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## An Analysis of Accounting Concepts Through Case Studies

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AN ANALYSIS OF ACCOUNTING CONCEPTS THROUGH CASE  
STUDIES

by  
Molly Elizabeth Medling

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of  
the requirements of the Sally McDonnell Barksdale Honors College.

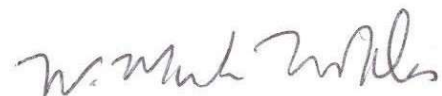
Oxford  
May 2023

Approved by



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Advisor: Dr. Victoria Dickinson



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Reader: Dean W. Mark Wilder

Abstract  
AN ANALYSIS OF ACCOUNTING CONCEPTS THROUGH CASE STUDIES  
(Under the direction of Dr. Victoria Dickinson)

This thesis aims to provide a holistic picture of the accounting profession through various topics in the field. Divided into case studies, each case examines a particular accounting issue or concept through research and analysis. These cases range from an examination of the events of 9/11 through the lens of the accounting profession to a multiple-case analysis of International Paper Company's financial position and future actions. Several online articles, financial reports, and accounting courses were used to inform the information included in this thesis. These sources were not only used to provide an analysis of accounting concepts, but also to inform discussion of professional characteristics of accountants. These elements in conjunction serve to inform readers of the accounting profession as well as the accounting professionals that participate in the topics discussed in this thesis. Overall, this thesis seeks to inform readers of the multi-faceted accounting profession through individual studies of accounting concepts.

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Case 1: Minutes That Changed the Country

Molly Medling

In this case summary, students were tasked to record their thoughts and emotions in light of the 20<sup>th</sup> anniversary of the 9/11 tragedy. This comes after watching a YouTube video of firsthand testimony and videos of Ground Zero that day. This traumatic video was difficult to watch, but it provided the basis upon which I formed my submission. I wrote about three thoughts I had in the aftermath of 9/11, including recognition of the courage of the New York City Fire Department, the relatability of the victims who were killed that day, and the disappearance of 9/11's resulting political unity. In each of these points, I provide examples from 9/11 and tie their impacts to the present day, showing the lasting impacts of the attack. Overall, the paper sought to inspire and educate the generation who grew up almost entirely post-9/11, reminding us that not only is America capable of being attacked, but also that we can recover from the greatest of strife.

Despite hearing the story of 9/11 every year, I am always struck by the unspeakable brutality displayed by the attackers and the heroic bravery of civilians and first responders alike. At this very special anniversary, I have gained a much deeper understanding, perhaps because I am a young adult now and capable of comprehending just how meaningful 9/11 truly is. I now know more about the statistics of who died, who orchestrated the attack, what happened that day, and how recovery was possible. Most of all, this case provided perspective through which I now see my environment. Few aspects of today's society are left untouched by 9/11. From the creation of Homeland Security and greater safety measures in airports to the countless memorials for victims and the United States' interactions with foreign countries, we see the effects of 9/11 every day, but many do not recognize them. Therefore, the most important personal takeaway from this case was to always remember the tragedy and the brave men and women who gave their lives to save others.



I have always been hyperaware of the events and aftermath of 9/11. My father has been the chief of the Dyer County Fire Department and the director of the Dyer County Emergency Management Association in Tennessee for the past 30 years. Both of these positions have given my father a unique perspective, a sense of commiseration and understanding, on what the New York City first responders accomplished and ultimately gave many of their lives for on that tragic day. Dad passed this appreciation down to me, which has formed my respect for the men and women of our country who protect our freedom and safety every day. Furthermore, I was born on September 11, 2000, so for as long as I can remember, my birthday has brought me tremendous joy and grief. My peers and I have grown up in a world post-9/11, reaping the consequences of an event we either cannot remember or never experienced. Therefore, I always set aside time on my birthday to remember and educate myself on the unprecedented national tragedy that is 9/11. On this milestone, the 20<sup>th</sup> anniversary, I have three topics that weigh heavily on my conscience as I navigate through the shockwaves that continue to be felt throughout the United States and the entire world: the heroic actions of first responders, a greater understanding of the victims and their children, and the disappearing sense of national unity.

For my entire life, my father has been called to respond to dangerous situations from house fires to flood relief. When going to these events, he often sends a message in our family group chat to let us know what he is doing. Although I am used to the practice now, I cannot say that I do not feel a sense of anxiety when I see these messages. However, I am fortunate enough to say that my dad has always returned home from these calls. The families of the 343 firefighters of the New York City Fire Department (FDNY) who were killed in the 9/11 attacks were not so lucky. Despite the irreplaceable loss, it is obvious that the men and women who fought to rescue and save so many were not regretful of the inherent danger of their occupation,

but rather, they were acting on the sacred oath and duty to ensure the safety of others. This was the case for brothers Lieutenant Kevin Pfeifer and retired Battalion Chief Joseph Pfeifer. Joseph recounts from that tragic day, “I could remember one lieutenant from Engine 33 coming up to me and not saying a word. And we stood there wondering if we were going to be okay. And that lieutenant was my brother, Kevin. And then I told him what I told many of the other fire officers. I said, ‘Go up to the 70<sup>th</sup> floor.’” Lieutenant Kevin Pfeifer gave his life that day for the worthy cause of addressing the 9/11 tragedy, along with many of his fellow firefighters (CBS News 5-6). It is stories like this that remind Americans of the true meaning of bravery and sacrifice. No firefighter responded to 9/11 without fear; they knew what likely awaited them in the aftermath of the crashes. Instead of being daunted by this, each of them climbed the thousands of stairs in the North and South Towers to extinguish the fires and evacuate the buildings as efficiently as possible. This made a lasting impression on many of the families of FDNY casualties, including the two sons of the late FDNY Chief of Department Peter Ganci who are now captain and battalion chief in the same department (CBS News 7). The firefighters who responded that day, both living and dead, have left a legacy of American resilience and pride to the entire country, serving as an example of selflessness. This legacy certainly extends to my father, who I believe sends messages and makes calls before significant disasters out of fear that he will die like so many responders did that day without a proper goodbye to his loved ones. I will never forget the actions of those 343 FDNY workers who gave their lives for the preservation of America’s strength.

I am saddened to admit that my next consideration on the 20<sup>th</sup> anniversary of 9/11 is rather recent. Before this year, I had not given much thought to the fact that a large portion of 9/11 deaths were accounting and finance workers. As much as I feel that such work is a noble

profession, I have never thought of it as so important that my life is in danger from our country's enemies. I expect that a majority of the accounting and finance workers had similar ideas that day. Nevertheless, perception does not equal reality; many accountants and other business personnel died that day, which fills me with fear and grief. I am only two years younger than Jessica Sachs, an auditor in the Boston office of PricewaterhouseCoopers for eight months. She was onboard American Flight 11 on her first trip to the western United States when it crashed into the North Tower, killing all 92 passengers. As a recent college graduate, devout Christian, and renowned over-achiever, Sachs represents a certain degree of relatability between myself and the attack (Legacy.com 1-10). So many of the people killed were just standard 9-5 workers. The same sentiment applies to Sandler O'Neill & Partners, an investment banking firm in the South Tower of the World Trade Center, which lost 66 of the 83 employees who were at the office the morning of 9/11. Similar to the stories of the FDNY, the tragedy of these deaths was given some meaning and has inspired hope in the 20 years following the crash. Following the first anniversary of 9/11, the University of Massachusetts, Jessica Sachs' alma mater, established a memorial scholarship in her honor to be rewarded annually to one junior and sophomore in accounting who exhibit Jessica's penchant for "community involvement, leadership, academic achievement, and classroom contributions" (The Campus Chronicle 1-2). Another memorialization comes through Maggie Smith whose father was an investment banker at Sandler O'Neill & Partners in the World Trade Center on 9/11. Smith is one of the dozens of children who have joined Wall Street after their parents died in similar positions that day. What makes her particularly special is that she works for the same company as her father did. Smith explains, "It's really special, and it makes me very, very happy that I have the opportunity to grow the memory of him and create my own legacy at the same time. I want to be able to have an impact

on the company in the way that my dad wasn't able to" (Biekert 3-7). There are countless testaments to the outstanding men and women who died on 9/11, regardless of their career. Sachs' memorial scholarship and Smith's work at her father's firm show that even in the face of unspeakable loss, humanity perseveres.

My final thought is perhaps the most pervasive in today's society. Following 9/11, the country experienced a season of profound national unity. According to national NBC News/Wall Street Journal polls, the portion of Americans who believed that "the country was on the right track" improved from 43 percent in June 2001 to 72 percent soon after the 9/11 attacks. Additionally, the subsection of Americans who believed that "the nation was united and in agreement about the most important values" grew from 34 to 74 percent. Posing the same question in 2021, the Associated Press found that a mere 11 percent of Americans felt nationally united (Todd et al. 4-9). What caused the disappearance of American patriotism, unity, and fellowship? It is not for lack of recent tragedy as we currently live through the COVID-19 pandemic. In the words of Thea Trinidad who lost her father in the attacks and recalls the familial atmosphere of New York of that time, "Now, when I feel like the world is so divided, I just wish I could go back to that. I feel like it would have been such a different world if we had just held onto that feeling" (Peltz and Calvin 6, 25-26). At the 20-year milestone, it appears that history is repeating itself more than ever. We are in a climate of great political division, significantly due to a presidential election, reminiscent of the aftermath of the controversial 2000 Bush v. Gore election. Likewise, 9/11 began the "war on terror," which ended last month "with a hasty, massive airlift punctuated by a suicide bombing that killed 169 Afghans and 13 American service members and was attributed to a branch of the Islamic State extremist group" (Peltz and Calvin 19). When I see these similarities, watch the news, and hear the hatred spewed from both

sides of American politics, I feel disheartened. The nearly 3,000 innocent first responders and civilians did not sacrifice their lives for a world where we continue to make the same mistakes of our past. As a world power, political example, and exhibitor of tragic loss and remarkable strength, this country's leaders and its citizens can do better. Calvin Wilson, brother-in-law of the First Officer of United Airlines Flight 93, expresses the proper response America should have to times of strife, "We don't focus on the damage. We don't focus on the hate. We don't focus on retaliation. We don't focus on revenge. We focus on the good that all our loved ones have done" (Peltz and Calvin 13). Every American is united under the same principle of freedom and strength, an ideal for which so many men and women have fought and died. As citizens, we should rejoice in their bravery and remember their sacrifice, not the hate and revenge. While 9/11 certainly brought a period of nationwide harmony, it seems that this sentiment has faded, which is perhaps the most insulting way to memorialize the victims of the attack. It is my sincerest hope that America can once again prioritize our kindness and respect for one another over the conflict and disagreement that plagues us today.

In conclusion, 9/11's impact will always be visible to this country and its people. From the memorials scattered across the United States to the legacies of the victims, I see a nation that has recovered, but not forgotten. As I have considered the firefighters, corporate workers, and political climate through the scope of the tragedy, I have felt profound grief as well as powerful hope. Despite the widespread conflict of the present, I know that people can make a difference and heal our nation, just as was done after 9/11. This should inspire and strengthen the resolve of Americans suffering during the current pandemic and political strife. As 9/11 showed us, there is always hope, even in the darkest of times. I will never forget that lesson. I will never forget the people who sacrificed their lives. I will never forget.

## Case 2: Design Your Life

Amyaha Graham, Trey Johnson, Molly Medling, Erin Morgan

In this case, the group of students who wished to go to Nashville after graduating and I researched several topics relevant to our future living situations in the city. These topics included weather, recreation, crime, finances, and other important subjects. After researching, we created a PowerPoint presentation showcasing our findings. Among the most important things that I learned from this assignment are the best areas of Nashville for renters, the price of rent in those places, the harsh realities of traffic and crime in the city, and the high quality of healthcare. For instance, after seeing the price of rent in Nashville, I will definitely be considering roommates for the first few years of life there. As well, I will take advantage of the few public transportation offerings that Nashville has whenever possible to reduce gas expenditures and traffic. These revelations culminate into a greater understanding of my future budget. While our budget worked nicely, there will certainly be months that are harder than others especially since the budget assumes a flat rate for salary, which is the same for all cities represented by these projects. Therefore, this project forced me to deeply consider the implications of living in Nashville, both the good and the bad. After these considerations, I am still excited to live in Nashville. Despite high crime, traffic, and rental rates, there are still so many aspects of the city to enjoy. As someone who loves going to concerts and seeing live music, Nashville offers a great amount of opportunity. Furthermore, the fantastic healthcare offers peace of mind in the case of future afflictions and children. In terms of work, I find the industry breakdown very intriguing since it means that I can work on manufacturing clients, which is my minor field of study. Lastly, Nashville is a three-hour drive from my family, so it provides easy access to the people I

love most. Overall, I believe that I will enjoy living in Nashville and cannot wait to experience all that the city has to offer.





# **Case 2: Nashville City Analysis**

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**Amyaha Graham, Trey Johnson, Molly  
Medling, and Erin Morgan**



# Geography

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# Geography

- Elevation: 500 ft. - 850 ft at the highest point (FloodMap.net)
- Sits just on the Highland Rim, a very hilly area
- Cumberland River runs through the city

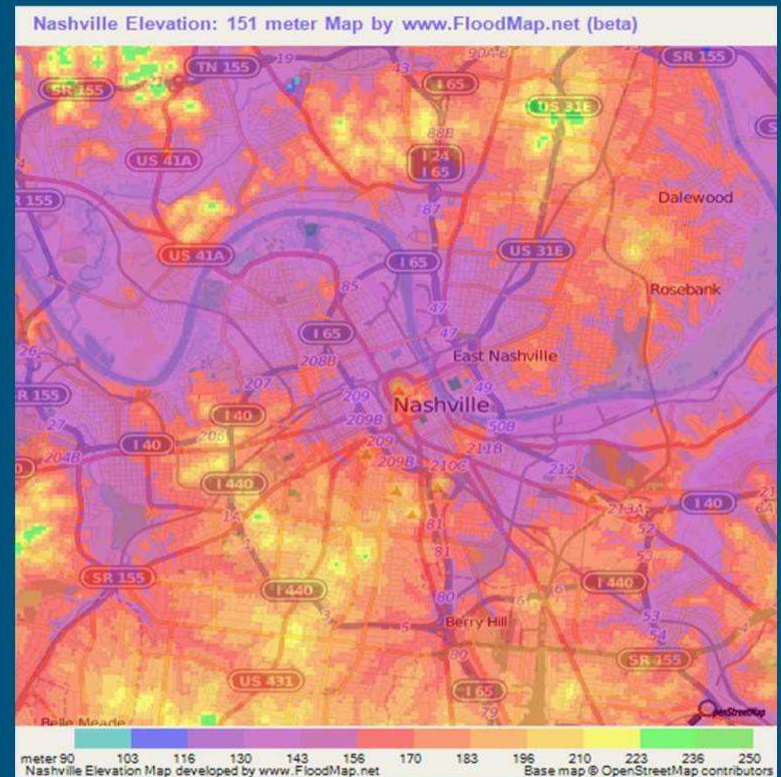


Fig. 1. FloodMap.net, Elevation Heat Map of Nashville.

# Climate

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# Climate

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- Mild climate overall (“Statistics & Facts” 13)
- Full four seasonal cycle (“Statistics & Facts” 14-17)
  - **Spring** is rainy and warm during the day, but chilly at night.
  - **Summer** is warm with high humidity.
  - **Fall** has fluctuating weather, but is usually mild/cool in the day and colder at night
  - **Winter** is cold with light snowfall in the later winter months

# Industries and Employers

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("Statistics & Facts")		Industries ("Statistics & Facts")	Top 5 Employers
Industry	Percentage 16 and older employed	Company	Local Employees
Educational services, and health care and social assistance	22.4%	Vanderbilt University Medical Center and Monroe, Carrell Jr. Children's Hospital at Vanderbilt	24,039
Professional, scientific, and management, and administrative and waste management services	11.8%	Nissan North America	12,000
Retail trade	11.3%	HCA Healthcare Inc.	10,600
Arts, entertainment, and recreation, and accommodation and food services	10.6%	Vanderbilt University	10,331
Manufacturing	10.1%	Saint Thomas Health	8,335

# Hubs of Transportation

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# Transportation Hubs

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- **Nashville International Airport (“Travel and Transportation” 5-13)**
  - Has a bus system that takes people downtown from the airport
- **Music City Star Commuter Railway (“Travel and Transportation” 37)**
  - Route has six stops from Lebanon to Riverfront Park.
  - Two buses (one circling downtown and ongoing to West End)

**Nashville has taxi and rideshare services, but no major hubs for these industries.**

# Traveling Home

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# Nashville to Hometown

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## Trey and Molly - Dyersburg, TN

- About a three-hour drive
- 172 miles away from downtown Nashville
- Average cost would be half-to-full tank of gas

## Amyaha - Clarksdale, MS

- 4.5-to-five hours
- 285 miles away from downtown Nashville
- Average cost would be a one-to-two full tanks of gas

## Erin - Lincoln, NE

- 11.5-hour drive
- 752 miles away from downtown Nashville
- Average drive cost is three full tanks of gas
- About four-to-five hour flight with one stop
  - Nashville Airport to Omaha Airport
- Average flight costs would vary from \$150-300

# Commuting

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# Commuting

- **Train**

- Railroad tracks across the region
- The Music City Star can take people from Lebanon to Nashville and anywhere in between
- Usually takes about an hour
- Train lines run all week and can accommodate 70 commuters per trip (“What to Expect” 2-3)
- About five dollars per ride or \$170 for monthly pass (WeGo Public Transit)

- **Bus**

- Nashville Metropolitan Transit Authority provides bus services across the city and its suburbs
- Buses come every 20 minutes
- Depending on where people are coming from it can take about an hour
- A 31-day unlimited bus pass is \$65 (WeGo Public Transit)

- **Combination**

- Some people will take a train to the downtown area and then a bus to their exact destination

# Commuting continued

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- **Car (“What to Expect” 6)**
  - Coming from Hendersonville (about 20 miles outside Nashville) to Nashville along I-65 N can take 30-to-65 minutes in the morning
  - Lebanon (about 30 miles outside Nashville) to Nashville can take 60-to-90 minutes in the morning
  - Many people opt for the bus or train because of these long drive times
  - Take into account gas prices
- **Bike (“What to Expect” 7-8)**
  - Usually only people living closer to downtown area
  - Accessible bike lanes

# Commuting Continued

- Many accounting firms in the downtown area so depending on whether you live in the city or outside will determine your exact commute time
- The average commute for driving is 40-to-60 minutes because most people (80 percent) drive their cars (“Nashville, TN Driving” 10-11).
- Many parking garages and metered spots to accommodate for large crowds

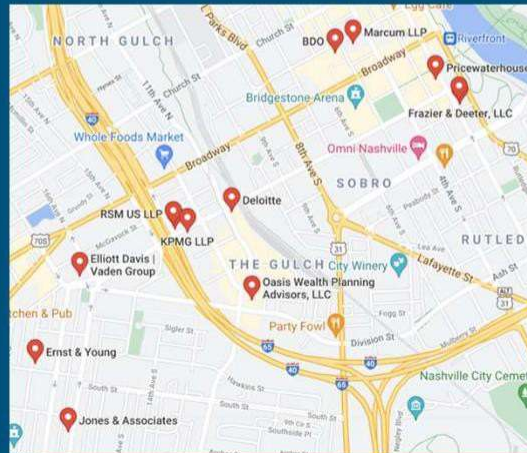


Fig. 2. Google Maps, Accounting Firms in Downtown Nashville, 2021.

# Volunteering and Community Involvement

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# Religious

- **Cross Point Church (Allison 7)**
  - One of the largest churches in Nashville area
  - Average weekly attendance is slightly over 5,000
  - Non-denominational
- **Over 700 churches in the Nashville area (Kollar 1)**
- **Most Nashville churches practice Christianity or Catholicism (World Travel Guide 5).**



Fig. 3. Is3p.com, Cross Point Church Auditorium.

# Volunteer Organizations

- **Boys and Girls Clubs of Middle Tennessee**
  - Mentorship program to help children ages five to eighteen reach their goals (Boys & Girls Clubs of Middle Tennessee)
- **Monroe Carell Jr. Children's Hospital at Vanderbilt**
  - Volunteering programs for adults, college students, and high school students
  - Currently on hold due to COVID-19 concerns (Monroe Carell Jr. Children's)
- **Hands on Nashville**
  - Organization that volunteers for various causes around the Nashville area (Hands On Nashville)
  - Current philanthropy relates to flood relief

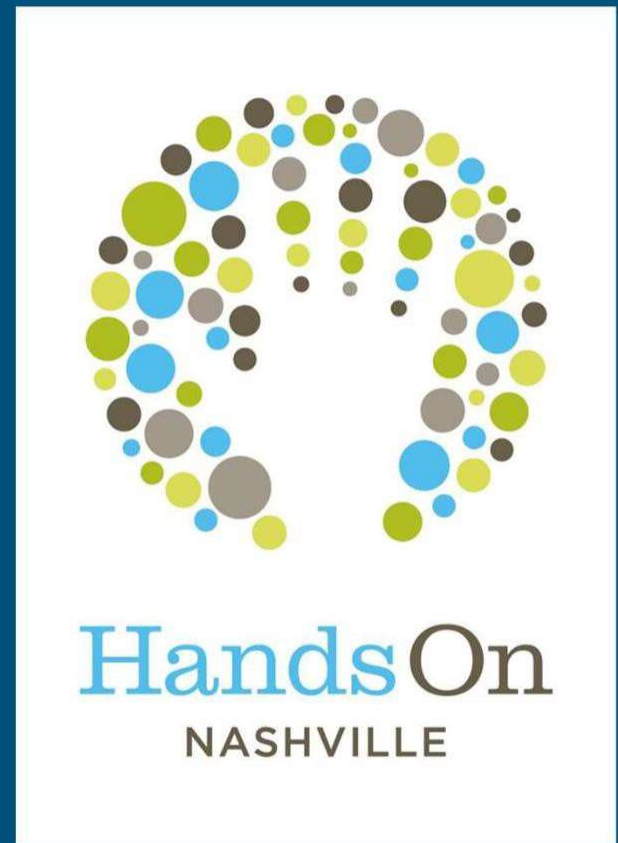


Fig. 4. HON.org, Hands On Nashville Logo.

# Civic

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- **Nashville Public Library**
  - Advance learning and connect with community (Nashville Public Library)
- **Nashville Area Chamber of Commerce**
  - Nonprofit organization to help create economic prosperity through community leadership (Nashville Area Chamber)



Fig. 5. Nashville Public Library, One of Nashville Public Library's Branches.

# Recreational Activities

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# Centennial Park

- Premier park in Nashville
- Attractions (Nashville.gov 1)
  - Parthenon
  - Centennial Art Center
  - Lake Watauga
  - Centennial Sportsplex
  - Events shelter
- Events (Centennial Park Conservancy)
  - Music - Musician's Corner, Opera in the Park, ECHO
  - Festivals - Celebrate Nashville, Nashville Earth Day
  - Activities - Centennial Craft Fest, Tennessee Craft Fair, Yoga in the Park, Kidsville



Fig. 6. Nashville.gov, Parthenon.



Fig. 7. nashvilleguru.com, Centennial Craft Fair Booth.

# Concerts

- **Ascend Amphitheater**
  - “The Ascend Amphitheater operated by LiveNation is an open-air event venue located on the Cumberland River and in Riverfront Park” (Nashville Downtown Partnership 1).
  - Capacity - 2,362
  - Upcoming acts - Machine Gun Kelly, LANY, and 5 Seconds of Summer (Live Nation)
- **Bridgestone Arena**
  - Concert and sports venue in downtown Nashville (Bridgestone Arena)
  - Home of NHL’s Nashville Predators
  - Capacity for concerts - 20,000
  - Upcoming Acts - Harry Styles, Zac Brown Band, and Chris Stapleton



Fig. 8. [visitmusiccity.com](http://visitmusiccity.com), Ascend Amphitheater.



Fig. 9. Bridgestone Arena, Bridgestone Arena.

# Concerts (continued)

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- **Grand Ole Opry**
  - “The Grand Ole Opry is the stage that showcases the past, present and future of country music.” (Grand Ole Opry).
  - Several shows per week
  - Capacity - 4,372
- **Ryman Auditorium**
  - Grand Ole Opry House until 1974 (Ryman Auditorium)
  - Hosts music and entertainment of all genres
  - Capacity - 2,362

# Sports

- **Nashville Predators (“Nashville Predators”)**
  - Ice hockey team in the Western Conference of the National Hockey League (NHL)
  - Inaugural season in 1998
  - Won conference championship in 2017
  - Play in Bridgestone Arena
  - Ticket prices range from \$10-360 depending on the game (SeatGeek).
- **Tennessee Titans (“Tennessee Titans”)**
  - NFL football team based in Nashville since 1997
  - Attended Super Bowl in 2000
  - Play in Nissan Stadium
  - Average ticket price is \$357, but can be as low as \$58 depending on the game (TicketIQ)



Fig. 10. NHL.com, Nashville Predators Logo.



Fig. 11. nfl-teams.net, Tennessee Titans Logo.



# Shopping

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- **Opry Mills Mall (Simon Property Group)**
  - Outlet mall with 200+ store, dining and entertainment options
  - Stores include Old Navy, kate spade, American Eagle, etc.
  - Located between I-40 and I-65 on Briley Parkway (close to downtown and airport)
- **The Mall at Green Hills (“The Mall at Green Hills”)**
  - Mall with 100+ specialty, luxury and contemporary stores and restaurants
  - Stores include Amazon Books, Gucci, ZARA, Lush, etc.
  - Located in affluent corridor of Nashville and close to downtown

# Museums

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- **The Country Music Hall of Fame and Museum**
  - Located in downtown Nashville
  - “Smithsonian of Country Music” (Country Music Hall of Fame and Museum)
  - Features galleries, artifacts, stores, event and performance space, and classrooms
  - Frequently adds new exhibitions and updates permanent exhibitions
- **Frist Art Museum**
  - Located in downtown Nashville
  - Has hosted touring world-famous exhibitions since its opening in April 2001 (Frist Art Museum 3)
  - Family-friendly learning environment

# Crime

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# Statistics (Lee)

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- **High crime rating relative to similar cities**
- **Crime rate - 105% higher than the national average**
  - **Violent crime (assault, rape, and murder) - 183% higher than the national average**
  - **Property crime (burglary, robbery, and car theft) - 92% higher than the national average**
- **Most common crimes**
  - **Theft**
  - **Assault**
  - **Vehicle theft**
  - **Robbery**
  - **Rape**
  - **Homicide**

# Most Dangerous Neighborhoods (Lee)

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Mostly in west Nashville

- Bordeaux
- Talbot's Corner/Capitol View
- Elizabeth Park
- McKissack Park
- Cleveland Park
- College Heights/Clifton
- Buena Vista and Osage-North Fisk
- Shepherd Hills

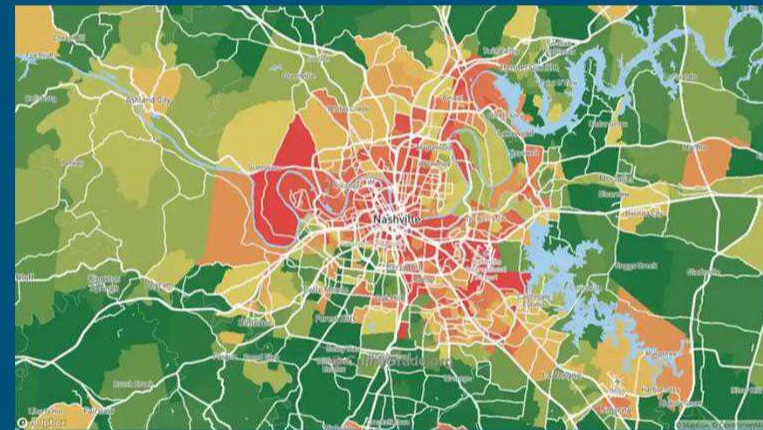


Fig. 12. crimegrade.org, Nashville Crime Map.

# Safest Neighborhoods (Lee)

Mostly in central and south Nashville

- Downtown and Sobro
- Germantown
- The Gulch
- Midtown
- Berry Hill
- Hillsboro Village
- Melrose



Fig. 13. smithgeestudio.com, The Gulch.



Fig. 14. nashvilleguru.com, Hillsboro Village.

# Healthcare

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# The Health Services Capital of the United States

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- **Nashville has an outstanding healthcare industry**
- **Migration of healthcare industry to Nashville began in late 1960s and has only grown since then (Frist)**
- **Home to over 500 healthcare companies and 17 publicly traded healthcare company corporate headquarters**
- **Premier hospitals (Kraft)**
  - **Tristar Centennial Medical Center**
  - **St. Thomas Midtown Hospital**
  - **Vanderbilt University Medical Center**
- **World-renowned medical schools**
  - **Vanderbilt University Medical School**
  - **Meharry Medical College**



# Education

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# Nashville Public Schools

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- **Despite Metro Nashville Public Schools frequently being in the bottom five percent of public schools in the state, there are impressive school districts in the Nashville area (Gonzales).**
- **Affluent suburbs with top-ranked schools (Faris)**
  - Mt. Juliet
  - Hendersonville
  - Murfreesboro
  - Franklin
- **Each of these suburbs has a median house price between \$150-450 thousand, which may not be affordable for new families.**
- **Several nationally ranked magnet schools in the Nashville area (Gonzales and Kast 2)**

# Nashville Private Schools

- 58 private schools serving 16,659 students (Private School Review)
- Top-ranked private schools
  - Franklin Road Academy
  - St. Paul Christian Academy
  - Benton Hall Academy
- Average tuition cost - \$15,220



Fig. 15. tuckhinton.com, Franklin Road Academy.



Fig. 16. nashvilleparent.com, St. Paul Christian Academy.

# Everyday Living

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# Housing (RentCafe)

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- **Average apartment rent as of 2021: \$1,581**
  - 13% increase from 2020
- **Average apartment square feet: 890 sq ft**
- **Studio apartments are typically the cheapest**
- **Overall, rent increases as the number of bedrooms increases**
  - It would be best to have roommates in order to decrease individual costs

# Rental Properties

## Avana Overlook ( 3 bedroom, 2 bath)

Rent (Avana Overlook):

- Without roommates: \$1,507
- With roommates:

\$502/person Square feet: 1,266

Location: Antioch, TN (approximately 12 miles to downtown)

Amenities: Washer/Dryer, Garage parking, Stainless steel appliances, community pool and fitness center, etc.



Fig. 17. [avanaoverlook.com](http://avanaoverlook.com), Avana Overlook Apartments.

## Views of Brentwood (1 bedroom, 1 bath)

Rent (Views of Brentwood): \$1,249

Square feet: 740

Location: Brentwood, TN (approximately 11 miles to downtown)

Amenities: Washer/dryer hookup, private balcony, valet waste service, dog park, stone sun deck, etc



Fig. 18. [livevob.com](http://livevob.com), Views of Brentwood Apartment.

# Everyday Living

## Conveniences

- **Pet friendly (various dog parks)**
- **Plenty of grocery stores**
- **Numerous coffee shops around town**
- **Many food options**
- **Wide array of healthcare options**

## Inconveniences

- **Traffic (long delays during peak hours)**
  - **Ranks 23 out of 240 cities for heavy traffic (Wrather)**
- **Not enough public transportation**
- **Nashville is a top allergy capital (Expat Arrivals).**

# Finances

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# Individual Tax Rates

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- No state or local income tax on wages and salaries (SmartAsset)
- Based on a \$55,000, federal taxes are approximately \$5,162
  - Marginal tax rate: 22%
  - Effective tax rates: 9.39%
  - FICA (Social Security and Medicare) tax is approximately \$4,208
    - Tax rate: 7.65%
  - Average Net Income is \$45,631
- Other taxes not included in net income:
  - Sales tax rate: 9.25%
  - Property tax rate: 0.64%
  - Fuel tax: \$0.26 per gallon of regular and \$0.27 per gallon of diesel

Table 1: Monthly Budget for Nashville

<b>Monthly Budget</b>	
Gross income	\$ 5,000.00
Less: Federal taxes	\$ 522.00
Less: FICA taxes	383.00
Net income	<u>4,095.00</u>
<b>Expenses</b>	
Rent	502.00
Utilities	70.00
Groceries	260.00
Internet	60.00
Cell phone	70.00
Car/Renters insurance	600.00
Gas/Transportation fees	300.00
Healthcare	150.00
Personal hygiene	75.00
Entertainment	150.00
Clothing	175.00
Eating out	200.00
Miscellaneous	300.00
Total expenses	<u>2,912.00</u>
<b>Savings</b>	
Emergency fund	200.00
Savings	\$ 410.00
Total savings	<u>610.00</u>
<b>Money remaining</b>	<b>\$ 573.00</b>

Case 3: Excel Crash Course

Molly Medling



801-750 West Pender Street Vancouver BC V6C 2T8

The Board of Directors of the  
Corporate Finance Institute® have conferred on

*Molly Medling*

who has pursued studies and completed all  
the requirements for the certificate of

## Excel Crash Course - Spreadsheet Formulas for Finance

National Registry of CPE Sponsors Number: 139079

Instructional Delivery Method: QAS Self Study

Finance: 3.0 credits.



Certificate number  
180815744

In accordance with the standards of the National Registry of CPE Sponsors,  
CPE credits have been granted based on a 50-minute hour.

Chair of the Board

Director

Director

Oct 13, 2021

Case 4: Financial Impact of COVID-19 on Pfizer Inc.

Madison Demus, Aubrey Christian, Molly Medling

The purpose of this case study is to evaluate the economic impact that the COVID-19 pandemic has had on the pharmaceutical industry, specifically Pfizer. We researched various topics relating to this impact including the initial impacts of the pandemic on Pfizer's financial statements, home remedies for COVID and Pfizer's response to them, how lobbying has changed since the beginning of the pandemic, and the executive order issued by President Biden on September 9th, 2021. Each of these topics gave us a clear picture of the internal condition of Pfizer and the sustainability of its success. It also lends to a useful discussion on how businesses have benefited and suffered because of the pandemic.

Throughout the case, we used Google, DuckDuckGo, and Bing search engines to find related articles. We noticed Google results were heavy with government sources; the top three to five results were almost always government websites. Bing tended to side with news agencies, as most of the articles were from one of the major news media companies. DuckDuckGo results were heavy in journals and studies. The question that led to the biggest differences in results seemed to be what therapeutics are recommended for COVID-19? Google led to mainly professional medical websites that recommended only treating symptoms when possible and listening to doctors' instructions. The other search engines, however, resulted in various strange and questionable home remedy recommendations. Overall, similar articles could be found across the search engines, but there was a clear distinction between the majority results of each.

Some of the most important things we learned from this case were how to interpret 10-Ks and how to quickly dissect business articles. Both of these also contributed to a greater understanding of the need for a holistic research approach to contentious topics, like vaccine distribution. For instance, if we had only looked at the financial statements from Pfizer, we would have had a completely different understanding of the company. It is clear that companies

are going to report information that is the most beneficial to them, even though there are plenty of other considerations to be taken into account when looking at something as broad as “how has the COVID-19 pandemic affected Pfizer economically?”

### **1. How has Pfizer been affected by the pandemic according to their 2020 10-K?**

Pfizer states in the company’s annual report that the COVID-19 pandemic caused an “unfavorable impact of approximately \$700 million, or two percent” (24). The majority of this impact was from low demand for Pfizer goods in China and the large decline of in-person wellness visits to doctors. The pandemic greatly affected the business and operations of Pfizer across the board. Pfizer salespersons still do not have full access to healthcare professionals because of restrictions on in-person meetings (27). Many of the medications Pfizer produces require a doctor's visit before a prescription can be made. Due to the inability to contact people face to face, it was much more difficult for patients to obtain the prescriptions for these medications, thus creating a reduction in demand for Pfizer. Additionally, any physician-administered medications (like vaccines) were affected by the decline in doctor visits (27). Pfizer also recognizes that there have been risks and difficulties associated with the pandemic for its internal operations. For instance, they speak of challenges in reallocating R&D, supply chain management, and "potential delays and disruptions related to regulatory approvals" (18). Hospital revenues for Pfizer increased in the U.S. by three percent from 2019 due to the ongoing treatment of COVID-19 patients on respirators (33). Pfizer later saw a large increase in revenues, approximately \$154 million, due to governments rolling out the COVID-19 vaccine in large quantities. The company also has over \$8 billion in short-terms assets owned by the US and foreign governments.

## **2. What do different search engines yield in research on Pfizer's financial condition in the pandemic?**

Researching the impacts of COVID-19 on Pfizer across three different search engines (DuckDuckGo, Bing, and Google) produced various results. CNBC reports that Pfizer sold \$3.5 billion in Covid-19 vaccines in the first quarter of 2021. Additionally, they raised their sales forecast based on Covid-19 vaccines from \$26 billion to \$33.5 billion (Jimenez 2,4). A different article, by European Pharmaceutical Review, states that Pfizer reported revenues from the second quarter of 2021 as \$19 billion (19). Pharmaceutical Technology compares Pfizer's approach to the vaccine to other companies. Reportedly, two doses of the Pfizer vaccine go for a total of \$39 while two doses from another company, AstraZeneca, are priced from \$4.30 to \$10. Pharmaceutical Technology comments on the profit-based approach Pfizer seems to be taking in regards to the COVID-19 shot (7). The profit-based approach has led Pfizer to expect \$33.5 billion in coronavirus vaccines (Pratap 1). While this is a large figure, it does not come without expense. Revenues grew by 68 percent in the first two quarters of 2021, but expenses rose by 69 percent. The expected EPS is \$4.11 per share, an 85 percent increase over 2020, and they ended the second quarter with \$11 billion in free cash flow (Hoy 7-8). They have already started working on making a pill to prevent COVID, which could have great upsides as the discussion of yearly COVID vaccines increases. However, with vaccination numbers decreasing, Pfizer is experiencing lower returns for breakthroughs. For instance, after releasing their Phase Three study showing vaccine efficacy of 95.6 percent, stock price only increased by 0.1 percent (Hoy 3). Pfizer has also been affected by steep costs to sustain their growth over the pandemic with costs increasing just as fast as revenues in the first half of the pandemic. This has been mitigated by impressive gains in revenues over the past few months. According to Hoy, "Pfizer was strong



before the pandemic hit, but now it's on steroids," implying that the pandemic, while it has brought issues for the company, has positively impacted the company (13).

### **3. Best therapeutics for COVID-19?**

Home remedies for COVID-19 have been argued since the pandemic began. Various organizations and articles have suggested therapeutic ideas for treating the Coronavirus. Mayo Clinic mainly recommends being aware of warning signs and following doctors' instructions. Many of the top results give similar recommendations such as drinking plenty of water, getting lots of rest, and staying away from others. Numerous sources recommend home remedies to treat the symptoms of COVID-19, rather than the virus itself. Recommendations for the cough commonly associated with the virus include drinking warm beverages, gargling salt water, eating frozen foods, breathing in steam, and using cough drops. A few articles mention testing out meditation/relaxation techniques to deal with shortness of breath and the stress that comes from the idea of the pandemic (University of Maryland Medical System). Other articles recommend more radical approaches to treat the virus at home. For example, Healthline reported Chinese officials recommending licorice as a remedy for COVID-19. Supposedly, licorice paste can prevent the Herpes virus from replicating and some believe it could do the same for Covid (Ries 21-22).

An observational study published by medRxiv concluded the combined usage of hydroxychloroquine and zinc could increase survival rates up to 200 percent for patients on ventilators (Pavlich 1). According to a study performed by C. Prodromos and T. Rumschlag, out of 43 reports studying Hydroxychloroquine treatment, 25 showed positive clinical efficacy, 15 showed no improvement, and three showed negative effects (5). Concerning this topic, a survey from Jackson & Coker reported that over half of American physicians would prescribe

hydroxychloroquine to treat Covid-19 (Pavlich 4). Another popular treatment alternative is Ivermectin, an anti-parasitic agent used to treat parasitic diseases such as river blindness and strongyloidiasis. The World Health Organization only recommends this treatment as part of clinical trials, pointing to several studies showing reduction of mortality and need for medical attention as a result of the drug is of “very low certainty” (5).

#### **4. What is Pfizer’s opinion on alternative treatments to Covid-19?**

While there is not much information on Pfizer's viewpoint, it is in their interest to discredit alternative Covid-19 treatments. Any company making a revenue off of their medication would recommend against any alternatives, especially home remedies. If people turn to other options to treat the problem, the company would see great decreases in revenue. Avoiding situations like this is becoming more and more important as income due to Covid-19 becoming such a large cash cow for Pfizer. As larger segments of the population are getting vaccinated, it is becoming clear that there is a group that is against the vaccine. This desire could be part of the reason Pfizer has started working on an oral remedy for COVID. Pfizer has also researched alternative treatments to their vaccine, including azithromycin (Zithromax) and hydroxychloroquine. According to their trial, efficacy was highest in patients who were administered both drugs. Pfizer also recommended this for malaria treatment in Africa (Tirumalaraju 1-6). However, Former Pfizer Vice President Dr. Michael Yeadon said in a conversation with Steve Bannon in regards to vaccines, "In absolute honesty, I don't think they're even necessary. Why are they not necessary? Well, that's because there are at least four or five safe and effective medicines and their presence has been suppressed and hidden from the public, so they're not really necessary” (Bannon’s War Room 2). Dr. Yeadon’s statement brings forth the question: are Pfizer and the American government taking advantage of the public by encouraging multiple vaccinations?

Recent profits from revenue growth and influx of vaccinations incentivizes Pfizer to continue encouraging the vaccine, despite other research proposing alternate solutions. The CDC and FDA are also key in these debates, debunking several possible vaccine alternatives. These organizations have particular incentive to encourage vaccination to maintain their initial stance. As these two organizations, once “two of the country’s most respected sources of health information and guidance,” have grappled with the political controversy surrounding vaccinations and the COVID-19 virus, they have likely considered the political implications of disagreeing with President Biden’s vaccination agenda and changing their decided stance. These actions would undermine the authority and respect the organizations hold, which are the only assets that they can utilize in times of uncertainty (Suwondo et al. 1).

#### **5. How has Pfizer lobbied in the pre- and post-Covid period?**

Lobbying activity has varied greatly from before the pandemic to after, particularly for pharmaceutical companies. As can be expected, pharmaceutical companies, such as Pfizer, put a great deal of money into influencing the Biden administration. With the support of the president pushing for vaccines to be rolled out, Pfizer is expected to see revenues increase due to their COVID-19 vaccine. Additionally, companies with COVID-19 vaccines are lobbying very hard against waiving intellectual property rights for the vaccines. Eliminating intellectual property rights for vaccines would allow any company to produce them. Companies like Pfizer would greatly dislike this. Another lobbying goal that has been achieved is amnesty from legal action. Pfizer now has “immunity from liability if something unintentionally goes wrong with their vaccines” (Sigalos 2). This decreases motivation of the government, Pfizer, and other agents of change to actively seek new treatments. If Pfizer cannot be held liable for adverse vaccine effects, why should it strive to improve? This successful political maneuvering has led Pfizer to

only increase its lobbying efforts. The pharmaceutical industry was reported to have increased lobbying spending by 6.3 percent in the first quarter of 2021 compared to that of 2020 (Cunningham and Ellerbeck 4-5). Pfizer was said to be the largest spender of any individual drug company in regards to lobbying. In recent months, Pfizer has focused on growing its lobbying efforts. Last year's spending was the highest since 2010 at right over \$13 million. The majority of the new hires have close ties with the Biden administration (Winters and Kassam 4, 11).

#### **6. 9/9 Executive Order: What is it, and why was there a policy change?**

The executive order made on September 9th, 2021 requires federal contractors to implement "COVID-19 safety protocols." This includes mandating COVID-19 vaccines for federal workers with certain exceptions for medical conditions and religious beliefs (Liasson 4). It is still unclear what the specifications of the "COVID-19 safety protocols" entail and to whom they apply. Of course, this executive order came with plenty of backlash from various parties. After months of trying to persuade those reluctant to get vaccinated, Biden released the executive order requiring government contractors to get vaccinated.

## Case 5: Important Influencers

Molly Medling

In this case, students were tasked to interview a business professional who was a "difficult personality." This could mean that we were intimidated by or did not enjoy working with the professional. I interviewed Mr. Barry Atkins, an Audit Partner in Deloitte's Memphis, Tennessee office. I met Mr. Atkins through Deloitte's Audit Innovation Campus Challenge this semester. He was my team's Deloitte advisor for the project, and I was intimidated by him throughout the process. He had high expectations for our work and never withheld criticism. This pushed me to fully understand environmental, social, and governance disclosure issues, a complex and relevant topic in today's business world, while also teaching me how to be receptive to criticism. I chose Mr. Atkins for this assignment since these lessons were difficult to learn, and I knew that he could teach me more about the accounting profession and the Big Four. After interviewing him with the provided questions, I gained a new perspective on auditing, Deloitte, and work/life balance.

The greatest takeaway from this interview was the importance of technology and human interaction. While these two things may seem like opposites, Mr. Barry argued that they work together to produce a holistic and effective product for clients. Today's professionals need to how to operate technology, but also how to interact with clients and critically think about issues, things with which my generation struggles. This lesson also applies to my personal life. It is important to have an online presence since it is a beneficial communication tool. However, social media should not dictate my life, nor should it replace my in-person communication. Therefore, young people should be more receptive to face-to-face conversations as this is a critical skill for leadership positions, both at work and in personal lives. This also showed me that I should not let intimidation stop me from asking questions and networking.

### **1. Tell me about your life growing up before you started college or your career.**

Mr. Barry Atkins had an unconventional upbringing. The nature of his father's work required frequent moving for promotions. This meant that he lived in four different cities before attending college. Mr. Atkins allowed his father's drive to shape his work ethic. He worked weekends and summers throughout his high school career either washing cars or cutting lawns. Furthermore, he always applied himself in school as a successful A/B student.

### **2. What were your college years like?**

Mr. Atkins attended the University of Mississippi, graduating with an accounting degree in 1987. He maintained his regiment of academic success in college, placing school first in his priorities. Nevertheless, he did not allow his schoolwork to reduce his social enjoyment. As he put it, "Work hard, play hard. But work must come first." To balance these responsibilities, he would take morning classes, do homework in the afternoons, and participate in social activities in the evenings. He was especially fond of Oxford nightlife, so he avoided studying in the evenings, preferring to do it earlier in the day. He also valued having interactive professors who made their classes both entertaining and informative. Two of his favorite professors were Dr. Russel Briner and Mr. Jimmy Davis for those reasons. Overall, Mr. Atkins performed very well in college while maintaining a healthy social life.

### **3. How did you decide to pursue accounting?**

When Mr. Barry initially came to the University of Mississippi, he did not consider accounting as a possible path. The product of a long history of pharmacy graduates from Ole Miss, he thought he would follow in their footsteps. This was before taking chemistry his freshman year, which made him reconsider his plans. His mathematical skills brought him to accounting. However, this was nowhere near the most important factor in his decision. He wanted a career

with client interaction and problem-solving opportunities. This made the accounting profession a natural fit for his interests. Therefore, he changed his major to accountancy and never looked back. Mr. Atkins' journey to accounting was not attributed to anyone other than himself as he discovered his interest through individual research.

**4. Walk me through your first job to where you are now. What important things did you learn at each position along the way?**

As mentioned earlier, Mr. Atkins held several positions in high school, including car washing and cutting lawns. These positions built the foundation of his strong work ethic. After college, he began as an auditor at Deloitte in Memphis, Tennessee and has been there for nearly 35 years. His development at Deloitte has been continuous, which is perfect for his driven personality. When deciding where to work, he set a goal to become a partner at a Big Eight accounting firm after seeing the benefits and job description. Through each of his positions within Deloitte, he has learned the importance of client interaction, technological prowess, and organization. Mr. Atkins emphasized these skills as crucial to the accounting profession, especially for new hires.

**5. What has been your challenging and difficult hurdle so far?**

After a great deal of thought, Mr. Barry concluded that the most challenging part of his career was his first year as a manager. He began this position in the fall of 1992 after five years with Deloitte. Soon after beginning his new position, he quickly realized that his desire to be everyone's friend was unattainable. It was simply impossible to please everyone, much less when he was organizing those people to meet non-negotiable deadlines. There were other challenges as well. Despite the hours not being very different, the nature of his work changed. Rather than simply working on engagements, Mr. Atkins was communicating both up and down within the firm while maintaining relationships with clients. Nevertheless, he benefitted from the challenges



presented by the manager position. He gained invaluable experience in team coordination as well as internal and external business communication.

**6. What has your life been like outside of work?**

Immediately upon asking this question, Mr. Atkins emphasized his good fortune in both his personal life and career. He stated, "The nice thing about the accounting profession is that, if you are a hard worker and organized, you can do anything you want to outside of work. You just have to plan." One of his favorite pastimes is travel, which he has gotten to do frequently for his job. Some destinations to which he has traveled for work include California, Florida, and Australia. He also enjoys spending time with friends and family, boating, and golfing. His favorite season is summer, which is when he participates in many of his favorite activities. Lastly, he loves living so close to Ole Miss. He has been a football season ticket holder for 34 years and frequently tailgates in the Grove. He also finds great satisfaction in giving back to the university through his work on the advisory board for the Patterson School of Accountancy.

**7. What do you wish you would have known when you were 21 years old about life and your career? What piece of advice would you give me and my classmates?**

Mr. Atkins wished that he had foreseen the impact of technology on the world. When he was in school, most tasks were performed manually. Specifically, he remembered using physical spreadsheets in his Intermediate and Advanced Accounting classes. Furthermore, he emphasized the use of filing cabinets for storage, saying that at least half of the office space at Deloitte when he started was devoted to the storage of documents. His piece of advice to me and my classmates was to realize that technology, while it does make processes more efficient, is not as important as suggested by society. My class's generation is ruled by smartphones and social media, which makes us blind to the actual processes underlying technological mechanisms. Mr. Barry cited the

predisposition of new hires to work on their computers all day without interacting with clients. Whenever he is presiding over an engagement, he often requires team members to interact with the client and coordinate with one another for the first two hours of the workday. In the words of Mr. Atkins, “Everything in life is about relationships, which you cannot develop on a laptop.”

**8. What are you most proud of?**

Of all the things in his life, Mr. Barry is most proud of his three children. To him, his children are a manifestation of his values and work ethic, which his children each exemplify. He praised his children for their impressive handling of challenges. In his words, “They are good people, and that is all you can ask for as a parent.” His youngest son attends the university, which is another source of pride for Mr. Atkins.

**9. What has been the best vacation you have ever taken? What is left on your bucket list?**

Mr. Atkins' favorite vacations are his early trips to Napa Valley with a large group of his friends. On these trips, which would last five to seven days, the group would rent a large house in wine country and go on limousine excursions to vineyards. These trips involved learning the winemaking process, meeting with the winemakers, and wine-tasting. The beautiful scenery of California was also a beloved aspect of the trips. He still goes back every couple of years to visit Napa Valley to this day.

The bucket list question was especially timely for Mr. Atkins since he and his wife had compared bucket lists three weeks ago. This resulted in a surprising number of similarities, one of which was taking the family on a European vacation. As stated previously, Mr. Barry loves traveling but has never explored Europe. Some countries he most wants to visit are Italy, France,

and Spain. Additionally, he would love to see Wimbledon since he is an avid sports fan. He hopes to take this trip soon.

**10. What do you think will be the biggest challenge of your generation?**

The biggest challenge posed to his generation is the ever-changing nature of technology. A significant portion of the interview centered around his generation's aversion to technology despite its necessity. Rather than viewing technology as an insult to tradition, his generation should see it for its proposed efficiencies and ability to increase client service. Especially in light of the pandemic, a proper attitude toward technology is essential to the operational effectiveness of an organization. This means that his generation should not only be receptive to technological advances but also gain an understanding of the involved mechanisms.

**11. What will be the biggest challenge for my generation?**

The challenge of my generation is also technology but in a different way. According to Mr. Atkins, the problem is not that we know how to operate technology, but that we know when to unplug from it. Earlier he spoke on this issue from a work perspective, while he spoke more personally for this question. He believes that our generation has an addiction to social media, so much so that we are unable to see beyond our phones. Our worth has become so tied to the likes we get on posts and pictures that we are unable to achieve sustainable happiness. This was made worse by the pandemic, which drove us to our phones more than ever before. Mr. Barry further emphasized the importance of face-to-face communication, both in the work environment and in our personal lives. When at football games and in the Grove, he rarely uses his cellphone, which is unthinkable for so many people our age. I know that I use my phone as a crutch, and I often find myself reaching for it when idle. This destroys productivity and communication skills, invaluable assets to the workplace. Human interaction is such an important aspect of our

personal and work experiences, and my generation is missing out on many of the benefits it provides.

Case 6: International Paper Analysis

John Batson, Kennedy Marble, Molly Medling, John Michael Ritchie, Banks Robinson

# International Paper Organizational Chart

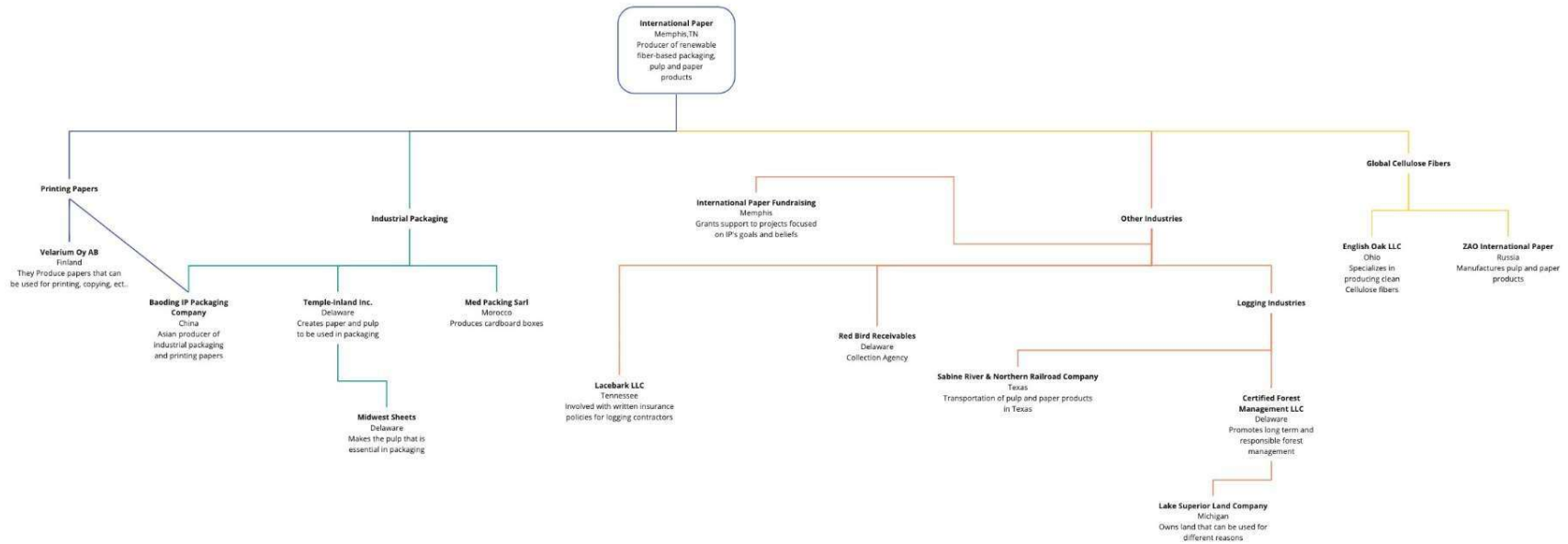


Figure 19: International Paper Organizational Chart

We were tasked with selecting a publicly traded company that our team is interested in, and we will study different aspects of the organization for the semester. We chose International Paper (IP), a global manufacturer of fiber-based pulp and paper products based in Memphis, Tennessee. This week we researched nearly everything we could find about the company, created an organizational chart of its structure, and determined its greatest threats to future operations. We explored annual reports, news articles, and background information relating to International Paper to get a better picture of the company. We analyzed their 2016 through 2020 annual reports because last year's annual report has not yet been released. The annual report, along with the market valuation data and industry analysis, provided us insight into the past performance and expectations for the future of the business. We also read news articles to understand their market standing. To find more information about their origins and their journey to becoming one of the leaders in the paper-manufacturing industry, we took information from their website.

International Paper was founded in 1898 in Corinth, New York, and soon began to supply 60 percent of the country's newsprint. They have since grown into an international supplier of renewable and recyclable paper and pulp products. The main segments of the business are producing industrial packaging, global cellulose fibers, and printing paper. They have nearly 40,000 employees and have been listed by many news outlets as one of the most diverse and best companies to work for in the country. The chairman and CEO, Mark Sutton, has been leading the company since 2014 and has become influential in several companies and councils around the world. International Paper is a company that millions of people have relied on for decades for their daily needs, such as printing a brochure, packaging as a small business, or changing a diaper.

International Paper has a plan committing to help better the future of our planet. This plan is referred to as Vision 2030. The four goals it involves are “healthy and abundant forests,” “thriving people and communities,” “sustainable operations,” and “renewable solutions” (“About International Paper”). They are determined to try to create products that help rather than hurt the environment. Their mission includes improving people's lives, the planet, and their performance as a company. The IP Way Forward is the company's plan to add value for those involved with the company now and in the future. International Paper has adopted the idea of a circular economy, meaning that they want their products to have more than one use. The company aspires for all its products to be reusable or recyclable, eliminating as much waste as possible.

The industrial packaging division was responsible for 73 percent of International Paper's revenue. In 2017, there were strategic investments made for expected growth in the industrial packaging division. Looking at the fourth quarter of 2019, they expect price and mix to improve in the first quarter of 2021 due to the realization of the previous movement of the price index (“2017 Annual Report”). They expect volume to be flat, and for operations and costs to improve. They expect these things to improve because of events that occurred in 2020 that were exceptions from ordinary business activity. COVID-19 resulted in higher supply chain costs for operations in Industrial Packaging. Sales volumes increased from 2019 to 2020, with boxes for shipping and such being in high demand (“2020 Annual Report”).

International Paper's other segment is Global Cellulose Fibers, which produces fluff and specialty pulp to be used in absorbent hygiene products. These products include diapers, feminine products, adult incontinence products, non-woven products, tissue, and paper products. This is a global operation taking place in the United States, Canada, France, Poland, and Russia. The performance of this segment has been lucrative over the past several years, but there have



been missteps. For example, 2016 and 2020 both saw drops in profitability and sales, but both of those were due to unavoidable actions. In 2016, IP acquired a pulp business from Weyerhaeuser to be integrated into their existing operations, and IP also undertook a massive conversion of the Riegelwood, North Carolina mill to produce more fluff and specialty pulp products (“2016 Annual Report”). Both of these projects increased manufacturing capacity in years to follow and contributed to the growth of the cellulose fibers segment. In 2020, losses plagued IP, which was typical for manufacturing businesses at the time due to the spread of the COVID-19 virus (“2020 Annual Report”). However, 2020 also showed lower maintenance downtime costs, which have been an issue for IP over the years. Another strong influence on profitability in the cellulose fibers division is the price of input costs, mostly wood, chemicals, and energy, which have fluctuated but mostly increased due to inflation. Overall, this segment is profitable and represents an advantageous investment of IP's resources.

Until 2021, International Paper was composed of three major segments, which included Printing Papers. IP announced it would create a publicly traded standalone company to take this product. This company became Sylvamo (trading name, "SLVM"), and stock in the new company was distributed to existing shareholders of IP. This is a strategic move by IP as they work to condense their business to their key value drivers, which have historically been industrial packaging and cellulose fibers. The demand for paper products has also been declining in recent years due to the shift to paperless interaction in both marketing and media, which has been exacerbated by the pandemic (Zacks Equity Research 1-5).

Next, there are several issues that International Paper has faced in recent years. As with most companies, the COVID-19 pandemic brought about difficult circumstances. As stated in their 2020 annual report, "COVID-19 has had a significant negative impact on demand for our

printing papers products. In addition, our operations in Industrial Packaging experienced higher supply chain costs due to the impact of COVID-19" ("2020 Annual Report" 9). Despite 2020 having higher sales volume and lower input costs than 2019, lower sales price and higher operating costs more than offset these gains for International Paper and its subsidiaries. Any weaknesses the company had before the pandemic have only been exacerbated since March of 2020 ("2020 Annual Report").

The supply chain for International Paper has been stretched thin due to the pandemic. No process in the supply chain has been spared with the CFO claiming the company is facing a cardboard-box shortage (Skerritt). With a shortage of shipping materials, International Paper must deal with delays and challenges in delivering materials. Other problems within the supply chain include a tight transportation environment, shortages of caustic soda and other raw materials (Hays). With so many interruptions in the supply chain, International Paper can only hope that 2022 will have fewer production issues.

Uncontrollable forces certainly present a challenge to International Paper. The winter storm in mid-February caused petrochemical plants to shut down as well as cease operations for many of its mills. This in turn caused supply chain issues with the lack of raw materials being processed. The company also has to deal with unscheduled maintenance outages, prolonged power and equipment failures, and chemical spills and releases. All of these problems can either slow production down or make the company vulnerable to legal action. One such case includes a group of Louisiana residents who claimed to be affected by a paper mill byproduct (Shaak 1). Only so much can be done to prevent these issues, however, International Paper appears to be more susceptible to these forces due to their industry.

Over the past few years, labor shortages have affected companies worldwide. International Paper is no exception to this unfortunate occurrence. The importance of operational mills and factories is highlighted in the 2020 annual performance report. Pandemic guidelines for businesses differ across the world, creating a managerial nightmare for all industries. Workers are essential to the creation and distribution of International Paper products, and the influx of various COVID-19 strands has brought about an advent of employees quitting their jobs. International Paper relies on a global workforce, and continued labor shortages have negatively impacted the business (“2020 Annual Report” 8-15).

Input costs for International Paper have increased throughout the pandemic. For instance, a trend exists between increased labor shortages and wages. Employees that are retained are expecting more money, causing an additional increase to input costs aside from raw materials and energy (Ha 5). International Paper utilizes a plethora of raw materials to create its products. The pandemic has altered consumer mentality from buying in-person, to ordering products online. E-commerce is a two-sided sword. On one hand, corrugated packaging is in high demand. On the other hand, the price for the raw materials needed to manufacture corrugated packaging is increasing. The trend of increased demand and wavering supply is steadily raising the material price and could negatively impact the business. Energy fluctuations pose a risk to manufacturing. Biomass energy is critical in providing energy to mills and upholding International Paper's "Vision 2030" plan to positively impact climate change (“Government Relations”). Biomass energy, as well as other energy sources, is becoming more expensive as companies are pressured to recover from pandemic problems while meeting high rates of demand. Input costs may continue to grow until stability in the global market is reached.

Overall, International Paper has performed well despite numerous challenges and shows promise of good performance in the future. We plan on addressing the challenges mentioned in this case in our future research, such as supply chain management and climate change risks. We also plan on encouraging more good practices, like their environmental campaign. This case provided the team with a detailed overview of the company and prepared us for upcoming cases and presentations.

Case 7: International Paper Audit Recommendations

John Batson, Kennedy Marble, Molly Medling, John Michael Ritchie, Banks Robinson

For this week's case, we were tasked with finding the greatest potential audit risks on International Paper's (IP) balance sheet and income statement accounts. Three accounts that posed the greatest threat to proper reporting were inventory, sales, and variable interest entities. If any of these accounts were misstated, it would certainly be catastrophic for investors and highly affect the financial appearance of IP. Through our research, we identified the risk associated with each account, internal controls that may mitigate those risks, and the testing that will assess the performance of those tests. We also inserted some data analytics tools that may be used to help with the internal controls of IP for these accounts. Our research was conducted using IP's 2020 Annual Report as their 2021 Annual Report has yet to be released.

The first risky account is inventory. International Paper's inventory includes raw materials, finished pulp, paper, and packaging products, operating supplies, and other items. There is a risk of existence because the inventory may be overstated. International Paper bases shipping terms on specific customer situations, which means that inventory could be misstated if added before delivery from suppliers ("2020 Annual Report" 57). Verification of transactions and shipping is also required for the sale of inventory to ensure completeness. Valuation is also an issue with the inventory. One internal control that would mitigate these risks is to maintain thorough documentation of inventory balances and changes. This would include documents such as purchase orders, packing slips, and production logs. For example, packing slips should be matched with items when receiving orders to ensure no items are missing. The documentation could be tested by obtaining access to their records and comparing them against physical inventory counts. Data analytics could be used to control inventory through a cloud-based inventory management program. This system would assist with tracking shipments, product IDs, and buyer and supplier information. Access to this system would provide the auditor with more

resources to test inventory accuracy. The next internal control for inventory is the segregation of duties. This means that different departments would control purchase authorization, inventory custody, and inventory accounting. Auditors would test this via employee inquiry and observation, such as asking department managers what tasks their employees perform and watching the daily activities of those employees. Data analytics could be used to track segregation of duties through IT access controls and entering IP's ERP system, which would detect if an employee was wrongfully accessing programs outside of their responsibilities and would limit the ability of employees to access certain information.

The second risky account is sales. Net sales in 2020 for International Paper was \$20.58 million ("2020 Annual Report" 46). There is a risk involving existence; sales could have been overstated through inaccurate accounting of credit sales and sales returns and allowances. There is also a completeness risk, seeing as the company could falsely account for revenue from products sold without customers receiving services or products yet (F.O.B. shipping issues). An internal control that is often used to mitigate sales risk is a numbering system for sales invoices. This would be performed in IP's information system, which would utilize data analytics to alert possible fraud. Testing would entail auditors taking a random sample of customer statements. The auditor would verify that the products sold are accounted for and that proper authorization was obtained for each transaction by checking signatures and management approvals. A second internal control could be setting a proper tone at the top level of the company. For example, toxic corporate culture could fuel unethical behavior to achieve a higher bonus or greater pay. Corporate culture can be tested by reviewing IP's statement of ethics and internal controls, observing everyday operations, and interacting with the audit committee of IP's board of directors. Data analytics may aid sales testing through the use of intelligent sales software to test

historical data for verification of current numbers and future projections. For example, a significant amount of sales data can be run using data analytics to predict the sales that will be uncollectible, which would enable auditors to test the allowance for doubtful accounts. Other acknowledgements that should be made are channel stuffing and workplace culture. These issues are often related as employees encounter pressure from executives to recognize revenue too early through fraudulent sending of excess inventory to customers. This can cause a material distortion in sales. The proper mitigation of these risks is constant monitoring of executives within IP and open communication between employees and the board of directors. Channel stuffing would also be found through the use of data analytics in sales analyses.

The final risky account is International Paper's variable interest entities. In 2006, International Paper sold 5.6 million acres of forestlands for installment notes totaling \$4.8 billion. These installment notes, referred to as "Timber Notes" in the annual report, were used as collateral for borrowings from third-party lenders to defer tax liability ("2020 Annual Report" 32). The creation of special purpose entities monetized the notes for the sake of achieving the tax deferral. Variable interest entities are a legal business structure in which an investor has controlling interest despite not having the majority of voting rights. Typically, these entities are created to protect the business from creditors or legal action (Hayes 1-3). International Paper constructed these entities to achieve more favorable taxes. The duality of this scenario is what constitutes its risk. On one hand, the ambiguity surrounding the entity's appearance on the consolidated balance sheet could positively impact a potential investor's willingness to give capital. However, knowledge of how variable interest entities have been used in the past may prompt a potential investor to withhold funding. The existence of this account illuminates the significance of being an ethical accountant because the presentation of information is a driving



factor in decision-making. Another risk associated with this account is materiality. Materiality is any information that can reasonably assist in making a decision. An internal control to help characterize variable interest entities is to annually assess all elements of the entities. This tactic would help management remain knowledgeable about the aspects that comprise the entities to further emphasize their importance to investors. One way to test the reliability of the controls along with the accurate presentation of these entities would be to review any changes to debt covenants or credit ratings. Reviewing these will allow management to correctly depict the information required to faithfully represent these entities to potential equity providers. Another test is a narrative walkthrough of the variable interest entities' relationships to International Paper. These entities are ambiguous; however, this test could instill confidence in outside sources that information is represented faithfully. Data analysis is an integral part of auditing a company. A database system that houses all information surrounding the variable interest entities of IP would be useful to understand their importance. It would make it easy for both management and an external auditor to find anything related to the entities. International Paper is within its legal right to utilize variable interest entities. The information is disclosed in the consolidated balance sheet, as well as "Note 15" of the annual report ("2020 Annual Report" 70-72). Additional testing and information surrounding the variable interest entities should take place to create clarity for all parties.

Accounting misstatements, whether intended or not, can be devastating for not just a company but also the many investors who depend on companies to have accurate financial statements. The accounts that pose the most risk to International Paper are related to its core of operations, particularly inventory and sales. Through our analysis of the inventory, sales, and variable interest entities accounts we were able to produce internal controls that mitigate the risks

associated with these accounts. Overall, we learned that the goal of auditing is to ensure that shareholders are properly informed and not misled. Through accurate representation, International Paper will create more business opportunities through the reduction of legal inquiries and a more favorable reputation in the stock market.

Case 8: International Paper Tax Recommendations

John Batson, Kennedy Marble, Molly Medling, John Michael Ritchie, Banks Robinson

For this week's case, we proposed two distinctive tax strategies to lower the tax liability of International Paper (IP). After research of various tax planning strategies and tax credits applicable to the paper and manufacturing industries, we recommend that IP consider the Research and Development (R&D) and the Interest Charge - Domestic International Sales Corporation (IC-DISC) tax credits. We explained both of these credits as well as their applicability to IP. Then, we quantified the benefit of the implementation of the credits, which is presented in tables. We used numbers and strategies from preceding IP annual reports and tax credit research sources to perform calculations.

The R&D tax credit deducts a portion of research and development expenses from a company's federal income tax liability, promoting domestic investments in innovation. Many manufacturing companies fail to take advantage of their eligibility for this credit. Multiple overlooked innovations are eligible for this credit, including expenses manufacturing process improvements and failed improvement projects. There is a four-part test to determine if a company qualifies for the credit. This test includes analyzing permitted purpose, technological nature, uncertainty, and process of experimentation. The research must be intended to improve or create a new product, increase performance, or lower costs (Baker Tilly). The research must also be based on physical science principles. Further, there must be proof that the company has addressed any uncertainties concerning the product or process development. Lastly, the company must demonstrate experimentation and consideration of alternatives. Typically research or experimental expenses for the use of the tax credit involve the use of contract research. Additionally, the company must present documentation of research intent and expenses. Ineligible research expenses include research conducted outside of the U.S., research completed after commercial production had started, studies and surveys, research that is funded by certain

external organizations, research completed specifically for a customer, the duplication of some existing product, and research for internal-use software.

The Research and Development Tax Credit is especially applicable to International Paper since it is already a key innovator in the paper industry. IP is currently using its research to tailor its packaging and paper products specifically to clients and to consult in supply chain issues (“Innovation”). IP has also pioneered sustainable packaging through the invention of ClimaShield, a recyclable and water-resistant packaging that has environmentally benefited the world for 25 years (“More Than Two Billion”). In preceding years, the company has invested heavily in R&D, an average of \$29 million per year for years 2017 through 2019. However, IP did not expense any R&D in 2020 or 2021 (“2020 Annual Report” 46). Although the reasoning for this decision is unclear, there is still a need for innovation in the paper industry, especially amidst the global transition to more electronic information transmission and the need for more environmentally conscious manufacturing practices. Therefore, we propose that IP once again deduct a portion of its R&D expenditures from its tax liability through research into more sustainable processes and products. The company has a unique advantage in this endeavor since it has only three major segments, industrial packaging, cellulose fibers, and printing papers. This allows IP researchers to concentrate on specific projects to further the innovation and competitive advantage of the company. Although future innovations of the paper industry are uncertain, IP would likely improve manufacturing processes to fulfill their Vision 2030 goals and transition to carbon-neutral operations as well as other innovations related to environmentally-friendly paper products (Stock Market Arbitrage 13-18).

With an innovation division already existing in International Paper, there would be few startup costs related to this proposal. If new equipment is needed, those items would not qualify

for the credit as they are depreciated over time. However, wages of researchers and the purchase of related supplies are eligible for the credit (“Qualified Expenses” 6-8). Since IP did not claim any R&D expense over the past two years, the basis for credit determination is six percent of current year QREs, which we assume will be \$29 million, IP’s average R&D expense for the years 2017 through 2019. This follows the rules of the alternative simplified credit (ASC) method of R&D tax credit calculation for entities without QREs in at least one of the preceding three years (“R&D Tax Credits”). This results in a tax credit of \$1.74 million along with an expense of \$29 million, both of which lower the tax liability of IP.

The Interest Charge - Domestic International Sales Corporation (IC-DISC) tax credit would reduce the tax burden of exporting for International Paper. LBMC describes this tax credit as “an incentive specifically provided by the tax code that allows U.S. exporters to increase their ability to compete globally by reducing U.S. tax liabilities” (LBMC 2). IC-DISC should not be confused as a tax shelter, but rather a way to save on taxes by transferring income from the exporter to the tax-exempt IC-DISC through an export sales commission. A DISC can be an actual company with real employees; however, they typically have no substance. Several steps must be taken to form an IC-DISC. First, the company must be established under state law. Next, the company must offer only one class of stock with a par or stated value of at least \$2,500. Finally, the IC-DISC must maintain separate books and records, but otherwise, there are no changes to business practices (LBMC 14).

IC-DISC comes with many advantages. Besides being a tax-exempt entity, commissions paid to a DISC reduce the taxable profit of the related supplier. The operating company pays a tax-deductible commission to the IC-DISC equal to the greater of four percent of the operating company's gross receipts from qualified exports or 50 percent of the operating company's net

income from qualified exports (LBMC 4). At the end of the year, a commission calculation is run which is returned as a qualified dividend to the shareholder. These dividends are taxed at a 20 percent rate. An IC-DISC is also not required to distribute all commission income to shareholders. Income can be loaned back to the exporter, creating tax deferment and working capital (LBMC 5-8). With all these benefits in mind, it would be beneficial for International Paper to consider forming a DISC. IP is a major exporter of paper and pulp packaging, so any sort of tax savings could greatly assist in keeping profit margins as high as possible.

The IC-DISC commission is calculated using the greater of four percent of the operating company's gross receipts from qualified exports or 50 percent of net income from qualified exports. This calculation is an estimate. The information required to calculate the true value of International Paper's IC-DISC commission is not readily available through traditional means of external analysis. However, this estimation uses numbers from International Paper's consolidated statement of operations to imitate the method used for the IC-DISC commission. First, net income from exports was calculated by subtracting expenses from net sales. Second, multiply total net sales by four percent to find the potential commission. Sequentially, multiply net income from qualified exports by 50 percent to derive the value of the second potential commission. Analyze the calculated potential commissions and choose the greater value of the two. In doing so, it can be realized that International Paper would receive a greater commission from four percent of gross receipts from qualified exports. Calculate the required federal income tax by multiplying 21 percent by the IC-DISC commission. Furthermore, multiply the commission by a 15 percent dividend sales tax. Lastly, subtract the determined dividend sales tax from the computed income tax to find total tax savings. These calculations are displayed in the following table.

Table 2: IC-DISC Commission Calculation

<b>IC-DISC Commission Calculation (in millions)</b>	
Qualified export gross receipts	\$20,580.00
Expenses	19,930.00
Export sales net income	\$650.00
4% Export gross receipts	\$823.20
50% Export net income	\$325.00
IC-DISC commission (higher of two calculations)	\$823.20
21% Federal tax	172.87
15% IC-DISC dividend sales tax	123.48
<b>Total tax savings</b>	<b>\$49.39</b>

Based on research of tax credits and International Paper, our team recommends that IP pursue the Research and Development (R&D) and the Interest Charge - Domestic International Sales Corporation (IC-DISC) tax credits to lower their tax liability sustainably. Throughout this case, we learned how to apply tax concepts to existing companies and situations. Additionally, we learned the importance of tax planning in business operations. Both of these strategies result in multi-million-dollar savings, which can be used to reinvest in current operations and fund further distinguishments from competitors in the paper industry.



Case 9: International Paper Advisory Recommendations

John Batson, Kennedy Marble, Molly Medling, John Michael Ritchie, Banks Robinson

In this week's case, we were assigned to look at our company from an advisory standpoint. We first looked at what business strategy our company used, finding that International Paper utilizes product differentiation. We then looked at trends in the company's financials by displaying values from the income statement and balance sheet in excel. By analyzing these values and the overall financial state of the company, we decided on the strongest threats present to the company's success and created an action plan for the threats. The two strongest threats we found were supply chain issues and increased regulation and fast-moving developments in environmental, social, and governance (ESG) disclosure and implementation. We then created action plans and implementation plans to prevent these threats and looked at how these plans would positively affect the company's financials. The following table shows the financials for the past five years.

Table 3: International Paper's Prior Years' Financials

<b>International Paper's Prior Years' Financials (in millions)</b>					
Accounts	2021	2020	2019	2018	2017
Revenue	\$ 19,363.00	\$ 20,580.00	\$ 22,376.00	\$ 23,306.00	\$ 21,743.00
Cost of goods sold	13,832.00	14,373.00	15,268.00	15,555.00	15,300.00
Selling, general, and administrative expense	1,385.00	1,520.00	1,647.00	1,732.00	1,653.00
Operating income	999.00	650.00	1,604.00	1,781.00	848.00
Assets	25,243.00	31,718.00	33,471.00	33,576.00	33,903.00
Liabilities	\$ 16,161.00	\$ 23,850.00	\$ 25,753.00	\$ 26,193.00	\$ 27,362.00
Ratios					
Return on assets	3.96%	2.05%	4.79%	5.30%	2.50%
Dupont decomposition					
Profit margin	5.16%	3.16%	7.17%	7.64%	3.90%
Asset turnover	0.77	0.65	0.67	0.69	0.64

International Paper pursues a business strategy of product differentiation by focusing on sustainability. Their products are unique because they are mass-produced with renewable resources in a cleaner process than the alternatives in the market. Their mission statement

declares that their goal is to improve the planet and people's lives by using renewable resources to create products that people depend on daily. Many of their long-term goals are related to becoming as sustainable as possible to benefit future generations by helping save the planet from climate change (Comparably 1, 3).

In recent years, supply chain issues have negatively impacted International Paper's operations. This is especially true in the post-Covid world where supply chain interruptions are becoming more pervasive, forcing corporate executives to scramble for solutions. These interruptions include areas such as inventory levels, transportation issues, and labor shortages. We recommend that IP take the time to shore up each component of the supply chain by having an action plan. This plan would focus on increasing reserves of extra inventory and retaining labor should there be a disruption in the supply chain.

The just-in-time inventory method has become a popular way to prevent inventory levels from being too high. As part of the action plan, however, we suggest that IP keep levels of inventory five percent higher than usual to be prepared for any shortages that may occur. As IP saw in 2021, events such as the deep freeze of February and heavy rain in the southeast can cause shortages of caustic soda and containerboard inventory ("Water Security" 8-10). With extreme climate events occurring more regularly, IP would be best suited to maintain these higher inventory levels to combat any potential shortages. Since inventory is so hard to come by currently, we recommend that IP increase inventory levels gradually.

Recently, another threat within the supply chain has been labor shortages. IP has felt these shortages not only within the company, but also with its supplier and customers. The lack of labor impacts production volume as well as cost (Klyce 11-12). To combat the labor shortage, we suggest that IP should implement a program that focuses on the retention of current

employees. This program would work to make sure IP offers competitive salaries as well as a positive work environment. Both measures would ensure that IP does not suffer from a high turnover rate which is common in manufacturing.

Initially, this action plan might cause expenses to increase. However, after a few years, the benefits will start to show in increased revenue and assets. Buying more inventory will result in an increase in expenses as well as an increase in assets. The positive of having higher inventory levels will show once there is a shortage in IP’s supply chain. When this happens, IP will continue to run effectively which in turn will keep revenue steady as opposed to a decrease due to a shortage. Implementing a retention plan for current employees will also increase expenses initially. Nevertheless, keeping a low employee turnover rate will result in less being spent on training new employees and fewer costs resulting from labor shortage inefficiencies. The retention plan will ultimately lead to higher revenues and operating costs as IP will not have to spend more to compensate for the lack of labor. The following table shows the financials of IP recast to account for this solution.

Table 4: International Paper’s Supply Chain Financials

<b>Supply Chain Financials</b>			
	2024	2023	2022
Return on assets	9.56%	7.83%	5.96%
Profit margin	13.47%	10.71%	7.92%
Asset turnover	0.71	0.73	0.75

A key threat to International Paper is increased regulation and fast-moving developments in ESG disclosure and implementation. ESG stands for Environmental, Social, and Governance, representing important aspects of corporate responsibility for stakeholders. The environmental

portion refers to IP's impact on natural resources, including waste and energy management. The social aspect depicts IP's internal and societal social impacts, which includes metrics on diversity and community relations. Lastly, governance refers to IP's board of directors and management, targeting composition and compensation (Campbell 3-5). Attention to each of these components is necessary to the success of International Paper, which operates in the forestry and paper industry. This industry places IP at risk to several climate factors, making sustainability a priority for long-term growth. With ESG standards being drafted currently by the International Financial Reporting Standards Foundation, the European Union, The Securities and Exchange Commission, and countless other bodies (Poole and Sullivan 26-31), IP cannot settle for mere compliance, it must outpace environmental, social, and governance standards by integrating sustainable practices into its business model as soon as possible.

One aspect of ESG regulation and reporting is the ESG score. An ESG score takes into account certain items that might not be presented on the financial statements explicitly but relate to economics, social, and governance criteria. An ESG score involves being transparent with the public about the nature of your business, and this transparency allows for accountability between the public and the company. This score is of great value to a company because it reveals how a company looks to the future and takes into account other aspects of its business that go farther than just the numbers. An ESG score is growing in importance today, especially when talking about the impact of COVID-19 and climate change. This score allows investors to look at the true value of a company. Specifically, having a good ESG score is key for International Paper because of its focus on sustainability. International Paper does a good job of revealing its goals for sustainability and renewable solutions to the public by having its mission statement along with its progress on goals for 2020 on its website and continuing to do this will help to improve

their ESG score. Since International Paper is doing well in the environmental sector of ESG, they could work more on improving social and governance criteria. Ensuring that they have a strong connection with their workforce and clear communication. They could also ensure that they are up to date with social trends. Increasing their social media presence to make the company relatable to the public could increase customer interaction and transparency all in one. Overall, International Paper does well on realizing the importance of an ESG score, but there is always room for improvement, and small improvements could lead to a higher score and more investors.

Implementation of ESG practices and disclosure into IP requires broad changes to be made to all aspects of the company. This starts at the governance level. Issues related to ESG should be frequently discussed in the boardroom. IP already named its first chief sustainability officer, Sophie Beckham, in 2020 (Nichols 1), which places environmental issues on the agenda at meetings. However, maximum emphasis should be placed on ESG since it has such a strong impact on the future of IP. Thus, IP should consider creating an ESG committee on its Board of Directors, which would oversee progress toward targets and delegate tasks to management. This would help IP work toward its Vision 2030 goals, keeping with the global standard of more diversity and sustainability in business. Assuming average base compensation of \$1.5 million per board member, we foresee the addition of two board members who are intelligent in environmental and social issues to be beneficial, setting the cost of this program at \$3 million per year (Salary.com).

The benefits of ESG mindfulness and action are immeasurable, and the consequences of ignorance are catastrophic. ESG is a concern for all stakeholders, including many who claim that it significantly impacts their dealings with companies. According to the 2021 Deloitte Global Millennial and Gen Z Survey, younger people tend to support businesses that “mirror that same

commitment to driving positive change for society, putting people and planet ahead of profits” (Poole and Sullivan 12). This translates directly to employee retention, as most employees want their employer to hold sustainable values. Therefore, by continually addressing ESG issues and integrating support mechanisms into IP, employees are more likely to contribute to greater operational efficiency, driving costs related to retention and training down. Investors and customers are also interested in ESG issues. With these issues at the forefront of business today, investors are typically unwilling to provide capital to companies not displaying innovative solutions to social and environmental issues. Customers are much the same as they have access to unlimited information, which can fuel their desire to support companies mirroring their sentiments for greater social responsibility. This would lead to greater access to capital through greater investment from shareholders. Overall, ESG is linked to higher profitability as investments continue to grow in ESG.

In conclusion, International Paper utilizes a product differentiation strategy to distinguish itself from its competitors in the paper and pulp industry. Two major threats this industry faces are supply chain issues and ESG disclosure regulations. To address these threats in a manner consistent with IP’s strategy and mission, we determined action plans to mitigate risk and increase profitability over the next three years. This lesson taught us to critically examine clients’ financials through the perspective of their biggest threats. This prepares us to serve clients through risk mitigation and creative solutions.

Case 10: International Paper Risk Analysis

John Batson, Kennedy Marble, Molly Medling, John Michael Ritchie, Banks Robinson



As a large global corporation, International Paper faces many risks in its business. These risks pertain to their operations, the economic environment, and the technological environment. This week, we researched the greatest threats that IP is facing in these areas, while also recommending mitigation strategies. Much of this research came from news articles and internally produced reports from International Paper to determine what experts define as their most detrimental threats. Some examples of mentioned issues include supply chain risk, the Russian conflict, and cybersecurity concerns.

As is the case with most manufacturing companies post-COVID, the greatest operational risk for International Paper is supply chain disruptions. All stages of the supply chain have experienced problems in the past two years that have greatly affected IP's operations. Not only has IP dealt with material shortages, but they have also faced labor shortages, a tight transportation market, and higher supply chain costs in general. As IP has noted, demand for its products has been strong, but problems in the supply chain have constrained how well IP has been able to fill those demands.

As mentioned above, several sources of these supply chain risks pose a danger to the company. Rising supply chain costs have been a great hindrance in taking advantage of the strong demand that IP has seen for its products. Tim Nicholls, IP's chief financial officer, recently noted that supply chain costs jumped \$170 million in 2021, which was more than half of the increase in total costs for the year (Klyce 9). Included in these higher costs were raw materials such as caustic soda which is key in making paper and pulp products. Shortages in caustic soda were caused by the deep freeze of February 2021 and the ensuing heavy rains that followed in the gulf coast region. S&P Global noted that "US export and domestic spot caustic soda prices entered 2021 at \$225/dry metric ton (dmt) FOB USG and \$245/dry short ton (dst)

FOB plant, respectively. Both were last assessed July 27 at \$475/dmt FOB USG and \$650/short ton (st) FOB plant, respectively” (Hays 5). These tremendous increases in as little as seven months display how rapidly supply chain costs can change and disrupt IP’s operations.

Two other risks within the supply chain are the ongoing labor shortage and the tight transportation market. IP notes several times in its annual report how the labor shortage and constrained transportation environment have continued to limit the company from operating at full capacity. On the transportation side of things, record high freight rates and limited trucking capacity forced IP to keep “extremely low” inventories of its containerboard (Hays 8). Not only is IP struggling to find the materials it needs, but it is also struggling with securing those materials. “The Great Resignation” has also not been kind to IP as the company has struggled with a shortage of workers as well as higher labor costs. The lack of workers is further compounding the supply chain issues and preventing IP from providing all that is demanded.

International Paper could take several routes to mitigate all these risks within the supply chain. One strategy would be to keep higher inventory levels on hand. Keeping high levels of inventory is not always a desirable strategy, however, during these uncertain times, it would be a smart choice for IP. With more inventory on hand, IP can be ready to meet demand if any interruptions happen within the supply chain. In terms of the labor shortage, IP should focus on retaining current employees through a retention program. Lowering employee turnover is key for IP as replacing labor in this current market is a difficult task. Finally, IP needs to work with its accountants to see where costs can be shored up in terms of transportation and other supply chain expenses. These costs are sometimes out of the company's control so any action that may facilitate cost reduction be reduced should be taken into consideration. Since IP is such a large

exporter of goods, it could look into outsourcing transportation if it is a cheaper option. The main objective for the company would be to make sure all transportation is efficient and cost-effective.

International Paper faces many macroeconomic risks in its operations as a multinational corporation. Currently, we judge its two most significant threats to be the Russian conflict and rising inflation. To begin, Russia invaded Ukraine in February 2022 to bring about "denazification," according to President Vladimir Putin. This attempt to seize Ukraine to create a unified Russia comes as Ukraine was integrating with Western society through requested acceptance into North Atlantic Treaty Organization (NATO) and the European Union (EU) (Hookway and Yaroslav 16-17). Naturally, many Western companies have been re-evaluating their investments and operations in Russia as conflicts continue. For example, Exxon Mobil Corp. is exiting Russia by divesting its investments and leaving its consortium in the country. FedEx Corp. has also halted operations in Russia, stopping deliveries bound for the country (Stiff 17, 36). Similar to these companies, IP has a sizable investment in Russia. IP has a 50/50 joint venture with Ilim Group in Russia, which creates the largest integrated paper and pulp manufacturer in the country. The total annual paper and pulp production of this venture is more than three million tons, supporting its market leadership in Russia and China ("International Paper in Russia"). IP earned \$311 million from the Ilim venture in 2021, a significant increase from \$48 million in 2020 ("2021 Annual Report" 27).

A second key macroeconomic threat to International Paper is rapidly increasing inflation. Inflationary pressures are a recent issue, with IP stating in its 2021 annual report, "While inflationary increases in certain input costs, such as energy, wood fiber, and chemical costs, have an impact on the Company's operating results, changes in general inflation have had minimal impact on our operating results in 2019 and 2020" (39). With inflation becoming increasingly

problematic in 2021 and continuing to exacerbate in 2022, higher operational costs will plague IP. U.S. inflation rose to a 7.9 percent annual rate in February 2022, which shows no sign of returning to slowing with the Ukraine conflict further straining the global supply chain (Rubin 1).

Along with these threats, there needs to be action plans to mitigate the macroeconomic risks International Paper is facing. The Russian threat needs to be handled cautiously. IP's contract with Russia for their joint venture is up for renegotiation in October, so we suggest that the company continues with the joint venture until then. At the time of renegotiation, IP can examine the political climate for insight on a possible exit from the country. International Paper recently announced that it might sell its 50 percent stake in the venture but continue with operations (Connolly 1). Before International Paper worked with Russia, the Ilim group asked for Vladimir Putin's help in saving them from a hostile takeover, making the group's loyalties more complex. Selling its ownership is the only way for International Paper to get out of the contract with Russia before it is up for renegotiation ("2020 Annual Report" 34). The Ilim joint venture is a large source of investment income for International Paper as well as a significant harvest and export supply of wood and pulp products. It is in IP's best economic interest to continue operations in Russia until October. For now, without pulling out of the joint venture, International Paper could resolve conflict by starting to transition operations to the United States and other stable countries to build a stronger foundation in the event of more political strife.

IP must address the threat of inflation. Inflation is becoming increasingly more pressing, and actions taken to mitigate this risk are not very attractive. International Paper could increase their prices to match the increase in their cost to sell goods. There could be a potential backlash

from customers after raising prices, so the company could offer certain special services or rewards for valued customers (Funding Circle 10-12). Inflation also affects the company's supply chain, causing shortages and increased costs. International Paper should adjust its input of raw materials to ensure its output can reach its demands. The company should also work on employee retention to ensure that the company is united while having to make economic adjustments due to inflation.

As one of the most influential companies in the global production and distribution of paper and pulp-based products, it is of utmost importance to create safeguards against online threats. Cyber security is a crucial part of protecting a company's data, processes, and innovations. It is defined as "the body of technologies, processes, and practices designed to protect networks, devices, programs, and data from attack, damage, or unauthorized access" (De Groot 2). The need for quality security has been exacerbated over the past month as global unrest from the conflict between Russia and Ukraine has grown. Russia has already revealed an adept ability to infiltrate cyberspace in Ukraine as "hackers managed to knock out electric power for around 230,000 customers in Western Ukraine" (Madnick 4). Each passing day, the world further integrates technology into all facets of life, and ignoring the importance of cybersecurity will be detrimental to a business with the magnitude of IP.

To further grasp the importance of cyber security in the business world, one must approach it through a business lens. Ntvia, a technology consulting firm, released a study in 2020 that revealed: "43 percent of cyberattacks target small businesses" (Robles 4). While IP does not fall into that category, Ntvia argues that "one of the reasons hackers target small businesses is to use them as stepping stones to get to Fortune 500 companies" (Robles 10). This leaves IP in a vulnerable position if the proper security measures are not implemented. There are many

different avenues that companies can experience cyber-attacks from. First, it must be recognized that attacks can derive from internal sources. For example, a competitor could pay a current employee to download and distribute the processes that give the company a competitive advantage. In the case of IP, the vertical integration surrounding the entire process of gathering raw materials to distributing finished products is a massive competitive advantage. Weak internal security could open the door for a bribed employee to have access to an abundance of knowledge on how IP has established that competitive advantage. At face value, an internal attack seems trivial because companies trust their employees. However, this is entirely possible and should be treated with as much caution as any other security threat. External actors act as the other source of cyber-attacks. There are too many reasons why companies are targeted in cyber-attacks, but a common objective is to steal data. For example, IP has to store the crucial information of its extensive customer list to process orders and provide goods. This information could include bank account numbers, addresses, employee specifics, and other details that define their relationship with IP. If left unchecked, an attack on IP's pool of data could result in the information of their clients being stolen and sold to third parties. The International Federation of Accountants states, "Loss of customer data may result in legal or regulatory action against the organization" (Ursillo and Arnold 5). This is significant because IP would suffer at the hands of legal action, as well as lose the trust of its clients.

Understanding the sources of cyber threats helps in the formation of plans to mitigate risk. One of the most important roles of an account is to evaluate internal controls. Internal controls give management the foundation needed to foster a healthy business. This is the best way to combat the threat of an internal attack. Management should focus on the segregation of duties, making sure that crucial information surrounding the supply chain, raw material

conversion, and clients is kept separate and only accessible by authorized personnel. Another way to mitigate internal risk is to “implement security software such as a traffic monitoring system” (Netwrix 5). Management can establish a pathway through documents that can be considered a trend toward information theft, and a traffic monitoring system will provide management with the necessary software to track employees along the path. Internal threats will always be present, but the implementation of safeguards will mitigate the risk of employees conducting attacks. Countering external threats is more difficult than internal. Along with the rigorous task of finding out the motive behind an attack, costs surrounding external cyber protection can be very expensive. It is predicted that “worldwide security spending will hit \$170 billion in 2020,” a massive number that continually rises each year (Patterson 8). Fortune 500 companies are sparing no expense on cybersecurity. The potential for losing millions of dollars outweighs the cost of quality cybersecurity. If IP invests in the best possible cybersecurity today, it will save more money tomorrow. To begin the process of mitigating external risk, “The first line of defense for any organization is to assess and implement security controls” (Swanagan et al. 9). By definition, security controls are risk mitigation techniques, and IP could start by establishing a cybersecurity awareness program that teaches employees what to look for when deciding if there is a potential threat. IP could then create a security operations center with the goal of “continuous monitoring of a network, detection management, and incident response” (Allen and Swanagan 8). This can be achieved through the creation of a physical facility or using it as a service. Security operations centers used as a service are becoming the norm in cybersecurity. Some firms specialize in creating security that is tailored to the business. IP can save on costs by utilizing one of these services to run their cybersecurity. It is recommended that IP focuses on creating internal controls that mitigate internal risk, along with investing in a

security operations center as a service to conduct their external risk mitigation. Diligence in establishing the correct security will lead to a safer and more profitable International Paper.

In consideration of the numerous threats that International Paper faces, it is clear that operating a business is complex and requires knowledge of the inner workings of a company as well as the greater economic climate. IP and most other multinational companies are currently facing a great deal of uncertainty due to operational, macroeconomic, and cybersecurity concerns. However, there are ways to mitigate these risks and propel IP into a successful future. Therefore, this case taught us the importance of analysis of the greater environment in business as it is necessary to maintain success.



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