ETHICS & THE BUILT ENVIRONMENT

Ву

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Presentation Description

- ▶ Ethical and moral issues that are connected, with the development and maintenance of the built environment, became recently, the concerns of many professional organizations, their membership and corporates.
- Such development and maintenance include among other things, buildings, engineering structures and the space, i.e. the built environment.

Presentation Description

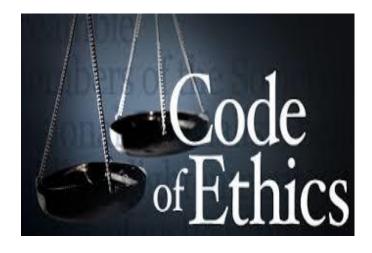
- Synthesis of ASHRAE Code of Ethics will equip engineers and enable them to gain deeper understanding of the relationships between ethics and the built environment, and the ethical principles and their impact on built environment.
- ▶ It will help to determine the structural decision for an <u>ethical problem</u>. Moral practices and many improprieties engineers may encounter will be detailed with examples.

ETHICS & THE BUILT ENVIRONMENT Learning Objectives:

- 1. To define the purpose of <u>professional ethical codes</u> by illustrating ASHRAE Code of ethics.
- 2. To know how to differentiate between <u>personal and</u> <u>professional ethics</u>.
- 3. To recognize several <u>improprieties</u>, engineers & architects may encounter, and more importantly how to <u>resolve their implications</u>.
- 4. To identify the <u>players</u> of the built environment, and its process, with many hands causing lots of ethical issues.
- 5. To understand the <u>needs for formulating Built</u> <u>Environment code of ethics</u>.

PARTI

- ▶ I.1 Introduction
- ► I.2 Ethics
- ▶ 1.3 Ethical Theories
- ► I.4 Codes of Professional Ethics
- ► I.5 ASHRAE Code of Ethics
- ► 1.6 Transparency
- ► 1.7 Professional Competence
- ▶ 1.8 Moral Integrity



II. Ethical Improprieties:

- ▶ II.1.1 Corruption, Bribery & Excessive gifts
- ▶ II.1.2 Cover Pricing / Cover Bidding
- II.1.3 Ethics of Procurement
- ▶ II.1.4 Fraud
- II.1.5 Collusive Tendering
- II.1.6 Competition and collusion fair
- ▶ II.1.7 Negligence
- II.1.8 Conflict of Interest
- ▶ II.1.9 Dishonesty and unfairness
- II.1.10 Violation of environmental ethics
- II.1.11 Confidentiality and Propriety breach
- ▶ II.1.12 Money Laundering

- III.1 Built Environment
- III.2 Built Environment players
- III.2.1 Architects
- III.2.2 Engineers
- III.2.3 Contractors
- III.2.4 Surveyors
- ► III.2.5 Real Estate Agents
- III.3 Built Environment Process
- III.4 Ethical Issues in the Built Environment
- IV. The Need for Development of an Ethical Framework
- V. Conclusions

I.I Introduction:

Ethics

- * Engineers encounter typical concerns like:
 - Safety,
 - Health,
 - Welfare,
 - Environment protection

and face the need to device moral methods to cope with <u>right and wrong issues</u> like conflict of interests, whistle blowing, honesty, etc.

I.2 Ethics:

- Ethics is very hard to define.
 - It should have a definition understandable or relevant to more than a few, as in philosophical ethics.
- The Oxford English Dictionary defines ethics as the "moral principles that govern or influence a person's conduct".

1.2 Ethics:

Ethics

Professional Ethics:

- Professional ethics is an act of "giving one's best to ensure that client's interests are properly cared for, but in doing so, the wider public interest is also recognized and respected".

1.3.1 Ethical Theories (Normative):

Ethics

Utilitarian:

- Utilitarianism seems especially weak in capturing some of our most basic moral intuitions about:
 - The injustice of sacrificing the interests of the few for the many.
 - The moral relevance of special relationships

1.3.2 Ethical Theories:



Kantian (Deontological)

- Core Idea: Use reason to discern that some actions are wrong based on the nature of the action and apart from its practical consequences.
- Duty Ethics: Moral duties are fundamental.
- Ethics actions can be written in a list of duties:
 - Be fair, be honest, do no harm to others, etc.
- Actions are our duties because they express respect for others.

1.3 Ethical Theories:



Virtues ethics

Virtues is a moral approach with a concern for the community and the identification of desirable universal qualities.

Virtues were formally expoused by Plato and were later developed by Aristotle who consolidated an ethical framework in his work.

Code of Ethics

1.3 Ethical Theories:

Ethics

- Aristotle identifies 11 moral virtues, all governed by one intellectual virtue, prudence—good deliberation
 - 1) Courage
 - 2) Temperance
 - 3) Generosity
 - 4) Magnificence (generosity with wealth)
- 5) Magnanimity (proper pride)
- 6) Right ambition
- 7) Good temper
- 8) Friendliness
- 9) Truthfulness
- 10) Wit, &
- 11) Justice

1.4 Codes of Professional Ethics:

Ethics

- ▶ A fundamental mechanism for ensuring professionalism is <u>a code of ethics</u>.
- "If a builder build a house for some one, and does not construct it properly, and the house which he built fall in and kill its owner, then that builder shall be put to death."

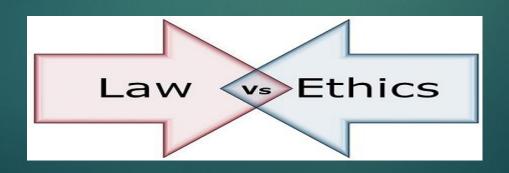
The Code of Hammurabi (1795-1750 BC)

 Codes can clearly articulate unacceptable behaviors.

1.4 Codes of Professional Ethics:

Ethics

- Ethics are moral values and standards that indicate to members of a society <u>how they should act</u>.
- Laws are rules and regulations that mandate certain behaviors and <u>punish offenders</u> who violate those regulations.
- ► Ethics and laws set standards for how the members of a society should behave. Ethical codes tell people how to behave while laws enforce certain behavioral codes.



1.5 Corporate Social Responsibility, <u>CSR</u>:

Ethics

- ► The voluntary activities undertaken by a company to operate in an economic, social and environmentally sustainable manner.
- Any company should be:
 - Accountable for its impact on society, the economy and the environment.
 - Transparent in its decisions and activities that impact society and the environment.
 - Respectful of human rights and recognize both their importance and their universality.

I.6 ASHRAE Code of Ethics:



- Most engineering codes of ethics worldwide exhort engineers to consciously put the <u>public interest</u> above all others.
- Nearly all organizations, therefore, have access to ethical conduct guidelines to <u>assist with the ethical</u> <u>decision-making process.</u>
- As members of ASHRAE or participants in ASHRAE activities, pledge to act with honesty, fairness, courtesy, competence, integrity and respect for others in conduct.
- Will avoid conflicts of interest, and behavior that is discriminatory and/or harassing.

1.6 ASHRAE Code of Ethics:

Ethics

- Efforts shall be directed at all times to enhancing the public health, safety, welfare and environmental protection.
- Members shall be good stewards of the world's resources while considering the environmental, financial and human/societal impacts of their actions.
- Products, services and advice shall be offered only in areas where having <u>competence</u> and expertise.
- Shall act with care in all activities, using and developing up to date knowledge and skills.
- shall avoid real or perceived conflicts of interest whenever possible, and disclose them to affected parties when they do exist.

I.6 ASHRAE Code of Ethics:

Ethics

- The confidentiality of business affairs, proprietary information, intellectual property, procedures, and restricted Society discussions and materials shall be respected.
- ► Each member is expected to be committed to the ASHRAE Code of Ethics in his/ her own professional activities.
- Activities crossing national and cultural boundaries shall respect the ethical codes of the seat of the principal activity.
- Lack of adherence to the confidentiality requirements of "Executive Sessions" is an ethical violation.

I.6 ASHRAE Code of Ethics:

Ethics

- Seeking ethical sanctions against another ASHRAE member in a frivolous (to be denied by court), or malicious manner is an ethical violation.
- Making unfounded malicious statements that are derogatory (showing disrespectful attitude) to a fellow member, staff or the Society is an ethical violation.

Complaint Procedure:

Any member who believes that he or she has witnessed or has been subjected to unethical conduct or other violation of this policy should immediately report the matter in accordance with the procedures identified in the ASHRAE Discrimination and Harassment Policy.

I.6 ASHRAE Code of Ethics:

Any member found to have violated this policy will be subject to disciplinary action, up to and including expulsion from membership in accordance with the Enforcement Procedures and ASHRAE's Bylaws.

ETHICS & THE BUILT ENVIRONMENT

- ASHRAE Members that are "Covered Persons" as defined by the ASHRAE Conflict of Interest Policy are required to disclose conflicts of interest following the procedures identified in the ASHRAE Conflict of Interest Policy.
- Failure to disclose a conflict of interest by a Covered Person is an **ethical violation** subject to the Ethics Enforcement procedures.

1.7 Transparency:



- Generally, "transparency" implies <u>openness</u>, <u>communication and accountability</u>.
- It is a metaphorical extension of the meaning a "transparent" object is one that <u>can be seen</u> <u>through.</u>
- Ethics and transparency are <u>cornerstones of</u> <u>reputation of an organization.</u>

1.8 Professional Competence:

Ethics

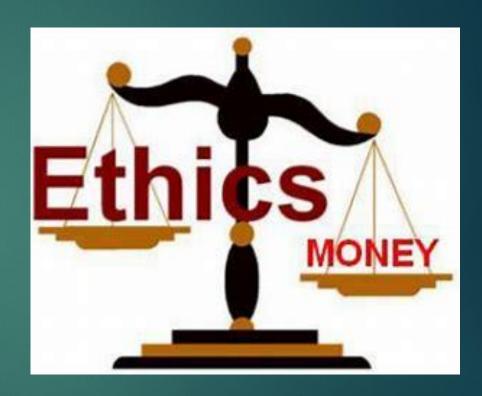
- ► The capability to perform the duties of one's profession generally, or to perform a particular professional task, with skills of an acceptable quality.
- They involve the ability to work on a team, effectively addressing client and stakeholder needs, efficiently managing projects, innovative thinking, and basic business knowledge.
- This tier covers the knowledge, skills, and abilities that engineers can benefit from, regardless of the sector.

1.9 Moral Integrity:



- An integrity-based approach to ethics management combines a concern for the law with an <u>emphasis</u> on <u>managerial responsibility for</u> <u>ethical behavior.</u>
- integrity strategies may vary in design and scope
- All strive to define companies' guiding values, aspirations, and patterns of thought and conduct.

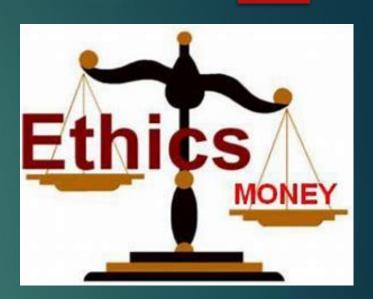
Part II
ETHICAL
IMPROPRIETIES



Part II

II. Ethical Improprieties:

- ▶ II.1.1 Corruption, Bribery & Excessive gifts
- II.1.2 Cover Pricing / Cover Bidding
- ▶ II.1.3 Ethics of Procurement
- ▶ II.1.4 Fraud
- II.1.5 Collusive Tendering
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- ▶ II.1.10 Violation of environmental ethics
- II.1.11 Confidentiality and Propriety breach
- II.1.12 Money Laundering



II.1 Ethical Improprieties:

Ethical Improprieties

Engineering Ethics is usually considered to be a sub-field of <u>applied ethics</u>, which studies engineers' relations to society, to the public, to their clients, to their employers and to the profession itself.

II.1 Ethical Improprieties:

Ethical Improprieties

II.1.1 Corruption, Bribery & Excessive Gifts

- Requesting, offering, giving or accepting directly or indirectly, a bribe or any other undue advantage or prospect thereof which distorts the proper performance of any duty or behavior required of the recipient of the bribe.
- ► The scale of corruption is <u>magnified by the size and</u> scope of the construction sector, estimated globally at some US\$ 3,200 billion per year.
- Active type: Asking for the bribe directly or indirectly
- Passive type: Accepting or not objecting to bribe.

II.1 Ethical Improprieties:

Ethical Improprieties



- Offering, giving, receiving, or soliciting of any item of value to influence the actions of an official or other person in charge of a public or legal duty.
- Offering of payments or inducements to someone in a position of trust to get them to do something for the bribe payer to which the bribe payer is not entitled.

II.1 Ethical Improprieties:

Ethical Improprieties

II.1.1 Corruption, Bribery & Excessive Gifts

- The person receiving the gift may, <u>consciously or</u> <u>otherwise</u>, <u>be disposed</u>, <u>predictably</u>, to favor the interests of the gift giver.
- ► The gift must be of a <u>non-token nature</u> that it is reasonable to think that it may put the interests of the giver in a privileged status even when all else is equal.
- Some corporations have allowed gifts giving to their clients or potential clients as long as these two conditions do not apply.

II.1 Ethical Improprieties:

Ethical Improprieties

- II.1.2 Cover Pricing/ Cover Bidding
- A practice that occurs where a company wishes, or believes it is necessary, to be seen to tender for a particular project but <u>either</u>
- 1. does not wish to win the tender; or
- 2. does not have the time or resources to prepare a carefully priced tender for that project.

II.1 Ethical Improprieties:

Ethical Improprieties

II.1.2 Cover Pricing/ Cover Bidding

- The arrangement includes at least one of the followings:
 - a) A competitor agrees that they will submit a bid that is <u>higher</u> than the bid of the designated winner; or
 - b) A competitor agrees to submitting a bid that is known to be <u>too high</u> to be accepted; or
 - c) A competitor submits a bid that <u>contains special</u> <u>terms and conditions</u> that are known to be unacceptable.

II.1 Ethical Improprieties

II.1.3 Ethics of Procurement

Potential warning signs of unethical practices



- Deviations from correct procedures.
- Overcharging by the supplier.
- Poor record keeping.
- Missing files.
- Poor or no separation of duties.
 (One person issues the order and approves the payment).



II.1 Ethical Improprieties

II.1.3 Ethics of Procurement, Cont'd



- Poor control (one person signs a contract).
- Buyer's extravagant life style.
- Buyer's frequent absence from the office.
- Excessive entertaining by suppliers
- Resistance to audit.
- Reluctance to delegate.

II.1 Ethical Improprieties II.1.3 Ethics of Procurement, Cont'd



- Excessive secrecy.
- Dictatorial management style.
- Unnecessary meetings with suppliers.
- Not allowing other staff to deal with certain suppliers.
- Established suppliers' reluctance of entering competitive tendering.
- Supplier cartels.

II.1 Ethical Improprieties II.1.4 Fraud

Ethical Improprieties



- Act or course of deception, an intentional concealment, omission, or perversion of truth,
- Aiming to
 - (1) gain unlawful or unfair advantage,
 - (2) induce another to part with some valuable item or surrender a legal right, or
 - (3) inflict injury in some manner.
- Willful fraud is a criminal offense which calls for severe penalties, and its prosecution and punishment (like that of a murder)

II.1 Ethical Improprieties II.1.5 Collusive Tendering

Ethical Improprieties

- "Illegal agreements between tenderers that result in seemingly competitive bids, price fixing, or market distribution schemes that circumvent the spirit of free competition and defraud clients"
- It includes bid-cutting, bid-shopping, cover pricing, hidden fees and commissions and compensation for unsuccessful tenderers together with "withdrawal" where a tenderer withdraws their bid after consultation with other tenderers.

II.1 Ethical Improprieties

Ethical Improprieties

11.1.6 Competition and Collusion Fair

- Concept of open access to competition and a level playing field for competently <u>matched</u> <u>"suppliers"</u> chosen by the "clients".
- Competitors ensure they do not in any way restrict the competition process so that prices may be artificially raised through certain processes.
- Certain Acts consider <u>collusion and sharing of</u> <u>information</u> as a contravention of competition.

II.1 Ethical Improprieties

11.1.7 Negligence:

Ethical Improprieties

- Failure to exercise that degree of care which, in the circumstances, the law requires for the protection of these interests of persons which may be injuriously affected by the want of such care.
- It is a source of confusion to both the public and the courts.
- Behavior that is careless lack of acceptable conduct and that can refer tort that sustains an action for negligence.

II.1 Ethical Improprieties

II.1.8 Conflict of Interest, COI:



"A conflict of interest: a set of circumstances that creates a risk if professional judgement or actions regarding a primary interest will be unduly influenced by a secondary interest.

II.1 Ethical Improprieties

Ethical Improprieties

11.1.9 Dishonesty and Unfairness:

- Dishonesty is determined according to the standards of ordinary people and known by the defendant according to the same standard.
- Unfairness:
- Is defined as the not right or fair according to set of rules of principles and not treating people equally.
- Can also be called injustice or inequality.
- Unethical dilemma and may vary from one place to another, and depending on the transparency levels.

Ethical Improprieties

II.1 Ethical Improprieties

11.1.10 Violations of Environmental Ethics

- Environmental ethics: The discipline in philosophy that studies the moral relationship of human beings to, and also the value and moral status of, the environment and its non-human contents.
- It helps definition of man's moral and ethical obligations toward the environment. ...
- Water and air pollution, the depletion of natural resources, loss of biodiversity, destruction of ecosystems, and global climate change are all <u>part</u> of the environmental ethics debate.

Ethical Improprieties

II.1 Ethical Improprieties

II.1.11 Confidentiality and Propriety Breach:

- A breach of confidentiality occurs when data or information provided in confidence to you by a client is disclosed to a third party without your client's consent.
- While most confidentiality breaches are unintentional, clients can still suffer financial losses as a result.
- The breach may be seen as theft if it involves intellectual property or information that is proprietary to the any player of the built environment.

Ethical Improprieties

II.1 Ethical Improprieties II.1.12 Money Laundering:



- Money: process of concealing the origins of money obtained illegally by passing it through a complex sequence of banking transfers or commercial transactions.
- ▶ The overall scheme returns the money to the launderer in an obscure and indirect way.
- The concealment of the origins of illegally obtained money, typically by means of transfers involving foreign banks or legitimate businesses.
- Small amounts of cash, it's easy to deal with it you just spend it.

II.1 Ethical Improprieties II.1.12 Money Laundering:

Ethical Improprieties

- Money laundering normally occurs in three stages:
 - <u>Placement</u>: Money is <u>introduced into the financial system</u> by some means;
 - <u>Layering</u>: A series of complex financial transactions are undertaken <u>to disguise the illegal source</u>
 - Integration: The funds are integrated into the legitimate economic economy and are co-mingled with legitimate funds in the system, thereby "cleaning" the money and giving it the appearance of having being legally earned.

II.1 Ethical Improprieties

Ethical Improprieties

Summary:

- All ethical improprieties do harm the built environment.
- If certain laws are encouraging certain ethical improprieties to gain coverage, it will be harming and destroying the need for initiating Code of Ethics.

PART III

BUILT ENVIRONMENT



PART III

- III.1 Built Environment
- III.2 Built Environment players
- ► III.2.1 Architects
- ► III.2.2 Engineers
- ▶ III.2.3 Contractors
- ► III.2.4 Surveyors
- III.2.5 Real Estate Agents
- III.3 Built Environment Process
- III.4 Ethical Issues in the Built Environment



III.1 Built Environment:

- The built environment describes the <u>man-made</u> <u>environment</u> in which we live, work, and recreate on a day-to-day basis.
- In social science, the term: built environment, or built world, refers to the <a href="https://www.numan.
- ► The built environment encompasses places and spaces created or modified by people including buildings, parks, and transportation systems.

Built Environment

III.2 Built Environment Players



III.2 Built Environment Players

- Professionals play an important role in the development of any economy through design, construction and development of Infrastructures and Industrial Systems.
- They are expected to meet <u>high standards of client</u> care as well as maintain their own professional codes.
- Consequently, the activities of built environment professionals have a huge impact on the environment and the quality of life, health and safety of the people.

III.2 Built Environment Players III.2.1 <u>Architects</u>

- Architects are artists.
- They combine <u>architectural history</u>, <u>science and art within the built environment</u> to produce designs that will not only meet the client's requirements, but also enhance the environment.
- Architecture encompasses making memorable places for people and is based on experience, memory and history.
- Architects today have the responsibility to produce buildings that fit with the surrounding context, physically and metaphysically, and still speak of their own time.

Built Environment

III.2 Built Environment Players III.2.2 Engineers

- It might be considered properly commencing between 4000 and 2000 BC in Ancient Egypt and Mesopotamia when humans started to abandon a nomadic existence, thus causing a need for the construction of shelter.
- During this time, <u>transportation became</u> increasingly important leading to the development of the wheel and sailing.

Built Environment

III.2 Built Environment Players III.2.2 Engineers

- In ancient times, engineers were typically referred to as architects or master builders.
- In the 18th century, the term civil engineering was first used to recognize it as a separate field from military engineering.
- Consulting engineering is an important and learned profession.
- Lots of Engineering Disciplines & qualifications.

III.2 Built Environment Players III.2.3 Contractors



- ► The construction sector contributes to 23% of air pollution, 50% of the climatie change, 40% of drinking water pollution, and 50% of landfill waste.
- ► The construction industry accounts for 40% of worldwide energy usage, with estimations that by 2030 emissions from commercial buildings will grow by 1.8%.
- Ethical considerations have become more prominent in construction although the use of ethics as a term is rare.

Built Environment

III.2 Built Environment Players

III.2.4 Surveyors

- ► The quantity surveying profession emerged at the beginning of the 19th century.
- Prior to the first recorded usage of term "quantity surveyor" in 1859, the term "measurer." "custom surveyor" or "surveyor" were used.
- In those early days the quantity surveyor acted as master tradesman, measuring the work at completion and frequently submitting final accounts to the building owner.

III.2 Built Environment Players

Built Environment

III.2.5 Real Estate Agents

- ▶ **Real Estate**: the world's finest, yet most demanding industries to break into.
- Forever growing with new rules and regulations created to ensure that ethical behavior in real estate agents is met.
- Members conducted themselves professionally and treat every client with dignity, carrying out their duties as property professionals.

III.3 Built Environment Process

- Commissioning agent
- Feasibility Studies
- Site Selection
- Budget Planning
- Preparation of a project schedule
- Schematic Design
- Government and local councils may have specific regulations which affect design solutions and the project schedule. This is also the opportune time for the client to make any amendments to proposed designs.

111.4 Ethical Issues in the Built Environment:

- Citing the main types of unethical behavior in architecture to be:
 - 1. Concealing of construction errors and stealing someone else's drawing.
 - 2. Exaggerating experience and academic achievements in resumes and applications for commissions.

111.4 Ethical Issues in the Built Environment:

- ➤ 3. Charging clients for work not done, costs not incurred or overstated.
 - 4. <u>False promises of advancement</u> as practiced by some architects.
 - 5. Misleading clients in project management.
 - 6. <u>Involvement in conflict of interest</u>.

Built Environment

III.4 Ethical Issues in the Built Environment

III.4.1 Potential Moral problems:

- a. Lack of vision: the form of tunnel vision biased toward traditional pursuits overlooks suitable alternatives, and in the form of groupthink promotes acceptance at the expense of critical thinking
- **b.** Incompetence among players carrying out technical tasks.
- c. Lack of time or lack of proper materials, both ascribable to poor management.
- d. A silo mentality that keeps information compartmentalized rather than shared across different fields.

Built Environment

III.4 Ethical Issues in the Built Environment:

Consulting firms

- Consulting engineering companies <u>play a key role</u> in the ongoing shaping and reshaping of the physical qualities of nature and culture, of landscapes, and the built environment.
- Thus, potentially, they have a key role in making modern societies more sustainable.
- There are many developments that suggest that consulting engineers will be <u>very much concerned</u> with environmental issues in their work.

Built Environment

III.4 Ethical Issues in the Built Environment

<u>Retrofitting:</u> The scale and pace of retrofit programs around the world <u>remains wholly</u> inadequate with a few rare exceptions where nearly a third of existing non-domestic buildings have already been retrofitted, primarily to help reduce overall energy consumption.



IV. The Need for Development of an Ethical Framework

- Global population increase, rising incomes and development will inevitably produce unanticipated and deleterious ecological, economic and human social consequences.
- Sustainable Development policies generally embody an economic determinism with respect to technological change.
- It avoids the issue of ethics and assumes economic and environmental goals are compatible.
- The built environment sector is only a limited part of the ethical agenda. Need to reconsider if looking for an industry that is behaving morally.

Conclusions

IV.2 Conclusions:

- 1. The majority of organizations have their <u>own</u> <u>ethical codes of conduct</u> and the employees <u>belong to professional associations</u> that promoted good ethics, the curbing of unethical conduct is still difficult.
- 2. There are no laws and therefore no punishment to enforce their value or use.

Conclusions

ETHICS & THE BUILT ENVIRONMENT

IV.2 Conclusions:

- 3. There is no consensus on precisely what constitutes unethical behavior and what should be done to improve it.
- 4. One way to improve ethical standards is simply by: enforcing the law where unethical conduct is also a breach of the criminal law.

IV.2 Conclusions:

- 5. There is a need to build an international code which is acceptable in order to create a true level playing field for procurement and property deals and development control on a global scale.
- 6. Each professional body may produce their own standards and there is no recognized ethical principles that all should follow and be regulated on.

IV.2 Conclusions:

Conclusions

A single-wide code can contribute to the development of ethical standards within the built environment.

- A drive to license all builders to provide some assurance of their integrity, is required.
- Introduced a consumer driven initiative called <u>'Quality Mark'</u> with the objective of distinguishing between the 'rogue' builders and the reputable organizations.
- The change for better ethical standards of conduct, in the industry can only be achieved by reducing the chances for construction participants to consider it a need to draw advantage at someone else's expense.

Conclusions

IV.2 Conclusions:

 Codes alone are insufficient to ensure ethical conduct and they need to be complemented with the assignment of functional responsibility training and officer)

Q & A



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