

# The National University of Computer and Emerging Sciences

# **CS-4001 Professional Practices in IT**

**Section F** 

# **Semester Project**

# Company Analysis of Minas Code



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PPIT Project Fast NUCES, Islamabad

#### Introduction

This report presents an in-depth analysis of the ethical and operational practices followed by **Minas Code.** The focus of this report is on the company's adherence to professional and personal codes of ethics, its alignment with ethical theories, and its compliance with the ACM/IEEE Code of Ethics. Additionally, the report examines the company's handling of legal aspects, intellectual property (IP) rights, and any computer crime incidents. Further analysis includes employee and client contracts, organizational structure, and revenue models. This report aims to evaluate the company's ethical and operational standards while providing suggestions for potential improvements based on best practices in the industry. Ethical lapses in the IT industry cost companies over \$1 billion annually. Minas Code's commitment to ethics positions it as a leading example in operational transparency.

The findings and recommendations in this report are intended to highlight areas of strength and areas for potential enhancement within **Mina Code**'s ethical and operational frameworks. This case study analyzes Minas Code, a service-based software company in Islamabad, Pakistan, with hypothetical examples for educational purposes.

# Part A: Analysis

# Organization Visited:

Company Name: Minas Code

Location: Sector D, Iqbal Boulevard, Phase 2 DHA, Islamabad

Date of Visit: 6<sup>th</sup>-November-2024

Code of Ethics: Professional and Personal Ethics

#### Code of Ethics Overview

Minas Code operates on a set of core values centered around delivering excellence, innovation, and transparency. The company's code of ethics includes:

- Transparency and Accountability: The company ensures open, honest communication, particularly in client interactions, fostering a foundation of trust.
- **Integrity and Confidentiality:** Employees are expected to adhere to confidentiality protocols and maintain professionalism across all projects.
- Continuous Learning and Growth: The company encourages employees to continuously learn and improve, reinforcing a growth-oriented mindset.
- **Respect and Inclusivity:** Minas Code values treating everyone with respect and encourages a collaborative culture to support long-term client and employee relationships.

#### Personal and Professional Conduct

The company's ethical standards cover both personal and professional settings. Employees are expected to uphold ethical behavior aligned with company values, ensuring consistent quality in every interaction and project. These standards help create a unified mission and enhance the company culture, contributing to a supportive environment.

#### **Communication of Ethics**

- **Onboarding and Training:** Minas Code provides ethics training as part of the onboarding process. New hires review the company's code of ethics and policies within their first week.
- **Employee Handbook:** An employee handbook is shared, detailing all ethical standards and guidelines.
- **Updates and Ongoing Education:** The handbook is updated as needed when new policies are introduced, and employees are informed of these changes in a timely manner.

#### **System for Reporting Ethical Violations**

The company has robust systems for addressing ethical violations:

- **Monthly One-on-One HR Sessions:** Employees can discuss concerns directly with HR, covering both professional and personal matters.
- **Open-Door Policy:** An open-door policy allows employees to approach higher management with any concerns.
- **Disciplinary Procedure:** A structured disciplinary process includes verbal and written warnings, with escalation based on the severity of the violation.

### **Examples and Data**

#### Case Study on Ethical Dilemma

**Example**: "An employee faced a conflict of interest when a client offered them a direct contract. Minas Code's policy addressed this by conducting a meeting with the client and reinforcing the employee's contractual obligations, ensuring transparency."

#### **Data Example:**

"Minas Code employs a team of 25 professionals and generates annual revenue of approximately \$500,000 from its service-based operations."



# **Ethical Theory Followed**

# **Ethical Theory**

Minas Code primarily follows a **Deontological approach** in its ethical framework. This theory emphasizes duty and adherence to established principles, which aligns with the company's core values:

- Commitment to Duty: Employees are expected to fulfill duties with honesty, transparency, and fairness. The team emphasizes adherence to instructions from clients and ensures complete transparency in project execution.
- **Documentation and Predictive Planning:** To anticipate potential outcomes, the company documents all instructions and agreements thoroughly, preparing for various situations.

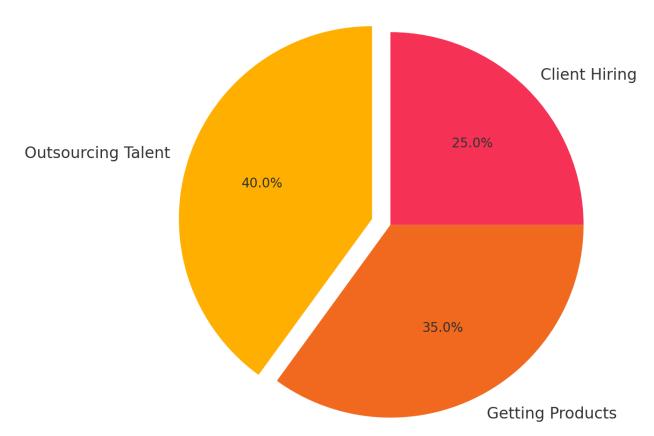
# **Examples of Ethical Situations**

- Employee Hiring and Cultural Fit: While specific ethical dilemmas haven't arisen due to the company's smaller size and open culture, the hiring process at Minas Code considers both technical skills and cultural alignment. This approach aims to foster an environment where employees feel comfortable and are encouraged to share opinions openly.
- **Transparency with Clients:** The company documents project guidelines thoroughly and maintains transparency in communication, ensuring that expectations are aligned, and ethical issues are mitigated from the start.

# Encouragement of Ethical Concerns in Daily Work

- **Open-Door Policy:** Employees are encouraged to voice any ethical concerns they may encounter.
- **Anonymous Reporting Options:** For employees who prefer discretion, there are options to report concerns anonymously, including through 360 reviews and progress evaluations within their DMS (Digital Management System).
- **Regular Reminders of Ethical Practices:** HR conducts one-on-one sessions to reinforce the importance of ethics in the workplace, underscoring ethical behavior as a critical component of the company's reputation.

#### Revenue Streams of Minas Code



# Compliance with ACM/IEEE Code of Ethics

#### Adherence to ACM/IEEE Standards

Based on the interview, Minas Code demonstrates a strong commitment to ethical standards that align with both ACM and IEEE Codes of Ethics. This alignment is foundational to their operations, especially as a service-based company, where maintaining high-quality work, trust, transparency, and privacy is essential.

### ACM Code of Ethics

- **Principles and Practices Aligned with ACM Standards:** MinasCode follows ACM ethical guidelines by emphasizing ethical behavior, safeguarding employee privacy, avoiding harm, and contributing positively to society. This commitment is seen in their structured onboarding and continuous training programs.
- Onboarding and Mentorship: During the onboarding process, new employees receive mentoring on the organization's policies, which are designed to reflect the values of the ACM Code of Ethics. This includes responsibilities for maintaining privacy, acting with integrity, and considering societal impacts.
- Ongoing Training and Reinforcement: Regular training sessions ensure that employees continuously engage with these ethical standards. This emphasis on consistent education serves to instill ethical values such as transparency, honesty, and accountability, helping employees internalize the importance of their role in contributing positively to both the company and society.

#### **ACM/IEEE Compliance Table**

ACM/IEEE Principle	Minas Code Practice
Act in public interest	Fosters transparency in client communication.
Avoid harm	Maintains strict confidentiality and IP compliance.
Honesty and fairness	Implements structured onboarding and open-door policies.

Lifelong learning  Offers mentorship programs and ethics training
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#### IEEE Code of Ethics

- Commitment to IEEE Values: Minas Code's operations are also aligned with the IEEE Code of Ethics, which emphasizes honesty, fairness, respect, and prioritizing public welfare. The company actively incorporates these standards into its practices to ensure that ethical guidelines are followed rigorously.
- **Periodic Compliance and Training Sessions:** The company holds periodic sessions focused on ensuring compliance with ethical standards derived from IEEE principles. These sessions not only emphasize adherence to ethical practices but also support ongoing professional development, fostering a culture that values fairness, respect, and transparency.
- Focus on Continuous Learning and Privacy: As part of IEEE's emphasis on continuous learning, Minas Code offers various programs encouraging employees to develop their professional skills. Privacy is also prioritized, with clear guidelines to handle user data responsibly and uphold confidentiality across projects.

#### Evidence and Examples of Compliance

- **Structured Employee Training:** Minas Code's onboarding and training processes are carefully structured to embed ethical principles from the ACM and IEEE Codes of Ethics. Employees are educated on privacy, integrity, and societal responsibility from day one, with these principles reinforced through regular sessions.
- **Product Development and Ethical Responsibility:** In product development, fairness and transparency are central. The company actively works to eliminate biases in its models, aligning with ACM and IEEE standards on fairness and transparency. Privacy and confidentiality are maintained in contracts and throughout data handling practices, creating a "win-win" situation for both the company and its clients.
- Transparency and Conflict of Interest Avoidance: Ethical responsibility is integrated into every project, emphasizing accuracy and clarity. The company's focus on avoiding conflicts of interest and upholding confidentiality demonstrates its dedication to these ethical standards in every client and partner interaction.

# Handling of Legal Aspects

# Legal Compliance and Incidents

• Legal Policies: The company, Minas Code, places significant emphasis on legal compliance, particularly in areas such as data protection and labor laws. To ensure adherence to industry standards and regulatory requirements, they have established a dedicated compliance team.

This team is responsible for staying updated on relevant legal standards and adjusting internal policies accordingly. Whenever these policies are updated, they are proactively communicated to employees, ensuring everyone is aligned with the latest legal expectations. This systematic approach demonstrates their commitment to maintaining compliance with data protection laws and other regulatory frameworks, thereby minimizing legal risks.

- Incident Handling: According to the company, they have not encountered any legal incidents, breaches, or disputes to date. However, they have a structured incident management plan in place, should such situations arise. The company emphasizes transparency and swift communication as key strategies for resolving any potential legal issues. This proactive approach extends to both clients and employees, ensuring trust is maintained in case of disputes. In the event of any incident, their plan involves internal assessments followed by transparent communication to effectively manage the issue.
- **Key Legal Challenges:** One of the primary legal challenges identified by MINAS Code is related to their service-based model, where employees have direct engagement with clients. The concern is that employees might attempt to work directly with clients, bypassing the company. To mitigate this risk, MINAS Code has established clear compliance policies. Employees are explicitly informed that they cannot engage with clients independently without the company's knowledge. In cases where this policy is violated, the company first conducts sessions to address the issue and issues warnings. If the problem persists, they are prepared to take legal action to protect their business interests.

The company's proactive compliance measures and well-defined policies demonstrate their dedication to handling legal aspects responsibly and transparently, ensuring both client and employee relationships are protected.

# Handling of Intellectual Property (IP) Rights

# IP Rights Management

- **Software and Tools Used:** The company, Minas Code, takes a proactive approach to managing intellectual property by utilizing licensed software and proprietary tools exclusively. To ensure the security of their IP, all equipment necessary for development is provided in-house, and employees are required to work on-site. This controlled environment allows them to maintain strict oversight over their proprietary software, significantly reducing the risk of unauthorized access or misuse.
- **IP Policies:** The company has well-defined policies in place to protect its intellectual property rights. These policies include clear guidelines for employees on the use of licensed software and respecting third-party copyrights. Employees are strictly required to use only company-provided software and tools, and unauthorized use of external software is explicitly prohibited. To enforce these standards, the company conducts regular compliance checks, ensuring that all employees adhere to their IP policies.

• **Handling IP Issues:** According to Minas Code, their strategy of maintaining a controlled, on-site work environment has been effective in preventing significant intellectual property issues. By keeping all development processes within company premises and controlling access to proprietary tools, they have successfully mitigated potential IP risks. As a result, they have not faced notable IP-related disputes. This proactive approach helps the company safeguard its intellectual assets while fostering a culture of responsibility and compliance among its employees.

# **Incidents of Computer Crimes**

# Computer Crime Management

**Reported Incidents:** The company has not experienced any incidents of computer crime, such as data breaches or unauthorized access. Minas Code's smaller team size contributes to tighter control and oversight, allowing for vigilant monitoring of security practices. Additionally, the company takes a proactive approach to prevent potential risks by maintaining a secure, controlled environment and adhering to best practices in data protection. This setup supports a secure infrastructure with minimized vulnerabilities.

# Contracts between Employees and Employers, and Between Supplier and Client

# **Contractual Obligations**

**Contracts**: Before finalizing the contracts there is a meeting with the client/supplier and everything is clearly mentioned in them in detail. It is also clearly documented so that there are no problems later on. This approach fosters trust and ensures that all parties have a clear, shared understanding of their roles and responsibilities, minimizing potential conflicts.

# Organizational Structure and Management

# Company Structure and Management

- **Organizational Hierarchy**: At Minas Code, the Hierarchy is not really followed or at least strictly followed as they enforce a flat organizational structure thus promoting open communication. The team is also collaborative so the team gets the culture they want to flourish
- **Leadership and Decision-Making**: This role is usually taken by the team-leads at Minas Code. This reflects a collective expertise of the team also, the CEO himself is always present for any team member so everybody has access to his level of expertise as well.

#### Software Business and Revenue Models

#### Business and Revenue Models:

- **Business Model**: Minas Code is a service-based company. They usually provide 3 types of services.1: Outsourcing talent, 2: Getting Products, 3: They hire for their clients
- **Revenue Streams**: The 3 services they provide are their main revenue streams as they scout for talent, take projects from other companies and work on them to deliver them against payments. Furthermore, they hire people for their clients, basically doing the HR work for them. They also do consultancy work, providing expert advice and solutions tailored to meet specific client needs across various industries

#### **Additional Observations**

# Other Notable Aspects

- Mentorship Program: Minas Code offers a Mentorship program which is structured in such a way that it benefits the new hire and the seasoned employee as well.
- **Hiring Process:** They claim to have transparency in their hiring process, they also ensure that the hiring and onboarding process are ethical and transparent meaning there is no favoritism and promotes equal opportunity.

# Part B: Analysis and Suggestions

# **Analysis Summary**

Minas Code demonstrates a robust commitment to ethical and operational excellence, with strengths across its code of ethics, adherence to ACM/IEEE standards, legal and IP management, and organizational structure. Key highlights include:

#### 1. Code of Ethics

 Minas Code maintains a comprehensive code of ethics that emphasizes transparency, accountability, continuous learning, and respect. This code is reinforced through regular training, an employee handbook, and accessible reporting systems, promoting a strong ethical culture.

# 2. Ethical Theory Application

• The company's deontological approach supports a duty-based ethical framework, fostering trust and transparency in client interactions and internal practices.

#### 3. Compliance with ACM/IEEE Standards

 By aligning closely with ACM and IEEE ethical codes, Minas Code reinforces standards of privacy, honesty, and fairness. Ongoing training and mentorship programs further support this compliance, ensuring that employees are well-versed in professional ethics.

#### 4. Legal and IP Management

A proactive approach to legal compliance and IP management minimizes risks.
 Licensed software, in-house tools, and controlled access underscore the company's dedication to safeguarding intellectual property.

# 5. Computer Crime Prevention

 Minas Code's controlled work environment helps secure company assets against unauthorized access, contributing to a secure operational framework.

# 6. Organizational Structure and Revenue Models

 The company's flat structure promotes collaboration and accessibility to leadership, while its service-based revenue model diversifies income through outsourcing, talent hiring, and consultancy.

# Suggestions and Recommendations

#### 1. Code of Ethics

- Expand ethical guidelines with scenario-based protocols to enhance decision-making, providing clarity for handling complex situations.
- o Conduct annual ethics reviews to ensure alignment with evolving standards.

#### **Scenario-Based Protocols:**

Scenario: An employee inadvertently shares confidential project details. Protocol:

- 1. Report incident to HR immediately.
- 2. Conduct a damage assessment.
- 3. Notify the client transparently and implement preventive measures.

#### **Complementary Ethical Framework:**

"Adding utilitarianism helps evaluate actions based on their overall benefit, complementing the deontological focus on duty."

#### 2. Ethical Theory Application

o Integrate complementary ethical frameworks, such as outcome-based decision-making theories, for a more versatile approach in diverse scenarios.

#### 3. ACM/IEEE Compliance

 Consider adding regular ethics assessments and case study-based training sessions to deepen practical understanding of ACM/IEEE standards.

#### 4. Legal and IP Management

o Increase awareness of IP policies through quarterly information sessions, helping employees remain vigilant and informed.

## 5. Computer Crime Prevention

 Enhance cybersecurity protocols with regular training and advanced monitoring to bolster defenses against emerging threats.

# 6. Organizational Structure and Revenue Models

 Define specific leadership roles as the company expands to ensure consistency in decision-making. Additionally, explore product-based revenue options to diversify income streams.

# Conclusion

Minas Code's commitment to high ethical standards, robust legal compliance, effective IP management, and secure operational practices underscores its strength as a leader in ethical and operational integrity. By implementing these recommendations, Minas Code can continue to strengthen its framework and adapt to future challenges, ensuring ongoing success and reputation in the industry.

# References

#### **Company Website**:

• <a href="https://minascode.com/">https://minascode.com/</a>.

#### **ACM/IEEE Documentation**:

- <a href="https://www.acm.org/code-of-ethics">https://www.acm.org/code-of-ethics</a>
- <a href="https://www.ieee.org/about/corporate/governance/p7-8.html">https://www.ieee.org/about/corporate/governance/p7-8.html</a>