Business Analytics

Meeting the need for talent. PAGE 4
The learning experience for students in Virginia Tech’s financial planning program got even better last fall, with the opening of the Charles Schwab Financial Planning Suite.

Comprising classroom and meeting spaces, the suite was created with a $200,000 gift from the Charles Schwab Foundation.

Located at 302 Hutcheson Hall, the suite features a state-of-the-art audiovisual system and web-conferencing tools. Users can connect their smartphone, tablet, or laptop to the high-resolution projector and sound system.
Pamplin Society Launched, provides more alumni opportunities

THE COLLEGE HAS ESTABLISHED the Pamplin Society to provide alumni more opportunities to promote, support, and improve the college, and to recognize those who have served it through participation on the Pamplin Advisory Council or departmental advisory boards, philanthropy, or outstanding professional or community achievements.

The Pamplin Society currently has seven officers, led by president Marvin Boyd (MSCI ’00, MGT ’01). It succeeds the R.B. Pamplin Society, an honorary group of former members of the Pamplin Advisory Council.

“The new organization is open to alumni of all ages and career levels who want to participate actively in the Pamplin community,” Boyd said, “and are willing to make a nominal annual contribution.”

Pamplin Society members, Boyd said, will engage in a variety of initiatives, including fundraising, student enrichment, and business and community outreach. They will be invited to college events and have opportunities for networking and mentoring.

LEARN MORE: www.pamplin.vt.edu/pamplin-society

Lifelong Career Services now helps alumni, employers

PAMPLIN HAS LAUNCHED a Lifelong Career Services program to help its alumni with their career search and employers with their hiring needs. The service is free to alumni. For each graduate they recruit through the service, participating employers make a contribution toward a freshman scholarship created by the firm.

The alumni hired are eligible to mentor students in the Pamplin Undergraduate Mentoring Program and are matched up with the recipients of their firms’ scholarship for mentoring.

“For years, firms have asked us to help them recruit our alumni. Simultaneously, alumni ask for help finding their second or third job out of college,” says Stuart Mease, Pamplin’s executive director for student advancement and career services.

Introduced in January, the program has already attracted 18 firms as participating employers. The program can strengthen the college’s relationship with its alumni and employers, and help Pamplin differentiate itself with prospective students, he adds.
Finding his niche in neuroscience near the end of his sophomore year dispatched the indecision and turmoil Jonathan Briganti had felt — “every path seemed to call to me” — and gave him an academic goal at Virginia Tech. When he discovered business analytics while competing in a campus hackathon, he acquired a career focus. Briganti expects to graduate this spring and join Pamplin’s master’s program in business analytics in the fall.

Business analytics is the process of using scientific techniques and technologies to extract useful information from raw data to make business decisions. Pamplin’s program would make him more proficient in both data analytics and business subjects, says Briganti, who became CEO of a healthcare tech startup he and others launched in the wake of the hackathon.

“Corporations... lack analytics talent with the ability to use the data to build a business case.”

- Linda Oldham, CBIA Executive Director
The degree, he adds, will also position him well to pursue other passions that might emerge through the course of a career and lifetime.

Also starting the program this fall is Angelica Melvin (PSYC ’13), who is seeking knowledge and skills to forge a new career she hopes will involve data analytics at a community-oriented business.

Growing up in an “impoverished, isolated Appalachian community, where supporting local business was emphasized,” Melvin recalls learning the value of a strong work ethic and a job well done from various family members.

“I worked alongside my mom in her restaurant after school. Later, I worked in a cousin’s auto body shop.”

Currently an administrative assistant on campus, Melvin was previously a sales manager at Goodwill. “Working at a store that was frequented by people of disadvantaged socio-economic backgrounds,” she says, “helped me refocus my career goals.”

Robert Lorence spent nearly three years as an engineering undergraduate and transferred colleges twice before arriving at Virginia Tech.

Now a senior in economics, he is also enrolled in the business analytics program’s accelerated track, which lets students earn graduate-course credit while completing a bachelor’s degree.

“I felt absolutely positive if I got in this program I would have a faster success trajectory professionally,” says Lorence.

“Having data analytics skills, along with my grounding in engineering and economics, will allow me to pivot quickly and have a really exciting career.”

Briganti, Melvin, and Lorence can expect sunny job prospects when they graduate. “There’s a significant shortage of talent in the data and business analytics arena,” says Linda Oldham, executive director of Pamplin’s Center for Business Intelligence and Analytics (CBIA), which runs the one-year graduate program.

The skills shortage is a popular topic of trade journals, industry reports, and executive conferences.

Analytics and data science programs have multiplied (U.S. universities now offer more than 100), but “they can’t crank out enough sufficiently trained people to meet the demand,” says Oldham, citing Deloitte’s Analytics Trends 2016 report.

Especially sought are those with knowledge and skills to manage and interpret data for business decision making — “people who can identify, frame, and solve problems that will also bring high returns on investment,” Oldham says. “Corporations tell me they lack analytics talent with the ability to use the data to build a business case.”

Pamplin’s business analytics concentration gives students a solid education in both data analytics and business, she says. “This is how our master’s program is dramatically different from analytics programs in engineering, computer science, and statistics.”

The program is “a great way for students with virtually any undergraduate degree to gain skills that are in high demand,” says business information technology professor Cliff Ragsdale, who serves as CBIA’s academic director. “Our immersive, hands-on curriculum trains students to use the tools of analytics to deliver effective solutions to real-world business problems.”

The curriculum includes core courses in accounting, finance, managerial statistics, organizational behavior, and marketing policy and strategy, as well as courses in business intelligence and analytics, and business information visualization.

Capping off the learning is a multi-
ROBERT TORPEY, of Deloitte, says Deloitte saw a natural synergy between its analytic offerings and CBIA.

With the center.

“Analytics research only matters to the extent that it helps solve problems that people and businesses care about,” says Ragsdale. “CBIA serves as a conduit for connecting corporations that have business problems and opportunities with faculty and graduate students who have analytics expertise.”

Collaborations offer “significant business insights and value” for corporations, Ragsdale says, as well as “rich sources of data and living laboratories” for Pamplin’s researchers.

With specialties that include text, financial, healthcare, and operational analytics, center faculty are tackling such research topics as product safety, consumer privacy, expert search efficiency, and data use in federal government agencies.

Pamplin established the center in 2014 with founding sponsor Deloitte, which contributed $50,000 to the initiative.

“With the continued dramatic growth of data creation and collection, analytic applications to deliver this information, and the shortage of these skills in the market, we saw a natural synergy between Deloitte, our analytic offerings, and CBIA,” says Robert Torpey (BIT ’02, COMM ’02), senior manager of analytics and information management at Deloitte Consulting LLP.

His own learning experiences at Virgin-ia Tech reflect what has come to be called the “VT-shaped student” model, Torpey says. He says he was “well prepared to enter the work-force,” armed with a business degree with a technical focus and a liberal arts degree, as well as experiential knowledge gained from a business study-abroad program and the cooperative education program.

“I started at an analytics software company, immediately leveraging my technical

A FAMILY TRADITION: Angelica Melvin

STUDENT ANGELICA MELVIN seeks a data analytics career with a community-oriented business.

“IM REALLY PROUD of the fact that I’ve been working since I was nine years old. By going into business, I feel like I’m continuing a family tradition.

My maternal grandfather was a small-business owner during a very poignant time in history, the Civil Rights Movement. He had only a fifth-grade education, but he became a well-known and well-respected auto mechanic in a small Appalachian town.

Through the quality of his work and business practices, he was able to cross racial lines and gain the business of white customers. Not only were they loyal customers, but he considered them friends. I feel like, in his own way, he made people question their stereotypes and preconceived ideas of who African Americans are and what we’re capable of.”

JERRY HOGGE, of Leidos Defense, Health, and Interna
tional Solutions Group, says the CBIA partnership has been a “highly successful” one that has delivered powerful business solutions.
degree, but eventually, I wanted to get to the front lines of the most challenging business issues. That’s when I made the move to consulting, with a focus on business intelligence and analytics. A ‘VT-shaped’ education has allowed me to play an integral role translating the business needs of my clients into technical approaches that enable them to make actionable data-driven decisions."

Torpey notes that Deloitte already had a well-established relationship with Virginia Tech, with annual sponsorship of and participation in a wide range of campus events, membership on several advisory boards, and designation of Virginia Tech as a high-priority school for hiring.

Deloitte helps guide the center’s strategic direction, helps fund faculty and graduate-student research in data analytics, and jointly sponsors the annual business analytics symposium.

The center has also attracted sponsor funding from Leidos. “The volume of data that is created each and every day related to key business challenges is ever expanding,” says Jerry Hogge (EE ’87, M.S., ISE ’91), senior vice president of Leidos Defense, Health, and International Solutions Group. “As a result, the ability to create actionable business intelligence in these complex, big-data settings requires the very best in analytics, methodologies, and approaches.”

Pamplin’s center, he says, offers an innovative environment that combines the best academic capabilities with real-world challenges.

“Our experience in working with CBIA has allowed my defense, health, and international healthcare businesses at Leidos to address highly complex problems with very big data sets,” Hogge says.

“It has been a highly successful partnership that has delivered powerful, insightful, and practical solutions to multifaceted business intelligence and analytics challenges. We look forward to continuing this relationship as we tackle important issues across a spectrum of markets, business sectors, and industries.”

CONTINUED ON NEXT PAGE

IN HIS OWN WORDS: Jonathan Briganti

Thrust into a big new world
My first exposure to big data and the master’s program in business analytics was during the Mobile Apps for Global Good in Healthcare Analytics Hackathon last spring. My team and I went with an idea for a new type of preemptive screening for dementia using smartphones. As a neuroscience major, my role was ensuring that the app was scientifically and medically sound, along with finding the best methods to accurately test an individual’s cognition. Winning this hackathon brought us a partnership with Carilion Clinic.

Opening doors to any field
One of the major draws of the MSBA in business analytics is how applicable it is to any field. This program would open doors to places I never thought possible. I love neuroscience and always will, but an advanced degree in neuroscience allows me to do neuroscience jobs, primarily in a research capacity. Data analytics lets me enter any field and still find a niche I can fill.

Patient data
I want to work for or with hospitals to increase the usability of patient data. As our world switches over to electronic healthcare records, I want to help hospitals discern what patient information is important to keep, how to access and store that data in the most cost-effective manner, and build programs or train the professionals on how to use the data in increasingly better ways. I could help make the quality of care for every patient better than ever.

Being CEO
We are in the process of forming a company focused on the core ideas we presented at that hackathon. We are working closely with Carilion Clinic and hope to have clinical trials this spring. This would not be possible without all the amazing work, ideas, and support from everyone involved. It’s the most exciting part of my life right now, I never envisioned owning a company and meeting with legal counsel about patent and copyright law. We saw a need in the medical world, and with the help of the hackathon, we are actually trying to fix that issue. We have garnered a lot of interest from a number of different entities, and I cannot wait to see where this goes.
BUSINESS ANALYTICS STUDENT Robert Lorence would like to reach out to Ben Carson, who leads the Department of Housing and Urban Development (HUD), to hear his thoughts about housing and running the department.

“I have heard him speak about how housing ties into health, which I hadn’t considered before,” says Lorence, whose team capstone project in Pamplin’s master’s program in business analytics is to create a tool or application for an unbiased performance score that would aid HUD officials in awarding grants for homeless support programs.

Lorence hopes the HUD secretary can “share some of his goals and give us his perspective towards developing a solid and viable project path forward.”

The capstone assignments are aimed at solving a problem selected by a sponsoring organization, which provides relevant data and identifies success metrics and expected benefits, says Linda Oldham, executive director of the Center for Business Intelligence and Analytics.

“Topics should be complex enough to be challenging, yet contained enough to allow for meaningful results. Each project should strike a balance between technical issues and business concerns.”

Lorence’s team project is sponsored by Hewlett Packard Enterprise, which is providing support for HUD’s information technology initiatives.

HUD holds a competition annually as a way for local governments and organizations to vie for federal grants that specifically assist homeless people, notes Hewlett Packard’s capstone project proposal.

“Our project is focused on trying to create a standardized grading system for HUD so federal funding can be allocated better, based on elements such as critical housing classifications and need-based scoring,” Lorence says. “Right now, groups seeking funds self-grade, so without other comparisons, they can be pretty insular in their value knowledge.”

IBM Cloud, another capstone project sponsor, asked students to “create a startup lifecycle model, using big data to identify candidate companies for acquisition and the optimum time to acquire.”

Other capstone project sponsors are Carilion Clinic, which asked the students to investigate a number of demographic questions related to its planned expansion of telemedicine infrastructure and services; Beyer Automotive, which sought help with questions aimed at creating a better buying experience at the dealership; and Altria, which sought insights into data collected from its manufacturing equipment.
Pamplin Advisory Council Annual Meeting

DEAN ROBERT SUMICHRAST, members of the Pamplin Advisory Council, and other members of the Pamplin community enjoyed student poster presentations and mingled in the atrium during the council’s annual meeting last fall. The day ended with a reception and dinner at the German Club.

PHOTOS BY CHRISTINA O’CONNOR

SEE MORE AT: www.magazine.pamplin.vt.edu
EVENTS

Student Leadership Conference

STUDENTS HAD THE OPPORTUNITY to further develop their leadership skills, network with company representatives, and gain practical wisdom at the 18th annual Student Leadership Conference in January. The conference was attended by 69 students and representatives from Dixon Hughes Goodman, Ernst & Young, Deloitte, Target, Grant Thornton, KPMG, PwC, Capital One, and the Pamplin Recent Alumni Board. The conference was hosted by the Pamplin Leadership Development Team, a student organization advised by the Business Leadership Center.

#HokiesTasteTheFeeling

STUDENTS POSE in front of a mural on the Drillfield designed for the launch of a student-led social media campaign on how Coca-Cola can be incorporated into the best Virginia Tech moments. The campaign, #HokiesTasteTheFeeling, was launched on the Drillfield in February by marketing seniors Kasey Chau, of Alexandria, Virginia, and Kasey Casella, of McLean, Virginia. The students pitched their winning campaign in the second annual “Barracuda Bowl,” a student competition focused on bringing together Virginia Tech and Coca-Cola brands through social media.

BIT Senior Showcase

BUSINESS INFORMATION TECHNOLOGY majors exhibited their senior team projects in the Senior Showcase in the Pamplin atrium last fall. The projects in the Introduction to Business Analytics Modeling course, taught by professors Alan Abrahams and Michelle Seret, allow students to apply analytics techniques studied in class. Project sponsors were CarMax, which is also sponsoring the spring 2017 showcase, and Altria. The students on one project team, left to right, with CarMax representative Jocelyn Blanchard (far left): Sara Cerv, Nick Robinson, Saliou Kaba, and Kevin Osborne.
Ray Zinn Visits Innovate

**TOP:** Entrepreneur and inventor Ray Zinn met students during a visit to the Innovate living-learning community last fall. Zinn co-founded semiconductor maker Micrel in 1978 and led it until its acquisition in 2015 by Microchip Technology. **BOTTOM:** Zinn with Joshua Baylor, a sophomore majoring in business information technology.

Financial Management Association

**FINANCE PH.D. ALUMNI**, faculty, and current Ph.D. students got together at a dinner at the Financial Management Association meeting in Las Vegas last fall. Clockwise from left: Debi Battacharya (Ph.D. ’14, now teaching at Duquesne), Jitendra Tayal, Honghui Chen (Ph.D. ’99, now teaching at University of Central Florida), Murali Jagannathan (Ph.D. ’96, now at SUNY Binghamton), Shahram Amini, Hongyan Li, Nikos Artavanis (Ph.D. ’13, now at University of Massachusetts), finance professor George Morgan, Sylvia Hudgins (Ph.D. ’87, now at Old Dominion University), and Jack Broughton (Ph.D. ’89, now at Chapman University).

Virginia Tech Entrepreneur Forum

**THE INAUGURAL** Virginia Tech Entrepreneur Forum, organized in metro Washington, D.C., by the Apex Systems Center for Innovation and Entrepreneurship last fall, drew more than 150 alumni for a discussion on cybersecurity. The forum was moderated by Apex CIE board chairman Win Sheridan (PSCI ’94). Panelists included Charles Clancy, director of Virginia Tech’s Hume Center for National Security and Technology, and Ryan Trost, co-founder and chief technology officer of ThreatQuotient. The forum this spring focused on trends and potential investments related to big data in health care.
When Business Insider asked IBM two years ago to name some of its rising stars, the company came up with 17 key employees who represent its future. One of them was Kelly Chambliss (MSCI ’92).

Chambliss, a managing partner within the tech giant’s global business services unit, came to IBM when it acquired PricewaterhouseCoopers’ (PwC) consulting business, shortly after Chambliss had been promoted to partner there.

“I’m not sure I ever envisioned working at a company with the number of employees IBM has, but it’s been a perfect place,” Chambliss says. “Working for a large company like IBM, there are so many opportunities to take on new responsibilities, learn new skills, and take on new challenges.”

Today’s graduates might not consider a company with a rich history like IBM to be an exciting place to work, Chambliss says, but they’d be wrong. “They might think there’s more opportunity at a small startup or a younger tech company. But the experience you can get in a short amount of time at a really large company that has consistently reinvented itself should not be overlooked.”

The pace of technological and business change today is so rapid that every company, even institutions like IBM, must constantly work on reinventing themselves, Chambliss says. “We’re seeing an unprecedented convergence of technology and new business models that’s driving an exponential pace of change — and it’s hard to imagine that ever changing now.”

Chambliss grew up in Eureka, a small farm town in Central Illinois, and envisioned herself playing volleyball for one of the big Midwest schools — until she took a trip to Virginia Tech. “When I visited Tech, I just felt instantly at home,” she says. “There was no question in my mind that I was going there.”

When she started at Virginia Tech on a full volleyball scholarship, she was majoring in biochemistry. “I gradually found my way to business, though,” she says. “At the time, I was starting to get really passionate about technology. Pamplin had a program they called management science then. It’s now called business information technology. It was at this fascinating intersection of technology, business, and data science. I was in my element at Pamplin.”

After graduation, she wanted to go into consulting and accepted a job at what was then Price Waterhouse — mostly, she says, because she could work in Atlanta. “At that age, you make decisions on some of the smallest things,” she says. “I wanted to live in Atlanta because the Olympics were coming.”

Her career at Price Waterhouse and PwC followed a traditional path, Chambliss says. She spent her first couple of years focused on hands-on technical aspects, working as a
The experience you can get in a short amount of time at a really large company that has consistently reinvented itself should not be overlooked."

software developer and application architect. Seven years in, she had the opportunity to move to Australia to work on business in the Asia-Pacific region — moving to Sydney just before the next Olympics. Not long after, she was promoted to partner.

In recent years, Chambliss, who was named to the Pamplin Advisory Council last year, has started to reconnect with the college. "I try to carve out a percentage of my time to help others," she says. "There are so many people who made the time to help me, coach me, and give me advice. Virginia Tech played a huge role. I was given a fantastic foundation for a great career."

Re-familiarizing herself with Pamplin, Chambliss says, has reminded her of how forward-looking the college was when she was a student. "One of the courses I took was artificial intelligence," she says. "It was probably one of my favorite courses and we even did some coding in LISP, one of the first languages used in programming artificial intelligence. I can even picture the textbook. I don't think many people took AI courses 20 years ago as part of a business degree. And, now I work for IBM where we are applying AI to usher in a new era of technology we call cognitive computing."

That forward-looking attitude hasn’t changed as far as Chambliss can see. “The courses and the type of professors who’ve been brought in recently are so closely aligned with the market,” she says. “The college is really in touch with what’s coming next and what’s going to have the greatest impact on business, people, and society. The focus is on developing the kinds of skills that graduates need to go on and do great things.”

One significant change she’s seen since her graduation is the emphasis on helping students develop an entrepreneurial mindset. “That’s a relatively sizeable shift, and an important one," Chambliss says. “It’s such an important attitude, even if people are going to work for a large company.”

And as for teamwork, Chambliss says it wasn’t just on the volleyball court that she learned about its value. “A lot of what I did in Pamplin and the way the courses were structured was all about working with others to achieve common goals. That will always be important to success in business.”

- Dan Radmacher
Less than three years after graduation, Doug Brainard (FIN ‘13) had what many would consider to be a cushy, promising job in his chosen field. He was working in Washington, D.C., as a consultant with the Defense Advanced Research Projects Agency, managing a multimillion-dollar budget for a variety of projects. But he wanted a change, and a few months later, he got it: Brainard would spend more than four months in Africa as a Kiva Fellow, traveling around Kenya and Uganda to help Kiva’s partner organizations and ensure they were in compliance with the nonprofit microlender’s rules. He would go weeks without running water and learn to navigate a new culture where he did not know the language.

“I didn’t study abroad in college or do military service,” Brainard says. “I saw this as a way to see the world and give something back.”

Through its website, Kiva allows individuals to give $25 loans to organizations around the world. These crowdfunded microloans help people and organizations grow their businesses, provide clean water, and engage in other activities that help alleviate poverty.

Kiva Fellows assist its partners and provide accountability to its lenders, says Natalie Russell, an associate at Kiva Fellow and Intern Programs. Competition is fierce for the positions — which were unpaid, until recently. “Before the latest change in the program, we’d get between 100 and 200 applicants and had about a 20 percent acceptance rate,” Russell says.

The application process is rigorous, and Kiva makes sure the fellows know what they’ll be getting themselves into. “We’re very upfront about what the experience is going to be like,” says Russell. “We look for those applicants with prior travel experience and demonstrated cross-cultural competency. We screen them for adaptability, flexibility, and the ability to transition and pivot.”

Brainard, however, didn’t have a lot of international experience. The winter of his sophomore year, he participated in a Pampolin project in Belize where he taught local teachers how to better use Excel in their classrooms.

But Russell said his attitude and aptitude made up for any lack of experience. “We saw other qualities in addition to his prior professional experience that made him a great candidate,” she says. “His determination to have an impact on the ground really stood out to us.”

Brainard’s positive attitude had impressed Mike Kender, finance professor of practice, who keeps in touch with his former student through Facebook. “Doug was active in his fraternity,” he recalls, “and was a pleasure to be around.”
I had to think on my feet and make decisions constantly.

After a week of intensive training in San Francisco, Brainard traveled to Uganda, where he spent his first two weeks in a tiny village called Kyakatebe working with Kiva partner YICE (Youth Initiative for Community Empowerment). YICE provides loans to small groups of women, many of whom are single mothers who farm small plots of rented land.

While in Kyakatebe, Brainard went 12 days without running water, using an office-cooler-sized jug of water he bought for both drinking and bathing. The language barrier was also an issue, though Brainard says he managed.

“As the only white person in the village, I really stood out,” he says. “People would stare and say, ‘mzungu,’ a phrase commonly used to identify foreigners. Sometimes I was with someone who could help translate, but if not, we’d just use hand gestures and broken English. Almost everyone spoke at least a little English. People really tried to be helpful. If I was looking lost, they’d come see if they could help. I think seeing a stranger was a highlight of their day.”

From Uganda, Brainard went on to assist Evidence Action, a partner in Kenya that is distributing chlorine dispensing stations to villages for purifying water.

“Doug was really essential in making sure our partnership was healthy and strong,” Russell says.

Brainard says his Pamplin experience was helpful. “I didn’t apply a lot of hard skills there,” he says. “It was mostly problem-solving skills and the generally good work ethic that I developed at Pamplin that I was able to use there. I had to think on my feet and make decisions constantly in a world where I was always the center of attention.”

Russell says Kiva Fellows are often looking to pivot into nonprofit work. “Doug wanted to work in a career that he felt passionate about,” she says. “Going in, he wasn’t sure what he wanted to do afterward, but he was sure he could leverage the experience.”

Brainard, a native of Lexington, Massachusetts, has started a new job as a senior financial analyst at Carbon Black, a Boston-based cyber security company.

He would like to return to Africa eventually. “My time in East Africa taught me a lot about perspective,” Brainard says. “Reading about poverty is completely different than being immersed for several months. It was a truly humbling experience that’s left me much less reliant on ‘things.’”

—Dan Radmacher
Spendthrifts habitually buy more than others, but “taking the thrill out of spending” can change their behavior, new marketing research shows.

Extravagant, irresponsible spending has been tied to personality differences, notes Mario Pandelaere, associate professor of marketing in the Pamplin College of Business at Virginia Tech.

Spendthrifts tend to buy impulsively, save less, and run up a substantial amount of credit card debt, Pandelaere says. Tightwads, in contrast, tend to mull over purchasing decisions and typically spend less.

Though personality traits can drive individual spending behavior, research has shown that their impact can be curbed and even overridden by situational factors, he says.

“Ironically, despite the rampant problem of overspending,” Pandelaere says, studies on spending behavior have mostly focused on how tightwads can be tempted to spend more — not how spendthrifts can be encouraged to spend less.

In a recent study, Pandelaere and two fellow researchers investigated spendthrift psychology and ways to alter spending behavior. They tested their theory that spendthrifts are characterized by a need to spend freely, and that this “spending autonomy” gives them a sense of energy and vitality that fuels their tendency to spend.

Elaborating on the notion of autonomy, Pandelaere says that when people can independently regulate or control their own behavior, they experience psychological benefits, such as feeling energized or alive. Researchers call such emotions “subjective vitality,” he says, and have documented its link with behavioral independence in both lab and real-world settings.

This sense of vitality can make people feel excited and act more spontaneously, he adds.

“Our central assumption is that spendthrifts enjoy spending without restraint. Consequently, restrictions on this spending autonomy would take the joy out of the ex-
“Spendthrifts’ motivation to spend is driven not by indulgence but by the sense of vitality they get when they are able to spend freely.”

The researchers devised four experiments to examine the effects of reduced freedom of choice through restricting product selection or making clear to participants the opportunity costs of a selection.

Their results demonstrated that willingness to spend diminishes when choice is restricted — for both self-indulgent purchases as well as charitable donations. The latter finding “underscores the notion that spendthrifts’ motivation to spend is driven not by indulgence but by the sense of vitality they get when they are able to spend freely.”

Willingness to spend also decreased in situations when participants could choose freely within a given assortment but were told that a specific selection was better than the others — thus making clear the opportunity cost to participants whose preferred choice was not the superior one.

Pandelaere says their research shows that spendthrifts begin to behave like tightwads when their purchasing choices are limited. “When spendthrifts are not able to spend freely and autonomously, they experience a dampening of the particular energy and vitality associated with spending and become less willing to spend.”

In daily life, common situations that reduce the freedom in how money might be spent include items being out of stock, or fewer color or style choices. What steps might spendthrifts seeking to spend less take?

Pandelaere says his findings suggest that they should shop at stores with a smaller assortment of products or consider alternative uses of their money before making a large purchase.

If spendthrifts could think about the opportunity costs of spending, they might

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BEING A SCHOLAR of consumer behavior has allowed Mario Pandelaere to understand his own actions as a consumer better and to make better decisions sometimes. Having expertise in consumer psychology and knowing how businesses can and do use it to their advantage haven’t always prevented him from falling prey to such manipulations — although, Pandelaere says, “it has led me to more readily realize that I have been duped.”

He recalls, for instance, explaining in class a particular persuasion tactic used by marketers, only to be swayed by it days later, when he unwittingly complied with an actual merchant’s request.

Pandelaere, who earned all four of his graduate degrees at KU Leuven, Belgium’s largest and highest-ranked university, has master’s degrees in business engineering, statistics, and psychology, and a Ph.D. in psychology.

He cites his main research interests as: causes and consequences of materialism, luxury and conspicuous consumption, numerosity (the presentation and processing of quantitative information), well-being, and social influence.

“I have always liked statistics and the more quantitative courses during my studies,” Pandelaere says. “They have naturally led to me to think about how the representation of quantitative information may change people’s perceptions of the information and their decisions based on it.”

After receiving his doctorate, Pandelaere spent two years as an academic researcher in marketing at Leuven, then moved to Ghent University for a research professorship in marketing, a post he held for seven years before joining Virginia Tech in 2015.

Pandelaere’s favorite topic to teach remains “persuasive communication.” Persuasion, “the effect of framing information one way or another on decisions,” and social influence have also been subjects of some of his research.

As for his interest in well-being, Pandelaere says it resulted directly from his study of materialism. “A good deal of research shows that materialistic people are not as happy or satisfied with their lives as less materialistic people. I found that research fascinating, leading me to consider well-being more in depth.”

One result is a paper he wrote expounding materialism’s “silver lining.” “I wondered why people would continue to be materialistic when it makes them unhappy. What do they get out of their lifestyle?”

His research suggested that materialistic people were “more likely to engage in luxury consumption, and luxury consumption makes people, at least in the short run, happy. “It is great to indulge,” he says. “In addition, the effect of luxury consumption on momentary happiness is stronger for materialistic than less materialistic consumption.”

That materialism causes lower levels of happiness, however, is a conclusion Pandelaere is not prepared to accept: “the jury is still out on that question.”

He says some research shows that “low self-esteem, conducive to lower happiness, may spur materialistic interests” — thus, lower levels of happiness may actually cause materialism. The relationship between happiness and materialism, Pandelaere says, may well be two-way.

- Sookhan Ho
A n award-winning paper by Virginia Tech data analytics scholars offers a caveat about using data from customer reviews on social media sites for research.

There’s little discussion of data quality in big data and social media analytics research, especially in the hospitality and tourism field, says Phil Xiang, an associate professor of hospitality and tourism management.

Big data is all the rage at the moment, and for good reason. The analytics and information that can be mined from large and increasingly prevalent data sets can be useful in any number of industries and fields.

But one timeless rule still applies: “Garbage in; garbage out.”

Missing data, mislabeled data, inconsistent data, and even fake reviews are not uncommon, Xiang says. “Many existing studies take data from social media platforms to make predictive analyses without first assessing the reliability and validity of the data.”

Xiang co-wrote a paper that examined the reliability of social media data by mining TripAdvisor hotel reviews. The paper — co-authored with Patrick Fan, a professor of accounting and information systems; Qianzhou Du, a business information technology doctoral student; and Yufeng Ma, a computer science doctoral student — won a best paper award at a tourism conference in Rome in January.

“We did this study to shed light about the reliability issues in using online review data,” says Fan. “Users should be cautious in using online reviews. Comments are meaningful, but ratings may not be, especially when the number of ratings is low.”

Though websites like TripAdvisor have been considered premier sampling sources for social media research in hospitality and tourism, the study casts doubt on the quality of the available data.

“This study demonstrates that drawing data from even a highly reputable website like TripAdvisor might yield unreliable results and thus potentially invalid conclusions,” the paper states.

The researchers concluded that the problem was in the data itself. A word cloud generated from the misclassified reviews suggested a business purpose to the trips, even when the reviewers had classified them as leisure.

The researchers then developed a method to clean the data by identifying the reviews that were mislabeled by reviewers.

The authors hope the study will raise awareness of data quality issues in hospitality and tourism research. “Our findings raise a number of questions regarding the existing approaches in research based on social media data,” says Xiang.

The study will likely lead to further research and, Fan hopes, development of tools to help other researchers as well as the average consumer make better use of this kind of social media data. The text classification algorithm could be refined to detect other travel purposes, and to develop segmentation tools to help with targeted marketing.

— Dan Radmacher

“USE WITH CARE,” say Patrick Fan and Phil Xiang about online reviews. “Comments are meaningful, but ratings may not be.”
GREGORY C. THOMPSON (ACCT ’77) and his wife, KATHRYN L. THOMPSON, of Kiawah Island, South Carolina, have pledged $500,000 in support of the Global Business and Analytics Complex.

A distribution of $272,482 was received from the estate of SCOTT D. PRINCE (MKTG ’75), formerly of Saint Simons Island, Georgia, in support of the Global Business and Analytics Complex.

JAMES E. PEARMAN JR. (ACCT ’70) and his wife, BRENDA K. PEARMAN, of Salem, Virginia, have pledged $250,000 in support of the Global Business and Analytics Complex.

CHRISTOPHER SHEAN (ACCT ’87) and his wife, LESLEY SHEAN (ELED ’88), of Castle Rock, Colorado, have given $246,080 in support of the Global Business and Analytics Complex.

JAMES H. HATCH (MACCT ’72), of Richmond, Virginia, has given $110,000 to support various endowments within the Department of Accounting and Information Systems and the Pamplin College of Business.

GRANT THORNTON LLP, of Alexandria, Virginia, has pledged $107,500 in support of the Apex Systems Center for Innovation and Entrepreneurship.

STEVEN L. PARKER (ACCT ’83) and his wife, SHARON S. PARKER (ACCT ’83), of Charlotte, North Carolina, have pledged $100,000 in support of the Global Business and Analytics Complex.

A charitable gift annuity of $100,000 was contributed by C. DONALD MILLER (BAD ’59) and his wife, ROBERTA L. MILLER, of Lynchburg, Virginia, which will ultimately provide unrestricted support.

ALTRIA GROUP, INC., of Richmond, Virginia, has contributed $71,750 toward several Pamplin initiatives, including its diversity recruitment strategy, the Business Diversity Center, the Pamplin social media program (PRISM), the Department of Business Information Technology, the Pamplin Undergraduate Mentoring Program, Collegiate Women in Business, Finance for Females, the Department of Finance, and Bond and Securities Investing by Students (BASIS).

DAVID CALHOUN (ACCT ’79), and his wife, BARBARA CALHOUN, of New Canaan, Connecticut, have given $62,000 to the David L. Calhoun Fund for Excellence in Accounting and Information Systems, providing unrestricted support to the department.

PAUL V. LOMBARDI III (ME ’95) and his wife, ALLISON K. LOMBARDI, of Chantilly, Virginia, have given $50,000 in unrestricted support and scholarships within the Apex Systems Center for Innovation and Entrepreneurship.

**STAY IN TOUCH!**

Hokies, stay connected to Virginia Tech and Pamplin by making sure the university has up-to-date contact information. Use your Virginia Tech PID and password to view and make corrections to your mailing address, email address, and other information. You can inspect and update your alumni profile anytime from anywhere. alumni.vt.edu/gateway
Honors & Awards

INTERNATIONAL

FRANCE BELANGER, R.B. Pamplin Professor of Accounting and Information Systems and the Tom and Daisy Byrd Senior Faculty Fellow, was awarded the KoMePol-IT Fellowship from the University of Koblenz-Landau in Germany. During her visit in June 2017, she plans to complete research on how to educate teens on security and privacy for their mobile phones and present it to the Ministry of Education, and develop new research collaborations on electronic government.

WEIGUO “PATRICK” FAN, professor of accounting and information systems; ZHENG “PHIL” XIANG, associate professor of hospitality and tourism management; QIANZHOU DU, a business information technology doctoral student; and Yufeng Ma, a computer science doctoral student, were recognized for Best Conference Research Paper at the ENTER 2017 eTourism Conference of the International Federation for IT and Travel & Tourism. Their paper is called “Assessing Reliability of Social Media Data: Lessons from Mining TripAdvisor Hotel Reviews.”

NATIONAL

MANISHA SINGAL, a hospitality and tourism management associate professor; YINYOUNG RHOU, a hospitality and tourism management doctoral student; and Yoon Koh, an assistant professor at the University of Houston, received the Best Paper Award at the Graduate Education and Research Conference in Hospitality for their paper, “What Does Financial Distress Imply for Employee Relations in Hospitality Companies?”

STEVE MARKHAM, the Digges Professor of Entrepreneurship in the Department of Management, has been named Claremont McKenna College’s 2017 Distinguished Alumnus. Markham received bachelor’s degrees in industrial/organizational psychology and classical philosophy from what was then Claremont Men’s College in 1974. Markham’s research is on topics that help improve organizational effectiveness. He has published more than 100 articles and book chapters.

COLLEGE AWARDS

OUTSTANDING MASTER’S STUDENT

NICHOLAS BROWN

began his studies in the Evening MBA and Master of Information Technology dual degree program in fall 2015. A graduate teaching assistant, Brown was elected National Capital Region vice president of the Graduate Student Assembly and volunteers at activities with the Alumni Association and Graduate School.

OUTSTANDING SENIOR

JOSEPH MILLS

is a finance and accounting and information systems senior from Princeton, West Virginia. He chaired the Virginia Tech Student Conduct Committee, tutored athletes through Student Athlete Academic Support Services, and held two professional internships. Mills also serves as a resident advisor for the Honors Residential College at East Ambler Johnston.

H.H. MITCHELL OUTSTANDING LEADERSHIP

PAUL GREY WEISSEND

a finance senior from Richmond, Virginia, is a member of the Corps of Cadets and the Honors College. Last semester, as chief investment officer, he helped manage a $5 million student-run endowment. He now co-heads a new student-giving initiative with the Virginia Tech Alumni Association. Weissend looks forward to studying in China next year as a Schwarzman Scholar.

COLLEGE SERVICE

JOGANNA YEE

an accounting and information systems and marketing management senior from Frederick, Maryland, has dedicated much of her time and talent to Pamplin. She was president of Business Horizons, vice president of administration for the Accounting Society, and serves as controller for the Gamma Lambda chapter of Beta Alpha Psi.
KEVIN CARLSON has been appointed associate dean for research and faculty affairs. He had served as head of the Department of Management since 2013. He joined Virginia Tech as an assistant professor in 1997.

ELIZABETH MITCHELL has been appointed assistant dean of advancement. She has 25 years of comprehensive higher education experience and previously served in senior roles at both the George Washington University School of Business and the Robert H. Smith School of Business at the University of Maryland.

DEVI R. GNYAWALI has been appointed head of the Department of Management. He joined Virginia Tech as an assistant professor in 1997, was promoted to associate professor with tenure in 2003, then to professor in 2010. He was appointed the R.B. Pamplin Professor of Management in 2011.

SVETLANA FILIATREAU has been appointed director of international programs and is the first person to hold this full-time position at Pamplin. She brings research expertise in international education and experience working in Ukraine and Canada. She most recently served as manager of Global Learning Integration at George Mason University.

GERICA GOODMAN has been appointed Professional MBA program director. Prior to joining Virginia Tech, she was involved in marketing and brand development at George Mason University and a number of non-profit organizations.

DANA HANSSON has been promoted from associate director to director of the Evening MBA program. She has helped lead the program toward higher enrollment, improved student qualifications, a more engaged student community, and a top 10 national ranking.

EXCELLENCE IN INTERNATIONAL PROGRAMS

DAVID BRINBERG, professor of marketing, created and now directs two study-abroad programs that have raised a combined $420,000 for NGOs in South Africa and Kenya. Participation in the programs produces lifelong impact for students, benefits the communities served, and builds the international reputation of Pamplin and Virginia Tech. Brinberg also won in 2015.

OUTSTANDING FACULTY IN DOCTORAL EDUCATION

CHRIS ZOBEL, professor of business information technology, has contributed to both the department’s doctoral research and teaching efforts. In addition to being one of the leaders of the business information technology Ph.D. seminar, he has chaired or co-chaired five dissertation committees and has published numerous journal articles, conference papers, and conference presentations.

WARREN L. HOLTZMAN OUTSTANDING EDUCATORS

JASON DEANE, business information technology associate professor, is in his 10th year with the department. While teaching Project Management for the first time this past year, he made several changes in an effort to afford students an engaged, experiential, service-based learning experience.

JASON MALONE, finance assistant professor of practice, teaches eight business law classes a year to more than 800 students. He is developing courses for entrepreneurial initiatives to help students create a legal framework for new ventures.

COLLEGE CERTIFICATES OF TEACHING EXCELLENCE

BROOKE BEYER, accounting assistant professor; JASON DEANE, business information technology associate professor; RICHARD HUNT, management assistant professor; JASON MALONE, finance assistant professor of practice; and JILL SUNDIE, visiting assistant professor of marketing.
CAREER AWARD FOR EXCELLENCE IN RESEARCH

PAUL HERR, professor and department head of marketing, has taught and mentored students for over 30 years. He has published more than 25 peer-reviewed journal articles and written papers now considered classics in the field. Herr’s research has been cited more than 6,600 times. His H-index of 27 and I-10 index of 37 are testament to his impact on the field. His contributions to doctoral education have also been recognized at the national level.

DOCTORAL RESEARCH EXCELLENCE AWARD

RICHARD GRUSS, a doctoral student in business information technology, focuses his research on data analytics and text mining. He has two articles published in A-ranked journals, two manuscripts under review, and several other manuscripts in progress. Gruss has developed a highly scalable collaborative tagging system used for text analytics projects. It has been used by product compliance teams of two global companies and a national regulator, and holds more than 80 million online consumer reviews and discussions.

OUTSTANDING DOCTORAL DISSERTATION AWARD

JITENDRA TAYAL (FIN ’16) wrote a three-essay dissertation on financial markets: 1) “Does Idiosyncratic Volatility Limit Arbitrage? Evidence from Short Selling,” 2) “Frictionless Short Positions and Asymmetric Risk Premium: Evidence from Future Markets,” 3) “Stock Prices Matter.” “He was the best Ph.D. student that I have mentored...in my more than two decades at Virginia Tech,” Vijay Singal, professor and department head of finance, wrote in his nomination letter.

DOCTORAL SUMMER RESEARCH GRANT

SHAHRAM AMINI, a doctoral student in finance, for his proposal, “Institutional Presence and the Underpricing of Initial Public Offerings.” The project will look at the effect of nearby institutional investors on the underpricing of initial public offerings.

CHRISTOPHER KWARAMBA, a doctoral student in business information technology, for his proposal, “Examining the effect of social media on supply chain disruptions: An empirical study.” He will study how social media can exacerbate the effect of demand side supply chain disruptions on firms’ market value in the backdrop of the restaurant industry.

DANIEL VILLANOVA, a doctoral student in marketing, for his project investigating what distributional properties consumers attend to when they evaluate a product based on user ratings/reviews. The grant will help him conduct additional research and enhance the level of contribution the work is making.

YUTONG XIE, a doctoral student in finance, for his project proposal that focuses on the relationship between a firm’s future cash flow volatility and three corporate decisions. The project seeks to divide total cash flow variation measured into downside and upside components.

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