

OVERVIEW OF 2001 EA INITIATIVES: IEEE PDI, CCDA, IEEE CAREERNAVIGATOR

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1. Overview and Background

Since 1998, The IEEE Board of Directors approved several initiatives by the Educational Activities Board to meet the following ISF98 Goals:

PT2: Provide rapid and pervasive customer access to IEEE products and services.

PT3: Conduct IEEE's business using electronic technologies while offering security of transactions and protecting the appropriate intellectual property rights.

SC3: Transform the culture and behavior of the Institute to be more adaptable in satisfying the needs of members and customers by ensuring that IEEE products and services meet current and changing member and customer needs.

Initially, there was the EIII (Electronic Internet Instruction Initiative) that was renamed the IEEE Professional Development Institute (IEEE PDI). Later the PDI Initiative was expanded through the Course Content Development Assessment (CCDA) Initiative that funded specific course development in cooperation with IEEE Technical Societies over a three-year period. Running in parallel with the IEEE PDI is the IEEE CareerNavigator, a project undertaken jointly with IEEE-USA to develop web-based career development tools.

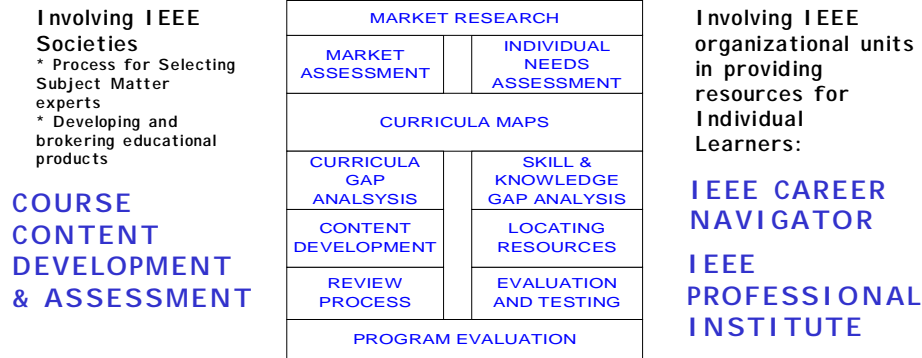
Funding for these initiatives during 2001 calls for \$847.8K in expenses (including purchased services) set against \$132K in revenue. In 2002, funding for these initiatives will peak at \$1,581.7K set against \$275 in revenue. In 2003 funding will be reduced to \$1,167.3 against \$473 K in revenue. A major challenge for these initiatives will be to develop on-going revenue streams from sales, brokered education, and corporate sponsorship. Funding from IEEE Societies will result in reduction of expenses and thereby contribute a positive result to the net.

2001 is a critical year for defining the projects that will enable IEEE play a significant role in providing and brokering lifelong education to enhance the careers of its members. The success of these initiatives will depend on the cooperation of all IEEE organizational units. Technical Activities will contribute greatly by fostering cooperation among its Technical Societies. Regional Activities will work with Educational Activities to enhance educational activities at the local and regional level. IEEE Marketing will assist in bringing IEEE educational products and services to the corporate as well as member market. IEEE Institutional Research will assist in needs assessment. IEEE Corporate Communications and IEEE Marketing will find ways to communicate the value added to membership of educational activities throughout the Institute.

The diagram below describes the relationships among the initiatives and suggests the various IEEE organizational units involved, particularly IEEE Societies who bear the responsibility of identifying content experts and reviewers. The IEEE Professional Development Institute provides the pan-IEEE organization for lifelong education. The Course Content Development and Assessment (CCDA) Initiative funds specific

development activities. And the IEEE CareerNavigator, jointly undertaken with IEEE-USA, will provide a web-based career development tool.

Relationships among INITIATIVES



2. The IEEE Professional Development Institute (IEEE PDI)

A cornerstone initiative is the IEEE Professional Development Institute (PDI) that aggregates lifelong education for IEEE members and customers and fosters experimental use of electronic to deliver information and educational products through electronic technology. "PDI" refers both to the funding initiative to mobilize resources for web-based education as well as to the web "gateway" to education and professional development resources.

PDI coordinates all IEEE continuing education and professional development resources through its web site <www.ieee.org/pdi/>. It also provides the impetus for developing and brokering courseware, including CD-ROM and web courses. 1999 activities included experimental and demonstration projects to test the viability of web-promoted and web-delivered courseware. In 2000, the PDI "gateway" was designed and tested, one that includes information and resources on lifelong education and professional development. In 2001, PDI is to be launched and the PDI site will be populated with resources from IEEE and other sources

The IEEE Professional Development institute brings together the elements needed to successfully deliver professional learning experiences any time, any place and at an affordable price. These elements are:

- Curricula – IEEE members and customers need a wide range of lifelong learning resources needed to maintain technical and professional vitality. By establishing a process for defining curricula, the IEEE can facilitate proper choices of topics, related to specific discipline and applications areas. The IEEE needs to provide an organized “road map” to accredit learning resources, provided by outside providers as well as the IEEE.
- Content - The IEEE through its technical societies, sections and individuals members can provide the subject matter needed by professional peers as well as other seeking educational materials in the fields of interest to IEEE. To provide this material electronically and cost effectively will require a change in the way courses are developed.
- Instructional Design - Traditional educational methods have been designed to provide a learning experience in a classroom environment. Over time some of these practices have been adopted to delivery of courses in a different venue and using evolving media. However, most courses developed in this way are a simple emulation of the traditional educational process. For the information era, new methods must be developed along with the tools that instructors need to present subject matter in the new information technology environment.
- Delivery System - Electronic media is in a stage of rapid development. Many systems concepts and associated software are being developed. The technical infrastructure and basic business model are being developed through the IEEE Internet initiative. The IEEE PDI will make use of these developments and integrate the educational components of content and instructional design with the system and business processes being developed through the web initiative.

The IEEE PDI initiative focuses on content and curricula -- planned learning activities that can be documented and recognized in the form of CEUs and certificates. By strengthening its educational infrastructure through IEEE will be in the position to tap the need of industry for "just-in-time" education through electronic delivery. In cooperation with IEEE Technical Societies and other IEEE organizational units, the current web initiative is developing the infrastructure that will enable IEEE entities to provide a variety of services of value to members and other professionals. This educational initiative will develop the processes, tools and methods needed for education providers to present educational content through the IEEE web site.

During the mid-1990s, IEEE held a number of workshops that identified needs to be addressed through PDI. The Industry 2000 workshops, organized by IEEE to ascertain industry needs, led to several recommendations that IEEE promote lifelong education and professional development. IEEE members underscored the desirability to exploit electronic technology to deliver relevant, timely, flexible and cost-effective continuing education to engineers. IEEE PDI is the culmination of initiatives that have included the establishment of IEEE's CEU registry and the development of the IEEE Career Asset

Manager. Other initiatives, such as the development of career roadmaps and lifelong curricula, are imbedded in IEEE PDI.

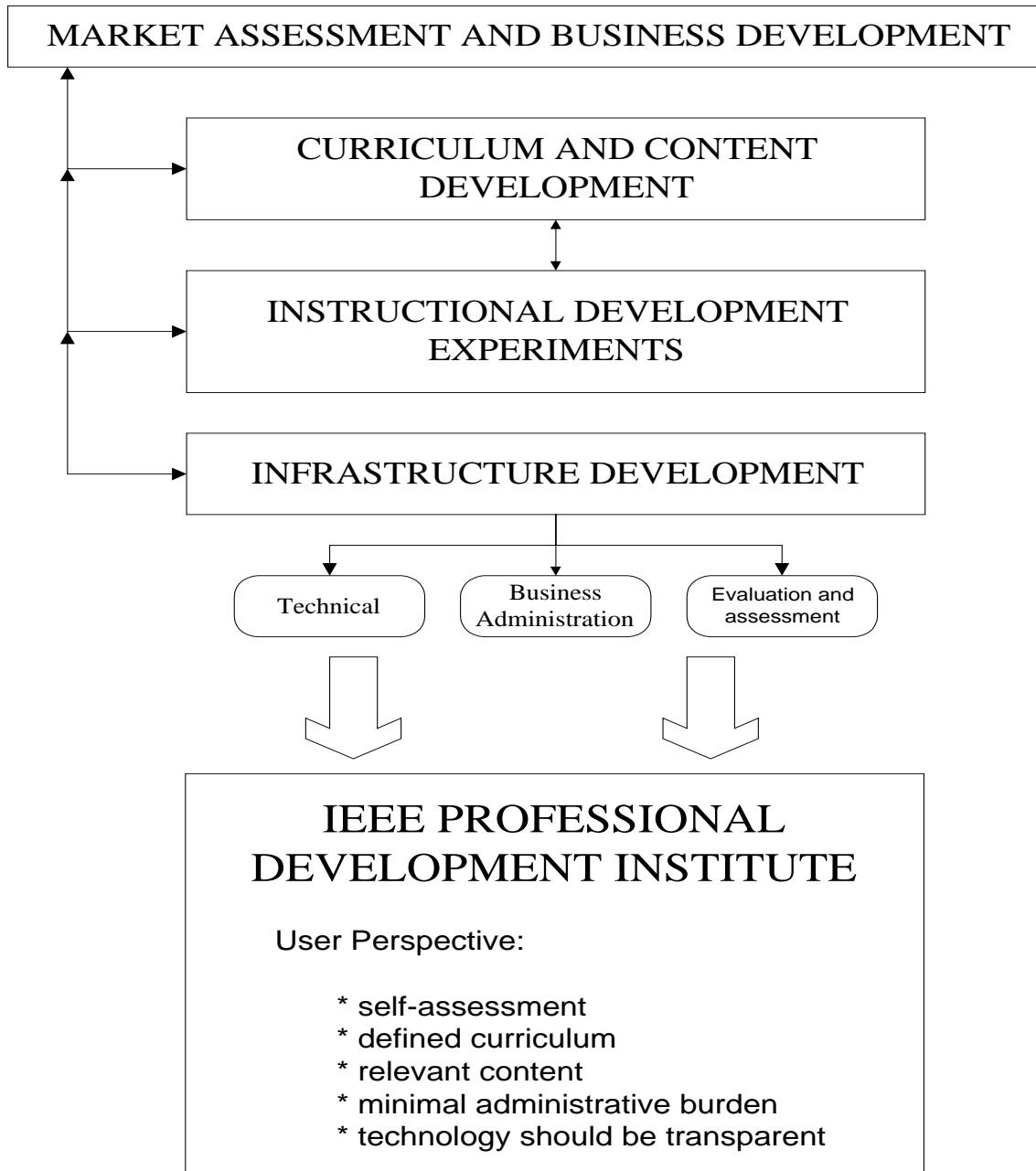
In 1999, two additional workshops were organized. The industry workshop, held in Chicago on October 1, brought together industry to explore areas of mutual interest and established the willingness of industry to partner with the IEEE in developing and distributing courseware.

The IEEE Web-Ed Societies workshop held December 11-12 in Washington D.C. was funded by the IEEE Foundation to convene Society education chairs to discuss the use of the web to promote and deliver continuing education in light of IEEE's PDI Initiative. (See Web-Ed Proceeding: <http://www.ieee.org/organizations/eab/webed/webed-proc14.htm>). This workshop yielded the following recommendations:

- Develop an appropriate web-based delivery system for all members throughout the world
- Concentrate its efforts in promoting the development of web-based educational experiences and materials that are properly designed
- Focus on developing appropriate curriculum for the web
- Develop content for web delivered courseware
- Concentrate its resources on proactive marketing by researching member needs
- Focus its web-based efforts on career development tools and information
- Develop strong evaluation component, based on peer review, for web offerings
- Disseminate information about web-based education developed by other providers
- Innovate in the use of the web to deliver education
- Generate revenue through web-delivered education unless courses are underwritten to cover costs.

The 2001 Web-Ed Workshop, on for April 20-2, will concentrate on providing IEEE Societies with the tools and templates needed to develop courseware for CD-ROM and the Web. This workshop will examine ways in which IEEE staff, through the Initiatives, can foster the use of the Web and other technologies to bring cost-effective and high-quality lifelong learning resources to IEEE members and customers.

What follows is a bird-eye's view of project activities over the life of the project, followed by descriptions of specific projects under the four categories: market assessment and business development, curricula and content development, instructional development experiments, and infrastructure development.



3. Course Content Delivery and Assessment Initiative (CCDA)

CCDA is an extension of the Professional Development Institute, focusing on the development of courses in cooperation with IEEE Technical Societies.

For the purpose of generating these estimates, three new product lines are defined. These products are to be designed for web-delivery and will also be available as CD-ROM or DVD. The market will dictate the form of delivery and the price that it is willing to pay. The new product lines are:

- **Overview Courses** - These are introductory courses that may be 0.25 to 0.75 minutes in length. They are based on the IEEE fields of interest and provide a timely introduction to state of the art and emerging technologies. The courses are to be offered at no charge to members with a minimal charge to non-members (\$25). The unit sales have been assumed to be 80% members and 20% non-members. The Development and Assessment CCDA program seeks to expand the educational content of the IEEE Professional Development Institute (PDI) through collaboration with IEEE Technical Societies. CCDA will link the IEEE PDI to IEEE *Xplore*. It will also continue to develop and verify new educational methods.
- **Level 1 Courses** - These are short courses of about 6 hours duration (0.5 CEU) in three 2-hour modules. The sales unit is the full 6-hour course and the price in this estimate is \$125 for members and \$175 for non-members. Sales are estimated at 60% members and 40% non-members.
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4. IEEE CareerNavigator

The IEEE Career Navigator is an outgrowth of the Career Asset Manager, a career development and record-keeping tool developed for IEEE members. Project activities include the development of new Web application for career planning, career management and gap analysis.

In Q2, 2000, the CareerNavigator initiative was approved by the IEEE FinCom and funded for 3 years. In Q3, 2000, a cross-organizational unit project team was established with IEEE-USA.

A project Web site was established to provide staff and volunteers access to information about the project and its progress. The site is located at www.ieee.org/eab/navigator. The site contains project documents, team member contacts, market research, a first draft business plan, and meeting minute notes. The site is updated regularly.

The project will be implemented in two stages. The first stage will be the collection and re-purposing of existing career-related content from various sources including IEEE

Education and IEEE-USA. A baseline version of the site will be launched in Q3, 2001 and new content will be developed and integrated with content from the IEEE PDI. The second stage will herald the launch of the new CAM service.

One of the primary goals of CareerNavigator is to provide members with a set of tools to enable them to manage and enhance their careers. CAM (Career Asset Manager) is being developed as a Web-based service which, in concert with SPAR will provide members with the ability to organize their education, work experience and skills in a database that will allow them to find gaps and chart paths to specific goals. The development of this new application has been awarded to Enable Technologies, a company that has developed a successful suite of academic assessment tools. The highly detailed scope of work proposal is available on the CareerNavigator project site.

The look and feel of the site in its first generation is being designed by RnB Design who have done work for IEEE over the past two years. Two draft site plans are available for review along with three page templates, all of which are accessible from the CareerNavigator project Web site. The project team is currently reviewing the work and a decision is expected by March 2001 on direction.

The project team will be involving other IEEE stakeholders including IT, Marketing, Publications and Customer Service going forward. A presentation will be made at the upcoming WebEd2 workshop to IEEE Societies with the purpose of soliciting content and information for version I of the site.

5. 2001 PDI/CCDA Plans

Review of 2000 Progress

- Design of the IEEE PDI web site
- The adaptation of existing self-study courses to the Web (met targets, still in progress)
- The completion of a new web course (two others in progress)
- Brokering agreements with five universities (others in progress)
- Partnership with Telcordia under renewal
- Trial of Video-on-Demand delivery system
- Conversion of recent videos to multimedia CD-ROM s
- Development of new multimedia CD-ROM products
- The development of content for PDI, including first iterations of curricula maps in power, computing, and telecommunications.
- Award of an NSF grant (\$100,000) to support pilot migration of continuing education courses and materials to IEEE Xplore
- Award of \$50,000 to hold second Societies Web-ED Workshop in Washington D.C.
- PDI 2001 Plans and Schedule

During the first quarter of 2001, efforts will concentrate on populating the PDI site. Following the “soft launch” of PDI leading up to the Board Series, promotion efforts will continue to

encourage IEEE entities to encourage to provide the data needed to aggregate IEEE educational IEEE resources. Various outreach techniques will publicize the site once it is sufficiently populated, including a brochure (already completed) , articles in the IEEE Institute, email, as well direct mail advertising, including co-promotion with products. PDI will list all recognized university electrical and computer engineering/science programs (ABET/CSAB/REPCON) and has already begun this process. PDI will also list IEEE partners—those organizations that have chosen to discount their offerings for IEEE members and who have entered into a co-marketing arrangement. IEEE currently has six partnerships with universities and also resells products from various commercial providers.

Working with IEEE volunteers, IEEE staff will standardize operations as they mature. A challenging part of populating the site will be to provide curricula maps useful to IEEE members. To do this requires the cooperation of IEEE Societies. These maps will provide a structure to educational opportunities that are available from IEEE and from other sources (universities, etc.).

Links with both Societies and IEEE Regional Organizations are already in place. The CCDA part of the project will focus on content development and assessment. This includes the projects generated through IEEE Societies through the 2001 Web Ed Workshop to be held April 21-22. Some of these activities (such as meta-tagging learning objects, and review process) will be coordinated with the NSF-funded DLNET Project.

During 2001 there will be two major trends. One is the aggregation of all IEEE products on CD-ROM for sale to industry. The other is the appropriate use of the web to support existing products (such as online tests). New ground will be the offering of entire tutorials on the Web, including text and AudioPowerpoints. A major challenge will be to secure the resources to host and market web courses.

**PDI/CCDA AT A GLANCE – 2001 GOALS AND OUTCOMES BASED ON EAB CHALLENGES
13 Feb 2001**

ACTIVITY	EAB/EAD CHALLENGES	PROJECT OUTCOMES
1. Overall Project Management,	<ul style="list-style-type: none"> • Relate PDI/CCDA activities to EAB challenges & develop process for involving EAB committees • Involve other IEEE organizational units who are suppliers and stakeholders 	<ul style="list-style-type: none"> • Project plans updated quarterly and posted • Use of New Product Development Process to involve stakeholders • Formation of an internal cross-departmental PDI advisory team • At least three meetings of team in 2001
2. Infrastructure development	<ul style="list-style-type: none"> • Identify resources needed to host and market web-based products including audioPowerpoints and free overview courses 	<ul style="list-style-type: none"> • Plan and procedures for linking CD-ROM products to Web • Development of business rules linking web-based education products to IEEE Xplore
3. PDI Web site development	<ul style="list-style-type: none"> • Roll out and continuously update PDI site • Develop process for measuring impact or “hits” 	<ul style="list-style-type: none"> • Process for measuring use and impact of PDI site Survey documenting use of the PDI site with • Site maintenance plan • Refine curricula maps for computing, power, and communications
4. Outreach to IEEE Organizations, customers, and partners	<ul style="list-style-type: none"> • Hold Web-Ed Societies Workshop • Create templates for developing materials • Promote the recognition of lifelong education through CEUs, certificates, and certification • Promote and facilitate educational offerings by Societies, Sections and other units 	<ul style="list-style-type: none"> • Implementation of 2001 Societies Web Ed Workshop • Promotion of IEEE PDI at more than 5 IEEE meetings • Promotion of IEEE PDI at ASEE, FIE, London Online and through PDI site • Promotion through IEEE Institute, IEEE Spectrum, IEEE newsletters per promotion plan • Promotion to non-engineering public
5. New Product Development	<ul style="list-style-type: none"> • Develop a process for generating and reviewing content • Institute good practices for electronic delivery of education • Develop overview courses as member service • Develop revenue courses for industry customers • Develop proposal to create CD-ROM product line for industry, utilizing IEEE subscription models 	<ul style="list-style-type: none"> • New product development processes described in documents posted on Web • 10 or more “free” overview tutorials via Web and CD-ROM (AudioPowerpoints) • 4 or more revenue-producing self-study courses on CD-ROM with web component • 4 or more multimedia CD-ROM projects • Creation of Web component for all educational products • Creation of CD-ROM industry subscription program • Increase number of external products by 25%
6. Business Development	<ul style="list-style-type: none"> • Create templates for developing partnership agreements • Standardize partnership agreements with universities and other organizations • Establish a consistent process for brokering courseware • Use data from member and industry survey to shape programs • Review business plans for PDI for various audience segments among members and customers universities, and industry 	<ul style="list-style-type: none"> • LLC acceptance of business development plans, including university brokering and partnerships • Increase the number of university partners from 6 to 10
7. Market Assessment, Promotion and Outreach	<ul style="list-style-type: none"> • Asses member and industry needs through studies and surveys • Expand Web based promotion • Expand "IEEE PDI" holdings by Societies, Sections, universities, and industry • Standardize partnership agreements with universities and other organizations • Explore subscription program as ad-on to IEEE membership 	<ul style="list-style-type: none"> • Use data from 2001 industry study and member survey to modify marketing and promotion practices • Disseminate survey results through articles and presentations • Apply results to New Product Development • Increase listings of grad and short courses • Refined curricula maps that show links among discipline areas • Market educational products through established IEEE venues such as IEL
8. Instructional Design and Evaluation	<ul style="list-style-type: none"> • Define Web delivery modalities (instructor-led, self-study, etc.) • Develop process for tagging learning objects • Explore appropriate use of video and applets • Create templates for developing materials for PDI by Societies, Sections • Provide tutorial on instructional design and development • Develop process for evaluating proposals and completed projects 	<ul style="list-style-type: none"> • Write one or more articles pertaining to instructional issues • Provide development templates for AudioPowerPoints, multimedia CD-ROMs • Give 2 or more presentation pertaining to instructional issues • Produce overview tutorial on instructional design with Telcordia • Complete IEEE part of the NSF-funded DLNET Project focusing on meta-tagging learning objects

PDI/CCDA AT A GLANCE – 2001 SCHEDULE 13 Feb 2001

ACTIVITY	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1. Overall Project Management,	Establish New Product Development Process with IEEE Marketing Share plans and solicit input from EAB Lifelong Council and Outreach Council committees Plan/schedule to socialize project	Submit PDI and PDI products to New Product Development Process Buy-in from IT, Customer Service, Marketing Progress report	Progress report to volunteer and staff stakeholders	Final report and presentation
2. Infrastructure development	Meet with Technical Activities and IT to discuss hosting of audioPowerpoint presentation	Develop plans for hosting	Host web pilots either externally or at IEEE	Promote Market online courses
3. PDI Web site development and promotion	Launch and promote PDI web site through all IEEE venues	Continue to promote through IEEE and non-IEEE venues Include PDI promotions as ride-alongs with other marketing efforts	Continue to promote through venues Evaluate PDI site and continue to populate Measure impact and hits	Continue to promote through IEEE venues Obtain feedback by users
4. Outreach to IEEE Organizations, customers, and partners	Plan 2001 Web-Ed Workshop Develop development and business templates for Web-Ed Workshop Attend Reliability and Computer Society Adcom Letter to societies and sections to encourage posting on PDI Develop outreach plan for 2001	Give paper at MTT Conference Reminder to Societies and Sections to post courses on PDI Hold Web Ed Workshop	Promote at ASEE Reminder to Societies and Sections to post courses on PDI Web-Ed follow-up activities	Promote at FIE, London Online Reminder to Societies and Sections to post courses on PDI
5. New Product Development	Complete 3 audioPowerpoint presentations for demo at Web-Ed Workshop Initiate new PE CD-ROM products Initiate CD-ROM projects with Power Engineering Society Develop plan (including selection of vendor) to convert old self-study courses to PDF files for CD-ROM and possible Web delivery	Focus on new Power engineering topics Identify new topics through Web-Ed Workshop Being work on overview courses Convert all non-web self-study courses to PDF file for CD-ROM delivery	Focus on new computer and communications topics Follow-up development of at least three new Society projects Continue work on overview courses	Focus new computer and communications topics Follow-up development of at least three new Society projects Complete at least four overview courses Complete at least four new multimedia CD-ROMs
6. Business Development	Develop one or more new partnership agreement	Develop one or more new partnership agreement	Develop one or more new partnership agreement	Develop one or more new partnership agreement
7. Market Assessment, Promotion and Outreach	Implement member survey Implement industry interviews	Interpret results Use results for New Product Development Process	Communicate results through papers and presentations	Promote projects through FIE
8. Instructional Design	Develop templates for development of self-study materials. Develop plan for adding features made possible by increased computing speed and bandwidth	Develop ID guidelines for developers Write one or more articles pertaining to instructional issues	Develop presentation pertaining to instructional issues	Complete IEEE part of the NSF-funded DLNET Project focusing on meta-tagging learning objects

- developed along with the tools that instructors need to present subject matter in the new information technology environment.
- Delivery System - Electronic media is in a stage of rapid development. Many systems concepts and associated software are being developed. The technical infrastructure and basic business model are being developed through the IEEE Internet initiative. The IEEE PDI will make use of these developments and integrate the educational components of content and instructional design with the system and business processes being developed through the web initiative.

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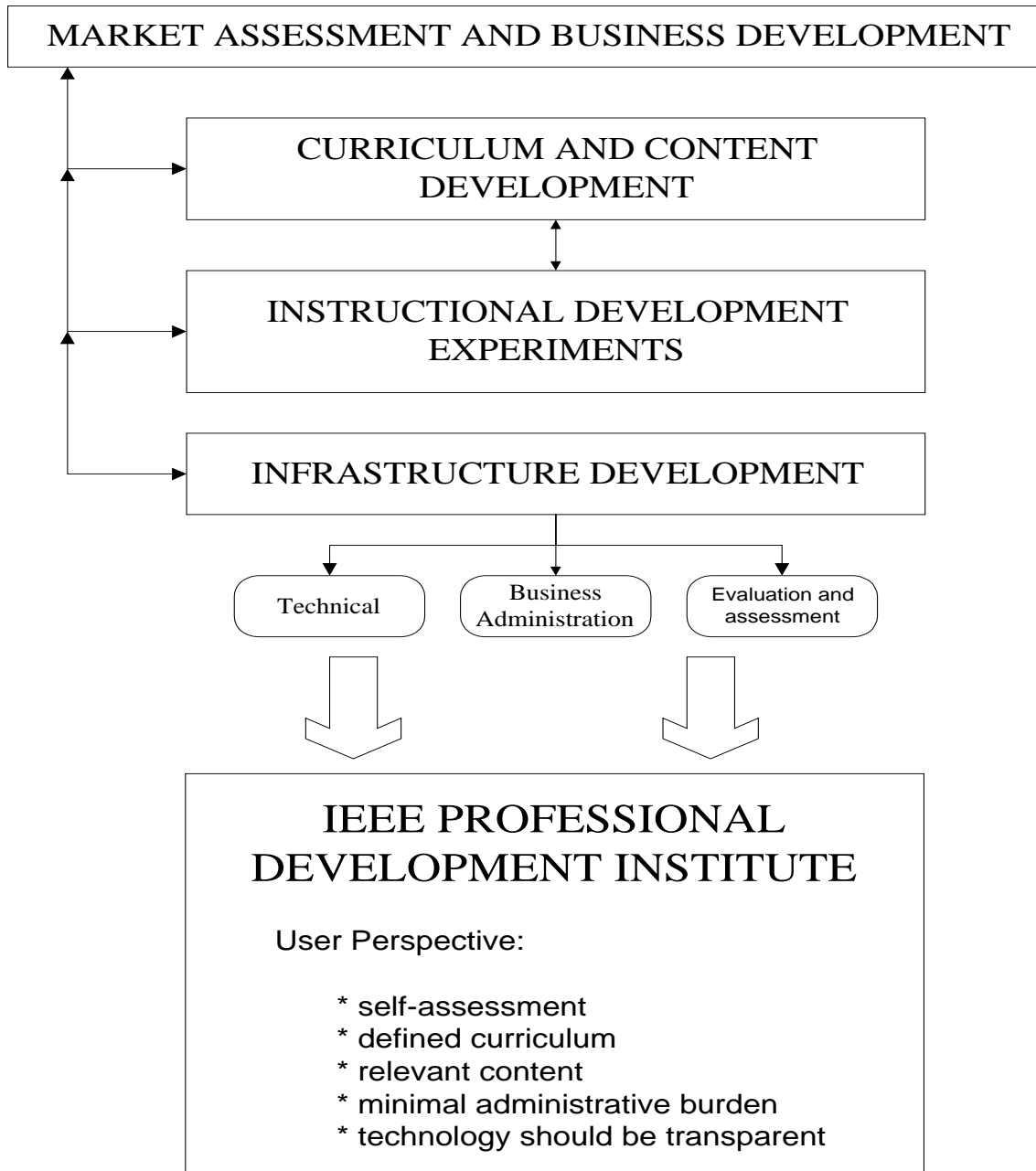
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13 Feb 2001**

ACTIVITY	EAB/EAD CHALLENGES	PROJECT OUTCOMES
1. Overall Project Management,	<ul style="list-style-type: none"> • Relate PDI/CCDA activities to EAB challenges & develop process for involving EAB committees • Involve other IEEE organizational units who are suppliers and stakeholders 	<ul style="list-style-type: none"> • Project plans updated quarterly and posted • Use of New Product Development Process to involve stakeholders • Ten or more documented documented meetings with other OU and IEEE departments • Increased awareness of staff and volunteers
2. Infrastructure development	<ul style="list-style-type: none"> • Identify resources needed to host and market web-based products including audioPowerpoints and free overview courses 	<ul style="list-style-type: none"> • 3 documented meetings with HQ infrastructure team – IT, Marketing, Customer Service, Technical Societies
3. PDI Web site development	<ul style="list-style-type: none"> • Roll out and continuously update PDI site • Develop process for measuring impact or “hits” 	<ul style="list-style-type: none"> • Survey documenting use of the PDI site with recommendations for improvements • Coordination of site with new “My IEEE” portal and IEEE Xplore
4. Outreach to IEEE Organizations, customers, and partners	<ul style="list-style-type: none"> • Create templates for developing partnership agreements • Create templates for developing materials for PDI by Societies, Sections, • Hold Web-Ed Societies Workshop • Create templates for developing materials • Promote the recognition of lifelong education through CEUs, certificates, and certification • Promote and facilitate educational offerings by Societies, Sections and other units 	<ul style="list-style-type: none"> • Distribution of outreach materials at 2001 Societies Web Ed Workshop • Promotion of IEEE PDI at more than 5 IEEE meetings • Promotion of IEEE PDI at ASEE, FIE, London Online and through PDI site • Promotion through IEEE Institute, IEEE Spectrum, IEEE newsletters per promotion plan
5. New Product Development	<ul style="list-style-type: none"> • Develop a process for generating and reviewing content • Institute good practices for electronic delivery of education • Develop overview courses as member service • Develop revenue courses for industry customers 	<ul style="list-style-type: none"> • New product development processes described in documents posted on Web • 4 or more “free” overview courses via Web • 4 or more revenue courses on CD-ROM • Release of one experimental Web-based courses • Creation of Web component for all educational products
6. Business Development	<ul style="list-style-type: none"> • Standardize partnership agreements with universities and other organizations • Establish a consistent process for brokering courseware • Review business plans for PDI for various audience segments among members and customers universities, and industry 	<ul style="list-style-type: none"> • Volunteer approval of document that explains partnership policy • Increase the number of partners from 6 to 10
7. Market Assessment, Promotion and Outreach	<ul style="list-style-type: none"> • Asses member and industry needs • Expand Web based promotion • Expand "IEEE PDI" holdings by Societies, Sections, universities, and industry • Standardize partnership agreements with universities and other organizations • Explore subscription program as ad-on to IEEE membership 	<ul style="list-style-type: none"> • Complete industry and member survey • Disseminate results through articles and presentations • Apply results to New Product Development • Increase listings of grad and short courses • Refined curricula maps that show links among discipline areas • Market educational products through established IEEE venues such as IEL
8. Instructional Design	<ul style="list-style-type: none"> • Define Web delivery modalities (instructor-led, self-study, etc.) • Develop process for tagging learning objects • Explore appropriate use of video and applets 	<ul style="list-style-type: none"> • Add appropriate features made possible by increased computing speed and bandwidth • Write one or more articles pertaining to instructional issues • Give 2 or more presentation pertaining to instructional issues • Complete IEEE part of the NSF-funded DLNET Project focusing on metatagging learning objects

PDI/CCDA AT A GLANCE – 13 Feb 2001

ACTIVITY	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1. Overall Project Management,	Establish New Product Development Process with IEEE Marketing Share plans and solicit input from EAB Lifelong Council and Outreach Council committees Plan/schedule to socialize project	Submit PDI and PDI products to New Product Development Process Buy-in from IT, Customer Service, Marketing Progress report	Progress report to volunteer and staff stakeholders	Final report and presentation
2. Infrastructure development	Meet with IT, Marketing, and Customer Service re pilot Web course (Mission Critical Systems) Meet with Technical Activities and IT to discuss hosting of audioPowerpoint presentation	Develop plans for hosting	Host web pilots either externally or at IEEE	Market online courses
3. PDI Web site development and promotion	Launch and promote PDI web site through all IEEE venues	Continue to promote through IEEE and non-IEEE venues Include PDI promotions as ride-alongs with other marketing efforts	Continue to promote through venues Evaluate PDI site and continue to populate Measure impact and hits	Continue to promote through IEEE venues Obtain feedback by users
4. Outreach to IEEE Organizations, customers, and partners	Plan 2001 Web-Ed Workshop Develop development and business templates for Web-Ed Workshop Attend Reliability and Computer Society Adcom Letter to societies and sections to encourage posting on PDI Develop outreach plan for 2001	Give paper at MTT Conference Reminder to Societies and Sections to post courses on PDI Hold Web Ed Workshop	Promote at ASEE Reminder to Societies and Sections to post courses on PDI Web-Ed follow-up activities	Promote at FIE, London Online Reminder to Societies and Sections to post courses on PDI
5. New Product Development	Complete 3 audioPowerpoint presentations for demo at Web-Ed Workshop Initiate new PE CD-ROM products Initiate CD-ROM projects with Power Engineering Society Develop plan (including selection of vendor) to convert old self-study courses to PDF files for CD-ROM and possible Web delivery	Focus on new Power engineering topics Identify new topics through Web-Ed Workshop Being work on overview courses Convert all non-web self-study courses to PDF file for CD-ROM delivery	Focus on new computer and communications topics Follow-up development of at least three new Society projects Continue work on overview courses	Focus new computer and communications topics Follow-up development of at least three new Society projects Complete at least four overview courses Complete at least four new multimedia CD-ROMs
6. Business Development	Develop one or more new partnership agreement	Develop one or more new partnership agreement	Develop one or more new partnership agreement	Develop one or more new partnership agreement
7. Market Assessment, Promotion and Outreach	Implement member survey Implement industry interviews	Interpret results Use results for New Product Development Process	Communicate results through papers and presentations	Promote projects through FIE
8. Instructional Design	Develop templates for development of self-study materials. Develop plan for adding features made possible by increased computing speed and bandwidth	Develop ID guidelines for developers Write one or more articles pertaining to instructional issues	Develop presentation pertaining to instructional issues	Complete IEEE part of the NSF-funded DLNET Project focusing on meta-tagging learning objects

7. IEEE PDI/CCDA 2001 Timeline/Milestones 13 Feb, 2001

January	
Develop plans to populate PDI site	x
Initiate new PE CD-ROM products	x
Letter to societies and sections to encourage posting on PDI	x
Initiative 3 audioPowerpoint presentations for demo at Web-Ed Workshop	x
Develop one or more new partnership agreement	x
Initiate CD-ROM projects with Power Engineering Society	x
Attend Winter Power to promote PDI	x
Promote PDI at ASEE CIEC	x
February	
Plan 2001 Web-Ed Workshop Develop development and business templates for Web-Ed Workshop	x
Attend Reliability Society and Computer Society Adcom	x
Develop outreach plan for 2001	x
Implement member survey and industry interviews	x
Develop plan (including selection of vendor) to convert old self-study courses to PDF files for CD-ROM and possible Web delivery	x
Populate PDI site	x
Share plans and solicit input from EAB Lifelong Council and Outreach Council committees	x
March	
Establish New Product Development Process with IEEE Marketing	
Meet with IT, Marketing, and Customer Service re pilot Web course (Mission Critical Systems)	
Meet with Technical Activities and IT to discuss hosting of audioPowerpoint presentation	x
Launch and promote PDI web site through all IEEE venues	
Obtain proposal for metatagging learning objects for DLNET	
One new partnership agreement	x
Hire consultant to assist in developing curricula roadmaps for all fields	
Develop PDI/CCDA Powerpoint presentation	x
April	
Submit PDI and PDI products to New Product Development Process	
Identify three new projects on power engineering	
Reminder to Societies and Sections to post courses on PDI	
Identify participants in curricula roadmap development from WebEd Workshop and develop schedule for follow-ups	
Hold Web Ed Workshop and identify new projects, including overview courses	
Review funding availability in light of new projects identified through Web-Ed Workshop	
convert all non-web self-study courses to PDF file for CD-ROM delivery	
May	
Buy-in from IT, Customer Service, Marketing	

Develop plans for hosting	
Implement full-scale promotion of PDI	
Give paper at MTT Conference	
Plan curricula roadmap meeting, hire consultants to develop documents	
Complete industry and membership studies and interpret results	
Write report and presentation based on results	
Use results to revise New Product Development plans	
Develop marketing plans and business rules for selling CD-ROMs as bulk sales to industry	
Write one or more articles pertaining to instructional issues	
Select suppliers for developing overview courses	
Develop production schedule for Society projects identified at Web Ed Workshop	
Identify volunteer PDI/CCDA volunteer work group	
Exploratory meeting with Pubs re meta-tagging learning objects	
Meet with Matt Loeb to review PDI and discuss relationship of PDI to IEEE industry outreach efforts.	
Develop schedule for industry visit to follow up survey	
Continue follow-up to generate new Society projects	
June	
Meeting with RAB to discuss PDI outreach	
Meet with Marketing and other stakeholders to discuss PDI/CCDA New Product Development effort	
Develop instructional development guidelines for developers	
Promote PDI at ASEE	
Follow-up Society projects	
Sign contracts for development of overview courses	
Meet with Spectrum to discuss tutorials overview tutorials	
July	
Progress report to volunteer and staff stakeholders	
Web-Ed follow-up activities	
Evaluate PDI site and continue to populate	
Measure impact and hits	
Promote at ASEE	
Develop new computer and communications topics	
Develop one or more new partnership agreement	
Communicate results through papers and presentations	
Develop presentation pertaining to instructional issues	
Meeting with IEEE-USA to coordinate PDI and CareerNavigator	
Identify participants for industry advisory group	
Begin visits to industry	
Produce power tutorials	
August	
Host web pilots either externally or at IEEE	

Hold curricula roadmap meeting	
Develop production schedule for communications and computer topics	
Marketing direct mailing for PDI	
Develop plans for follow member needs assessment activities	
Develop plans to integrate educational materials into IEEE Xplore	
September	
Develop plans to revise PDI site based on feedback	
Develop plans to charge for links by universities on PDI	
Obtain feedback by users through survey with assistance from Institutional Research	
Sell banner ads on PDI	
Continue to promote through IEEE venues	
Reminder to Societies and Sections to post courses on PDI	
Focus new computer and communications topics	
Begin planning 2002 activities	
Publish curricular maps on PDI site	
Hold industry advisory group meeting	
Develop one or more new partnership agreement	
November	
Promote at FIE, London Online	
Promote projects through FIE	
Meet with internal stakeholders (IT, Customer Service, etc.)	
Convene meeting of university advisory group	
Business plan for 2002 activities	
Final report and presentation	
December	
Complete IEEE part of the NSF-funded DLNET Project focusing on meta-tagging learning objects	
Complete at least four new multimedia CD-ROMs	
Complete at least four overview courses	
Meet with internal stakeholders to discuss 2002 PDI/CCDA projects	

8. CareerNavigator 2001 Timeline/Milestones 13 Feb, 2001

January	
Define CAM online product	X
Project team meeting with application developer	X
Meet with Odyssey Group	X
Identify other IEEE stakeholders	X
Meet with IEEE IT department	X
Create draft site plans for Version I	X
Create designs for Version I	X
February	
Seek input from IT department re. Hosting - internal vs external	X
Create final site plan for Version I	
Approve design concept for Version I	
Begin aggregation of existing IEEE content to Version I	
Revise and approve work plan from application developer	
Fill out NPD forms for CareerNavigator	
March	
Begin new CAM online application development	
Project team meeting	
Contact and invite participation of IT, Marketing, CorpCom and Pubs	
Continue content aggregation for Version I	
April	
Continue new CAM online application development	
Project team meeting	
Continue content aggregation for Version I	
Create launch promotion plan for Version I	
May	
Continue new CAM online application development	
Project team meeting	
Complete content aggregation for Version I	
Begin alpha testing of Version I	
Create alpha test user group including volunteers	
June	
Make changes/additions to Version I	
Begin beta test of Version I	
Project team meeting	
Begin alpha test of CAM online application	
Launch Version I	

July	
Begin search for advertisers/sponsors	
Create alpha test user group for CAM online	
Appoint Webmaster	
Appoint site Editor	
Continue alpha test of CAM online application	
Project team meeting	
Continue development of CAM online application	
Update monthly content	
August	
Incorporate feedback from alpha test to develop CAM online application	
Update monthly content	
Continue development of CAM online application	
Project team meeting	
September	
Create beta test user group for CAM online	
Launch beta test for CAM online application	
Explore external marketing partners for CAM online application	
Update monthly content	
Project team meeting	
October	
Continue beta test of CAM online application	
Update monthly content	
Work with marketing on promo launch plan for CAM online	
Incorporate revisions from beta test into CAM online application	
Project team meeting	
November	
Pre-launch of CAM online to volunteers	
Update monthly content	
Continue marketing plan for CAM online launch	
Prepare for Online Information 2001	
Project team meeting	
December	
Launch of CAM online @ Online Information 2001	
Update monthly content	
Launch of promo plan	
Project team meeting	