
The impact of technology on human behaviour and business environment

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Abstract: Nature feeds all in an enormous way for the benefit of human beings and living creatures with the concept of ecology behaviour. The author in this paper finds the bombastic situation with technology causing emotional sickness in reacting to cross situation and health issues like aging. The author is coining a new term anthropoid mechanic syndrome (AMS), due to consistent implications of technology in day-to-day activities. The analysis was found that human stress factor caused by technology is circumvent to lose the self-freedom of expression indulging in contravene situation. As per secondary data Asia is the biggest hub for technology growth but the mission created by technology revolutionises even the human creator to a different behaviour triggering a natural disaster.

Keywords: bombastic; stress; anthropoid; technology; impact; behaviour; disaster; creator; data; emotion; aging; health issue; characteristics; ecology; Asia.

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Biographical notes: PremSankar Manickavasagam received his BTech in Pharmaceutical Engineering and Technology from Bharathidasan University, India and worked in FMCG organisations in India. He received his MBA degree from University of Wales, UK. He has more than eight years of industrial experience as product specialist and awarded 'Best Continuous Improvement Goal Achiever'. He is specialised in industrial 'lean' tools and techniques and data segregation. Currently, he is working as an Assistant Professor at the University School of Business, Chandigarh University. His key research areas include marketing management, human behaviour, and product development.

1 Introduction

As every leaves of the plants has its own size and dimension the same it is, while comparing with the attitude factor, every human being tends to behave depending on their family background, environment, location, geographical changes, education and timely act.

The human behaviour has impacted in huge numbers while analysing the records from last two decades till current situation. During the past period of 1970s the human interaction was tangible. The hippocampus function of every human brain being proved to be the greater power than osmium density, the impact of technology on human behaviour proved that the density can be reduced to lithium even less than that.

Binding mode of technological environment has exaggerated in human behaviour, technology less is unpredictable and the real world seems to be dancing in zigzag conditions. Business environment accretion is devastating the human's creative self thinking. When analysing with antediluvian period the technology changed the method of thinking. Our characteristics in the minds of the humans tend to grow detaching from physical touch. Elicit behaviour causing enervating and exacerbate situation in human minds with technology world.

The author while interaction with different cultural people working in technological environment finds that doing physical activities is bigger task than working in technological environment. The caution for health benefits is even determined only by the guidance of business technological environment.

2 Literature review

Different models and theories has been stated by different researchers and authors but as per authors view the impact either in positive or in negative caused by the technology is bound to produce drastic changes in the human gene, currently the prediction is only in words but the research is still under process.

The business environment recognises that the technology has made to perform their task at an easier way and useful (Dillon and Morris, 1996). Technology governed rule behaviour in working environment differs from business to business, as the same technology cannot be used by the employees friends or relatives. The technology-based entertainment sectors focus on customers to relax and to 'kill time', and generating the revenue for the business, but the final behaviour of the humans found to be passing the time and relaxing (Hsu and Lu, 2004).

Every individual's perceptions vary in the use of technology for their personal use (Raza et al., 2007). Hussin et al. (2002) supported that the level of internal technology knowledge inside the firm indicates the adoption of technology. The business strategies of the firm also add value based on their adoption.

The academic success for youngsters is negatively impacted due to the time spending factors in computer, lack of creativity, lower performance in language skills (Cordes and Miller, 2000; Palmer, 2015).

A rapid increase in musculoskeletal problems reported for children using digital technology in the external and internal environments (Harris et al., 2015; Kelly et al., 2009). Once the development of musculoskeletal problems symptoms creeps automatically the body mass index (BMI) will the signal without any age barriers. Apart from the psychological factors headache and pain in the abdomen due to monitoring anxiety is the major negative impact (Harris et al., 2015).

Earlier days the people use to believe that cardiovascular and obesity mainly occurs through genetic transformation but researchers have analysed that in the early childhood due to increase in digital technology the rise of symptoms build at faster pace (Bel-Serrat et al., 2013).

In the advent of modern technology, use of mobile phone and technology in the bedroom has become a regular habit which is associated for less sleep (Cespedes et al., 2014). Another study found that sleep disturbances are mainly caused by the use of the technology at higher rate (Levenson et al., 2016). Few studies have found that extensive use of technology even during daytime affects the sleep quality (Hysing et al., 2015).

3 Conceit and pride of business environment

The technology boosts the business environment enhancing the keen source of economic conditions globally. Current trend of utilising mobile apps in most of the sectors has revolutionised the turnover. The humans feel enthusiastic and exited in doing the task from anywhere and whenever required without timeless boundaries. The behaviour of interacting with technology impedes the physical touch. The companies bound with traditional way of doing the business with pen and paper still exists but lagging in creating new customers.

Table 1 An analysis report of technology-based turnover

<i>Data of different sectors – implications of mobile APPs</i>				
<i>Sectors</i>	<i>Turnover</i>		<i>Benefits for business and customers</i>	<i>Extreme conceit behaviours</i>
	<i>Before 2017</i>	<i>After 2019</i>		
Interior decoration	7%	40%	Operational cost reduces, real visualisation effect for customers	Volatile memory
Retail and service	23%	69%	Easy payment options, business models understandable.	Impulse behaviour
Educational	68%	88%	Interactive learning opportunities.	Self-destruction and lost from society
Tourism	\$22.3 billion	\$38.7 billion	Choice of different information for customers to choose in all seasons.	Emotionally attached
Healthcare and medical	25%	59%	Quick treatment	Mood behaviour
Food and beverage	\$12.11 billion	\$17.02 billion	Attractive offers, tracking food.	Self absorption
Banking	18%	67%	Urban, rural easy transactions	Post-traumatic
Gaming	22%	74%	Mind blowing profits	Megalomania type of characters

Note: *Statistical source from Business Economics (August 2019)

4 Anthropoid mechanic syndrome

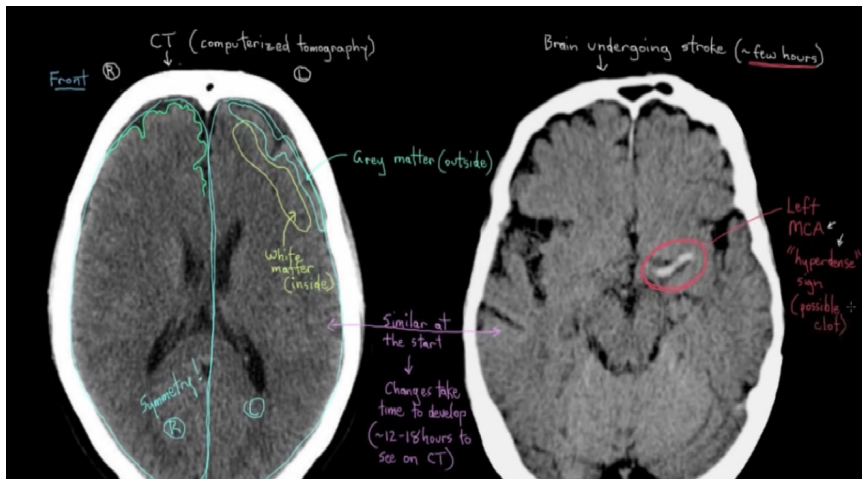
Author is coining a new term in human behaviour changes, with the use of technology above the limited period of duration is defined as anthropoid mechanic (stress) syndrome. As humans have the routine behaviour in day to day life with little changes in the activity

but when the person has higher impact with the business environment surrounded with technology the brain tends to foresee the implications and reacts into negative way in terms of accepting only the orders received from the technology remote and not with self defence/consciousness. Moving as per the framed technology protocol set with deadlines for the self, creating a self thought of being in happiest environment when compared with the external environment.

Author while interacting with few professionals working in software development companies, came to know that if a business environment is providing a comfort zone with the use of technology in terms of communication, motivation and growth but lacking in recharging the human brain.

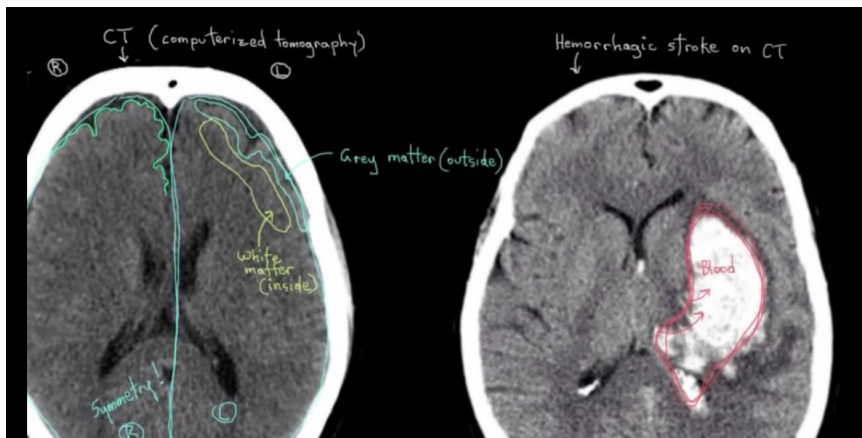
When the author interacted with few psychiatrists, came to know about the technology-based stress causing stroke due to empowerment of mechanical activities.

Figure 1 (a) Healthy brain (b) Affected brain (see online version for colours)



Source: Secondary data (Khan Academy)

Figure 2 (a) Healthy brain (b) Affected brain (see online version for colours)



Source: Secondary data (Khan Academy)

In Figure 1, comparison of normal brain with the brain undergoing stroke at the initial stage with the possibility of clot. Humans having higher impact that too male gender with the higher use of technology.

In Figure 2, comparison of normal brain with the brain undergoing stroke at a long run with blood clots shown in the picture. Humans having higher impact that too male gender with the higher use of technology.

When analysing Figures 1 and 2, any activity which is performed for long run from the impact of technological environment has a drastic changes in brain.

Activity: A certain age group of students (63 numbers) ranging from (7–18) years where selected in the region of Punjab-India. The children's and teenage were kept inside a single big hall providing them with indoor games (chess, carom boards, table tennis, drawing boards) along with technology-based devices (computer tablets, desktops, mobile phones) for 6 hours.

Analysis: To check the student's interest and activity (physical/technological) they wish to perform during the long run of 6 hours duration. Statistical tool T test was performed on the primary data.

Result: The study found that majority of the students attracted with technology in playing games, hearing music, movies online and social networking websites.

4.1 Influence of technology-based activities on gender

A sample of male and female respondents was taken to depict the influence of technology-based activities in gender of the respondents. There were 29 male respondents and 34 female respondents. The majority of the male respondents have high mean value (314.31) than female respondents (269.26). From the data base it is conclude that the male respondents are more influenced by the technology-based activities as compare to the female respondents. The value of standard deviation of the male respondents (25.026) is less than value of standard deviation of female respondents. It reflect that female respondents have more variation in their opinion and more deviated from central mean value.

4.2 Comparison between technologies-based activities and gender

Levene's test for equality of variances and t-test for equality of means was done to compare between technologies-based activities and gender. There were two scenarios considered, where equal variances were assumed and equal variances were not assumed. The Levene's test for equality for variances was significant for equal variances whereas t-test for equality of means was significant for both equal variances and equal variances not assumed.

Hypothesis:

H01 Gender does not influence technology-based activities.

H1 Gender influences technology-based activities.

Table 2 Demographic profiles of the respondents

<i>Physical activity vs. technology</i>					
<i>S no.</i>	<i>Name in alphabets</i>	<i>Age</i>	<i>Gender</i>	<i>Within 360 minutes performance</i>	
				<i>In minutes – physical activity</i>	<i>In minutes – technology</i>
1	A	10	Female	60	300
2	B	16	Male	30	330
3	C	10	Male	90	270
4	D	8	Male	15	345
5	E	11	Female	60	300
6	F	15	Female	45	315
7	G	16	Female	60	300
8	H	9	Female	30	330
9	I	13	Male	60	300
10	J	18	Male	20	340
11	K	14	Male	40	310
12	L	13	Female	45	315
13	M	7	Male	25	335
14	N	10	Female	40	320
15	O	16	Female	20	340
16	P	17	Male	35	325
17	Q	10	Male	20	340
18	R	11	Male	15	345
19	S	9	Female	55	305
20	T	17	Male	60	300
21	U	11	Male	40	320
22	V	13	Female	90	270
23	W	12	Female	70	300
24	X	7	Female	150	210
25	Y	7	Female	100	260
26	Z	10	Female	120	240
27	A1	11	Female	90	270
28	B1	8	Male	40	320
29	C1	18	Male	45	315
30	D1	16	Male	65	295
31	E1	15	Male	80	280
32	F1	12	Female	110	250
33	G1	11	Male	110	250
34	H1	13	Female	160	200

Source: Primary data

Table 2 Demographic profiles of the respondents (continued)

<i>S no.</i>	<i>Name in alphabets</i>	<i>Age</i>	<i>Gender</i>	<i>Physical activity vs. technology</i>	
				<i>Within 360 minutes performance</i>	
				<i>In minutes – physical activity</i>	<i>In minutes – technology</i>
35	I1	16	Male	25	335
36	J1	17	Female	180	180
37	K1	14	Female	140	220
38	L1	12	Female	110	250
39	M1	13	Female	25	335
40	N1	15	Female	100	260
41	O1	14	Male	95	265
42	P1	11	Female	110	250
43	Q1	17	Male	55	305
44	R1	16	Female	110	250
45	S1	12	Female	25	335
46	T1	13	Male	25	335
47	U1	8	Male	55	305
48	V1	9	Female	115	245
49	W1	10	Female	150	210
50	X1	11	Female	110	250
51	Y1	12	Female	25	335
52	Z1	13	Male	30	330
53	A2	15	Female	130	230
54	B2	18	Female	70	290
55	C2	12	Male	15	345
56	D2	17	Male	60	300
57	E2	17	Female	180	180
58	F2	11	Female	80	280
59	G2	12	Female	130	230
60	H2	10	Male	55	305
61	I2	14	Male	25	335
62	J2	12	Male	45	315
63	K2	12	Male	40	320

Source: Primary data

Hypothesis testing depicts the influence of technology-based activities on gender of the respondents. F test value is 0.00 that is less than 0.05, it indicate the variance across gender for the factor of technology-based activities is not homogeneous so, the value of equal variance is not assumed is considered. The mean score of female respondents is less than male respondents for technologies-based activities. The result indicates that for technologies-based activities of $t = 4.896$ with significance level .000 that is less than

0.05. So reject null hypothesis H01. This signifies that there is significant difference between performance of the male and female respondents. It reflects that male respondents are influenced by technologies-based activities as compare to female respondents.

Table 3 Influence of physical-based activities and gender

<i>Gender</i>	<i>N</i>	<i>Mean</i>	<i>Std. deviation</i>	<i>Std. error mean</i>
Male	29	45.34	25.033	4.649
Female	34	91.03	46.135	7.912

Source: Primary data

Table 3 demonstrates that the influence of physical-based activities on gender of the respondents. The majority of the female respondents have high mean value (91.03) than male respondents (45.34). It indicates that the female respondents are more influenced by the physical-based activities as compare to the male respondents. The value of standard deviation of the male respondents is 25.033 which is less than value of standard deviation of female respondents. It reflects that male respondents have more variation in their opinion and more deviated from central mean value.

4.3 Comparison between physical-based activities and gender

Another test was done to compare the physical-based activities and gender. Hypothesis testing was done to find out the significance of factors influencing.

Hypothesis:

H02 There is no significant difference between performance of male and female respondents while considering physical-based activities

H2 There is significant difference between performance of male and female respondents while considering physical-based activities

Hypothesis testing demonstrates the influence of physical-based activities on gender of the respondents. The result indicates that variance across gender for a physical-based activity is not homogeneous because F test value is 0.01 that is less than 0.05. The value of equal variance is not assumed is considered. The mean score of female respondents is more than male respondents for physical-based activities. The result indicates that for technologies-based activities of $t = -4.978$, with significance level .000 that is less than 0.05. So reject null hypothesis H02 that is there is no significant difference between the male and female on the bases of the physical base activities. This signifies that there is significant difference between performance of the male and female respondents while considering physical-based activities. It concluded that female respondents are influenced by physical-based activities as compare to male respondents.

5 Human stress

When technology is researched with the human factor there is a significant contributory point which lies in the same directions (Anderson et al., 2017):

- 1 difference in behaviour after a short period of technology use comparing with another activity)
- 2 correlation research (testing for an association between a use of technology and the extent of the behaviour)
- 3 longitudinal studies (testing whether the amount of technology use between two or more times can be used to predict changes in the behaviour).

Many researchers stated that the brains responsiveness alters the decision making and complex reasoning (in frontal regions, anterior cingulate and hippocampus) (Delazer et al., 2003). The main problem is researchers cannot able to track the activity they are performing. Less experienced users are spending more time in internet which makes too much stress to the brain (Judd and Kennedy, 2011). Hypothesised that few kids showed changes in neural activity associated with learning to use a search engine, although the basis for anticipating changes beyond this is not made clear (Wilson et al., 2002). Changes in neural activation in different regions can be expected when learning any task for the first time. For example, after adults learned to carry out complex multiplication, the brain activity produced by carrying out this task shifted from frontal to posterior regions (suggesting less working memory load and more automatic processing) (Gentile et al., 2011).

Stress term can be coined in positive and negative effect with the environment. For solving most of the problems logical thinking is required, but at the same time when a technology goes wrong the logic factor shifts to the person in blame of failure. Stress 'blame game' begins with the intention to escape from the situation. A good example is on January 2009, the US Airways Flight 1549 forced to land in Hudson River due to engine failure and only because of the pilots behaviour (presence of mind) the life of 155 passengers on board were saved. The technology was not blamed for the system failure; the error of pilot to submerge the flight was blamed but finally ruled out all by investigation. As per online reports the passengers still facing post traumatic stress symptoms due to brace for impact situation.

Billions of particles are present within our body with different thoughts and variety of mind, once a person recognises the good state of mind automatically he/she gains the self confidence of facing the negative consequences. Ensure that the mental state of mind has to remain calm while working in business environment using any type of technology.

Humans are bounded with stress with different environment but needs to make sure that it dissolves quickly same like a wave back into the water. The health condition of humans is mainly determined by their impact of stress level. The negative stress has serious impact in human's health. Employees working in the organisation has different stress- target, time factor, consequences of loss, product release, customer satisfaction, external environment policies, legal cases etc., hence it all depends on reaction condition of each individual to his/her situation.

As per some secondary reports most of the people has a grace in use of different technology and when a survey was conducted by the author, to find the most desired device for interaction and for personnel use was found to be smart phones.

Table 4 Device used to check personal e-mails

Device	Age group			
	17–24	25–45	46–66	66 and above
Smartphone	60%	78%	70%	55%
Laptop	19%	10%	9%	20%
Desktop	15%	7%	17%	24%
Tablet	6%	5%	4%	1%

Note: Sample size 120

Source: Primary data

The compact device acting for humans as third hand is a major revolution in the business environment. Too many brands with different technology used in the society but for producing a single smartphone the intact of nature (water) plays a vital role. Most of the working environment professionals around the globe are aware about the mental stress level of carrying the smartphone where ever they go, but at the same one of research conducted in US laboratory released a data in daily newspaper that most people are bound to skin related diseases like cancers and alteration of chromosome. It's a biggest threat to human lives.

Many diseases due to external environment stress causes mental pressure. While analysing with the age factors the technology tends to change the behaviour of younger minds which might cause a huge impact in their future life. When a technology keeps updating to the changing environment, the younger minds should be thought about its impact when used at a higher rate and to manage the stress level. The researcher finds that the restrictions imposed on use of technology can also cause stress hence it's better to limit the usage of technology for example while staying with the family members or with loved ones, the more the physical interaction the more the change in behaviour. Insomnia is one disease which is mainly caused by high stress factor mainly due to usage of technology more than the required limits. Researcher while interacting with the students and public found that most of them use mobile phones during late night in bed for reading news, watching movies, etc... resulting less sleeping hours, which is the initial symptom to any type of disease. As per researcher recommends strongly that more positive environment interaction is necessary like outdoor activities, learning in groups, with friends etc. minimises the negative impact.

Gender-based activities have more impact; males are frequent users of internet sites like electronic commerce than females (Jones et al., 2009). The females physiologically affected seeing the review comments in comparison with males (Bae and Lee, 2011). A positive review of feedback from friends and relatives boosts the purchasing power of female discovered by Garbarino and Strahilevitz (2004).

6 Behaviour vs. disinformation

Colin Powell (US Chief of Armed Forces) framed the rule of 40–70, when a person is having information between 40–70% has to take a quicker decision and lesser % of that is a gut shot. The employees working in organisation with any new/developed technology is

under gut shot basket, in that case the time factor, resource limits has to be focussed with single objective and not multitasking.

A famous quote “all that glitters is not gold” but the human finds difficult to crack down the disinformation floated either in business environment or in the society. Recently British Broadcasting Corporation (BBC) and many technology-based firms have joined hands to fight against disinformation. Crucial change in the behaviour of humans with technology is mainly because of disinformation. The society violence, degrading the business environment or the products is mainly disinformation reports framed by faceless groups. Majority of the celebrity/top businessman is targeted with conspiracies using social networking websites. Viewing false information and spreading in viral form is the current behaviour as it predicts to be real facts. It is worst threat to the country and to the human life's.

7 Conclusions

The author has discussed mostly on the negative impact (‘disturbance caused in one’s mind’) of technology with human behaviour, the use of technology has taken ownership in every field of business environment. Million years ahead, the expectation of war between technologies vs. nature without human life in the planet might happen as per the prediction of Stephen William Hawking (theoretical physicist).

Business environment composed of humans and nature but the stress level is too high due to the outcome of new technology on daily basis; the job security is one of most important priority for every employee to upgrade up to date based on technology. The total neuro-network connecting hub is the 1.5 kg (approx.) weighted brain which works as per our thoughts and actions in our daily activities, a strong hammer hitting the brain is same like stress accumulation leading to anthropoid mechanic syndrome (AMS).

During the past 20th century the humans performed the same task what we perform today but in a quicker duration also with higher negative impact both to the nature and to self. The technology is a boon and also a curse to the human mankind after 21st century.

The best solution for converting the negative impact is to limit the usage of technology in personal life as well as in business environment. As per authors suggestion choose specific times in a day, week and year to isolate yourself from the technology and create a time for self renewal of energy with the nature, human connections leads to deep thought and making important decisions in life. Each individual has to rediscover, to live a life physically and mentally fit at any type of situation. Nature is not expecting anything from the human behaviour or with technology but each individual has to rethink twice before discarding the e-waste into the environment.

“Think twice before you act.”

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