Electronic Handbooks (EHBs)

Phase II Final Report

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Contract Number: NAS13-04954
Report Number: CII-CR-2002-2234
January 2002

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Project Summary

Electronic Handbooks (EHBs) are Internet-based tools that support the paperless documentation and management of complex distributed processes (e.g., Grants/Contracts Management). Tools include user interface, backend, requirements capture, and demonstration software. Processes are represented as "Internet-based plays" where "actors" communicate thru the Internet. For each role, EHBs guide actors thru their parts. Two applications of EHBs are: National Aeronautics and Space Administration's (NASA) Small Business Innovation Research (SBIR) Program, and Department of Justice's Bulletproof Vests Partnership (BVP) Program. EHBs, like plays, are developed in six stages: Outline or Playwriting, Example or Rehearsal, Implementation or Staging, Utilization or Performance, Revision or New Production, and Cross-Subprocess or Cross-Play Analysis. The objectives of EHBs are to facilitates 1) paperless documentation and management of complex distributed processes, 2) system development, 3) integration of independently developed subsystems, and 4) process and system improvement.

Some NASA paperless documentation and management applications of EHBs include SBIR Contracts, Grants, Contracts, Education Programs, Technologies, Datasets, Software, Documents, and Missions.

Some non-NASA Federal Government management applications of EHBs include Contracts, Grants, Education Programs, Technologies, Datasets, Software, Documents, and Missions. Some education management applications include: Public School Students and University Students. Some private sector management applications include Automobile Sales and Service, Health Episodes, Grants and Projects, Publishing Projects, Legal Cases, Policies, Credit Cards, Travel, Loans, and Construction Projects

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2 Identification and Significance of the Innovation

The proposed innovations are as follows:

(1) Electronic Handbooks (EHBs) are Internet-based tools that support the paperless documentation and management of complex distributed processes (e.g., Grants/Contracts Management). Tools include user interface, backend, requirements capture, and demonstration software.

(2) Processes are represented as "Internet-based plays" where "actors" communicate thru the Internet. For each role, EHBs guide actors thru their parts.

(3) EHBs, like plays, are developed in six stages: Outline or Playwriting, Example or Rehearsal, Implementation or Staging, Utilization or Performance, Revision or New Production, and Cross-Subprocess or Cross-Play Analysis.

The significance of the innovations is that EHBs will:

(1) facilitate the movement from paper processes to paperless processes,

(2) improve end users interactions within complex processes,

(3) foster process, system, and product improvements, and

(4) reduce costs in the overall administration of processes.

No commercial process management system offers all of these facilities and a few systems support only a small fraction of the solution. These innovations will dramatically increase the productivity of organizations involved in managing complex distributed processes. In order to build a process management system which coordinates many participants and populates and locates information from multiple repositories, it is necessary to have a common, uniform methodology for capturing the requirements for the entire process. Otherwise the data and process becomes too fragmented, complex and costly to develop, enhance, and maintain.

3 Technical Objectives

The technical objectives of EHBs are to:

1. Facilitate paperless documentation and management of complex distributed processes.

2. Facilitate system development:

    - requirements capture,
    - system design,
    - implementation,
    - multi-developer coordination,
    - software distribution,
    - end-user learning,
    - system documentation,
    - system revisions, and
    - system reuse for similar processes.

3. Facilitate integration of independently developed subsystems.

4 Facilitate process and system improvement.

4 Work Plan

4.1 Technical Approach

In order to achieve the four objectives described in Part 3 of this proposal, Coney Island, Inc., has divided the project into four major areas:

- **EHBs User Interface Tools.** These are software tools that facilitate the building of the EHBs user interface for different EHBs applications.
- **EHBs Backend Tools.** These are software tools that facilitate the building of the EHBs database and database interfaces for different EHBs applications.
- **EHBs Requirements Capture Tools.** These are software tools that facilitate the overall building of EHBs applications.
- **EHBs Demonstration Tools**. These are software tools that facilitate the demonstration and/or marketing of EHBs.

4.2 Task Descriptions

During Phase I, our effort will focus on the develop of the four types of tools.

Task 1. Develop EHBs User Interface Tools

EHBs User Interface Tools are software than facilitate the building of the EHBs user interface for different EHBs applications. The key interface is the User Electronic Handbook (user EHB) for that role. For example, Figure 1 shows a sample user EHB for firms that are submitting applications to the NASA SBIR program.

Each user has an account and password and the EHB keeps track off all of the user's information that he/she needs to know to do his/her subprocess. For example, in the case of a user EHB for firms submitting SBIR proposals, the EHB keeps track of all the incomplete and completed proposals that the user is submitting. In the case of a user EHB for SBIR proposal reviewers, the EHB keeps track of all of the incomplete and complete proposal reviews that the reviewer is assigned.

Each user EHB is architected so that the user is prompted at each stage of the subprocess. This is done to minimize the learning effort involved in using the EHB. It also allows the user to come back after a long period of time and easily return to complete and/or restart the subprocesses.

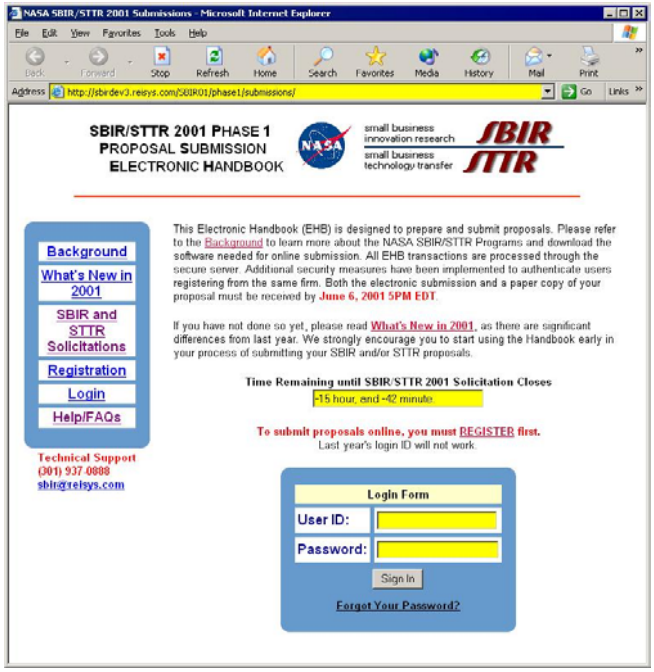


Figure 1. User EHB for firms that are submitting applications to the NASA SBIR program

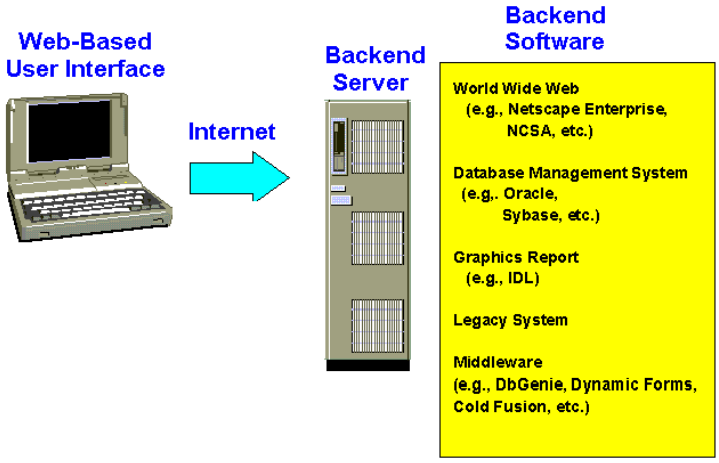


Figure 2. EHB system architecture.

Task 2. Develop EHBs Backend Tools

EHBs Backend Tools are software than facilitate the building of the EHBs database interfaces for different EHBs applications. Figure 2 shows a diagram for the EHBs system architecture and shows some of the backend tools that are used to implement EHBs. The set of EHBs Backend Tools includes:

World Wide Web Servers are used to store and maintain all of the web pages used in the implementation of EHBs. These are used by the EHBs to transfer the subparts of the EHBs between the users and the other backend tools. Some examples of World Wide Web Servers are Netscape, Apache, Microsoft IS Server, etc.

Database Management System Servers are used to store and maintain all of the databases used in the implementation of EHBs. These are used to main the record type data that the user EHBs will update and retrieve. Some examples of Database Management System Servers are Oracle, Sybase, Access, Informix, SQL Server, etc.
.
Graphics Report Servers are used to display reports generated from the data in databases used in the implementation of EHBs. These are used to generate graphic reports in the user EHBs with the data from the Database Management System Servers. Some examples of Graphics Report Servers are IDL, Power Point, MS Access, MS Excel, etc.

Legacy Systems are pre-existing or independently built subsystems that can sit “underneath” the user EHBs interfaces. Such legacy systems can be used as database and/or graphic report servers for existing pre-data. Some examples of Legacy Systems are accounting systems, payroll systems, etc.

Middleware Systems are used to store and maintain all of the databases used in the implementation of EHBs. These are used to generate tabular reports in the user EHBs with the data from the Database Management System Servers. These are also used to generate the User EHB pages themselves. Some examples of Middleware systems are DBGenie, Cold Fusion, Java Server Pages, Active Server Pages, etc.

Task 3. Develop EHBs Requirements Capture Tools

Requirements Capture Tool (RCTs) are web pages that define and document subprocesses of a subprocess. RCTs facilitate the overall system development process: requirements capture, system design, implementation, multi-developer coordination, software distribution, end-user learning, system documentation, system revisions, and system reuse for similar processes. Figure 3 shows an example of an RCT which is used to build the NASA SBIR Contract Administration and Closeout Subprocess. Figure 4 shows an example of a matrix of RCTs which correspond to all of the RCTs for the entire NASA SBIR processes.

The set of web pages in an RCT include:

Binders illustrates all of the data collected during the execution of the subprocess. For example, in the RCT corresponding to NASA SBIR Contract Administration and Closeout Subprocess, there would be links to contract folders and deliverables, contract award file library, deliverables library, and user profiles.

Process illustrates the “play” which defines the subprocess and tells us who produces the parts of the binder and when they produce them. For example, in the RCT corresponding to NASA SBIR Contract Administration and Closeout Subprocess, the subprocess would be a play with the following “acts”: 1) Preliminaries, 2) Deliverables, 3) Advisors, 4) Modifications, 5) Closeouts and 6) Analysis. Each act would be a subplay which defines who does what and in what order.

Example User EHBs illustrate for each role exactly what the role does in the subprocess. *Implemented User EHBs* are the user interfaces in the subprocess for each role. For example, in the RCT corresponding to NASA SBIR Contract Administration and Closeout Subprocess, some User EHBs include: Contract Specialist, Principal Investigator/Awardee Official, Contracting Officer Technical Representative (COTR), Advisor, Field Center Program Manager, etc.

Example Home Pages illustrate how the outside user or customer comes into the process and gets their User EHB. *Implemented Home Pages* are used as a public interface for its customers. For example, in the RCT corresponding to NASA SBIR Contract Administration and Closeout Subprocess, the Principal Investigator/Awardee Official would find a link to their user EHB in which they would be able to submit their deliverables and/or approve contract modifications.

Example Files illustrate the internal file structures for the files used to illustrate the Example user EHBs. *Implemented Files* define the file structure of all of the implementation of the EHBs. In both cases, the file structures are divided by roles. For example, in the RCT corresponding to NASA SBIR Contract Administration and Closeout Subprocess, some User EHBs files include: Contract Specialist, Principal Investigator/Awardee Official, Contracting Officer Technical Representative (COTR), Advisor, Field Center Program Manager, etc.

Suggestions provide a vehicle to collect comments and suggestions to improve the subprocess defined in the RCT. For example, in the RCT corresponding to NASA SBIR Contract Administration and Closeout
Subprocess, the Sugggestions link could result in an e-mail message to the system developer or an entry into a corresponding suggestions database used by the system developer.

Task 4. Develop EHBs Demonstration Tools

EHBs/RCTs Development Process, EHBs/RCTs Development Roles, and Quiz). Other items in the EHBs Demonstration Tool are customer specific (e.g., What are EHBs?, An Example EHB, Objectives, Requirements Capture Tools (RCTs), Multi-Year Areas RCTs/EHBs, Multi-Year Subprocesses RCTs/EHBs Development Matrix, Benefits, and Documents.)

EHBs Demonstration Tools facilitate the marketing of EHBs. Each EHBs Demonstration Tool is tailored to a particular customer so that the customer sees exactly how EHBs can be applied directly to his/her specific
processes. Figure 5 shows an example of an EHBs demonstration which was used to market EHBs technology to the Health Services Research Administration (HRSA) of the Department of Human Services (HHS). Some items in the EHBs Demonstration Tool are generic (e.g., Other Applications, Architecture,

4.3 Meeting the Technical Objectives

EHBs meets the technical objectives outlined in Part 3 as follows:

1. EHBs facilitate paperless documentation and management of complex distributed processes. See Figure 4.

2. EHBs facilitate system development:

    - Requirements Capture Tools (RCTs) reduce requirements capture costs, See Figure 3.
    - RCTs reduce system design costs, See Figure 3. Once the examples are generated in the RCT, much of the design is completed.
    - RCTs + Middleware (e.g., DBGenie, Cold Fusion, etc.) reduce implementation costs, See Figure 3. Once the examples are generated, implementation follows by replacing the example with SQL calls to the database.

- RCTs reduce multi-developer coordination costs, See Figure 4. Each developer is given their own RCT to design and implement.
- Web browsers reduce software distribution costs, See Figure 1. EHBs are distributed via the World Wide Web.
- User EHBs reduce end-user learning costs, See Figure 1. EHBs are built so that the user is led to thru the subprocess and does not need training.
- RCTs + Middleware reduce documentation costs, See Figure 3. Each RCT represents a complete set of documentation for that subprocess.
- RCTs + Middleware reduce revision costs , See Figure 3. By changing the examples in the RCT and presenting them to the owner, the revision can be validated. When the examples are approved, the implementation can be correspondingly adjusted.
- RCTs + Middleware facilitate system reuse for similar processes. See Figure 4. Different RCT subprocesses can be copied and reused for similar subprocesses.

3. EHBs and RCTs facilitate integration of independently developed subsystems, See Figure 4. The matrix of subprocess lets one look at all existing subprocesses. This will lead to integration of user interfaces followed by integration of backends.

4. EHBs facilitate process and system improvement by providing "multiple points of view", e.g.,

- Multiple User Perspectives. By looking at a subprocess thru different user roles (e.g, different user EHBs), one captures more requirements.
- Multiple Subprocesses. By comparing similar subprocesses (e.g,. SBIR Phase I and II proposal submissions), one can’t help but discover efficiencies.
- Multiple Subprocess Data. By examining an entire process thru the eyes of a single role or user type (e.g., the SBIR firm through the entire SBIR process), one creates simplification with regard to the user.
- Multiple Applications. By examining similar applications over the same organization (e.g, grants over different programs in the same agency), one can’t help but see commonalities.
- Multiple Organizations. By examining grants over multiple Federal Agencies, one can’t help but see commonalities.

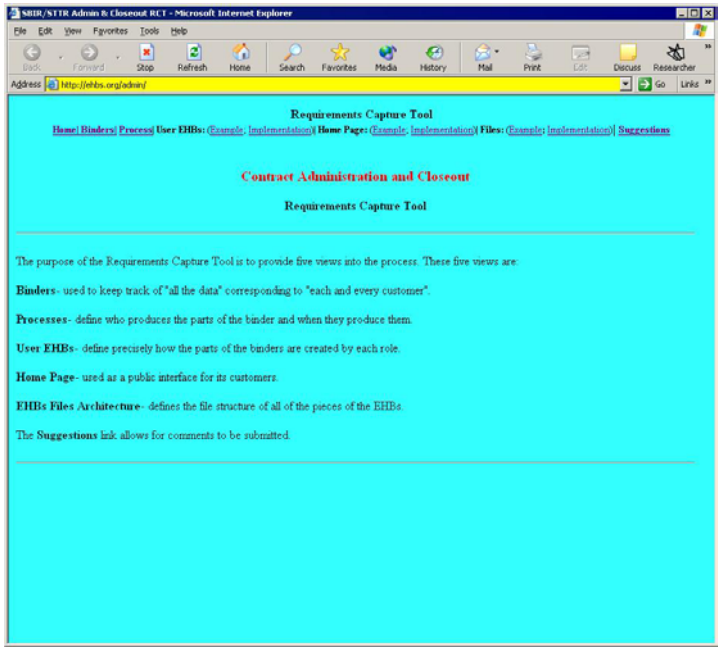
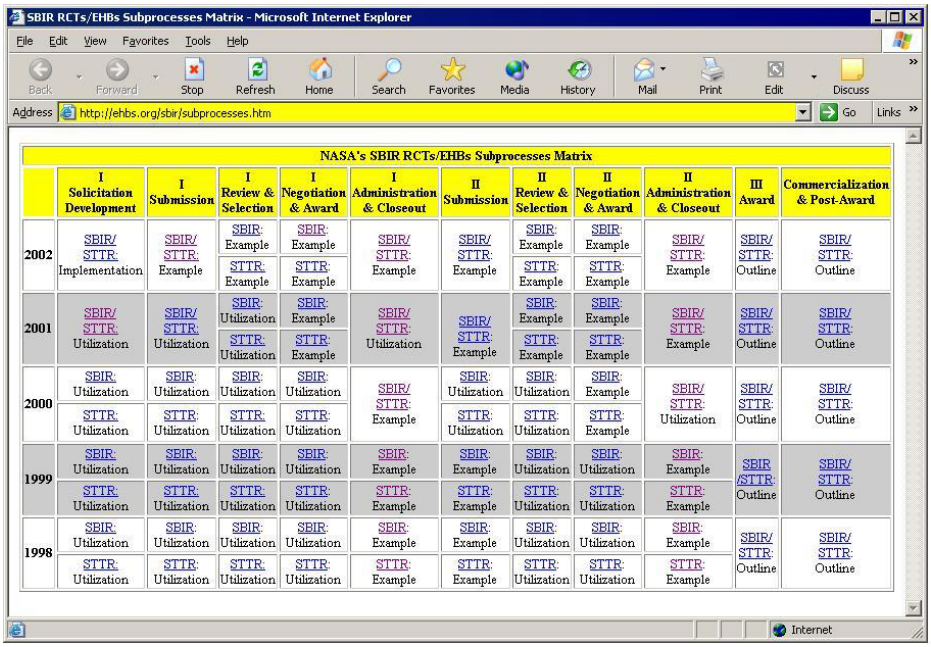


Figure 3. NASA SBIR Contract Administration and Closeout Process RCT.



NASA's SBIR RCTs/EHBs Subprocesses Matrix

	I Solicitation Development	I Submission	I Review & Selection	I Negotiation & Award	I Administration & Closeout	II Submission	II Review & Selection	II Negotiation & Award	II Administration & Closeout	III Award	Commercialization & Post-Award
2002	SBIR/ STTR: Implementation	SBIR/ STTR: Example	SBIR: Example STTR: Example	SBIR: Example STTR: Example	SBIR/ STTR: Example	SBIR/ STTR: Example	SBIR: Example STTR: Example	SBIR: Example STTR: Example	SBIR/ STTR: Example	SBIR/ STTR: Outline	SBIR/ STTR: Outline
2001	SBIR/ STTR: Utilization	SBIR/ STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Example STTR: Example	SBIR/ STTR: Utilization	SBIR/ STTR: Example	SBIR: Example STTR: Example	SBIR: Example STTR: Example	SBIR/ STTR: Example	SBIR/ STTR: Outline	SBIR/ STTR: Outline
2000	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR/ STTR: Example	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Example STTR: Example	SBIR/ STTR: Utilization	SBIR/ STTR: Outline	SBIR/ STTR: Outline
1999	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Example STTR: Example	SBIR: Example STTR: Example	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Example STTR: Example	SBIR /STTR: Outline	SBIR/ STTR: Outline
1998	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Example STTR: Example	SBIR: Example STTR: Example	SBIR: Utilization STTR: Utilization	SBIR: Utilization STTR: Utilization	SBIR: Example STTR: Example	SBIR/ STTR: Outline	SBIR/ STTR: Outline

Figure 4. NASA SBIR Development Matrix of RCTs.

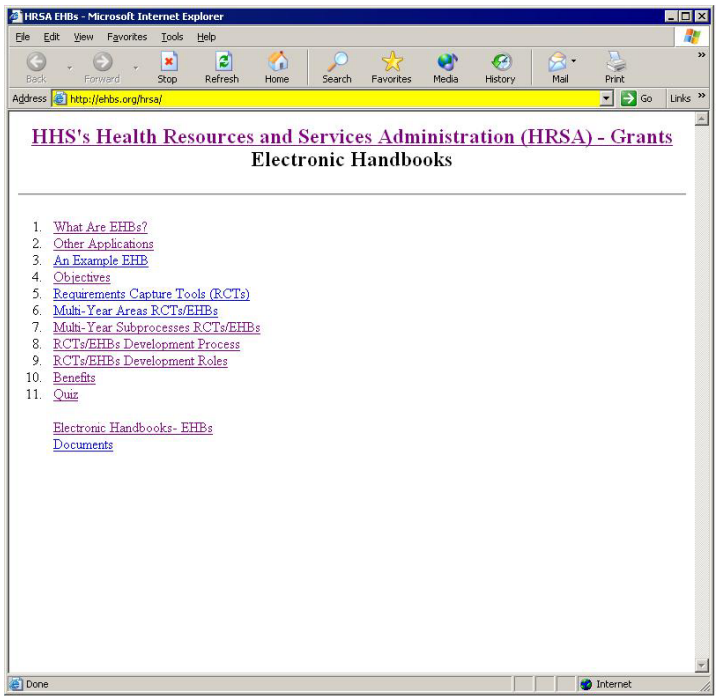


Figure 5. Health Services Research Administration (HRSA) EHBs Demonstration.

4.4 Task by Labor Categories and Schedules

Table 6.provides our projected allocation by labor category by task.

Table 7. provides our projected schedule by task.

Part 5 Potential Applications

5.1 Potential NASA Applications

There are a number of potential NASA applications for EHBs-based management:

Contracts. Here we manage NASA contracts from beginning to end. The basic subprocesses are 1) Solicitation Development and Outreach, 2) Proposal Submission, 3) Review and Selection, 4) Contract Negotiations and Issuance, 5) Contract Administration, 6) Contract Closeout, and 7) Post-Closeout Processes.

Grants. Here we manage NASA grants from beginning to end. The basic subprocesses are 1) Solicitation Development and Outreach, 2) Application/Proposal Submission, 3) Review and Selection, 4) Grant Negotiations and Issuance, 5) Grant Administration, 6) Grant Closeout, and 7) Post-Closeout Processes.

TASK	DESCRIPTION	PI	PM	Lead TE	2nd TE	Lead SE	2nd SE
1	Develop EHBs User Interface Tools	460	0	34	420	240	540
2	Develop EHBs Backend Tools	460	0	66	840	660	560
3	Develop EHBs Requirements Capture Tools	840	0	38	340	760	360
4	Develop EHBs Demonstration Tools	380	80	80	620	1000	1000

Where:PI=Principal Investigator
PM=Program Manager
TE=Technical Expert
SE=Software Engineer

Figure 6. Tasks by labor category.

PHASE II SCHEDULE

	Jan - Apr 02	**May - Aug 02**	**Sep - Dec 02**	**Jan - Apr 03**	**May - Aug 03**	**Sep - Dec 03**
Develop EHBs User Interface Tools	*	*	*	*	*	*
Develop EHBs Backend Tools	*	*	*	*	*	*
Develop EHBs Requirements Capture Tools			*	*	*	*
Develop EHBs Demonstration Tools			*	*	*	*

where * = Specification and or design.
* = Documentation
* = Software Development
* = SoftwareTesting

Figure 7. Tasks schedule.

Education Programs. Here we manage NASA education programs from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Education Program Proposal Submission, 3) Review and Selection, 4) Education Program Negotiations and Issuance, 5) Education Program Administration, 6) Education Program Closeout, and 7) Post-Closeout Processes.

Technologies. Here we manage NASA technology programs from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Proposal Submission, 3) Review and Selection, 4) Technology Negotiations and Issuance, 5) Technology Administration, 6) Technology Closeout, and 7) Post-Closeout Processes.

Datasets. Here we manage NASA data programs from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Proposal Submission, 3) Review and Selection, 4) Dataset Negotiations and Issuance, 5) Dataset Administration, 6) Dataset Closeout, and 7) Post-Closeout Processes.

Software. Here we manage NASA software programs from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Proposal Submission, 3) Review and Selection, 4) Software Negotiations and Issuance, 5) Software Administration, 6) Software Closeout, and 7) Post-Closeout Processes.

Documents. Here we manage NASA document programs from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Proposal Submission, 3) Review and Selection, 4) Document Negotiations and Issuance, 5) Document Administration, 6) Document Closeout, and 7) Post-Closeout Processes.

Missions. Here we manage NASA missions from beginning to end. The basic subprocesses are 1) Program Management Process and Functional (Program Formulation, Program Approval, Program Implementation, Program Evaluation) , 2) Project Management Process and Functional (Project Formulation, Project Approval, Project Implementation, Project Evaluation), and 3) Program/Project Management Systems Requirements (Resources Management, Risk Management, Performance Management, Acquisition Management, Safety and Mission Success, and Environmental Management, Program/Project Management Development)

5.2 Potential Non-NASA Commercial Applications

There are a number of potential non-NASA commercial applications for EHBs-based management:

Contracts. Here we manage contracts from beginning to end. The basic subprocesses are 1) Solicitation Development and Outreach, 2) Proposal Submission, 3) Review and Selection, 4) Contract Negotiations and Issuance, 5) Contract Administration, 6) Contract Closeout, and 7) Post-Closeout Processes.

Grants. Here we manage grants from beginning to end. The basic subprocesses are 1) Solicitation Development and Outreach, 2) Application Submission, 3) Review and Selection, 4) Grant Negotiations and Issuance, 5) Grant Administration, 6) Grant Closeout, and 7) Post-Closeout Processes.

Property Disposal. Here we manage property from beginning to end. The basic subprocesses are 1) Area Development, 2) Proposal Submission, 3) Review and Selection, 4) Property Negotiations and Issuance, 5) Property Administration, 6) Property Closeout, and 7) Post-Closeout Processes.

Research, Analysis, and Information Projects- Here we manage research projects from beginning to end. The basic subprocesses are 1) Area Development, 2) Proposal Submission, 3) Review and Selection, 4) Project Negotiations, 5) Project Administration, 6) Project Closeout, and 7) Post-Closeout Processes.

Education. Here we manage student enrollments from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Applications, 3) Review and Selection, 4) Counseling, 5) Enrollment, 6) Graduation, and 7) Post- Graduation Processes.

Automobile Sales and Service. Here we manage automobiles from beginning to end. The basic subprocesses are 1) Dealer Development and Marketing, 2) Submission, 3) Review and Demonstration, 4) Sales, 5) Servicing, 6) Closeout, and 7) Post-Closeout Processes.

Health Episodes. Here we manage patient health episodes from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Application Submission, 3) Review and Diagnosis, 4) Treatment Determination, 5) Treatment, 6) Treatment Closeout, and 7) Post-Treatment Processes.

Publishing Projects. Here we manage publishing projects from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Project Proposal Submission, 3) Review and Selection, 4) Project Negotiations, 5) Project Administration, 6) Project Closeout, and 7) Post-Closeout Processes.

Legal Cases. Here we manage grants from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Case Submission, 3) Review and Selection, 4) Case Negotiations and Issuance, 5) Case Administration, 6) Case Closeout, and 7) Post-Closeout Processes.

Insurance Policies. Here we manage legal cases from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Policy Application Submission, 3) Policy Review and Selection, 4) Policy Negotiations, 5) Policy Administration, 6) Policy Closeout, and 7) Post-Closeout Processes.

Credit Cards. Here we manage credit cards from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Card Application Submission, 3) Review and Selection, 4) Card Negotiations, 5) Card Administration, 6) Card Closeout, and 7) Post-Closeout Processes.

Travel. Here we manage travel from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Trip Submission, 3) Trip Review and Selection, 4) Trip Negotiations, 5) Trip Administration, 6) Trip Closeout, and 7) Post-Closeout Processes.

Loans. Here we manage loans from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Loan Application Submission, 3) Review and Selection, 4) Loan Negotiations and Issuance, 5) Loan Administration, 6) Loan Closeout, and 7) Post-Closeout Processes.

Construction Projects. Here we manage construction projects from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Application/Proposal Submission, 3) Review and Selection, 4) Project Negotiations and Issuance, 5) Project Administration, 6) Project Closeout, and 7) Post-Closeout Processes.

EHBs Building. Here we manage EHBs from beginning to end. The basic subprocesses are 1) Area Development and Outreach, 2) Submission, 3) Review and Demonstration, 4) Contract Negotiations and Issuance, 5) Building and Maintaining EHBs, 6) Contract Closeout, and 7) Post-Closeout Processes.

6 Contacts

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7 Technical Activities

7.1 Cumulative Technical Activities

Task 1. Develop EHBs User Interface Tools

During the last two years, Coney Island Inc. implemented and tested all components of the customer and manager user EHBs tools which become will become templates for generic customer and manager EHBs roles. Some applications of the former include SBIR firms, state and local government agencies, health episode patients, etc.. Some applications of the latter

include SBIR program managers, state and local government program managers, health episode professionals, etc..

Task 2. Develop EHBs Backend Tools

During the last six months, Coney Island Inc. implemented and tested all components of the DBGenie middleware tool for bridging the interface between the user EHB front-end and the back end database. During that time period, , Coney Island Inc. also completed designs for the Roles middleware tool for proving the access control between the user user EHB front-end and the back end database.

Task 3. Develop EHBs Requirements Capture Tools

During the last last six months, Coney Island Inc. implemented and tested all components of the EHBs Requirements Capture Tool used to display on the web the binder, process, EHB, home page, anf files perspectives for defining the subprocesses. These five perspectives are presented to process owners and users to help them better clarify their subprocesses and consequently, their EHBs.

Task 4. Develop EHBs Demonstration Tools

During the last last six months, Coney Island Inc. implemented and tested all components of the DBGenie Demeonstration tool for marketing and EHBs application to a new potential customer. These perspectives are presented to potential EHBs customers to help them better visualize the use of EHBs on their subprocesses .

7.2 Future Technical Activities

Task 1. Develop EHBs User Interface Tools

During the next six months, Coney Island Inc. will further revise and test all components of the customer and manager user EHBs tools to potential customers. These potential customers include NASA SBIR program managers, firms, reviewers, etc.

Task 2. Develop EHBs Backend Tools

During the next six months, Coney Island Inc. will further revise and test all components of the DBGenie Middleware Tools for bridging the interface between the user EHB front-end and the back end database. .

Task 3. Develop EHBs Requirements Capture Tools

During the next six months, Coney Island Inc. will further revise and test all components of the Requirements Capture Tools to potential customers. These potential customers include NASA SBIR program managers, firms, reviewers, etc.

Task 4. Develop EHBs Demonstration Tools

During the next six months, Coney Island Inc. will further revise and test all components of the Demonstration Tools to potential customers. These potential customers include NASA SBIR, ESTO, and EdCATs program managers.

8 Potential Customer and Commercialization Activities

8.1 Cumulative NASA Potential Customer Activities

During the last two years, Coney Island Inc. registered advisors from the following NASA Potential Customers:

- **NASA Small Business Innovations Research (SBIR).** The SBIR applications are for grants and contacts management. The registered advisors are John Wyatt (301) 286-4444 and Robert Jonas (301) 286-8547.
- **NASA Earth Science Technology Office (ESTO).** The EHBs applications are for grants and contacts management. The registered advisors are Ellen Russell (301) 286 -7873 and Steve Wright (301) 286-8457.
- **NASA Directives Management Program.** The EHBs applications are for policies and procedures management. The registered advisors are John Doe (301) 286-4444 and Steve Jones (301) 286-8547.
- **NASA Education Cataloging Program.** The EHBs applications are for education program management. The registered advisors are Mary Doe (301) 286-8888 and Steve Kisser (301) 286-9987.

8.2 Cumulative Non-NASA Potential Customer Activities

During the last two year, Coney Island Inc. registered advisors from the following non-NASA Potential Customers:

- **US Department of Justice Bulletproof Vests Partnership Program (BVP).** The EHBs applications are for grants and contacts management. The registered advisors are Karen Rush (202) 286 -7873 and Steve Fine (202) 286-8457.
- **Ford Motor Corporation.** The EHBs applications are for automobile sales and service. The registered advisors is Alan James (767) 286 -7873.
- **HHS's Health Resources Services Agency (HRSA)** The EHBs applications are for grants and contacts management. The registered advisors are Karen Rush (202) 286 -7873 and Steve Fine (202) 286-8457.
- **Holy Cross Hospital.** The EHBs applications are for grants and contacts management. The registered advisors are Karen Wyatt (202) 286 -6578

8.3 Other Cumulative Commercialization Activities

During the last two years, Coney Island Inc. registered Advisors from the following organizations:

- **NASA Far West Regional Technology Transfer Center** The registered advisors are Paul Hidden (301) 286-4444 and Many Nelson (301) 286-8547.
- **NASA Mid-Atlantic Regional Technology Transfer Center** The registered advisors are Paul Hidden (301) 286-4444 and Many Nelson (301) 286-8547.

8.4 Future Potential Customer and Commercialization Activities

During the next six months, Coney Island Inc. will try to recruit advisors from the following NASA potential customers:

- **NASA Education Cataloging Program.**

During the next six months, Coney Island Inc. will try to recruit advisors from the following non-NASA potential customers:

- **US Department of Justice Block Grants.**
- **LA Law Services.**

During the next six months, Coney Island Inc. will investigate as Advisors the following organizations:

- **DOD Mid-Atlantic Regional Technology Transfer Center.**
- **DOD Mid-Continent Regional Technology Transfer Center.**

9 Resources Status

The total cumulative costs incurred, as of 12/31/01, is 45,398.86 dollars. Up to the report date, an estimated 34% percentage of the work has been completed. The details of resource status are given in Figure 8.

Network Implementations
P.O.P. 11/02/2001-5/03/2002
Contract #NAS13-02001

	Current Report Period	TOTAL C-T-D
DIRECT LABOR	9,470.93	9,470.93
DIRECT TRAVEL	514.04	514.04
DIRECT CONSULTANT	-	-
DIRECT MATERIALS	-	-
TOTAL DIRECT COSTS	9,984.97	9,984.97
OVERHEAD 99.80%	9,451.99	9,451.99
GENERAL & ADMIN 20.90%	4,062.32	4,062.32
TOTAL COSTS	**23,499.28**	**23,499.28**
Estimate of Cost to Complete the Contract		**45,398.86**
Estimated Percentage of Physical Completion of the Contract		**34%**

Figure 8. Resource Plan

10 References

NASA Small Business Innovations Research (SBIR). (http://sbir.nasa.gov)

NASA Earth Science Technology Office (ESTO). (http://esto.nasa.gov)

NASA Space Science Technology Office (SSTO) (http://ssto.nasa.gov)

US Department of Justice Bulletproof Vests Partnership Program (BVP).
(http://bvp.ojp.usdoj.gov)