**Abstract**

As a professional, it is very much essential to be well developed in terms of professional skills and have a good understanding in them, in order to move forward and cope up with the professional world.There are many reasons to justify that and all that will be discussed in the latter part of this document.

**Introduction**

IT Professionals are in many numbers , but to stand out from the crowd , becoming an “effective IT professional” is a must.For that , professional skills must be developed in oneself. The content in this document will explain how such professional skills and awareness on them would contribute an IT professional to become an “effective professional”. There will be mainly 12 topics which will be discussed.

1. Personal Development Planning.
2. Values,Beleifs,Attitudes and Character.
3. Teams for Teamwork.
4. Team Leadership.
5. Decision Making
6. Embracing diversity in teams,organizations.
7. Time Management.
8. Computing Landscape.
9. Professional Responsibilities and Codes of Ethics
10. Intellectual Property
11. ICT and Law in Sri Lanka
12. Entrepreneurs

**Personal Development Planning**

Professional life is not easy as it is spelled, how one acts in professional life would directly affect his/her whole life too.Thus, it is important to maintain a good professional life. For this , personal development planning is very well necessary as a graduate person ready to enter the professional life. One should be able to identify their own skills and further develop them , but not only skills , things which bring drawbacks such as weaknesses and threats also should be identified and address them as to minimize their impacts. This is done by the “SWOT Analysis” which can be considered very important for an individual who is new to the professional world.By identifying your strengths and where your opportunities lye , one can get a good moral confidence as well as identifying the weaknesses and threats, one can rectify them and become a better professional. The SMART planning also is very useful as it can help in strategically planning the way a goal can be achieved and to make it a reality. This would break down the goal into several sections and by analyzing and working according to them, reaching a goal would become much convenient. Writing reflective journal is another methodology for personal development. Through this, one can identify what has gone wrong in a certain situation and create an action plan as to not let the same situation arise again, this helps building self-confidence. Thus it can be seen how much “Personal Development Planning” is essential in making an effective IT professional in the fast moving professional world.

**Values,Beleifs,Attitudes and Character**

Not everyone is similar to one another in terms of character. People are different to each other and understanding the difference and giving them a value is very much necessary for a person. These values ultimately affect an individual’s character which is very well observed in the professional world and also becomes one of the decisive factors for one’s success.This is very well explained by Mahathma Gandhi as follows ;

[1] “Your beliefs become your thoughts,  
Your thoughts become your words,  
Your words become your actions,  
Your actions become your habits,  
Your habits become your values,  
Your values become your destiny.”  
― **Gandhi**

Especially in a team work , if we do understand each other’s values as well as values of ourselves it would become more convenient to work with each other as it will build a mutual understanding amongst the group. For some few examples of values we can say ; Acceptance , Accountability , Self-control , Teamwork , so , if we know that someone possesses these types of values we can say that he has values to be a good leader in a group , thus we can understand each other by analyzing their values.

[2] “It's not hard to make decisions when you know what your values are.”  
― **Roy Disney**

As in the above saying , decision making becomes more convenient when one’s values are known.For example, if you know you have what it takes to be a leader , taking a step forward is the best thing to do, hiding values won’t bring success.

**Teams for Teamwork**

As a new person entering the professional world , understanding what a teamwork is about, is very essential.It is important to understand the problems that can be faced during a teamwork and how to handle them , thus a good professional can be made.

[3]"Coming together is a beginning, staying together is progress, and working together is success." – Henry Ford

We can understand from this saying how staying bounded together brings success. The first step of any teamwork is the formation , there many conflicts can happen , understanding and overcoming them is necessary. Conflicts can arise due to role assignment , communication barriers etc … As an individual, if he/she has an understanding that this is a normal scenario , conflicts arising in team formation , they will be able to solve those conflicts and manage the team without getting worried and failing to proceed with the team. And also after formation , during the teamwork also conflicts can arise , a professional person who is aware of these and sees those conflicts as part of the teamwork can successfully overcome them and proceed with the team. Team members might be assigned specific roles as for their values and skills, but yet as a professional , one should also care and look for the roles of his/her team member because as a team everyone should succeed with their individual contribution for the whole team to succeed.This is why understanding teamwork is very much essential for a professional person.

**Team Leadership**

Becoming a leader is not easy , anyone can be a leader but to be a great leader one has to have many values to himself/herself.Accountability , self-control, teamwork are some few of them.Leaders should be the ones that their followers are guided from and not a person who is been carried by their followers and ultimately getting credit.Leadership skills are very necessary in the profession of IT , especially for project work mostly in which a team should work to achieve a specific goal , and for that leadership skills plays a major role.Normally there is one leader in a group , it is that person who carries the weight of organizing and successfully completing the relevant task.

[3]“ Leadership is lifting a person's vision to high sights, the raising of a person's performance to a higher standard, the building of a personality beyond its normal limitations.” —Peter Drucker

As in the above saying , no matter the levels of the individuals in a group , a leader should be a person skilled enough to uplift a person’s performance beyond his/her normal limitations. For an example : In a project team , obviously , people with the same capabilities are not present , people can differ in strengths and weaknesses , a leader should identify them and motivate them to uplift their strengths and overcome their weaknesses providing a proper action plan. So no matter that the team , a good leader should always aim for the best possible understanding the variations in the team , this is very important as a professional to understand.

**Decision Making**

Decision making is a skill an individual , especially as a professional that one should possess. But it is not only in professional life, but also in one’s private life a good decision making skill is necessary. Because sometimes , only even one decision that one may take can lead to a change in life either in a good or bad way. We must always make decisions as to get the best outcome and for that going through the methodologies of decision making is very essential. Based on the goal , the decision making process is a thing to be done with cautious with a calm mind.For that , environment too plays a major role , it would be very much easy for one to make decisions in a calm environment rather than a hectic environment.

[5]“Your choices are made in a moment, and yet their consequences transcend a lifetime.” ---**MJ DeMarco**

In each big business we see , there once was a person who took a big decision for a big turnover. As such decisions can change a whole life.

**Embracing diversity in teams, organization and society**

The world consists of many types of communities.These communities vary by religion , ethnicity, beliefs etc… But despite the differences , all such communities must be treated equally. We have seen how leaders in the past used to fight against such discriminations , such as Martin Luther King , Nelson Mandela who fought against the “color bar” in which black people were treated as a minority in the then society.To obtain the achievable , staying united makes it easy , unity among those communities is very important. An example can be taken from the professional world itself, thinking of a project in the field of IT , when requirements are to be analyzed , people from different communities have a higher tendency to have a good mix of solutions as there are many viewpoints ; in terms of gender , age , race , religion. But if one such community only(Same age , religion etc…) engages in that work , they would probably be fixed into one perspective thus not getting a clear solution.

[6]“Inclusion is not a matter of political correctness. It is the key to growth.” — Jesse Jackson

As one writer [stated](https://www.itspronouncedmetrosexual.com/2011/12/political-correct-versus-being-inclusiv/), “Being politically correct is about looking good to others. Being inclusive is about being good.”

Creating an inclusive work environment means creating a place where everyone feels welcomed and accepted—and able to speak up, share insights, and provide more value to the organization.

So this is how embracing diversity in a team can provide more value to oneself as well as his/her organization.

**Time Management**

Time management is another useful skill as a professional one must learn. Time management provides many benefits to finance , recognition and even health. The famous saying “Time is money” points out how much time is valuable and affects in Finance. A person should have a proper plan to reach a certain goal if he/she wants to manage time accordingly. For an example, considering an IT project , the team can breakdown the project and provide a reasonable deadline for each of them. As in recognition, doing timely jobs can make one or an organization stand out from the crowd. Another perk of time management is good health, we can avoid unnecessary stress if we engage in a good time management. For an example an academic project ; If the team starts developing when they are in a time that they should be testing the system , it will bring pressure and an unnecessary stress which can cause mental health issues for some , this is because of not properly managing time. So this is why as a professional , time management is very important.

**Computing Landscape**

From the day computers were invented , they have grown exponentially , but parallel with that , people’s behaviors also had to be grown , because with advancement of technology , eventhough the world got many benefits out of it on the other hand it has also suffered many drawbacks , that is because of some people’s low mentality. Computers have had 5 generations until now. The first few used vacuum tubes , transistors , integrated circuits respectively which operated under a lot of electricity.We know that electricity production is very environment polluting , thus there were many drawbacks. But yet with the advancement of technology inventors found ways to reduce the electric consumption and thus minimizing environmental pollution.But besides environment , many bad things are been happening including crimes.

[7]

* The country whose population has the largest per capita usage of **worldwide darknet platforms in India.**
* Credit card numbers cost as **little as $9**on the dark web markets.
* Payment data costs as little as **$270 on the dark web.**
* The Dark Web accounts for roughly **48% of the internet.**
* The most commonly listed guns on the dark web are pistols, making **84% of category listings.**
* Terrorism statistics on the dark web reveal that **50,000 extremist groups exist there.**
* **8.1% of listings on darknet** marketplaces are for illicit drugs.
* ‘Empire’ is one of the largest darknet marketplaces listing over **6,000 products.**

The above reference represents the “dark web” in which many crimes are started from.As a professional it is very important to understand how technology can affect humanity in a bad way and refrain from using it as such but only for the personal and for humanity’s best.

**Professional Responsibilities and Codes of Ethics**

A normal person involving in a profession solely can be considered as a “professional” , for a person to be a professional , he or she has to follow some codes of ethics as well as should bear responsibility on the profession. It can be seen how much code of ethics have been given a value, by considering that there is also a standardized code of ethics as a professional to follow. For an example “IEEE code of ethics”. These have been created because ethics are given a high place when talking about profession.If one or an organization follows these codes of ethics properly , they are at a very minum risk to face to unwanted situations which can cause a personal downfall or a downfall to a whole organization. As an example;

been honest is one such code of ethic, if we consider a critical project such as an aircraft computer system building project , it is a critical project which should be done very cautiously without letting any mistake happen, for that many tests should be done,but what if the developer team is not aware and not experienced on the field yet accept the project because of financial advantage showing false experience to the client? It would become a disaster. Below are some flights which crashed due to computer system errors.

## [8] Qantas Flight 72

## Air France Flight 296

## 1994 Scotland RAF Chinook Crash

## AeroPerú Flight 603

## Adam Air Flight 574

## Thus, maintaining proper code of ethics is very important both individually and for the opposite too.

**Intellectual Property**

[9]“Intellectual property (IP) refers to creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names and images used in commerce.”

Patent is a way to protect intellectual property and it is very important as an individual as well as for a whole country to hold such a patent which brings recognition and value.

In this fast moving technological world there many countries who get the most of it and moved forward while there are also many who can not keep up with the flow and do not seem to move as forward as other countries do. Speaking about countries ,there are many factors for a country to gain a wealthy and healthy economy. When talking about “Rich countries” , what comes to one’s mind would be the USA , China , countries as such. We all know how much China and the US bring on a cold war with each other in terms of many aspects including technology. It is not a new fact that both countries give a lot of effort financially to produce and export their very own products. They vastly spend on researches to achieve such target.

Below table shows the top 3 countries with the most number of patents.

Chart, bar chart

Description automatically generated

And as we can see , China sits in the first place and also china is considered as one of the most rich countries in the world, so we can see a connection also here between been a rich country and also been technologically advanced ,not to mention Japan and the United States. Without dragging much in the past , in the present we can see how countries try to create their own Covid-19 vaccine , especially China and the United States , they know it would be very much financially beneficial and also beneficial for the well being of the world population.

A picture containing graphical user interface

Description automatically generated

In this chart above too , what we can see is how new inventions affect on how much a country can be called rich. So speaking of new inventions , people should be aware of this fact and try to give their maximum to their county to attain such status which can not be regarded impossible.

**ICT and Law in Sri Lanka**

Being aware of ICT related laws is very much essential as a professional. One should know the types of crimes , laws for them and how to act if facing such crime. Every country has their own sets of laws for cybercrimes as well as Sri Lanka. There have been many cyber crimes in the past and as well as in the present been happening and in the future too there is no doubt that such cyber crimes can happen , so been aware and ready is very important. Illegal content , Infringement of Right of Privacy , Infringment of Freedom of Expression are some cyber crimes. Also hacking is a cyber crime which can extend to many areas; stealing personal information , stealing business information , manipulation of social accounts etc…

[10]“Jonathan James, a prolific young hacker that was hacking NASA at night while being at school in the morning. He went on to be the first juvenile to be sentenced federally to a term of confinement for computer hacking**.**”

This is considered to be one of the biggest cyber crimes ever happened.This story above is about a teenager of 15 years who hacked NASA only for fun , but yet , the consequences were very tough that he was imprisoned.

This is why it is very important for one to learn about laws and not to engage in such illegal cyber activities for any case as it will result in very bad consequences.

**Entrepreneurs**

Entrepreneurship is a door for a lifetime success, but yet unlocking it is the most difficult thing to do.There are many reasons as to why graduated students should think about entrepreneurship which is not an impossible task to do, but with a high commitment and skill it can be followed through. Many people have the mentality of jobs and salary , only a few think of doing and starting something of their own by the knowledge they possess and that, is the starting point.There are many differences between been an entrepreneur and an employee ; where entrepreneurs are considered more socially and economically strengthened than employees. A good example is the creator of Facebook ; Mark Zuckerberg , who used his creative mind and with a high commitment he created what is considered to be the top of social media, he was not even graduated by then , but his commitment and skills helped him unlock the door of entrepreneurship.

So this is why people should focus on entrepreneurship rather than been more job oriented as it will bring many values not to oneself only but to a whole country.

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