



2017 ANNUAL REPORT

IT-oLogy®





Dear Friends,

I am pleased to share with our supporters, parents, educators and public our first Annual Report to the Community. Our Board of Directors has been instrumental in guiding us this past year and I would like to thank each Board member and our Chairman, Steve Wiggins, for their constant support. I would also like to thank our collaborators for their support, both financially and in-kind. We are truly blessed to have such assistance.

As you know, South Carolina's IT community is vibrant and growing – so much, in fact, that there are many open jobs but not enough talent to fill them. Our goal at IT-oLogY is to develop and secure IT talent for South Carolina's workforce for today and beyond. Our mission to attract, retain and educate our citizens about careers in the IT profession is our daily responsibility.

The information in this annual report is a recap of the progress we have made the past year towards our goal. Our roadmap to continue to grow IT talent in South Carolina is based on our guiding principles of:

- ◇ Believing that information technology changes the world
- ◇ Believing those who actively participate and lead in developing these advancements are the heroes of today and tomorrow
- ◇ Believing IT offers limitless career opportunities to all
- ◇ Believing in helping people to discover their role in information technology and equipping them with the knowledge and tools

We hope you will join us as we tackle the challenges and embrace the opportunities to grow the IT talent pipeline in South Carolina.

Tammy Mainwaring
President, IT-oLogY

Table of Contents

Mission and Purpose	3
Beliefs	3
Board of Directors	4
Methodology	7
Impact	8
Programs	11
Research	14
Financial Data	17
Awards and Achievements	18
Volunteers	19
Partners	20
Conclusion	21

I. IT-oLogy Mission and Purpose

The Midlands and South Carolina are facing a crisis that is growing exponentially each year. In an increasingly digital world, all industries rely on the efficient and effective use of information technology (IT). Each year, hundreds of IT jobs in South Carolina become available, and yet remain unfilled. Based on research (Multiple Choice Inc, 2017) there are currently more than 6,000 vacant IT jobs in South Carolina. Alarming, South Carolina is barely producing enough IT graduates to fill 40% of these jobs. (code.org, 2015). This represents millions of dollars being outsourced to other states and countries as well as salaries not realized that could significantly raise the standard of living for many of South Carolina's citizens.

Complacency is not an option! In order for South Carolina to stay successful, it is imperative that there is a skilled and ready workforce for the jobs of the 21st century. Currently, this workforce is not being produced.



IT-oLogy is a non-profit (501c3) in South Carolina that works to ensure every South Carolinian is equipped to take advantage of the career opportunities in the new technology economy. IT-oLogy's mission is to attract, educate, grow and retain IT talent to solve the IT skills crisis that South Carolina is facing. We do this through offering innovative, interactive, high-quality programs designed for K-12, postsecondary students, veterans, career changers and IT professionals.

II. IT-oLogy Beliefs

We believe that information technology changes the world. New advances in science, medicine, nutrition, engineering, security and education spread opportunity and hope.

We believe those who actively participate and lead in developing these advancements are the heroes of today and tomorrow.

Because information technology penetrates every industry and does not discriminate by age, gender, ethnicity, or any other factor, we believe it offers limitless career opportunities to all.

We believe in helping South Carolinians of all ages discover their unique talents in information technology equipping them with the skills to prosper in a rapidly growing global technology economy.

III. IT-oLogy Board of Directors

IT-oLogy is proud to have innovative leaders in the IT career field committed to building the current and future IT workforce.

STEVE WIGGINS



Stephen K. Wiggins (Steve) is a retired executive vice president and chief information officer of BlueCross and BlueShield of South Carolina and was responsible for all corporate systems strategic planning, development, programming and enhancements. Under Mr. Wiggins' direction, BlueCross operated two of the most advanced data processing centers in the United States processing an average of 1 billion dollars of healthcare payments every working day. Steve has written three books on the subject of management, the first entitled "Putting Picasso on a Schedule: The Art and Science of Managing IT" in 2012, "Managing Picasso: The Art and Science of Managing IT, Part 2" in 2014, and "Leading Picasso: The Art and Science of Managing IT, Part 3: in 2016.

He was named one of the Elite Eight of 2008 by Insurance & Technology magazine in recognition of the top eight insurance technology executives in the country, something the magazine has been recognizing since 1999. During his tenure as CIO (1993-2016), BlueCross has won numerous national awards related to technology. Mr. Wiggins has been employed with BlueCross since 1979. He earned the designation of Certified Systems Professional in 1985. Previously, he was with Electronic Data Systems in Dallas, Texas. Mr. Wiggins graduated with honors from Clemson University in 1976.

LOLA JORDAN



Ms. Jordan brings more than 20 years of health care and information technology to bear on the solutions that CDS provides. She brings a rare combination of having led large fiscal agent and Medicare carrier operations and a technology background, including data center, infrastructure, and print and application development teams. As a pioneer in the health care information technology field, Ms. Jordan brings insight and vision to the connectivity between health care information and technology. A person with her experience and forethought can discuss business areas such as hosting services, managed services, cloud business models, financial advantages, government programs, security, virtualization and z/Linux. Additionally, Ms. Jordan adds a perspective that few can – how to work with and build relationships with organizations such as the Centers for Medicare & Medicaid Ser-

vices and the Blue Cross and Blue Shield Association.

III. IT-oLogy Board of Directors (cont.)

BILL KIRKLAND



Bill Kirkland leads USC's Office of Economic Engagement. Previously, he served the USC / Columbia Technology Incubator as the Entrepreneur in Residence to provide early stage companies with strategic and operational planning, business development and investor management. Bill is also a Managing Partner of LK Global Consulting LLC. Prior to founding LK Global Consulting, LLC, Bill served as the President & Chief Executive Officer of Collexis Holdings, Inc. He was the company's co-founder, helping to bring European technology into the American market in 2006. He managed the successful sale of the company and its subsidiaries to Reed Elsevier in June of 2010. While at Collexis, he raised over \$20M in private funds from global investors. Prior

to joining Collexis, Bill spent two decades serving in executive management positions with both IBM and Pfizer. Bill earned a degree from the University of South Carolina.

TERRY FLOYD



Terry M. Floyd is the Managing Partner of TM Floyd & Company (TMF), an information technology services firm that Terry founded in 1976. With previous experience as a software engineer working for aerospace and telecom companies, Terry understands the IT industry from the perspectives of an executive and an IT consultant. Much of TMF's business is focused on providing IT services to healthcare payers. This industry-specific focus has led to the development of a portfolio of strategic consulting services. TMF's service offerings range from IT strategic planning and system implementation and integration to regulation implementation and compliance. TMF currently has a team of experienced healthcare consultants dedicated to helping payers respond to federal regulatory issues. TMF's success throughout its nearly 35-year history is a testament to Terry's busi-

ness drive and his ability to keep TMF agile enough to quickly respond to changes impacting IT and to translate that quick response into an ability to keep TMF's clients ahead of the curve.

III. IT-oLogy Board of Directors (cont.)

SANDY SMITH



Sandy Smith is the Senior Development Officer and Assistant Vice President for Internal Support within the I/S division of Blue Cross Blue Shield of South Carolina. She directs all aspects of talent management within Information Systems – employee recruiting, retention, as well as learning and development programs. In addition she is responsible for I/S executive reporting and analytics that include the annual cost and budget processes. Sandy leverages 25+ year’s experience in various IT roles – programmer, account manager, team lead of application development team, client manager, and business analysis. She has worked in IT her whole career supporting the commercial insurance, utilities and health insurance industries. She received an Associate’s in Computer Programming from Midlands Technical College and a Bachelor’s of Science in Information Tech-

nology from Limestone College.

RAY BRANCATO



Ray Brancato is Senior Vice President of Global Solution Sales for DevOps, leading the Enterprise Management and Application Delivery businesses for CA Technologies. Ray and his team guide companies through their DevOps journey to accelerate and transform their business while ensuring that critical applications and services are reliable. Ray and his team work directly with customers to identify key capabilities that will help them drive greater innovation, increased productivity, and competitive advantage as they navigate the application economy. He is also involved in developing CA’s overall DevOps strategy, focusing on agile solutions that provide quick-time-to-value by helping organizations drive continuous delivery of high quality applications and

services. Ray has over 25 years of experience in technology sales across multiple industries, including financial services, communications, pharmaceutical, service providers and telecommunication companies. He held various sales leadership roles at Peregrine Systems, Clarus, and BMC Software before rejoining CA more than seven years ago. Ray earned his Bachelor of Science degree in finance and management science from the University of South Carolina in Columbia.

IV. IT-oLogY Methodology

Research shows that a child must be reached by 8th grade in order to truly have an interest in an IT career. IT-oLogY offers programs/events from Pre-K-12th grade designed to provide students with technology confidence and teach them to problem solve, discover, develop and innovate. IT-oLogY's methodology is shown below in the cycle of creating the "Whole IT Professional."

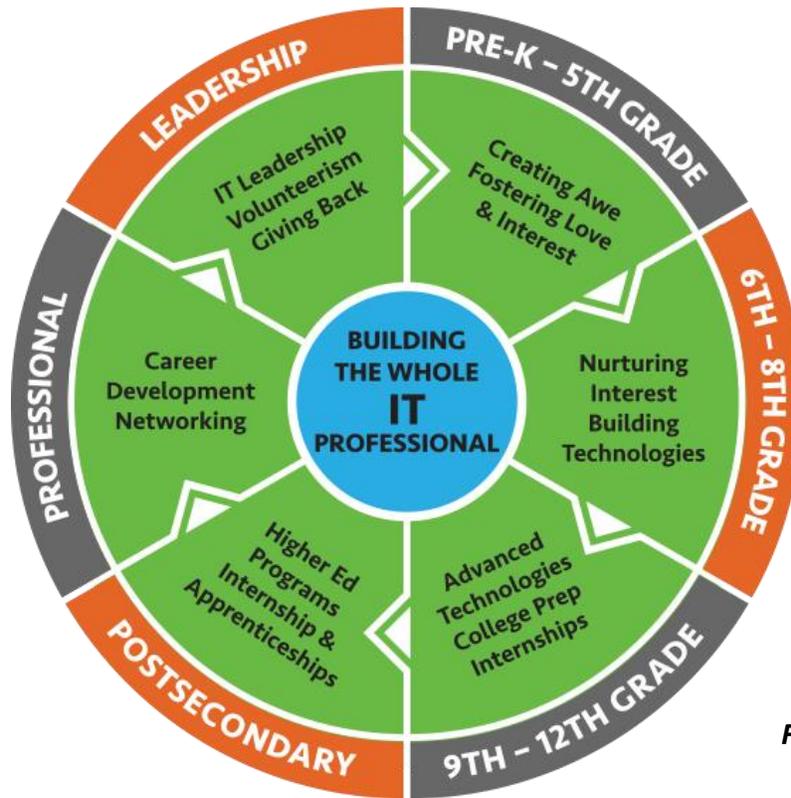


Figure A

Our approach in the first half of the wheel (*Figure A*) is to begin young and foster a love for technology that grows and progresses just as our students do. The American Academy of Pediatrics states that high quality, interactive media can have educational benefits for children above age two, improving "social skills, language skills, and even school readiness."

IT-oLogY offers cutting-edge programs aligned to the SC standards for computer science and digital literacy beginning at the Pre-K level. Our innovative programs teach children to code, use digital cameras, and fly drones in a fun, hands-on, interactive environment. In addition, IT-oLogY's Pre K-12th grade programs integrate 21st century learning standards with life skills and technology in a safe learning environment.

IV. IT-oLogY Methodology (cont.)



Our programs continue through elementary, middle and high school with age appropriate, current technology learning while integrating interpersonal skills. Students need educational experiences in school, after school, during non-school hours and in summer camps that provide opportunities to build knowledge and technical skills for success. Cultivating life experiences and technology in stages throughout Midland's students' education will help encourage them to make a positive impact and act responsibly toward self, family, school, community, nation, and the world.

A secondary benefit of our Pre-K-12th grade programs are that the technology and problem-solving skills learned will be shared at home having a domino effect which opens the door to potential adult learning.

Our Pre-K-12th grade programs impact the community by creating well-rounded, digitally literate, happy children who are prepared for a successful future. These children are our future workforce and the earlier we begin with digital literacy and life skills, the better we will be as a society.



The second half of creating the "Whole IT Professional" focuses on postsecondary career development. (Figure A). Postsecondary students that do not major in Information Technology have the option, through IT-oLogY's Course-Power program, to obtain a Minor in Applied Computing. Apprenticeships and internships are facilitated and provided by IT-oLogY. Coursework and career pathways are offered for veterans and career changers to transition into the IT workforce.

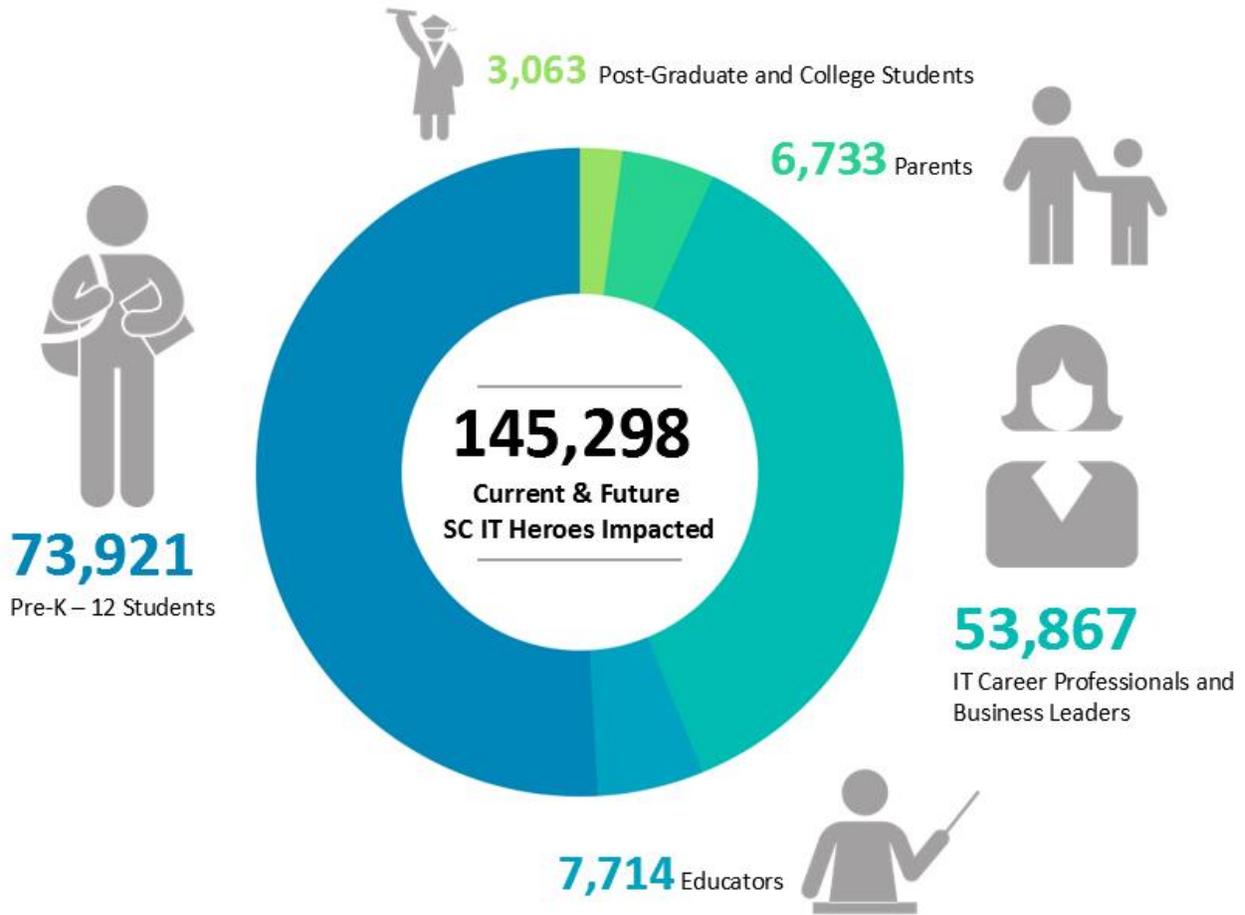


The end goal for IT-oLogY is to develop a lifelong learner and IT professional that volunteers and gives back to the community making the "Developing the Whole IT Professional" wheel an iterative cycle for generations to come by producing IT leaders in the Midland's that give back to the future just as we are giving back today.

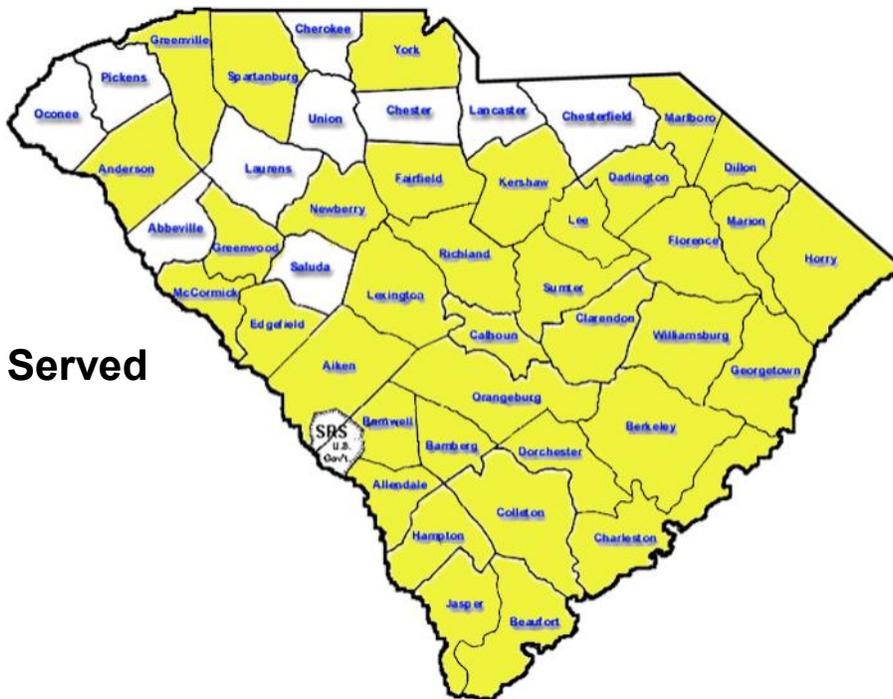
"Technology is entrenched in nearly everything we see, use, consume at one level or another. As a parent, I feel it is extremely important that my daughter be exposed to IT from as many avenues and as early as possible. She uses technology every day, and to expose her to IT at a young age where she is not just the consumer but being given a view in the mechanics of how things work and the possibilities of change I hope will have a positive influence her future. IT-oLogY is the spark to a future path."

Scott Morehouse, Sr. Infrastructure Solutions Designer and Isabel's dad

V. IT-oLogy Impact



SC Districts Served



V. IT-oLogy Impact (cont.)

South Carolina Educational Institutions Served



VI. IT-oLogY Programs

Pre-K – 12 Grade	Post-Secondary	Career Development	IT Professionals
Tech Explorers	Minor in Applied Computing	Educator PD: Technology Integration Across the Curriculum	WISE Events
Tech Field Trips	Internships	Educator PD: Code.org Training	IT Soft Skills Program
Cyber Saturdays	Mentor Programs	Educator PD: Cyber Innovation Center Training	CompTIA Training and Certifications
Tech League Competition	IT Soft Skills Program	CompTIA Training and Certifications	Quarterly Trends in Technology Events
IT-oLogY Innovation Challenge	WISE Events	IT Soft Skills Program	ITIL Certification and Training
Summer Cyber Camps	CompTIA Training and Certifications	WISE Events	Opportunities to Mentor and Give Back to Community
Aspirations Awards – 2016 National Winner from SC	Quarterly Trends in Technology Events	Quarterly Trends in Technology Events	Apprenticeship Lunch and Learns for Employers
After-School Enrichment	Saturday New Career Workshops	Saturday New Career Workshops	
IT Soft Skills Training	Career Fairs	Career Fairs	
Career Fairs	Internships	Apprenticeships/Internships	



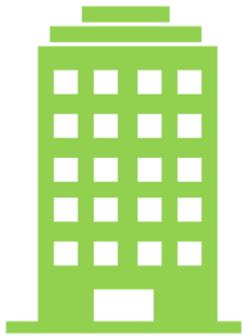
"TechExplorers was an excellent introduction to technology for my children ages 9, 8, 5, and 4. The instructors, as well as the material, provided rich content at a level that could easily be absorbed and applied. We continue to sing the 7 Habits song as we travel! Thank you so much!"

Chelsea Trevoniak, mom

VI. IT-oLogY Programs (cont.)

Delivery Methods

On-Site at IT-oLogY



IT-oLogY[®]

OR

**Off-Site
Customer Location**



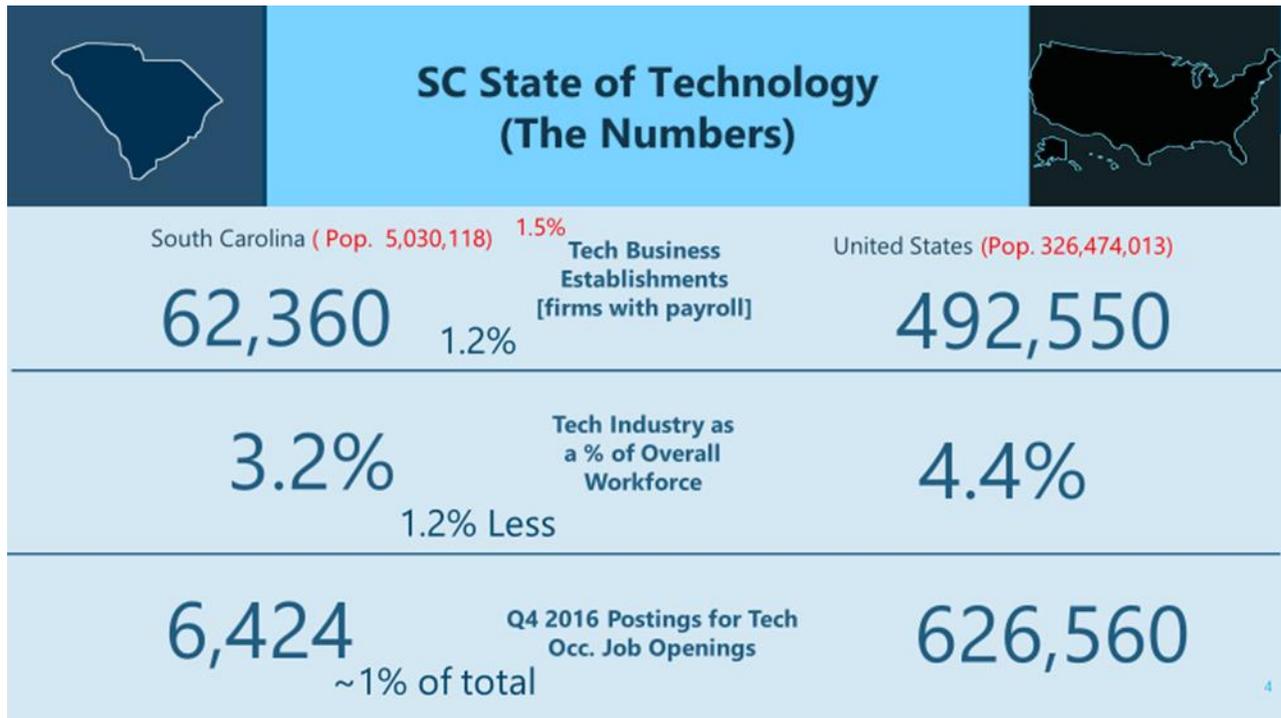
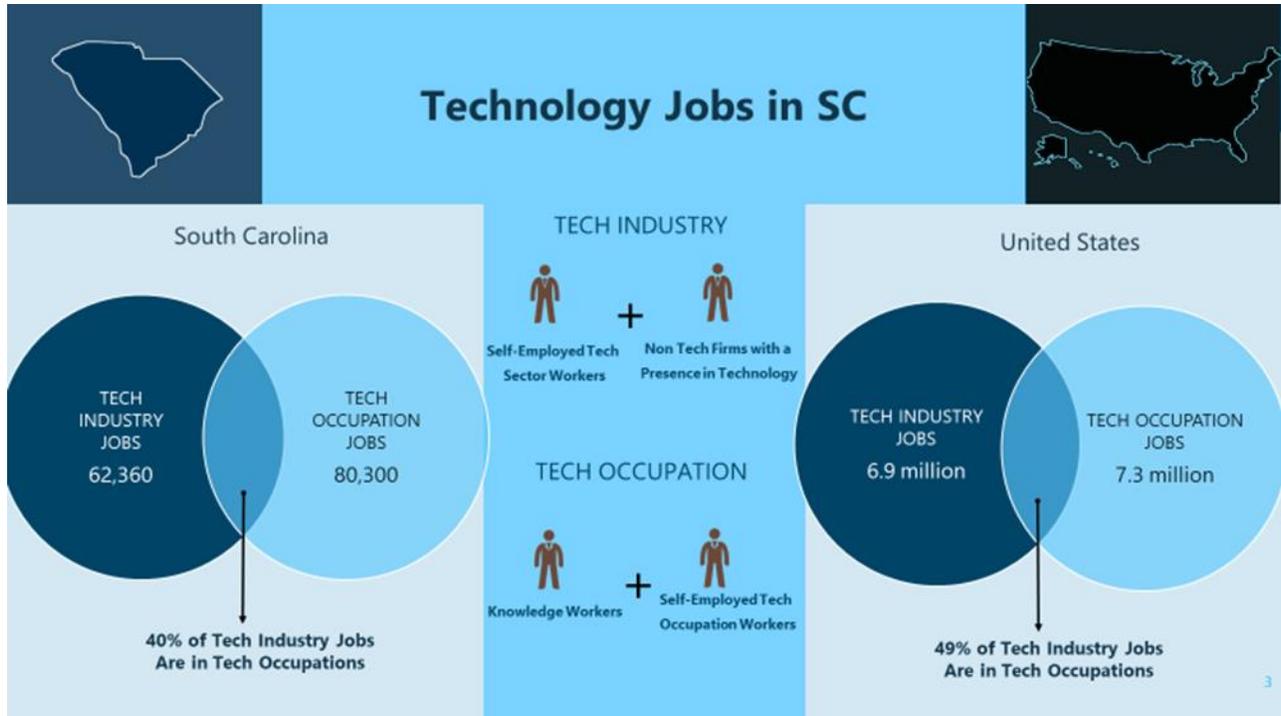
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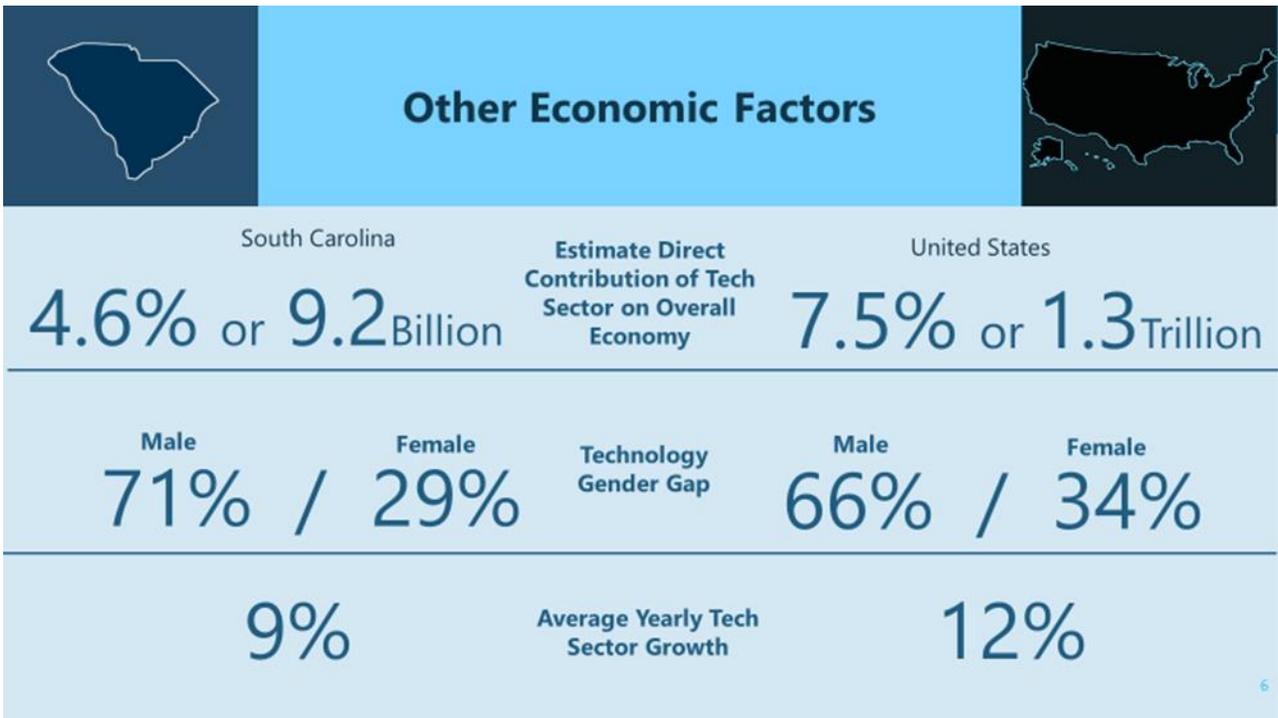
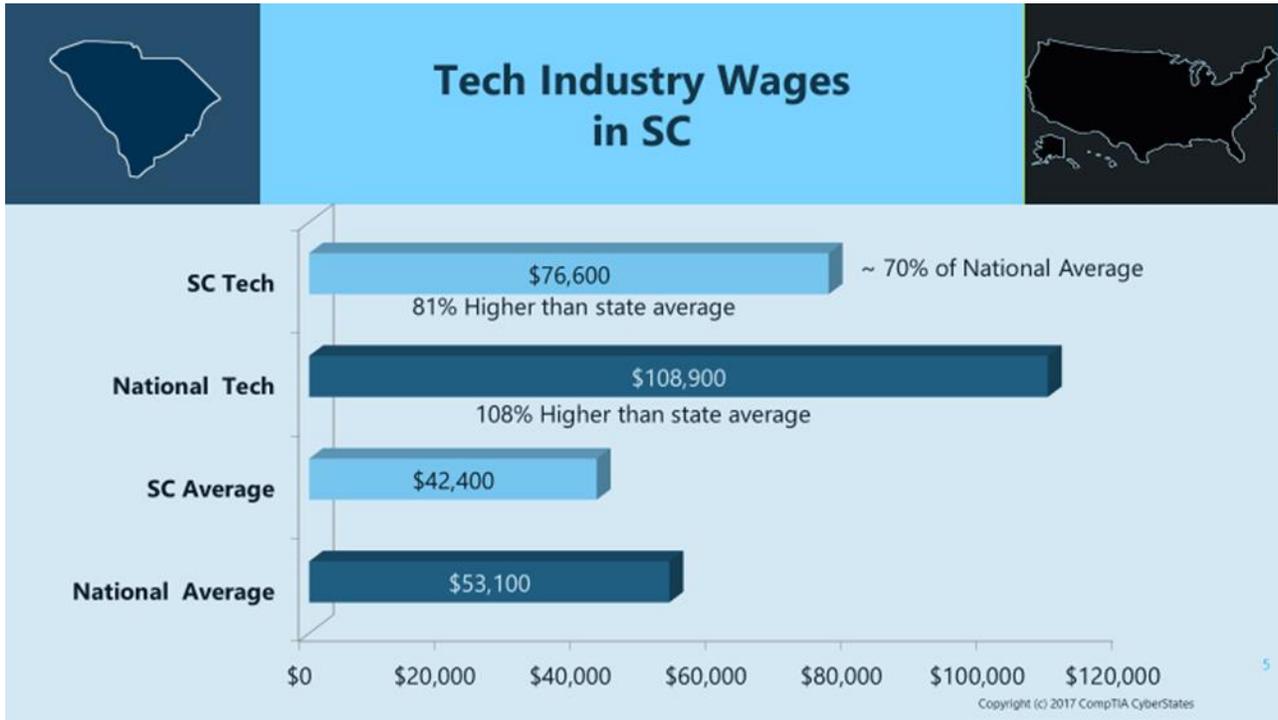
Based on Customer Needs



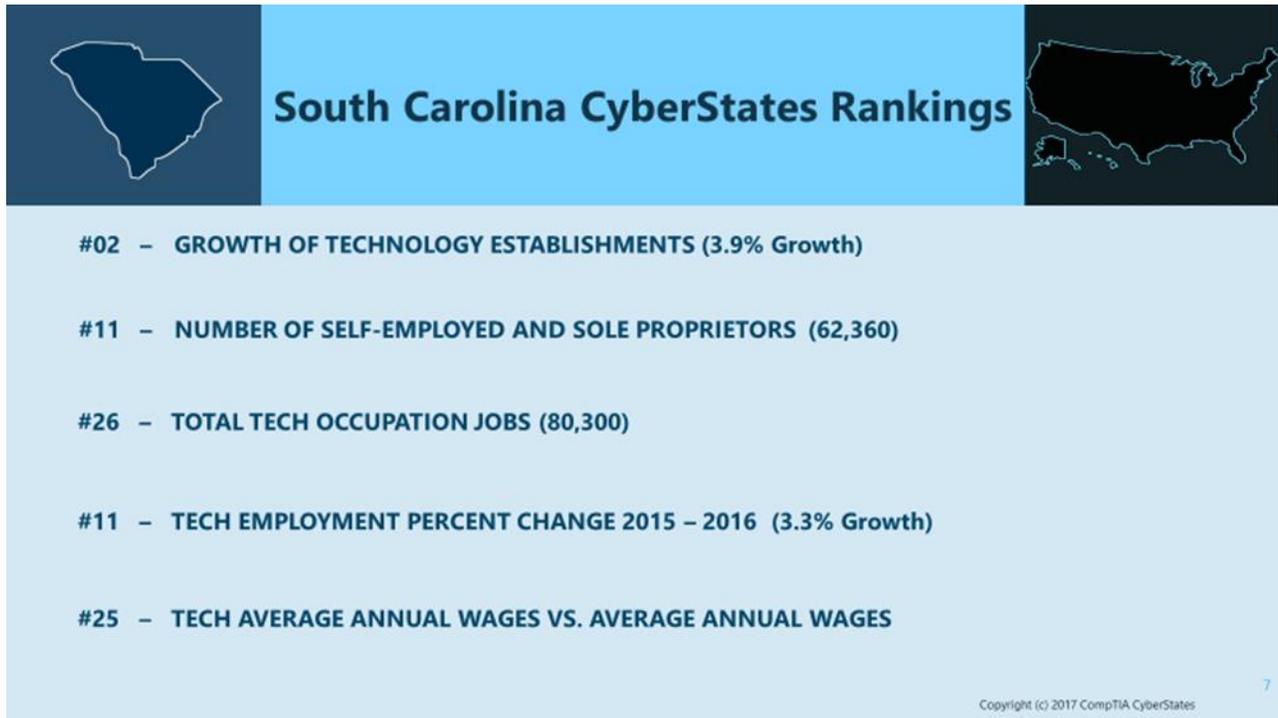
VII. IT-oLogY Research – IT Workforce Needs Assessment, Gaps, and Solutions



VII. IT-oLogY Research (cont.)



VII. IT-oLogY Research (cont.)

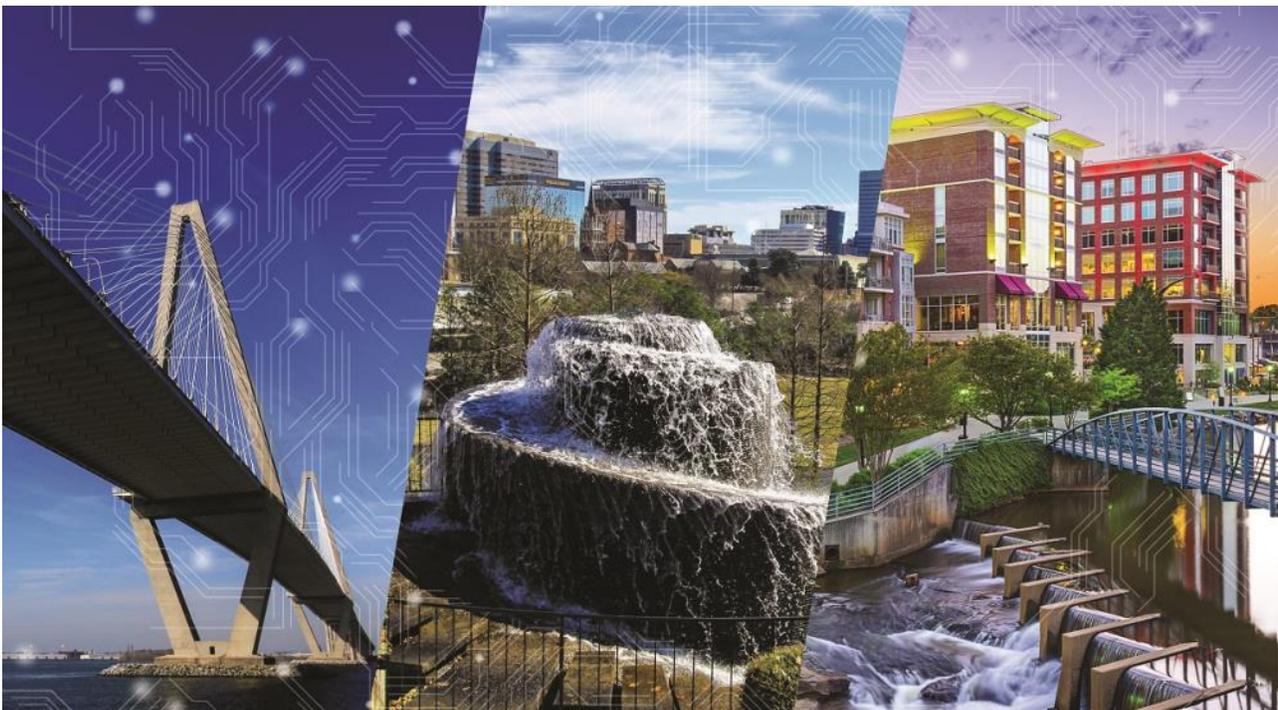


The graphic features a blue header with a white outline of South Carolina on the left and a white outline of the United States on the right. The title "South Carolina CyberStates Rankings" is centered in white text. Below the header, five ranking items are listed in dark blue text on a light blue background. A small number "7" is in the bottom right corner, and a copyright notice "Copyright (c) 2017 CompTIA CyberStates" is at the bottom right.

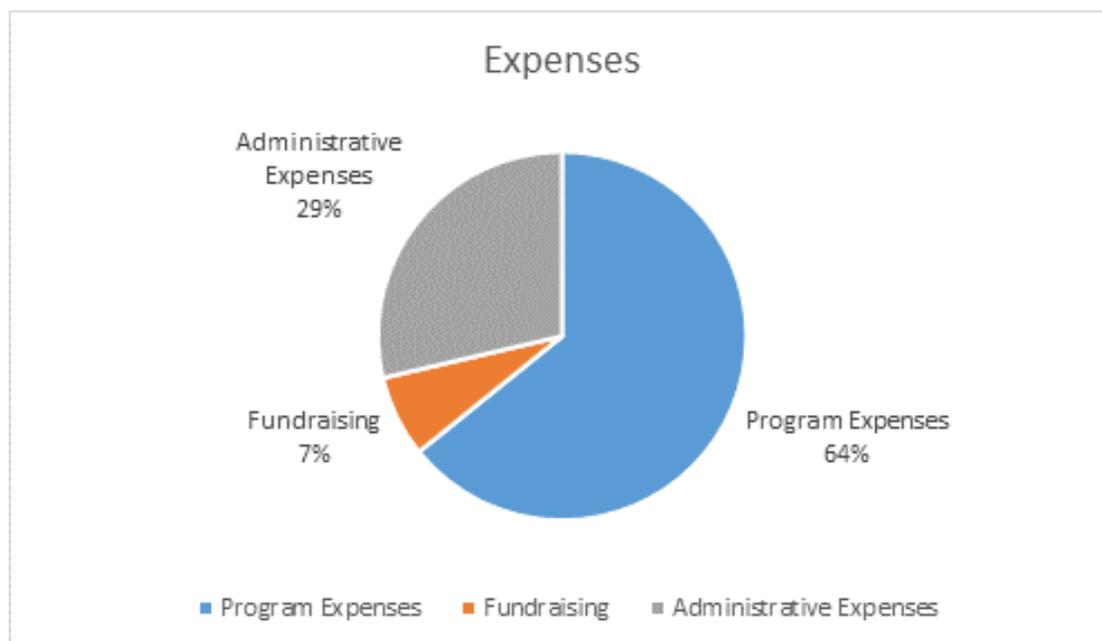
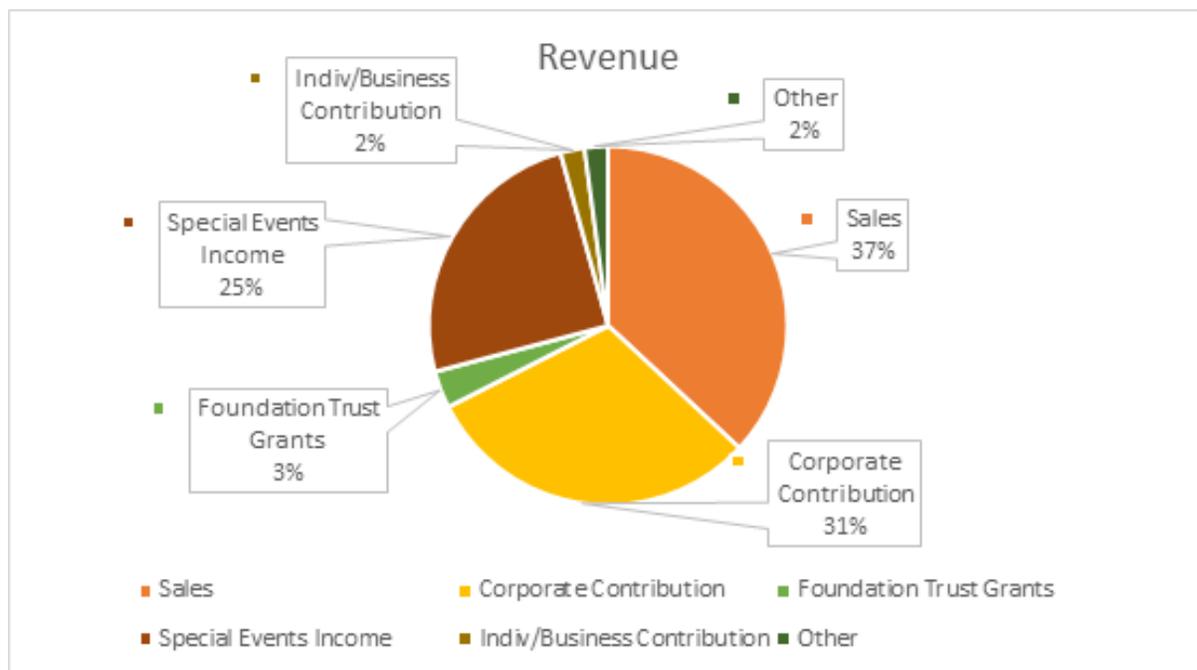
South Carolina CyberStates Rankings

- #02 – GROWTH OF TECHNOLOGY ESTABLISHMENTS (3.9% Growth)
- #11 – NUMBER OF SELF-EMPLOYED AND SOLE PROPRIETORS (62,360)
- #26 – TOTAL TECH OCCUPATION JOBS (80,300)
- #11 – TECH EMPLOYMENT PERCENT CHANGE 2015 – 2016 (3.3% Growth)
- #25 – TECH AVERAGE ANNUAL WAGES VS. AVERAGE ANNUAL WAGES

Copyright (c) 2017 CompTIA CyberStates 7



VIII. Financial Data



IX. Awards and Achievements

In 2017 IT-oLogy was awarded the [Annual Literacy Award \(ALL\) by the USC College of Information Science](#) recognizing the non-profit's digital literacy achievements. The ALL awards honor individuals and groups who have had a statewide impact on literacy in South Carolina.



ApprenticeshipUSA Leader

In partnership with the United States Department of Labor, IT-oLogy promotes apprenticeships as a tried and true workforce development strategy that have paid dividends for companies who use the program.



Red Cross First Responder Certification

In 2017, the entire IT-oLogy team plus all IT-oLogy interns attained First Responder certification to ensure the safety of children and adults that attend IT-oLogy's programs and events.



X. Volunteers

As a non-profit, our volunteer community of over 500 truly makes a difference for our programs and events for all ages across the state of South Carolina. IT-oLogY volunteers share our mission of helping others take full advantage of the unlimited opportunities information technology offers.



XI. IT-oLogy Partners



XII. Conclusion

IT-oLogy welcomes individuals, groups, and organizations to join us in the fight for better lives for SC citizens of all ages. The gift of exposure to technology, training, parental involvement and awareness of career opportunities is what IT-oLogy can provide to prepare children to succeed in school and in life. We attract, educate, grow and retain South Carolina's citizens so they can secure well-paid IT jobs that will enable them to provide for their families and contribute to a thriving South Carolina economy. We develop young minds to use technology to solve community and world problems.

In the eloquent words of a great American leader, Franklin D. Roosevelt, "We cannot build the future for our youth, but we CAN build our youth for the future."

And that's what we do at

