HIMSS 2009

CHICAGO, IL APRIL 6, 2009

EMERGING OPPORTUNITIES IN CHINA H.I.T.

HIMSS 2009

THE DORENFEST GROUP

AGENDA

- ABOUT THE DORENFEST GROUP AND ITS CHINA BUSINESS OPERATION
- THE CURRENT STATE AND FUTURE DIRECTION OF HEALTHCARE IN CHINA
- USING THE H.I.T. EXPERIENCE OF OTHER COUNTRIES TO BETTER UNDERSTAND H.I.T. IN CHINA
- THE CURRENT STATUS AND FUTURE DIRECTION OF H.I.T. IN CHINA
- THE CITY OF SHENZHEN IS AN EXAMPLE OF REGIONAL HEALTH NETWORKS IN CHINA
- OPPORTUNITIES AND CHALLENGES FOR WESTERN COMPANIES IN THE CHINA H.I.T. MARKET
- DISCUSSION/Q&A

THE DORENFEST GROUP

- HEALTHCARE CONSULTING AND INVESTMENT FOCUS.
- OFFER HEALTHCARE IMPROVEMENT SERVICES TO SUPPORT A MORE POSITIVE WORLD FUTURE
- HELP HEALTHCARE ORGANIZATIONS TO IMPROVE HEALTHCARE SERVICES
 WHILE REDUCING COSTS BY IMPROVING WORK PROCESSES, MANAGEMENT
 SYSTEMS, SERVICES TO PATIENTS, AND QUALITY OF MEDICAL CARE
- IN 2006 THE DORENFEST GROUP FORMED THE DORENFEST CHINA HEALTHCARE GROUP, BASED IN SHANGHAI, TO BRING OUR SKILL, TECHNOLOGY, AND CAPITAL TO CHINA IN A TWO-PHASE PROGRAM
- WE ARE NOW OPERATING IN PHASE 1 OF THIS PROGRAM, OFFERING A VARIETY OF CONSULTING, TRAINING, AND EDUCATION SERVICES TO THE CHINA HEALTHCARE SYSTEM
- WE EXPECT TO ENTER PHASE 2 OF OUR ACTIVITIES IN CHINA IN 2010 WHEN WE WILL BEGIN TO MAKE INVESTMENTS IN WELL-DEFINED, GOOD BUSINESS PROJECTS, IN PARTNERSHIP WITH CHINESE HEALTH BUREAUS AND HOSPITALS

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DORENFEST PRE-ENTRY INVESTIGATION OF HEALTHCARE IN CHINA

- 1. IN 2005 AND THE SPRING OF 2006, WE VISITED 17 CITIES IN CHINA
- 2. VISITED WITH HUNDREDS OF LEADERS IN THE HEALTHCARE INDUSTRY IN CHINA TO LEARN ABOUT HEALTHCARE REFORM IN CHINA ITS PROGRESS, ITS PROBLEMS, AND ITS NEXT STEPS
- VISITED WITH OVER 100 HOSPITALS TO GAIN AN UNDERSTANDING OF HOSPITAL OPERATIONS IN CHINA, THEIR CURRENT STATUS, AND OPPORTUNITIES FOR IMPROVEMENTS
- 4. VISITED WITH PROVINCIAL AND CITY HEALTH BUREAUS TO LEARN WHAT THEIR GOALS ARE FOR THEIR PROVINCIAL AND CITY HOSPITALS
- 5. VISITED PRIVATE HOSPITALS TO OBSERVE THE RESULTS OF HEALTHCARE REFORM PRIVATIZATION EFFORTS IN CHINA
- 6. VISITED WITH COMPANIES SELLING PRODUCTS AND SERVICES TO THE HEALTHCARE INDUSTRY IN CHINA AND WHAT THEY BELIEVE ARE APPROPRIATE NEXT STEPS FOR REFORMING THE CHINESE HEALTHCARE SYSTEM
- 7. EVALUATED A GROUP OF HOSPITAL MANAGEMENT AND OWNERSHIP OPPORTUNITIES THAT WERE PRESENTED TO THE DORENFEST GROUP TO BECOME MORE FAMILIAR WITH THE ALTERNATIVE WAYS TO PROCEED IN BUILDING A "MODEL HOSPITAL" IN CHINA
- 8. DEVELOPED A STRATEGY FOR BRINGING DORENFEST SKILL AND EXPERIENCE TO CHINA

DORENFEST CHINA PHASE 1 BUSINESS OPERATIONS

- HOSPITAL AND HEALTH BUREAU MANAGEMENT CONSULTING
 - OPERATIONS IMPROVEMENT AND CHANGE MANAGEMENT
 - STRATEGIC PLANNING FOR NEW I.T. SYSTEMS
 - I.T. SYSTEM SELECTION
 - I.T. SYSTEM IMPLEMENTATION
 - WORK PROCESS IMPROVEMENT
 - MANAGEMENT TRAINING
 - INTERIM I.T. MANAGEMENT SERVICES
 - OTHER SERVICES
- GENERAL MANAGEMENT CONSULTING FOR HEALTHCARE COMPANIES
 - CHINA ENTRY STRATEGIES
 - MARKET ANALYSES
 - PRODUCT STRATEGIES
 - MARKET RESEARCH
 - IMPLEMENTATION CONSULTING
- EDUCATIONAL PROGRAMS FOR HOSPITAL AND HEALTHCARE BUREAU LEADERS

SOME RECENT CLIENT EXAMPLES IN CHINA

- EXAMPLES OF HEALTH BUREAU CLIENTS
 - SHENZHEN
 - CHONGQING
- EXAMPLES OF HOSPITAL CLIENTS
 - SHANGHAI CHANGNING MATERNITY AND INFANT HEALTH INSTITUTE
 - PEKING UNIVERSITY MEDICAL COLLEGE #3 HOSPITAL
 - RIZHAO CITY PEOPLE'S HOSPITAL
- EXAMPLES OF HELPING CLIENTS FROM OTHER LOCATIONS TO BRING THEIR SKILLS TO MAINLAND CHINA
 - HONG KONG HOSPITAL AUTHORITY
 - MICROSOFT

DORENFEST EDUCATION IN CHINA – TONGREN HOSPITAL, BEIJING 2005



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DORENFEST EDUCATION IN CHINA – ZHEJIANG MEDICAL ASSOCIATION 2009

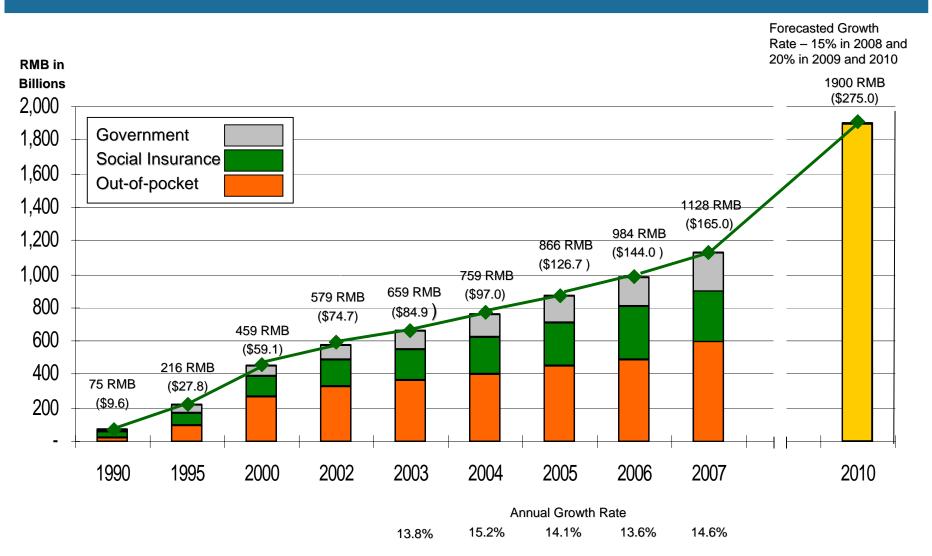


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THE CURRENT STATE AND FUTURE DIRECTION OF HEALTHCARE IN CHINA

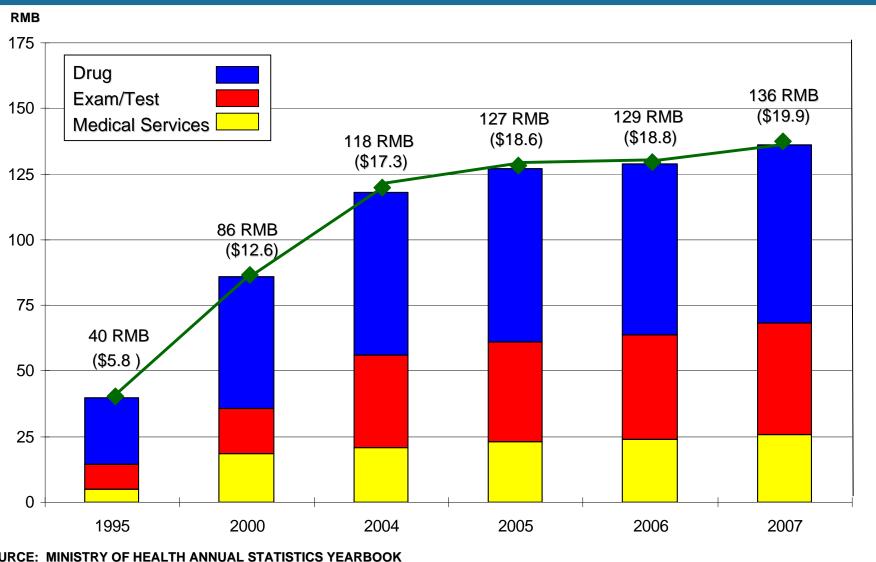
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HEALTHCARE COST TRENDS AND 2010 FORECAST (\$ AND RMB IN BILLIONS)



SOURCE: MINISTRY OF HEALTH ANNUAL STATISTICS YEARBOOK

AVERAGE MEDICAL EXPENSE PER OUTPATIENT HOSPITAL VISIT (\$ AND RMB)



SOURCE: MINISTRY OF HEALTH ANNUAL STATISTICS YEARBOOK

PKU3 HOSPITAL OUTPATIENT CLINIC REGISTRATION AT 7:00 AM



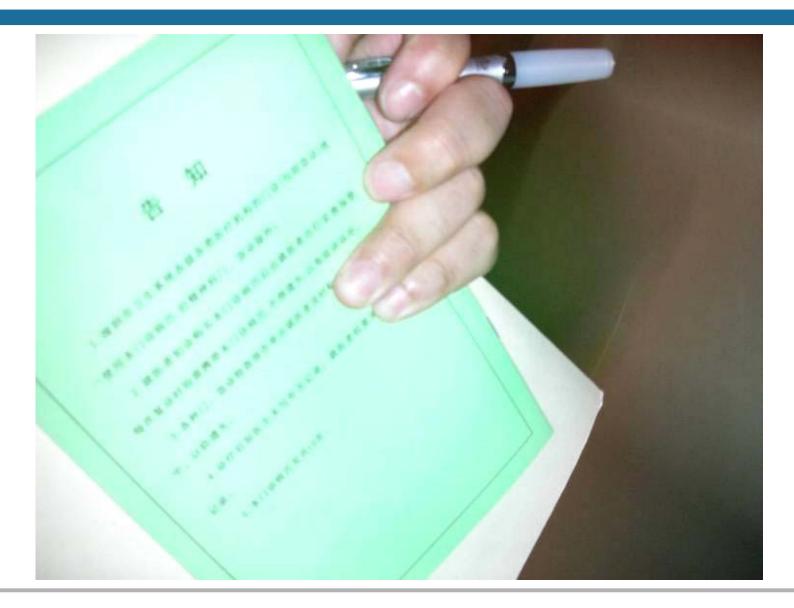
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PROCESSING THE REGISTRATION PAYMENT FOR CLINIC VISIT



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THE OUTPATIENT HEALTH RECORD WHICH PATIENT KEEPS



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CUSTOMER SERVICE IS A LOWER PRIORITY

1. LONG WAIT TIMES

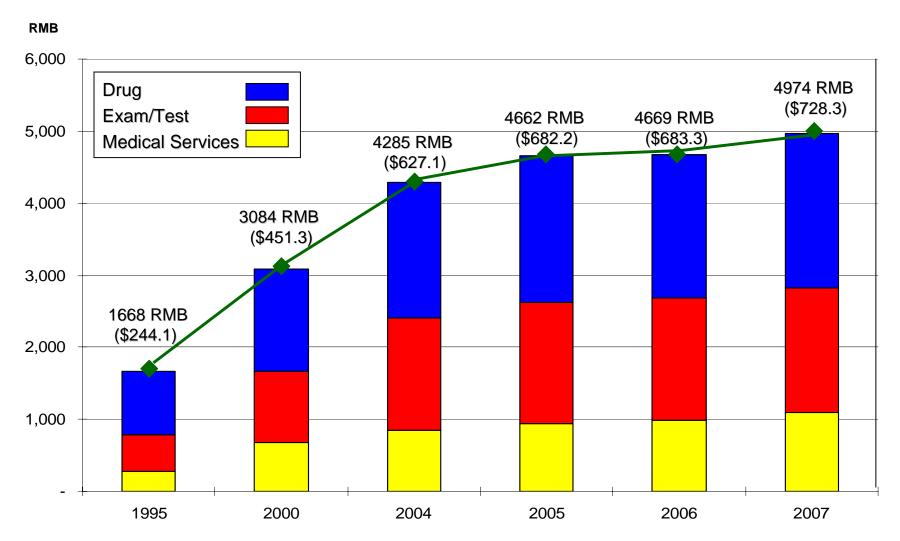
2. VERY FEW ADVANCE APPOINTMENT SYSTEMS

3. AVERAGE TIME OF PHYSICIAN VISIT IS 2-5 MINUTES

4. COLLECTING MONEY AND MAKING PROFITS ARE A MAJOR FOCUS

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AVERAGE MEDICAL EXPENSE PER INPATIENT HOSPITAL STAY (\$ AND RMB)



SOURCE: MINISTRY OF HEALTH ANNUAL STATISTICS YEARBOOK

THE CURRENT STATUS OF HEALTHCARE REFORM IN CHINA

- AFTER 4 YEARS, HEALTHCARE REFORM WAS APPROVED. SOME DETAILS STILL BEING FINALIZED. THE FOCUS WILL BE:
 - IMPROVE HEALTH INSURANCE FOR URBAN AND RURAL RESIDENTS.
 - IMPROVE DRUG DISTRIBUTION SYSTEM
 - STRENGTHEN INFRASTRUCTURE TO PROVIDE BETTER HEALTHCARE IN RURAL AREAS
 - MAKE ACCESS TO HEALTH SERVICES MORE EQUAL
 - WORK ON DEVELOPING THE ELECTRONIC HEALTH RECORD.
 - MAKE PROGRESS ON A VARIETY OF PILOT PROGRAMS FOR PUBLIC HOSPITAL REFORM
 - IMPROVE QUALITY OF CARE
- THE CHINESE GOVERNMENT WILL INVEST A TOTAL OF 850 BILLION RMB DURING THE PERIOD 2009 TO 2011 IN THE ABOVE 5 AREAS

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CHALLENGES OF THE CHINESE HEALTHCARE SYSTEM

- AT THE PRESENT TIME, ALMOST 60% OF ALL HEALTHCARE COSTS ARE PAID BY PATIENTS OUT-OF-POCKET
 - LACK OF MEDICAL INSURANCE OPTIONS
 - LOW GOVERNMENT FUNDING
- ACCESS TO HEALTHCARE FOR THE POOR IS LIMITED.
- THE MIDDLE AND UPPER CLASSES ARE DISSATISFIED WITH HEALTHCARE SERVICES
- 4. THE WAY DOCTORS EARN THEIR INCOME RESULTS IN A WEAK DOCTOR-PATIENT RELATIONSHIP
- 5. DRUGS AND DIAGNOSTIC TESTS ARE TOO IMPORTANT TO THE FUNDING OF THE HEALTHCARE SYSTEM
- 6. HOSPITALS NEED TO MAKE PROFITS TO SUPPORT THEMSELVES
- 7. PRIMARY CARE IS NOW IN THE EARLY STAGES OF BEING OFFERED SEPARATELY FROM HOSPITALS THROUGH NEWLY DEVELOPED COMMUNITY CLINICS
- 8. AS THE COUNTRY CHANGES ITS HEALTHCARE SYSTEM, THE COST OF HEALTHCARE TO THE COUNTRY WILL RISE MORE RAPIDLY IN THE FUTURE

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CHINA HEALTHCARE OFFERS OPPORTUNITIES FOR FOREIGNERS

- 1. RAPID GROWTH IN HEALTHCARE SPENDING AND A DESIRE TO IMPROVE HEALTHCARE SERVICES
- 2. A DESIRE TO **MOVE TOWARD** INTERNATIONAL STANDARDS FOR SERVING THE GROWING MIDDLE CLASS AND WEALTHY POPULATION
- SKILLS MISSING IN CHINA TO ACCOMPLISH HEALTHCARE IMPROVEMENT OBJECTIVES
- 4. FOREIGN SKILLS ARE VALUED AND MANY UNIVERSITIES, HOSPITALS, AND COMPANIES ARE BRINGING THEIR SKILLS TO CHINA
- 5. WAYS TO SERVE THE EMERGING NEEDS PROFITABLY ARE STILL NOT CLEAR

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USING THE H.I.T. EXPERIENCE OF OTHER COUNTRIES TO BETTER UNDERSTAND H.I.T. IN CHINA

OPPORTUNITIES TO IMPROVE THE HEALTHCARE DELIVERY PROCESS HAVE BEEN PURSUED FOR MANY YEARS

GREAT REDUNDANCY OF INFORMATION

HIGH ERROR POTENTIAL

LACK OF TIMELINESS

HIGH COST

ORGANIZATION COMPLEXITY

U.S. HOSPITALS SOUGHT THE E.H.R. AS THE HOLY GRAIL THROUGH FOUR GENERATIONS OF I.T. SYSTEMS

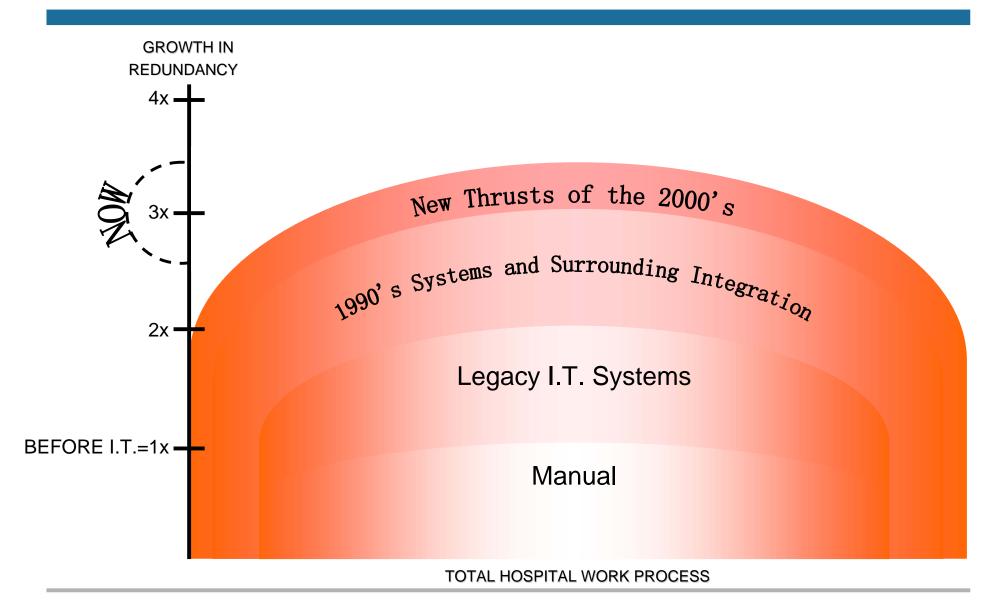
FINANCE SYSTEMS (LATE 1960S-1970s)

LIMITED CLINICAL SYSTEMS (LATE 1970s AND 1980s)

MORE ADVANCED CLINICAL SYSTEMS (1990s)

ELECTRONIC HEALTH RECORDS (2000s)

POORLY IMPLEMENTED CHANGE HAS LAYERED REDUNDANT WORK STEPS ON TOP OF ORIGINAL INEFFICIENCY



H.I.T. EVOLUTION IN THE REST OF THE WORLD

- CANADA STARTED IN THE LATE 1970s.
- EUROPE AND AUSTRALIA BEGAN IN THE EARLY 1980s.
- ASIA BEGAN IN THE 1990s
- CANADA, FRANCE, GERMANY, ENGLAND, AND AUSTRALIA ALL STARTED LATER THAN THE U.S., INVESTED LESS, AND HAVE MADE MORE PROGRESS
- HONG KONG STARTED EVEN LATER AND IS NOW AT THE STATE OF THE ART IN H.I.T.
- CHINA H.I.T. IS LIKE THE U.S. IN THE EARLY 1980s IN TERMS OF MANAGEMENT SKILL AND APPROACH. CHINA HAS THE STRONG DESIRE TO "LEAP FROG" THE REST OF THE WORLD IN H.I.T.

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THE CURRENT STATUS AND FUTURE DIRECTION OF H.I.T. IN CHINA

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THE DEVELOPMENT OF H.I.T. IN CHINA

- CHINA BEGAN TO COMPUTERIZE ITS HOSPITALS IN THE EARLY 90'S.
- CHINA MADE SLOW PROGRESS WITH INITIAL FOCUS ON FINANCIAL SYSTEMS
- 5 YEARS AGO CHINESE HOSPITALS BEGAN TO MOVE MORE AGGRESSIVELY TOWARD I.T. USE FOR CLINICAL SYSTEMS
- ALONG THE WAY, MANY SOFTWARE SOLUTIONS WERE DEVELOPED WITH SEVERAL HUNDRED SMALL SOFTWARE COMPANIES EMERGING IN CHINA
- IN 2005, CHINA SPENT LESS THAN 1% OF TOTAL HEALTHCARE COSTS ON I.T. OR ABOUT \$600 MILLION (USD)
- IN 2007, CHINA SPENT OVER \$1 BILLION (USD) ON H.I.T.
- WE PREDICT ACCELERATED GROWTH, WITH H.I.T. INVESTMENT IN CHINA RISING TO BETWEEN \$2 AND \$3 BILLION (USD) BY 2010

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H.I.T. EVOLUTION DURING DORENFEST'S PRESENCE IN CHINA

- WHEN WE FIRST CAME TO CHINA IN EARLY 2005 TO STUDY THE HEALTHCARE INDUSTRY, ATTITUDES TOWARDS H.I.T. WERE VERY CONSERVATIVE:
 - HOSPITAL MANAGEMENT NOT HAPPY WITH I.T.
 - APPLICATION SOFTWARE AVAILABLE VERY LIMITED AND THE BEST SYSTEMS WERE SELF-DEVELOPED
 - MANAGEMENT SKILLS IN I.T. LIMITED
 - HOSPITAL MANAGEMENT HESITANT TO INVEST IN MAJOR UPGRADES TO I.T. SYSTEMS
 - VERY LIMITED BUYING OF MAJOR NEW I.T. SYSTEMS IN CHINESE HOSPITALS IN EARLY 2005
- DURING THE PAST 4 YEARS, THE SITUATION HAS CHANGED
 - WHILE ISSUES ARE SIMILAR, MANY HOSPITALS MAKING OR CONSIDERING MAJOR UPGRADES TO I.T. SYSTEMS
 - BIGGER BUDGETS AVAILABLE TO MOVE TOWARD DIGITAL HOSPITALS, PHYSICIAN WORKSTATIONS, ELECTRONIC MEDICAL RECORDS, PACS, AND OTHER SYSTEMS
 - BUT WEAKNESSES IN THE BUYING PROCESS, APPLICATION SOFTWARE AVAILABLE, AND IMPLEMENTATION APPROACHES CAUSING SUBSTANTIAL DISSATISFACTION AMONG HOSPITAL LEADERS, CLINICIANS, AND OTHER USERS

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FACTORS CONTRIBUTING TO FUTURE SPENDING GROWTH IN CHINA H.I.T.

- CHINA HOSPITAL WORK PROCESSES ARE REDUNDANT, EXPENSIVE AND ERROR PRONE WITH GREAT OPPORTUNITIES FOR IMPROVEMENT WITH APPROPRIATE USE OF I.T
- 2. THE MINISTRY OF HEALTH (MOH) GUIDELINES FOR HEALTH I.T. DEVELOPMENT CALLS FOR ELECTRONIC MEDICAL RECORDS AND REGIONAL HEALTH NETWORKS TO BE IMPLEMENTED BETWEEN 2003 AND 2010 PROVIDING MUCH MOMENTUM FOR HOSPITALS AND HEALTH BUREAUS TO INVEST MORE IN I.T. NOW
- CHINESE HOSPITAL LEADERS WOULD LIKE TO TAKE A BIG LEAP FORWARD IN IMPROVING WORK PROCESSES AND IN DIGITIZING CHINESE HOSPITALS
- 4. IMPROVED USE OF INFORMATION TECHNOLOGY IS ONE OF 8 PILLARS OF SUPPORT FOR THE NEW CHINA HEALTHCARE REFORM PLAN. AREAS OF INVESTMENT GROWTH INCLUDE:
 - ELECTRONIC HEALTH RECORDS FOR PUBLIC HEALTH SERVICE
 - HOSPITAL I.T. SYSTEMS WITH A FOCUS ON HOSPITAL MANAGEMENT AND EMR
 - DATA SHARING THROUGH REGIONAL HEALTH NETWORKS
 - HEALTH INSURANCE I.T. SYSTEMS

GENERAL FACTORS IMPEDING SUCCESS IN CHINA H.I.T.

- CHINESE HOSPITALS HAVE NOT INVESTED A LOT OF RESOURCES IN I.T.
 SYSTEMS AND INFRASTRUCTURE TO GET TO THE PRESENT LEVEL OF
 ACCOMPLISHMENT. WHILE CHINA WOULD LIKE TO CONTINUE THIS LOW
 INVESTMENT APPROACH, ITS NEXT STEPS FORWARD WILL REQUIRE GREATER
 INVESTMENT
- 2. THE POOR RESULTS ACCOMPLISHED FROM PAST INVESTMENTS IN I.T. ARE CAUSING HESITATION AMONG LEADERS OF CHINESE HOSPITALS TO MAKE FUTURE INVESTMENTS IN I.T.
- 3. THERE IS CONCERN AMONG H.I.T. EXPERTS IN CHINA ABOUT THE READINESS OF H.I.T. SOFTWARE PRODUCTS, HARDWARE PLATFORMS, AND INTEGRATION TOOLS TO FACILITATE THE ACCOMPLISHMENT OF CHINA'S GOALS
- 4. INEXPERIENCE IN THE BUYING OF H.I.T. SOFTWARE PRODUCTS, LIKE OTHER COUNTRIES IN THEIR EARLY STAGES OF EVOLUTION, HAS RESULTED IN POOR BUYING DECISIONS

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GENERAL FACTORS IMPEDING SUCCESS IN CHINA H.I.T. (CONTINUED)

- 5. LIKE OTHER COUNTRIES AROUND THE WORLD, IMPLEMENTATION OF NEW I.T. SYSTEMS IN CHINA HAS OFTEN ADDED WORK INSTEAD OF REDUCING WORK AND HAS CREATED UNNECESSARILY REDUNDANT WORK PROCESSES
- 6. THE IMPLEMENTATION SKILL AND CHANGE MANAGEMENT EXPERIENCE NEEDED FOR CHINA TO TAKE THE BIG LEAP FORWARD THAT IT WOULD LIKE TO TAKE IS NOT YET AVAILABLE AT THE LEVEL REQUIRED FOR CHINA TO ACCOMPLISH ITS GOALS
- 7. SOMETIMES, HOSPITAL LEADERSHIP NOT KNOWING WHAT IT DOES NOT KNOW, IS CONTINUING TO USE POOR BUYING AND IMPLEMENTATION APPROACHES BECAUSE THEY DO NOT KNOW BETTER WAYS ARE POSSIBLE AND THERE IS A STRONG MOMENTUM TO CONTINUE WITH THESE APPROACHES

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THE COMPETITIVE ENVIRONMENT

- 1. THERE ARE HUNDREDS OF SMALL SOFTWARE VENDORS ACTIVE IN THE CHINA H.I.T. MARKET
- 2. THE MARKET SEGMENTS WITH THE MOST VENDORS ARE EMR, H.I.S., PACS, R.I.S., AND LAB
- 3. ALL H.I.T. VENDORS IN THE MARKET STARTED IN A CITY AND MOST ARE STILL OPERATING IN THAT CITY OR A SMALL REGION AROUND THE CITY. SOME H.I.T. VENDORS ARE BEGINNING TO BECOME MORE NATIONAL IN SCOPE
- 4. MANY VENDORS IN THE HIS MARKET OFFER HEAVILY CUSTOMIZED SOLUTIONS RATHER THAN STANDARD SOLUTIONS. THESE CUSTOMIZED SOLUTIONS CREATE GREATER DEPENDENCY ON THE VENDOR AND ARE MORE DIFFICULT/EXPENSIVE TO KEEP CURRENT AS VENDORS PERIODICALLY RELEASE STANDARD VERSIONS/RELEASES
- CHINESE HOSPITAL LEADERS WOULD LIKE TO SEE A NEW GENERATION OF H.I.T. SOFTWARE DEVELOPED FOR THE COUNTRY TO ASSIST IN HELPING THEM ACCOMPLISH THEIR "LEAPFROG" OBJECTIVES

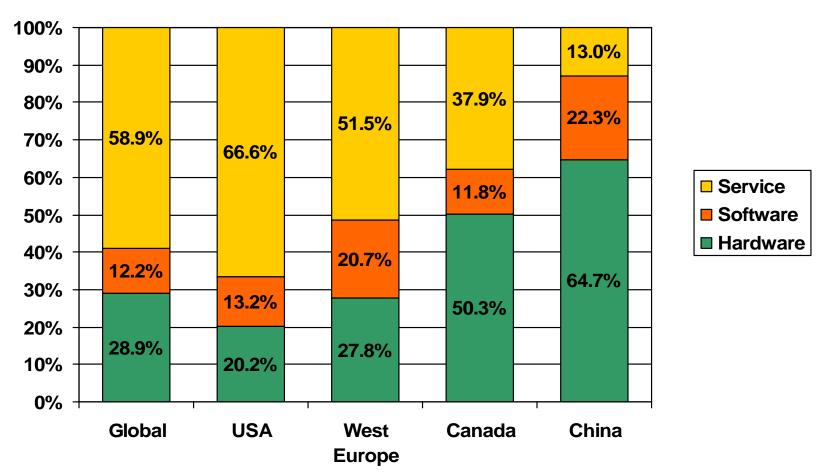
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EXPECTED EVOLUTION OF H.I.T. IN CHINA

- 1. IMPROVED BUYING AND IMPLEMENTATION OF I.T. SOFTWARE WITH MORE USER INVOLVEMENT
- 2. BETTER USE OF I.T. TO SUPPORT HOSPITAL MANAGEMENT
- 3. BETTER USE OF I.T. IN CLINICAL SERVICES
- 4. DIGITAL HOSPITALS WITH ELECTRONIC HEALTH RECORDS WILL EVOLVE WITH GREATER FREQUENCY
- 5. BETTER SYSTEMS INTEGRATION AND MORE STANDARDS TO SUPPORT I.T. PROGRESS AND THE USE OF MULTIPLE VENDORS IN THE I.T. ENVIRONMENT
- 6. REGIONAL HEALTH NETWORKS WILL EVOLVE

ALLOCATION OF H.I.T. INVESTMENT AROUND THE WORLD

2005 GLOBAL H.I.T. INVESTMENT STRUCTURE



SOURCE: CCW Research

CHINA HEALTHCARE LEADERS WANT TO "LEAPFROG" THE WORLD

- CHINESE HOSPITALS AND HEALTH BUREAUS ARE CAREFULLY CONSIDERING HOW TO BE MORE SUCCESSFUL IN TAKING NEXT STEPS FORWARD IN I.T. USE
- THERE IS A RECOGNITION THAT FOR CHINA TO ACCOMPLISH ITS OBJECTIVES IN H.I.T. REQUIRES THE FOLLOWING:
 - LEARNING QUICKLY FROM THE GLOBAL EXPERIENCE
 - OVERCOMING RESISTANCE TO CHANGE
 - KNOWING HOW TO MANAGE CHANGE
 - DOING MORE OF WHAT THE REST OF THE WORLD DID RIGHT AND LESS OF WHAT THEY DID WRONG TO AVOID MISTAKES OTHER COUNTRIES HAVE MADE AND CHINA IS STILL MAKING
 - DEVELOPING MORE EXPERTISE IN THESE AREAS OF NEED.

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THE CITY OF SHENZHEN IS AN EXAMPLE OF REGIONAL HEALTH NETWORKS IN CHINA

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SHENZHEN REGIONAL HEALTH NETWORK VISION

- SHENZHEN, A CITY OF 12 MILLION PEOPLE, SELECTED BY MINISTRY OF HEALTH IN 2004 TO BE A PILOT SITE IN DEVELOPING REGIONAL HEALTH INFORMATION NETWORKS AND DIGITAL HOSPITALS
- THE GOALS OF THE RHN ARE TO ACCOMPLISH THE FOLLOWING::
 - PROVIDING BETTER TOOLS AND INFORMATION TO IMPROVE HEALTH MANAGEMENT IN THE CITY
 - SHARING HEALTH INFORMATION THROUGHOUT THE CITY
 - REDUCING "ISLANDS OF INFORMATION" THROUGHOUT THE CITY
 - PROMOTING AND ADOPTING TECHNOLOGY STANDARDS THAT WILL FACILITATE INTEROPERABILITY OF HEALTH INFORMATION
- THE PLAN IS TO DEVELOP AN INFORMATION NETWORK THAT CAN BE ACCESSED AND USED BY HEALTHCARE PROVIDERS THROUGHOUT THE CITY OF SHENZHEN

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SHENZHEN REGIONAL HEALTH NETWORK VISION (CONTINUED)

- THE RHN WILL CONSIST OF "ONE CENTER, THREE PLATFORMS, AND NINE SYSTEMS"
- ONE CENTER REFERS TO SHENZHEN HEALTHCARE DATA CENTER
- THREE PLATFORMS REFERS TO:
 - DATA SHARING AND EXCHANGE PLATFORM
 - HEALTHCARE MACRO MANAGEMENT AND DECISION-MAKING SUPPORT PLATFORM
 - HEALTHCARE I.T. PUBLICATION AND VALUE-ADDED SERVICE PLATFORM
- NINE SYSTEMS REFERS TO THE I.T. SYSTEMS FOR THE FOLLOWING :
 - HOSPITAL OPERATIONS
 - PUBLIC HEALTH EMERGENCY RESPONSE
 - DISEASE PREVENTION AND CONTROL
 - HEALTHCARE SUPERVISION AND LAW ENFORCEMENT
 - EMERGENCY CARE
 - MATERNAL AND CHILD HEALTH
 - COMMUNITY HEALTHCARE
 - HEALTH EDUCATION
 - OTHER SYSTEMS FOR HEALTHCARE OPERATIONS

SHENZHEN REGIONAL HEALTH NETWORK CURRENT STATUS

- CITY LEADERS WOULD LIKE TO SPEED-UP THE DEVELOPMENT OF THE REGIONAL HEALTH NETWORK IN 2009
- HEALTH DATA CENTER IS UNDER CONSTRUCTION
- VPN (VIRTUAL PRIVATE NETWORK) SYSTEM IS BEING DEVELOPED
- BASIC STANDARDS FOR INFORMATION SYSTEMS ARE NOW UNDER DEVELOPMENT
- A EXCHANGE SERVER PLATFORM PROTOTYPE TO SHARE DATA AMONG HOSPITALS IS BEING DEVELOPED
- PROGRESS HAS BEEN MADE IN THE DEVELOPMENT OF THE COMMUNITY HEALTH SERVICE INFORMATION SYSTEM
- A PILOT PROGRAM TO BUILD A DIGITAL HOSPITAL IS IN ITS EARLY STAGE OF DEVELOPMENT

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SHENZHEN REGIONAL HEALTH NETWORK CURRENT CHALLENGES

- A STRONGER CITY GOVERNANCE STRUCTURE IS NEEDED TO OVERSEE THE ENTIRE REGIONAL HEALTH NETWORK AND DIGITAL HOSPITAL PROJECT
- 2. THE PROJECT NEEDS BETTER I.T. PROJECT AND CHANGE MANAGEMENT SKILL
- 3. APPLICATION SOFTWARE NEEDS TO BE ACQUIRED FOR THE DIGITAL HOSPITAL PROJECT, AS WELL AS THE REGIONAL HEALTH NETWORK
- 4. DATA EXCHANGE STANDARDS NEED TO BE DEVELOPED
- 5. HOSPITAL RESISTANCE TO SHARING DATA NEEDS TO BE OVERCOME

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OPPORTUNITIES AND CHALLENGES FOR WESTERN COMPANIES IN THE CHINA H.I.T. MARKET

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WESTERN BUSINESSES NOW OPERATE IN MANY MARKETS IN CHINA

- MOST MAJOR WESTERN COMPANIES AND MANY WESTERN INVESTORS HAVE REVIEWED CHINA FOR INVESTMENT OPPORTUNITIES
- LARGE MULTINATIONAL COMPANIES ARE NOW OPERATING IN MOST INDUSTRIES IN CHINA
 - FIRST FOR LOW COST MANUFACTURING
 - LATER TO SERVE THE CHINESE MARKETPLACE
- WESTERN COMPANIES OPERATE IN CHINA AT THE PLEASURE OF THE CHINESE GOVERNMENT
 - WHEN THERE IS A STRONG NEED FOR WHAT THE WESTERN COMPANY OFFERS,
 THE CHINESE GOVERNMENT WILL MAKE IT EASIER
 - WHEN THE NEED IS REDUCED, THE CHINESE GOVERNMENT CAN CREATE A
 VARIETY OF OBSTACLES FOR THE PROGRESS OF THAT COMPANY
 - THE SIZE AND FUTURE GROWTH OF THE CHINESE MARKETPLACE IS LIKE A MAGNET THAT ATTRACTS THESE COMPANIES, EVEN THOUGH THERE ARE LOTS OF CHALLENGES FOR THEM

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WESTERN BUSINESSES NOW OPERATE IN MANY MARKETS IN CHINA (CONTINUED)

DOING BUSINESS IN CHINA IS DIFFERENT THAN DOING BUSINESS IN THE WEST.
 WHEN WESTERN COMPANIES COME TO CHINA, THERE ARE MANY THINGS THEY
 MUST LEARN IN ORDER TO BE SUCCESSFUL IN OPERATING A BUSINESS IN CHINA

 WHEN CHINESE COMPANIES COME TO THE WEST, THEY EXPERIENCE SIMILAR ADJUSTMENT ISSUES

 THE CHINESE PEOPLE ARE VERY ENTREPRENEURIAL AND IN GENERAL ARE GREAT BUSINESS PEOPLE. DOING BUSINESS WITH THEM ON THEIR TURF PRESENTS A VARIETY OF CHALLENGES FOR WESTERN COMPANIES

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WESTERN COMPANIES IN THE HEALTHCARE INDUSTRY IN CHINA

- MANY WESTERN COMPANIES OPERATE IN THE CHINESE HEALTHCARE INDUSTRY
- MOST DOMINANT MARKET SEGMENTS SERVED BY WESTERN COMPANIES ARE:
 - PHARMACEUTICALS
 - MEDICAL DEVICES
 - MEDICAL IMAGING
- MANY COMPANIES IN THESE MARKETS HAVE OPERATED IN CHINA FOR A LONG TIME AND HAVE BEEN QUITE SUCCESSFUL IN SERVING THE CHINESE HEALTHCARE INDUSTRY
- IN ADDITION, MULTINATIONAL TECHNOLOGY COMPANIES SUCH AS IBM, HEWLETT PACKARD, CISCO, MICROSOFT, INTEL, AND OTHERS THAT OPERATE IN MANY INDUSTRIES IN CHINA ALSO SELL THEIR PRODUCTS IN THE HEALTHCARE INDUSTRY IN CHINA

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WESTERN COMPANIES IN CHINA H.I.T. SOFTWARE AND SERVICES

- UNTIL RECENTLY, THE CHINA H.I.T. MARKET DID NOT LOOK LIKE AN OPPORTUNITY AREA
 FOR WESTERN COMPANIES
- IN THE LAST FIVE YEARS, MANY WESTERN COMPANIES HAVE LOOKED AT CHINA H.I.T. AND SOME ARE NOW PARTICIPATING IN THE CHINA H.I.T. MARKET
- GE, SIEMENS, AND PHILLIPS HAVE ESTABLISHED SUCCESS IN THE GROWING PACS MARKET AND HAVE EMBARKED UPON A VARIETY OF SOFTWARE STRATEGIES IN OTHER H.I.T. APPLICATION MARKETS
- TODAY IN MARKETS OTHER THAN PACS, ALMOST ALL APPLICATION SOLUTIONS ARE PROVIDED BY CHINESE COMPANIES
- IBM, INTERSYSTEMS/TRAK HEALTH, AND MICROSOFT ARE ALSO ACTIVELY PURSUING APPLICATION SOFTWARE STRATEGIES IN CHINA, BUT THEIR MARKET POSITION AT THE PRESENT TIME IS VERY SMALL
- IBM AND THE DORENFEST GROUP HAVE BEGUN TO SELL CONSULTING SERVICES TO CHINESE HOSPITALS AND HEALTH BUREAUS
- BECAUSE OF THE GROWING H.I.T. MARKET AND LACK OF GOOD APPLICATION SOLUTIONS
 FOR CHINESE HOSPITALS, MANY WESTERN COMPANIES ARE NOW LOOKING AT THE CHINA
 H.I.T. MARKET AS A MAJOR OPPORTUNITY FOR THE FUTURE
- THE U.S. TRADE AND DEVELOPMENT AGENCY (TDA) IS CONDUCTING A CONSULTING STUDY TO FIND FEASIBLE PROJECTS

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OPPORTUNITIES ARE EMERGING FOR WESTERN COMPANIES IN CHINA H.I.T.

- 1. CHINA'S SPENDING ON HEALTHCARE AND H.I.T. IS GROWING RAPIDLY
- 2. PAST INVESTMENTS IN H.I.T. HAS RESULTED IN A GREAT DEAL OF DISSATISFACTION WITH APPLICATION SOLUTIONS NOW AVAILABLE IN CHINA
- A NEW GENERATION OF H.I.T. PRODUCT SOLUTIONS IS FELT TO BE NEEDED BY HEALTHCARE LEADERS IN CHINA
- 4. BETTER IMPLEMENTATION MANAGEMENT SKILL AND EXPERIENCE IS ALSO NEEDED, BUT THIS NEED IS LESS EVIDENT TO CHINESE HEALTHCARE LEADERS AT THE PRESENT TIME
- 5. WESTERN EXPERIENCE IS WELCOMED BY CHINESE HOSPITAL AND HEALTH BUREAU LEADERS AS THEY MOVE FORWARD TO ACCOMPLISH THEIR H.I.T. AND WORK PROCESS IMPROVEMENT OBJECTIVES

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CHALLENGES FOR WESTERN COMPANIES IN THE CHINA H.I.T. MARKET

- 1. IT HAS TAKEN MANY YEARS FOR IBM, HEWLETT PACKARD, GE, SIEMENS, AND PHILLIPS TO ESTABLISH POSITIONS IN THE CHINA H.I.T. MARKET
- MANY OTHER WESTERN COMPANIES HAVE STUDIED OR ENTERED THE CHINA H.I.T. MARKET FOR BRIEF PERIODS
- 3. DIFFICULTIES FOR WESTERN COMPANIES INCLUDE THE FOLLOWING:
 - WESTERN PRODUCTS DO NOT FIT CHINA WORK PROCESSES, BUT WESTERN COMPANIES DO NOT FULLY UNDERSTAND THE CHANGES THAT MUST BE MADE
 - WESTERN PRICES FOR SOFTWARE PRODUCTS ARE TOO HIGH FOR CHINESE HOSPITALS
 - CHINA IS A VERY DIFFERENT MARKET THAN MOST OTHER COUNTRIES, AND THE DIFFICULTIES ARE NOT FULLY RECOGNIZED. THERE ARE PITFALLS AND WESTERN COMPANIES MANY MISTAKES DURING THEIR LEARNING PERIOD
 - THE CHINESE ARE VERY SELECTIVE WHEN SPENDING MONEY, SO WESTERNERS MUST PROVE THEMSELVES THROUGH PERFORMANCE

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THANK YOU.

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