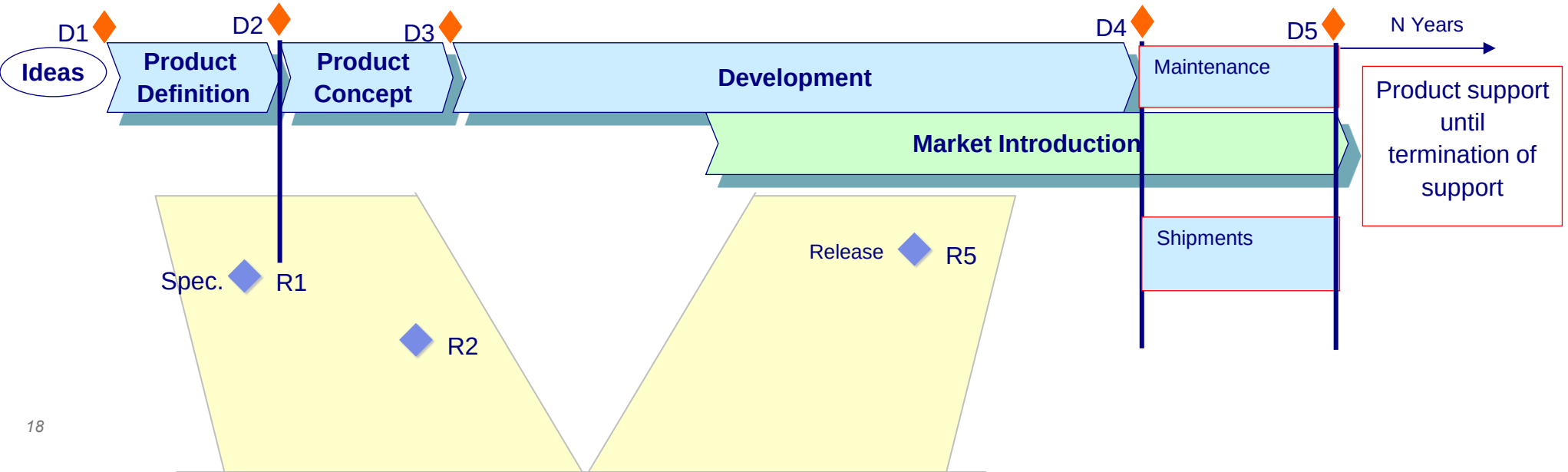
Management and teams competence

- Organization chart and reporting system with clear interfaces (dotted and solid line) between Malvern USA, Erlangen Germany, Jerusalem Israel and Bangalore India
- Clear responsibilities of management and teams at each location
- Contrary to most acquisitions, Siemens decision to keep the management and TMT
- To meet the desired plan, 22 new employees had been recruited within 6 months from acquisition including one senior CFO (from 15 headcounts to 37)
- A unique set of skills and relationships to be shared between and within the teams

Management and professional staff competence

Work Procedures and tight monitoring & control

- Actively involvement and close collaboration between the teams:
  - Weekly calls
  - Periodic meetings either in US or IL
  - Share thoughts and knowledge
  - Communication and information sharing and exchange
  - Annually management review meeting
  - Annually incentive meeting (round table)
  - Establishing new/adjusted procedures within the teams (as needed)
- For example the R&D control at Siemens Medical Solution



Work Procedures (Cont.)

- Initially CADVision was supposed to comply with the 'V' model used by Siemens Medical Solution
- Siemens 'V' model suitable to enterprise organization more than small business units like the local team of CADVision
- The request for adoption of the model 'as is' was 'mission impossible'
- These differences between the Siemens QA system and CADVision QA yield new R&D control procedure
- With the same spirit of the 'V' model, the new procedure was called 'pre D' (pre design'), while had the same steps of the 'V' model with much less QA obligations
- These 'pre D' type of procedures have been used mainly by research projects
- Thus, subject to few improvements CADVision QA system was comply with Siemens QA system

Adaptive work procedures and tight monitoring & control

Success factors in acquisition

(1) Start with strategy and find the mutual benefits

(2) Assign M&A team with available resources and plan

(3) Mutual commitment of both management and teams

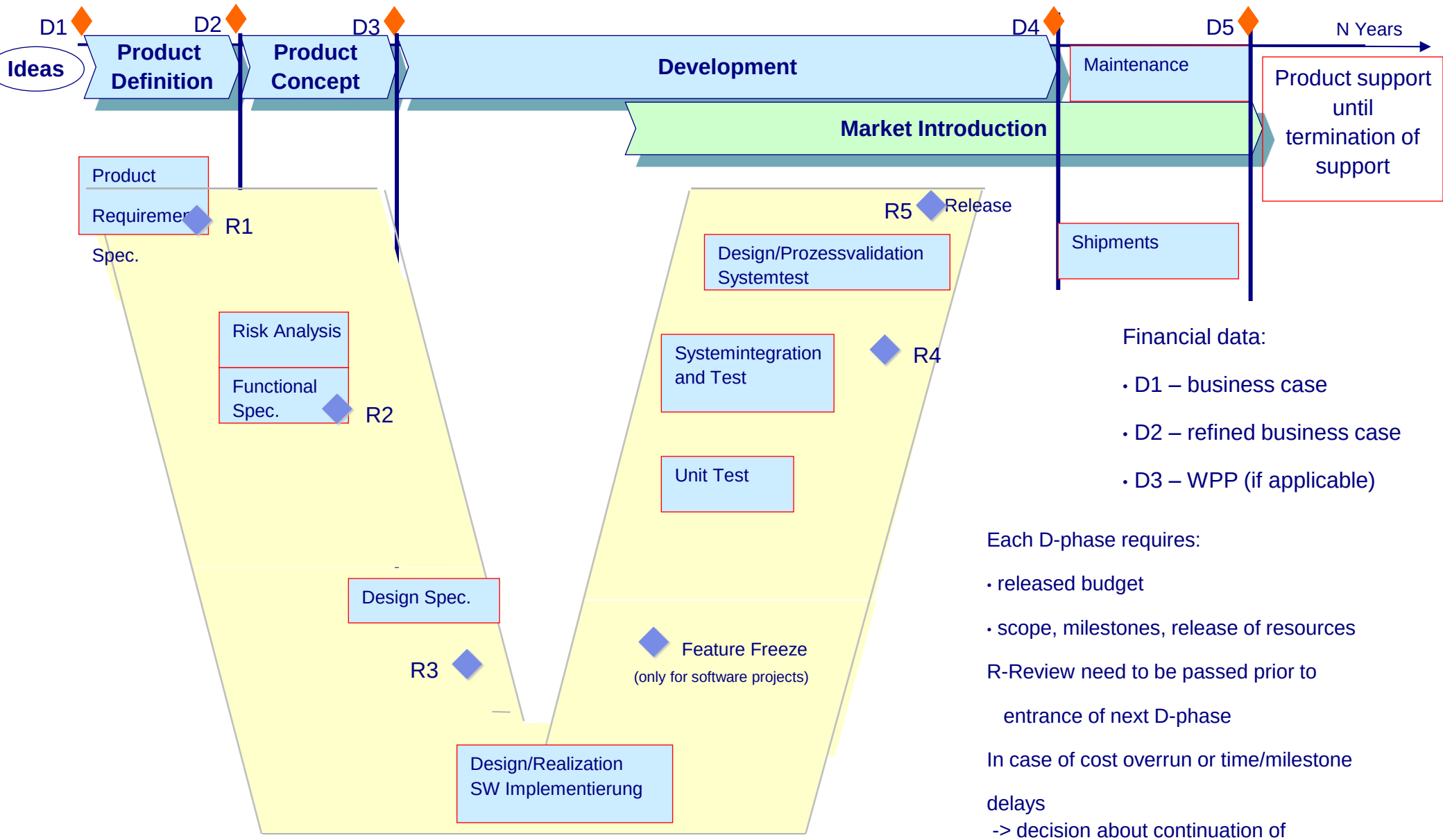
(4) Complete long-term plan with clear objectives and goals

(5) Management and professional staff competence

(6) Communication and information sharing and exchange

(7) Adaptive work procedures and tight monitoring & control

Appendix: Product Lifecycle at Med



Financial data:

- D1 – business case
- D2 – refined business case
- D3 – WPP (if applicable)

Each D-phase requires:

- released budget
- scope, milestones, release of resources

R-Review need to be passed prior to entrance of next D-phase

In case of cost overrun or time/milestone delays
-> decision about continuation of project and/or additional budget