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REVISION Final Due Date: November 20, 2009

Data Center University Educational Institution Profile

Defining the Provider and Its Characteristics

Data Center University [TM] (DCU) by APC is a one-stop global provider of high quality

data center design, build and operations education for information technology (IT) professionals,

facilities managers, and engineers. It is intended for those individuals seeking added training and

certification to complement their workplace experiences and education. DCU's curriculum is

designed around core competencies required to solve real world problems related to the physical

infrastructure of data centers today.

DCU offers an Associate level certification, comprised of fourteen courses, which can

provide added credibility and enhanced career training in an industry that is constantly changing.

"Associates demonstrate a base level proficiency in the elements of: cooling, power, racks,

cabling, fire protection, management and physical security. Associates possess the basic

knowledge necessary to participate on teams that design or upgrade the Data Center Physical

Infrastructure (DCPI)" (Data Center University by APC, 2008).

Training and certificate courses are available on-line or in the classroom, thus providing

flexibility for students who may need options. The current teaching model for DCU's online

courses involves one-way asynchronous communication; the learner takes the online course with

no live instructor support. DCU's online courses are developed utilizing Adobe Presenter,

Microsoft PowerPoint and Flash. DCU also offers face to face (F2F) training for the fourteen

Associate certification courses.

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DCU is staffed by a full time group of more than a twenty Managers, Instructional Designers, Subject Matter Experts, Technical Trainers, Electrical Engineers, Graphic Designers, and Data Center Professionals all working out of the West Kingston, RI, or the St. Louis, MO facilities. DCU is accredited by note-worthy international organizations in the field of data center design and engineering, as well as some state engineering boards, and offers Continuing Education Units (CEUs) through those organizations[1].

There are numerous learning paths[2] designed for the learner based on job titles or the learner can easily create a specialized learning path. The learning paths assist students in navigating course selections and choosing the courses that most suit the learners' field. Learners are also welcome to take any of the courses offered onsite, without choosing a learning path.

In addition to learning paths, DCU offers these support services for its learners:

- Cost effective learning options

  o Online courses are free. There is a small fee to take the certification exam ($295 USD); certification classroom training starts at $2100 USD for a 3 day session.

- Secure website, with 365 x 24 x 7 accessibility.

- Technical support, monitored by Global Knowledge (GK), DCU's external LMS

  o Learners can call a toll free number or can email to obtain technical support. Email responses are sent to the learner within 24 business hours.

- Learning content support, monitored by DCU's Program Manager

  o Learners can email for learning content support. Email responses are sent to the learner within 24 business hours.

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- Resource services

    o DCU does not have a traditional library, but has a catalog of white papers,

      specification manuals, and webinars that are company-approved and developed by

      scientific engineers in APC's Data Center Science Center (DCSC). Learners can

      also join the DCU group on LinkedIn, a business-oriented social networking site,

      to communicate and connect with DCU leaders and others in their field.

- Learner services

    o Learners can enroll at any time easily creating their own user ID and password.

      Learners have access to a full report of their learning progress including

      information on their course, quiz activity, grades, date of attempt and completion,

      and the ability to print a certificate for verification of education work.

- Quality course development ensured by a standardized delivery paradigm

    o Each DCU course is developed utilizing the same Instructional Systems Design

      methodology. APC's Object Level Process Map offers a process that must be

      followed by every member of the DCU team and ensures quality and consistency.

DCU's Political System

DCU is funded corporately through APC's Global Marketing department budget. While

Data Center University is owned by the American Power Conversion Corporation (APC), the

curriculum does not include courses related to APC products, although it is based upon on the

scientific findings and writings of APC's world class engineers. The DCU program is vendor

neutral and product agnostic, however the audience attracted to the program often seeks out APC

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products as a result of their participation in DCU courses, and as a result of their need for

specific data center solutions. DCU is viewed not only as a leading-edge learning platform for its

learners, but also an important marketing tool for APC.

Budgetary Considerations

DCU has a budget of approximately 8 million dollars (Figure 1) (S. Hartman, personal

communication, October 28, 2009). The certification exam generates $31,000 annually; when

funds become available a "Professional" level certification program will be developed to

increase revenue. There is not a specific budgetary item that addresses learner support. Current

economic conditions are keeping the current DCU budget stagnant, and to adequately address the

topic of learner support, an expanded budget would be necessary. In early 2008, DCU converted

to "pay per unit" system; this caused a major drop in new registrations. In late 2008, this fee was

removed, and this leveled off the decline the fee caused.

Figure 1 - General Budget Situation

Item	Q1 2008	Q2 2008	Q3 2008	Q4 2008	2008
Salaries	$267,500	$307,500	$307,500	$347,500	$1,230,000
Testing Provider	$10,000	$10,000	$35,000	$40,000	$95,000
Software	$5,000.00	$5,000	$5,000	$5,000	$20,000
Creative Services	$45,000	$45,000	$45,000	$45,000	$180,000
T&E	$15,000	$15,000	$15,000	$15,000	$60,000
Miscellaneous	$25,000	$25,000	$25,000	$25,000	$100,000
Portal Vendor	$100,000	$120,000	$140,000	$160,000	$520,000
Classroom	$177,000	$212,000	$247,000	$282,000	$741,177
Marketing	$1,012,000	$1,932,000	$1,472,000	$2,915,000	$7,331,000
Total					**$8,097,655**

The Learners and Student Demand

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DCU learners consist primarily of professionals who fit into one of three category groups. The first group is composed of IT Professionals, Facilities Managers, and Engineers. The second group is comprised of professionals seeking added training and certification to complement their workplace experiences and education. The third group is current DCU employees seeking to learn more about their business. DCU markets directly to its learners through articles in Currents and Power News (APC company publications), press releases and industry publication sources, direct mail and email, banner ads, web-based advertising, industry association websites, promotions, tradeshows, and reciprocal industry association web links. DCU has educated over 85,000 learners worldwide since its inception in 2006, the majority of which are from the United States and India, but DCU has trainees from 147 countries. (S. Hartman, personal communication, October 28, 2009). Figure2 outlines the enrollment and course completion numbers from 2006 - 1H 2009.

Figure 2

Year	Hits	Registrations	Courses Completed
2006	164,026	48,749	17,832
2007	136,817	15,291	54,234
2008	122,768	10,607	56,963
1H 2009	37,716	7,351	34,196
Totals	461,327	81,998	163,225

- Students who enroll in DCU's online courses are able to complete coursework from their home or office. The students must have a computer and the basic computer skills necessary to navigate through the user-friendly website. Many DCU students re-enroll in additional courses[3] and over 90% of survey respondents would take another DCU course recommend DCU to a colleague.

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Learning Outcomes

　　The desired outcomes of DCU programs are that the participant will gain content expertise, mastery of program specific skills and learning skills. The indicators of success for these learning outcomes are judged by quizzes and certification exams. The project is considered successful if the learner completes course quizzes at 80% or better. This demonstrates they've gained the knowledge intended. Additionally, the passing of a certification exam qualifies them to participate on a team involved in design, build and operations of a data center. DCU does not currently seek feedback on learners' progress from their places of employment. Quizzes and certification exams are the only way outcomes are measured. Without additional information on medium and long term learning outcomes, it may be difficult to identify the learner supports necessary for long term skill retention and the timeframe necessary for recertification.

Opportunities

　　Offering free self-study, web-based courses for IT professionals, engineers and people involved in building or operating server rooms and data centers while charging for its certification programs, creates learner awareness of DCU and its parent organization, APC; and potential revenue generation through increase enrollment in its certification programs and APC products sales. Potential drawbacks, however, include foregoing revenue for the online courses and termination of programs due to course costs exceeding its value or benefits to the organization.

　　DCU also offers fee-based classroom instructions, taught by experienced training and development professionals within their related business fields, at its United States training

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facility in St. Louis, MO. Fee-based F2F courses may also be provided at customer sites by requests. This strategy demonstrates flexibility and a willingness to accommodate the customers and allows direct competition with other data center training contenders like Anixter University and the International Consortium for Organizational Resilience (ICOR).

DCU's parent company, APC, envisions creating "new site features including message boards, and specialized podcasts" (Global Knowledge, 2007). These tools would offer customer related organizations or individual learners a forum to share useful information pertaining to course related topics; and provide alternative mobile delivery means of course related materials.

Challenges

DCU's "robust e-learning platform" (Global Knowledge, 2007), is globally accessible via the internet, but presented in only one language – English. Translating the courses to other languages is essential for DCU if they desire to gain a larger portion of the target market. Course revisions and expansion are also necessary to avoid losing the market edge over their competitors; however, hiring additional design staff is problematic due to the deteriorating economy. In addition, although assistance may be obtained via the DCU learning content support email address, live instructional support is not provided.   This may become a problem in the future resulting in a loss of existing students.

Conclusion

DCU, the learning institution founded by APC, offers training opportunities and support for professionals involved with data center related functions. Through implementation of its forward-thinking goals using a leading edge approach, DCU has experienced great success. To

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remain ahead of its competitors however, DCU must continue to identify and address the needs

of the potential target market, and also identify innovative solutions to retain the competitive

edge that they currently enjoy.

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Footnotes

[1] Here is a complete listing of the international organizations that recognize DCU courses

for accreditation (Data Center University by APC, 2008).

- The Institute of Electrical and Electronics Engineers (IEEE)

  o IEEE offers 1 Professional Development Hour (PDH) for each hour.

- The Institution of Engineering and Technology (IET)

  o All courses are approved for credits.

- The Chartered Institution of Building Services Engineers (CIBSE)

- The Healthcare Information and Management Systems Society (HIMSS)

  o Specific HIMMS courses are approved for (1) contact hour for renewal of

    CPHIMS and CHS licenses.

- International Facility Management Association (IFMA)

  o Certain Courses are approved for credit for CFM/FMP maintenance points.

- The Illinois Society of Professional Engineers (ISPE)

- The Building Industry Consulting Service International (BICSI)

  o Specific courses are identified as (1) CEC for RCDD, NTS, and INS.

- State Engineering Boards

  o The following states will honor Professional Development Hours (PDH's)

    required toward the maintenance of their state board licenses. State boards will be

    "satisfied when sponsoring organizations conduct courses which will enhance and

    improve a licensee's professional skills and meet the criteria" of their guidelines.

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It is up to the engineer (learner) to verify the applicability of the course and to

meet the conditions of their state board rules. DCU provides links off their

website to each state's information.

- Alabama, Arkansas, Florida Continuing Education Provider #140,

  Georgia, Iowa, Illinois, Kansas, Minnesota, Missouri, Nebraska, Nevada,

  New Hampshire, North Carolina, Oregon, South Carolina, Tennessee,

  Texas, Utah, West Virginia

[2] Here is a complete listing of the learning paths offered by DCU.

- IT Staff (Systems Administrator, IT manager, DC Manager, Project Manager, IT

  Director, Team Leader)

- Network Staff (Network Engineer, Network Administrator, Network Manager)

- Consultant (Consulting Engineers, Independent Consultant, IT Consultant, System

  Engineer, Business Consultant, Project Manager, Analyst)

- Facilities Staff (Facilities Manager, Facilities Engineer)

- Executive (President, CIO, CFO, CTO, SMB Owner, VP, GM)

- DCU Certification Exam

- Going Green

- Students can create their specialized learning path

[3] Based on testimonials from students who have re-enrolled, some of the reasons are:

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- "DCU certification is a valuable professional credential"

- "Knowledge gained from DCU courses not only enabled me to perform a data center assessment but also gave me credibility when presenting it to management."

- "The online classes are well organized and easy to take. I can learn from the office, at home, or on a trip."

- "Having an additional certification under my belt is an excellent way to add value to my career" -Brian Gantzer, Network Engineer, Data Center Strategies, Countrywide Financial.

- "DCU provided concise refresher courses and a resource for designing an energy-efficient, cost-effective, and reliable data center that will meet current expectations of 24x7x365 availability and future expansion needs." -Kathy Mader of Penn National Insurance