Case Study: Rapid Transition to Remote Learning and Working (University of Central Florida)

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Initiatives: CIO Role Evolution; Education Digital Transformation and Innovation; Education Technology Optimization and Modernization

COVID-19 lockdown forced UCF to move all faculty and staff to remote teaching and working in a few days. Higher education CIOs can find out how UCF’s IT organization facilitated these transitions with good digital infrastructure, strong relationships, flexibility and attention to individual needs.

Institution name: University of Central Florida

Industry: Higher education

Location: Orlando, Florida

Annual budget: $1,852,771,930 (fiscal-year 2019 to 2020)

Students: 71,948

Employees: 12,354

Overview

On 11 March 2020, the Board of Governors for Florida’s state university system announced that all instruction should move online, starting 18 March in response to the COVID-19 pandemic (see Figure 1). This announcement came in the middle of spring break at the University of Central Florida (UCF). In addition, all employees were advised to begin working remotely. In effect, the university had just days to facilitate remote working, teaching and learning.

Faculty members returning to work on Monday, 16 March would have two days to move a total of 5,000 course sections that were not already online into an online modality. UCF’s IT organization, Information Technologies and Resources, would be called on to facilitate these transitions.
Solution: Four Key Factors Help Move UCF to Remote Learning and Work

Four factors contributed to the IT organization’s success during the crisis. This is an example of a COVID-19 response that has increased the CIO’s influence with the CEO and other business leaders (see Figure 2).
Existing Capabilities

UCF and the IT organization had already developed significant digital capabilities before the pandemic. The university started making significant investments in digital infrastructure in 1995, which included:

- Building out the campus data network
- Equipping all classrooms with multimedia
- Implementing an ERP system and an online service portal
- Migration to cloud infrastructure and voice over IP telecommunications

The digital initiative also included provision of digital library resources for students and faculty working remotely and the creation of a division that can produce and deliver high-quality online courses in partnership with UCF’s academic colleges and faculty.

UCF undertook this work to expand its reach to student populations that couldn’t be completely served on campus. Before March 2020, UCF already offered 100 academic programs online and reached 25,000 students online that it couldn’t otherwise serve on its multiple campuses. Nearly 50% of credit hours were
earned online. By building these digital capabilities over several years, UCF created the ability to scale up
online learning for all classes when the COVID-19 lockdown mandated it. Thus, UCF entered the
pandemic well ahead of where most universities are with online learning. In an era of frequent
disruptions, digital infrastructure can pay unexpected dividends (see The 2021 CIO Agenda: Seize This

“Through the foundation we had established, which included cloud services
and a wide variety of digital services for the campus, we were able to make
that transition relatively smoothly.”

— Joel Hartman, CIO, University of Central Florida

Relationships and Communications
From its inception at UCF in 1996, online learning had gained substantial traction to the extent that, by
2020, nearly half of all instruction was delivered in an online modality. It can take up to a year to develop
a high-quality online class, because online teaching requires a different approach from classroom
instruction. To help faculty create high-quality online courses, UCF offers:

- An eight-week, 80-hour faculty development course that faculty were required to complete in order to
be certified to teach online. UCF typically offers this three times a year for 40 faculty members each.

- Ongoing support in instructional design and media creation to handle any changes needed to create
online courses or special circumstances.

- Ongoing efficacy assessment to ensure student success in the online environment.

Before COVID-19, more than 2,000 faculty members had completed the faculty development course for
online teaching, and about 80% of all students enrolled in one or more online courses each year. In
addition, online learning leaders met with the academic deans twice a year to develop strategies for their
colleges to maximize the opportunities of digital education.

All of this work built up a large number of instructors qualified to teach online, as well as substantial
online course content. More importantly, these efforts built strong relationships and trust with faculty
and academic administrators that enabled UCF to move online quickly when COVID-19 struck (see also
Navigating Change — The CIO’s Role in Creating an Adaptive Higher Education Institution).
“The real issue is not so much the credential behind your name as the relationship and communication you have with the various constituents on campus. I think engaging those constituents and making them part of the planning, development and execution really played a role in their adoption along the way.”

— Joel Hartman, CIO, University of Central Florida

Innovation and Flexibility

Despite these preparations, hundreds of faculty members were not prepared to teach online. Clearly, the existing months-long faculty development course could not ramp up quickly enough. The university recognized that it would have to do things differently to meet the challenge of migrating 5,000 face-to-face courses into an online format in a matter of days. Accordingly, the university set aside its usual procedures in favor of improvised approaches to supporting faculty, including:

- Implementing the videoconferencing application Zoom campuswide, and integrating it into UCF’s learning management system Canvas
- Relaxing expectations for online courses, and allowing instructors to directly transfer online the classroom techniques they would normally use to lecture to students and set up the course syllabus
- Quickly creating an asynchronous faculty development program that could enroll hundreds of instructors at a time
- Providing faculty support from instructional designers and media producers, and giving students additional online library services and help desk support

Although these improvised steps are not best practices for online learning, they helped get the university through the immediate crisis in a very short time. Still, “remote teaching and learning” is not quite the same as “online teaching and learning” — and the rapidly created remote courses are being continuously improved.

“I think the major story here is not so much of a technology story but a human story.”

— Joel Hartman, CIO, University of Central Florida
Focus on the Individual

The transition to fully remote working, teaching and learning is a story of both mass exodus and individual circumstances that required both macro and micro approaches. This proved especially important to certain individuals during the pandemic — for example:

- Students who lost their jobs or even their housing
- Faculty members who are at home and have to balance their children’s education with their research and teaching responsibilities

One-size-fits-all procedures and policies would leave large numbers of people underserved. The university recognized that it can’t provide everything that employees and students may need on the fly. So, it celebrates and shares creative solutions that faculty create on their own. For example, one faculty member lectured by writing notes on the door of her bathroom shower for students to read as if it were a whiteboard.

Results: The IT Organization Becomes a More Strategic Partner

UCF’s focus on digital infrastructure, relationships, innovation and individuals helped to deliver a successful institutional response to the pandemic. The IT organization:

- Delivered the ability for people to work from home (for example, greatly expanded VPN and telephone trunking capacity).
- Supported the ability to expand online education in response to the initial demands of the pandemic.
- Delivered the ability to communicate across campus effectively. (People could migrate their office phone lines to their homes electronically and continue to communicate as they would in their offices, as well as use collaboration platforms such as Microsoft Teams and Skype for Business.)

These successes boosted morale within the IT organization and raised the level of expectations of what it could accomplish. The university is now considering how to apply what it has learned during the crisis to the future and is analyzing why some operations became more efficient during COVID-19 remote working. It hopes to use these insights to make the institution more efficient and effective. For example, even before the pandemic, financial calculations of online education included cost avoidance of new buildings and their maintenance (and parking decks, which cost $12,500 per parking space to build).

While many U.S. colleges and universities experienced substantial enrollment decreases throughout the pandemic, ¹ UCF’s enrollment increased. ² Flexible access to both online and hybrid learning, along with extensive universitywide support, likely contributed to the increase.
“So I think IT has had an opportunity to show our stuff over this period, and it may bode well for IT in the future in terms of being a more strategic partner with the university’s leadership.”

— Joel Hartman, CIO, University of Central Florida

About This Research
We based this report on an interview with UCF CIO Joel Hartman in August 2020.

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Navigating Change — The CIO’s Role in Creating an Adaptive Higher Education Institution

Evidence
1. Fall 2020 Current Term Enrollment Estimates, National Student Clearinghouse Research Center
2. UCF Student Enrollment, University of Central Florida Institutional Knowledge Management