SYSTEM FOR ASSET MANAGEMENT IN PATHWAY COMMUNICATIONS

- PRESENTED BY SZ TEAM:
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Pathway Communications

- a Canadian Internet service provider (ISP)
- located in **Markham, Ontario**
- a part of Pathway Group, has 4 other sister companies
- provides Internet service, telephone service, IT solutions, and IT business outsourcing.
- consists of accounting, IT, sales, provisioning, sales, customer support, application development and networking departments

Problem

- PC's accounting team is in charge of all assets of the five companies, mainly through paperwork.
  - Frequently receives requests for large amount of assets
  - Information flow is extremely complex and data loss is very often
  - Result:
    - Employee fraud vulnerability
    - Assets loss during transaction between companies
    - Dirty assets' status leads to unnecessary operation costs

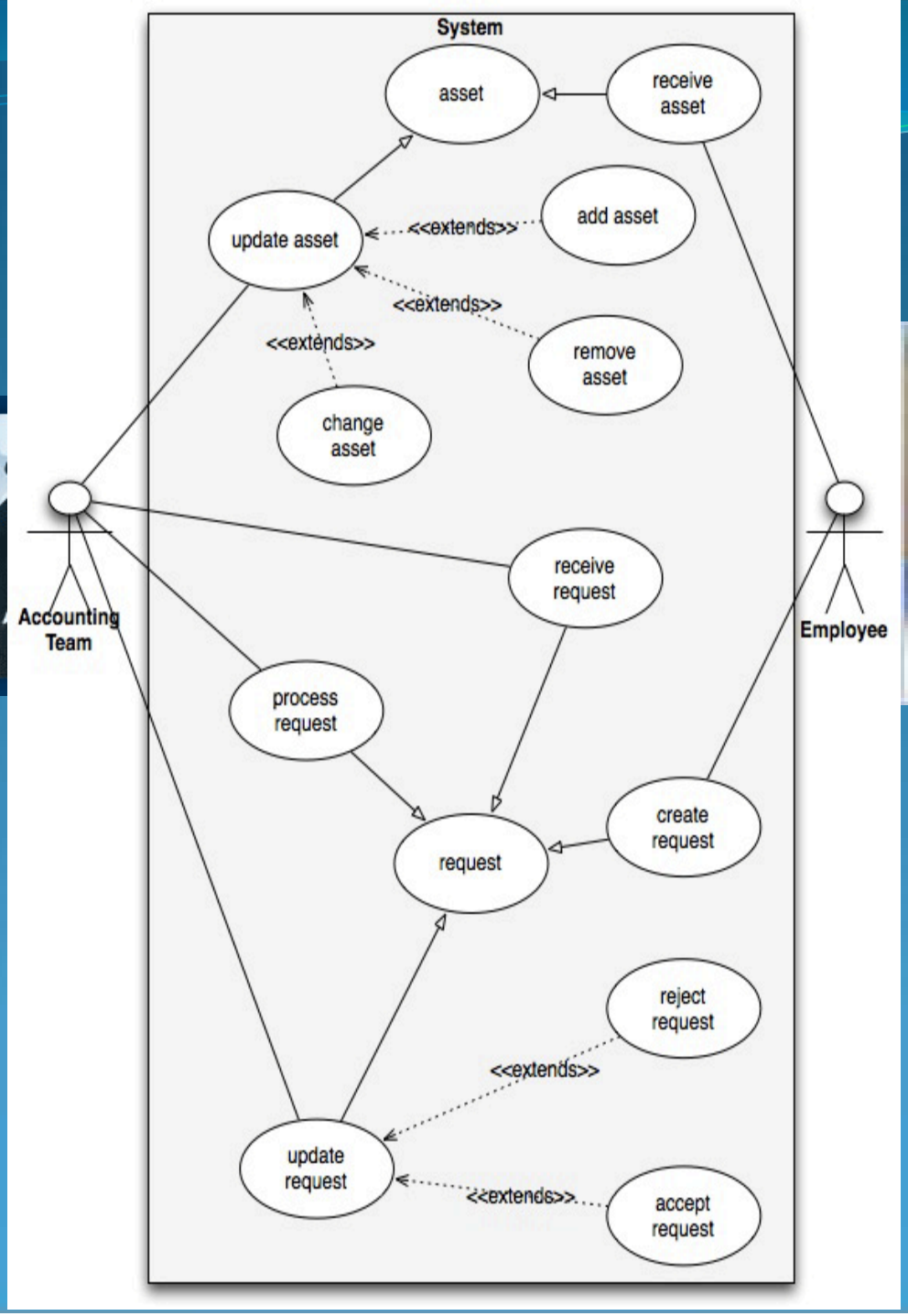
Requirements

- Functional
  - Keep track of all assets' status, whether it is damaged, lost, or in good condition
  - Transfer assets though different sister companies
  - Add, remove or update assets within the system
  - Record and proceed all asset purchase requests within the system
- Non-functional
  - Access control
    - System Administrators (accounting team member) have full access to all functions of the system, while being monitored by team leader
    - Other employees can only raise requests of purchasing assets
    - Head of the company have access to all transactions
  - Data correctness
    - Resistance
    - to unauthorized changes to assets or requests status

Hardware

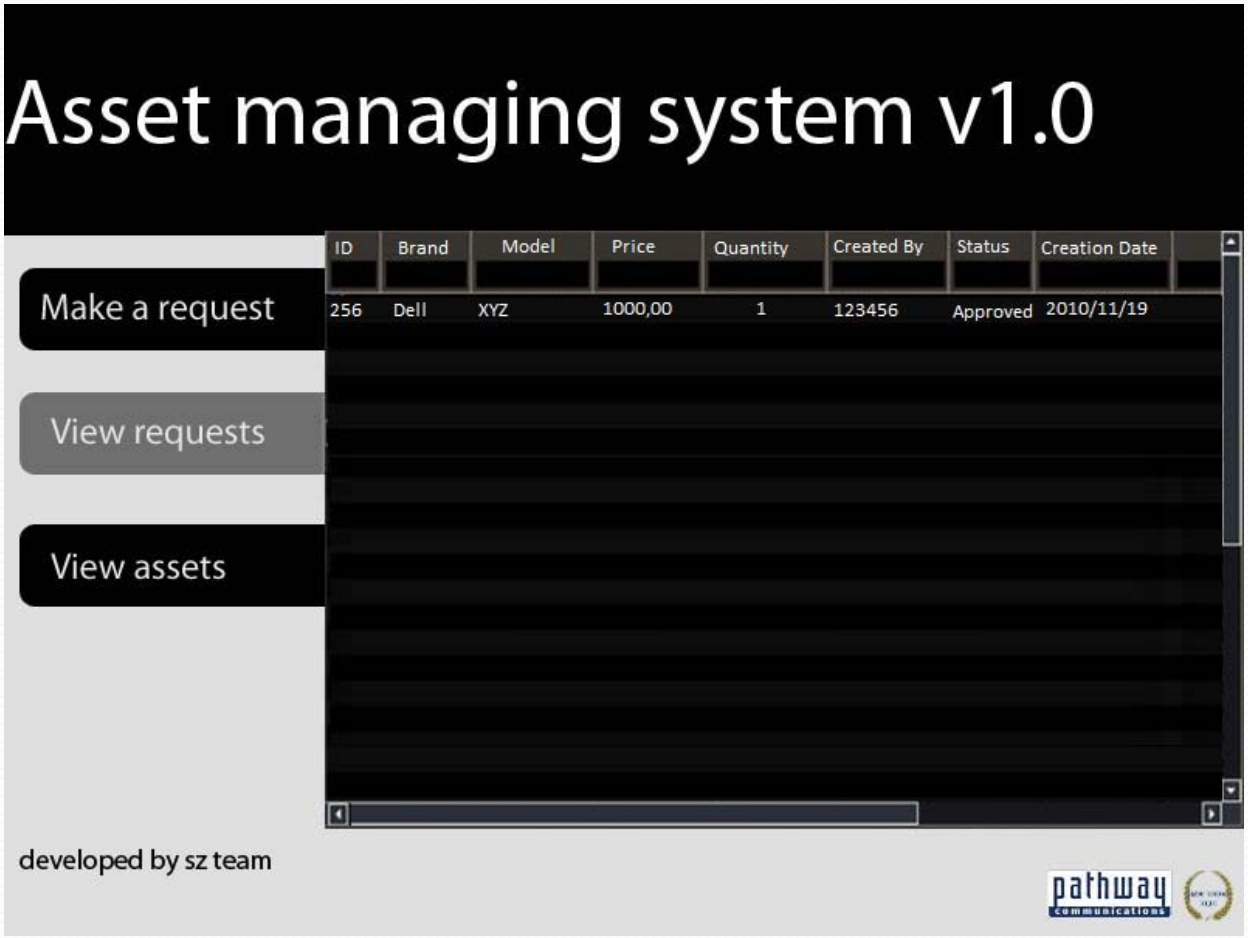
Server-side Hardware Requirement	
CPU	Quad Core AMD64 processor
Memory (RAM)	4 GB minimum
Free disk space	8 GB minimum

Client-side Hardware Requirement	
CPU	Core duo 1.6 Ghz (or higher) or equivalent compatible processor
Memory (RAM)	2 GB minimum
Free disk space	2 GB minimum
Operating System	•Windows 7 32 bit (recommended)
Prerequisites	•Visual C++ 2005 SP1 ATL Security Update Redistributable •Microsoft .NET Framework 3.5 (SP1) Microsoft Office 2007 (SP2)


System
asset
receive asset
update asset
<<extends>>
add asset
<<extends>>
<<extends>>
remove asset
change asset
Accounting Team
receive request
Employee
process request
create request
request
reject request
<<extends>>
update request
<<extends>>
accept request

Software Interface

Software Interface

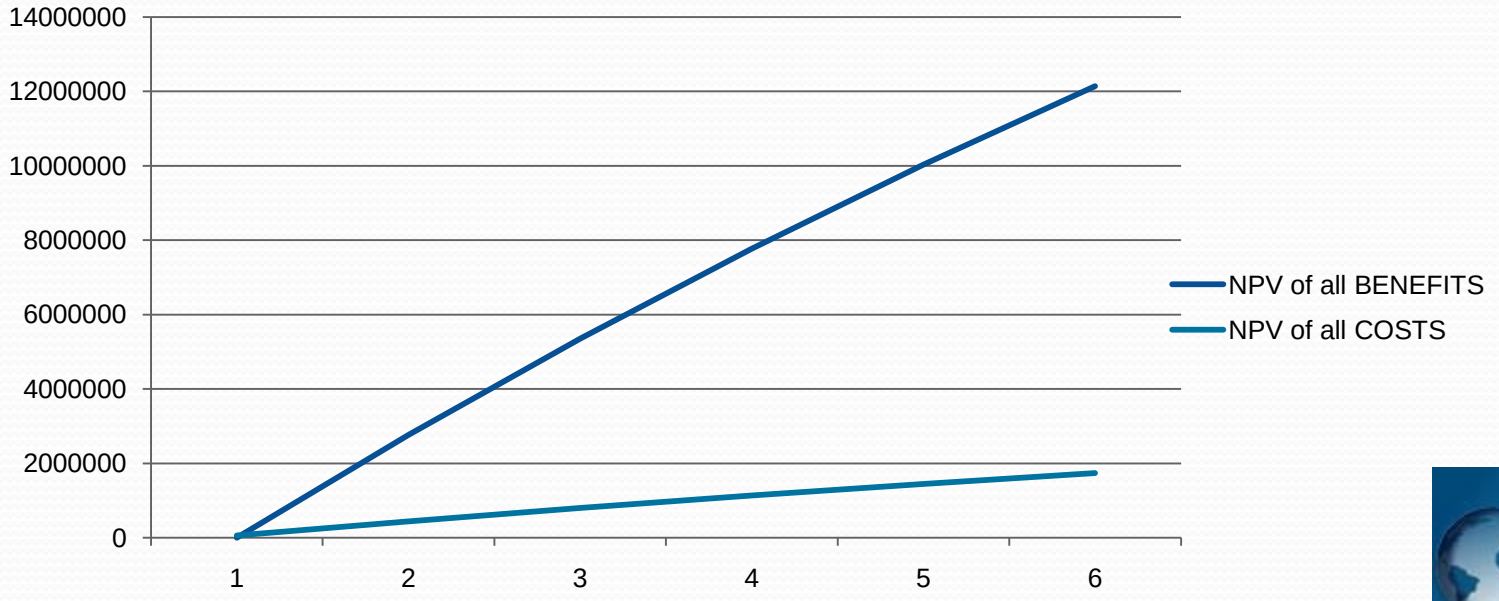


Cost-Benefit - INPUT VALUES

Hardware	$0	System will be running on existing server	
Software	$0	No additional software is required	
Development team salaries	$50,000	$50hr for 4 weeks and 4 people + ealry finish bonus	
Training	$10,000	For 10 days training	
Total Development Cost	$60,000		
Hardware	$15,000	Purchased 10 computers and 1 server.	
Software	$0		
Operational Labor	$395,200	Salaries per year	
Total Operational Cost	$410,200		
Salary savings	$39,000	on 6 office assistances who keeps all paper records of the assets	Assume on Average an Asset worths $1000
Lost Asset Reduced	$2,500,000	Assuming 10% of Assets are Lost during transaction before the system was implemented	Assumen Total Asset = 25000
Unnecessary Asset Purchase	$400,000	Assuming 10% of Asset Purchase is detected as unnecessary after the system was implemented	Assume Totol Asset Purchase Request = 4000/year
Reduced operating cost	$22,000		
Total Benefit	$2,961,000		
Discount Rate Used	7.00%		

Break-even analysis

B-E Analysis Over 5 Years:	0	1	2	3	4	5
NPV of all BENEFITS	0	2767290	5353542	7770600	10029533	12140685
NPV of all COSTS	60000	443364.5	801649.1	1136494	1449434	1741901



Thank You !