Chapter – IV

Experiences and views of the performing artists of South Indian Music

In order to understand how technology has helped for South Indian Music, the researcher has made scheduled interviews with fifteen performing artists. This chapter sums up the outcome of the interview. Through the interview the researcher found that all the performing artists have used the modern technology. They not only having the knowledge of music, almost all of them are using the technological development in their concerts and recordings. This is highly appreciable. This is a welcome trend which in turn helps them to develop the south Indian music to reach every corner of the world. There is a view that the modern technology is more advantageous to the artists, using musical instruments. Music software used for tala, sruti adjustments, mixing, multi track systems are the current trends which helps the instrument artists. Majority of the artists feels that the current trend and the technological development in South Indian Music are in micro phones, recording and performance through digital sound technology. They believe that this will help them to make the minute nuances to be heard by the last row fans. At the same time, some of them feel that the same technology may be disadvantageous as it forces the artist to be more perfect. Almost all the performing artists have highlighted the development of technology in recording and its techniques. The free uploading and downloading of music programmes and piracy are cited as the disadvantages of this technological development.

Today, artists need to be aware of technology and its uses, learning the music and performing are not enough. This technological knowledge will help them in their innovative ideas and creativity in their performances, otherwise, they become
outdated. Fortunately, all the interviewed artists are well aware of the technological development in music. From this, it is proven that the facts of the performing artists of contemporary age are well aware of the technological development in music and also its usage in their performances.

Fifteen performing artists were interviewed by the researcher with an interview schedule in order to elicit their views on current trends in South Indian Music, Technology in music education, Impact of globalization on the development of music, Impact of modern technology in the instruments, Recording and Sabha’s growth. The collected data were analysed question wise and compared with the views of other artists. When there is a question on current trend in South Indian Music, there were more similar and fewer different views expressed by the artists.

1. Sri.Mudikondan Ramesh¹ Veenai artist says, “Technology is playing a vital role to achieve its purpose. As the world is moving towards technology the music also takes its opportunity to avail the support of technology. As a result, it has produced perfection and caused innovative things in the music world. The twenty first century is witnessing these kind of changes in the field of music. It is a stage by stage development style. Only before forty years true voice pickup arrived from UK. But Sambasiva Iyer of karaikudi was good in the toughest nuances and gamakas even before the technology developed in our country, but still many of us are not aware of it. After using microphones and pickups, veenai artists are making the minute nuances, anusvarams, gamakas and aesthetic of music to reach all audiences with good sound effects. In earlier days, the tone of veenai which we heard was of wax which is a complicate one and it has to be adjusted more. But today fixation of the tone has become very easy with screws. These frets and strings that looks like a rail, are attached and made tight whenever the artist wants
the tone to be adjusted. The electric veenai, can be easily adjusted according to the artist’s fingering types. This type of veenai already has programs of various instruments like Santoor, keyboard etc. Veenai is a three dimensional instrument, so pulling gamakas is very easy to handle in this type of Veenai. In current trend, veenai’s resonance is not from the body, but it is from the strings. The flat kudam which is available in electric veenai is easily portable, so that it can carried anywhere easily. During abroad travels we can take it easily since there are no Embassy checking for these smart instruments. During recording, we do not use veenai kudam, instead our veenai gets attached with an amplifier. So string vibration picks up through the microphone and magnetic pickup jack in the amplifier is built into the veenai itself. In that way good sounds are projected out and we get the fine tone. That tone is bit different from the old one but the new effective tone we hear is very fine. People like this digitalized Veenai. So Veenai artists also use this technology and conduct more events. It also gets good appreciation from people. Even instruments have underwent many changes. Electric Veenai is also available in folding type. With that instrument music is good, usages like handling, pulling, playing are easy and we get attractive sound effects. So people’s response is good and it has increased the artist’s creativity and enthusiasm in the concerts. Technology improves the human creativity. According to me, technology is a boon for music and musicians since it gives a lot of scope for improvement and creativity. I find much positive changes in the way of education also. I could find the difference between the considerable change in learning music between his period, his son and his grandson. In gurukula system, we learn one krithi for one month (or) even more, we also do housekeeping work for guru and observe his music and activities. It takes too much of time. I believe
that compared to ancient days now the technology has developed a lot, for example a child in abroad is learning music through skype and he/she is getting mastered through online, this is a great development. Presently education is possible through online, skype, phone classes, concert collaborations, group practices, free downloading and uploading globally from our own place. I opine that during the period of karaikudi Sambasiva Iyer there was no developments in the field of technology. But today the technology has mingled with the world of music. I express that his music has spread worldwide. People listen to his music and then book him for concerts through internet and mobile. So he sees it as an indirect advertisement to him. His fans have increased. Because of technological developments in music concerts, learners, listeners, sponsors, sabhas growth, payments, worldwide travel have been increased. Earlier days artists had to wait for forty five to sixty years for exposure, platform, authority and to attain reputed fame and name in music field etc. Today’s musicians get the global platform through the media and technology. Even in a single concert, the artists set a strong platform through technology. So there is no possibility to get frustration in life. Through technology we can gain enthusiasm, creativity etc, work more with less expense”.

2. The same kind of positive view was expressed by Sri. Durga Prasath, Veenai and Gotuvadyam player, staffartist, AIR. He said, “Technology increases perfection. I compare the concerts of earlier days with those of the present day. I see a lot of improvements in the present day’s concerts technically viz software maintains sruthi, talam, and etc. Music software’s using click track to maintain our singing (or) playing speed properly. Today all musicians do the practice through software. So perfection and concentration level is high. Similarly I see the negative side
also, I caution that we have to do the concert very carefully because if we commit any mistakes that will be reflected on the stage. According to me the music software used for tala, sruti adjustments, mixing, multi track systems are changing things. I further believe that in live concerts, effective microphones are available today, so singers avoid throw singing. To protect the normal sounds these technologies can be used. It would easily reach even the last row rasikas. I think that the modern technology is more advantageous to the artists using musical instruments. For example, the digital veenai which is introduced for technological advancement in south Indian music, views the usages to develop education, concerts growth of our music were much positive. I express that the technology increases quality music education through Skype. A student of mine has enquired through WhatsApp about who sung the song ‘Tirupugazh’, so even for doubt clarification technology helps us. He learns music part time. I believe that today all musicians do the practice through software’s. Sounds are converted to .wav file. Sound waves are shown on the monitor and adjusted to the level we need (Sound pictures technology) because of technology improvements. Musicians work with perfection and high level concentration. Internet usages of uploading and downloading have been a great strength for Carnatic Music. Other country’s people are easily listening, watching our performances video through web. Without technology, Carnatic Music could not have reached the global scenario. People like the electric veenai with digital sound technology. Compared to regular veenai, digital veenai’s maintenance is easier. Radio stations have no tapes, all collections is full of hard disk, storage card. Orchid easy, backup easy, music software like ‘Protools’, ‘Sonic’, ‘Soundforge’ etc, without technology, we cannot present the best one on stage. AIR plays recorded music only, so we have to work
hard manually, using good sound system and other technological tools in concert hall, this makes our programmes more rich and gets fine appreciation from audience and critics”.

3. Sri.U.P. Raju³ Mandolin artist opined on the current trend of South Indian Music. He said, “Without using the amplifier and pickup technology in instrument, mandolin will not produce the quality sound, because it is not a hollow instrument like Veenai. It is a solid instrument. Pickup lineout attached to the amplifier and it can produce the natural sound of ‘Mandolin’. Sound processor is also a very important thing. Guitar and Mandolin are of the same family. Sound processor improves the sustaining value of the base and sharp of the instrument. Then with the amplification of instrument the sound quality is made more effective. In the past, we used one mike and the performance was not effective. We use technology to produce the music with more sweetness and to play it easily. Since the quality of sound is high, we have to give the effective music with sensitive nuances, aesthetic sense of fine arts reach all rasikas. Naturally first we should be ready to work hard to become a good musician, then we should adopt this type of technology, because sometimes our battery (or) sound processor might get failed, so at that time we have to conduct the concert with single mike and give good music to rasikas and stand by in our position. During those situations only our practice and talent would help us. Because some strings may be hard and some are light, both should be played well. Nowadays frets and spare parts quality have been more improved. Its availability, usages, prices and other things are easily known through media due to the impact of technology, after twenty five years, we have attained the current sophisticated musical life. With the impact of technology, our South Indian Music Education can reach global level and concerts
growth also increased. I opine that from these media and technology, we are learning a lot. For example, if we want to learn a krithi, we have to just browse the internet and get more krithis. Meaning of the songs and various styles of singing or playing are also available in online. I believe that it is not equal to live classes. People in other countries, states, district of people regularly meet through net. So I prefer taking classes through Skype for Singapore, Australia, US etc. In recent days various technology of CD, DVD, MP3, Pendrive, Instead of internet, Online, Offline, TV, Media, Web cast etc are being used widely so our music reaches around the globe through technological improvements. The concerts styles have also been changed like fusion, jugalbandis, western and Indian classic, jazz etc. We play fusion with keyboard, thavil, drums, mirdangam, vocal, etc. Nowadays people want these types of colourful music concerts. In this case, sound technology is more helpful because without sound technology we cannot balance and coordinate this multi instruments in concerts. Hence, microphone, amplifier, sound processor technologies are needed for all these types of concerts. We are able to produce good music with aesthetic sense and less strain with the helpful of technology. Now present recording trend is that the musicians need not meet a person. They can send the Music file through Online, Music directors and Sound engineers ensures to edit it, clear the noise, erase unwanted things and also change the Musical styles, gamakas can also be added or deleted in their own interests and produce the album. But during earlier days songs were recorded in live presence at a particular time and place but if any one of the team members had any doubts or if anyone from the team had made any mistakes, entire team of players had to play from the beginning. Compared to all these things nowadays recording is very clear and easy with the help of digital technology. I have released one DVD, 'How to
play Mandolin’, after viewing the DVD, more students approached me both lively and through Skype classes. Other school of music students also have joined with me and many concerts has also been booked and I got good fame and name throughout the world. Because of global appreciation, our enthusiasm, hard work, innovation and creativity have increased. After technological advancements in sabled, acoustics, sponsors, internet uploading, recording, downloading, NRI arrival, more concerts etc, financial growth of the musicians and that of sabled’s has been increased. LCD projections, web cast has also spread our music worldwide. So definitely, it will help in the growth of music and musicians”.

4. When the researcher interviewed Sri.SriramParasuram4 Violinist, Music Director, on the impact of technology usages in the current trend of South Indian Music, he talks about recording and performances. He says, “Since 1910 the cylinder recording got introduced from there it went on analog recording. Lp content extended recording then 45 rpm in the establishment of radio stations, in the advent of Doordarshan in 1960, 70’s. Recording studio’s advanced technologies in terms of microphones, signal processing, multi-track recording. Manipulations signal produces recordings, then of course from 1990’s computed manifestation started in a big way, music is always being two ways, one is recipient and the recipient to the advance of technology, this has also become a slave to technology. Compared to the olden day analog the modern day multi track recordings are highly developed. I have noticed that today even if we do mistakes in swathi while singing, everything will get adjusted through digital technology. Through multi track, we just need to cut, paste and do the editing works. Musicians in earlier days developed our sadhana but today youngster’s has developed the technology of voice reverb, amplifier, equalizer, mixer, multi-track, microphone etc. Today
people do not sing in proper sruthi. Just they are using auto take software, auto correction, pitch correction in whole krithi. These techniques are followed in live concerts also and not only in recording theatres. It means that software is available in the lowest price. He says that the Skype classes in music education are used by all types of people like NRI, cities, remote areas. On the positive side, it can be learnt from faraway. But Skype classes change the voice tempering, singing audios are received very slowly so live class feeling cannot be expected. I believe that technology does not wait for anybody and it is on objective process. It is most needed for South Indian Music but it depends on the way of using it in our better life. I see that the impact of technology is spreading the music worldwide. Our South Indian Music is open throated singing, but now it has passed away (not for all) because many of the younger artists had cultured themselves by adopting themselves to technology so that they can benefit most from that. So open throated singing is slowly taken back because people think it may not be in necessity. Why to spend more time, energy etc? is their question. So teachers, musicians and students are all using the today’s technology. Due to this they are profited. According to me the music today has reached worldwide because of technology like internet, TV, live streaming etc, it has benefited a lot of people. Digital domain runs on popular music, film music and now even carnatic music also does the same work. A singer may possess music knowledge and talent but how many audiences are getting the knowledge about carnatic music? Due to today’s technology Carnatic music’s main focus has become popular and as a result the music content has also changed. For example, if traditional Devagandhari Raga is sung in a concert, only few people knew it. But, today the reach is more. Our South Indian Music does not only mean the mass and popularity. Our South Indian
Music feel is based on knowledge (vidya) systems, the placement of music is considered as divine quality, popular music exist to entertain people, to give them sense of lightness which is based on people’s mortality and it will change for sure. Because that music is meant only for entertainment, it doesn’t have a Science, Rules, Guru, but classical music is entirely different from popular music, it has a set of tradition, Rules, sastra’s learning process, process of SADhana, it also has the meaning for in deeper cultural ways. So technology is most needed for South Indian Music but it depends on the way of using it with awareness either by the Teacher, Recorder or the Artist. For instance if you have laptop, mixer, fillers, sound box, amplification, microphone, sound engineer etc., your lower music level can be shown very big mass to the audience. Only after technological manipulation in our music, recording and learning has reached heights. Online Performances has reached global level. Sabha secretaries, sponsors, media’s need larger cross section of people attentions, speed songs, imitation, etc but classical music cannot be understood suddenly by public, but still public has developed interest in our music today. So level by level it has started to improve. It will also definitely bring name, fame in the economic growth of the artists”.

5. Sri. Nagaï Srimā⁵ violinist says “The current trend and the technological development in South Indian Music has brought in a lot of changes. I also compare the use of microphones before the advent of technology during 1960s with the present day. All India Radio was recording the Programme through this single centre mike and other accompaniments were seated around the circle. But now the current trend is very useful for recordings and live concerts, it helps our music to have minute nuances, to reach the rasikas fine. In past the mike did not show the musical nuances. Recordings were also not available during those days.
Nowadays Microphone SM57, SM58 sheer mike, dynamic mikes and condenser mike, etc are used. I also see the advantages of condenser mikes, which observe the sound from all sides. Musicians can turn their head while singing the song, sounds will not vary in such circumstances. Both in open and closed auditoriums without using the Microphone we cannot do the concerts. This is a good and basic advancement of technological things in carnatic music.

The role of equalizer in concerts also has its own significance. It helps the sharp, base, midrange natural sounds to reach the rasikas. Today the artist must know the base, sharp note, mike and sound engineering technology. So the technological effect in concerts has the chances to improve the artist’s creativity and enthusiasm. In my point of view, people’s mindset, social needs, musician changing the concert styles, all these factors decide the trend of Carnatic Music. People are using more technologies. Similarly music field has also started adopting the technologies. Otherwise there would be no connection with music and technology. I am also positive about the growth of technology and its impact on music. The modern technology usages are helpful for our music education and it is used to reach global appreciation and concerts growth today. My view on the technology in music education is very positive. I notice that nowadays people are using internet, online, etc. So many musicians are taking classes through Skype. Foreign and Indian people prefer distance classes through Skype. All disciplines of South Indian Music like Vocal, Violin, Miradangam, Flute, Mandolin, Guitar, Dance, Saxophone etc are taken as online classes. Before the Skype technology we took carnatic classes over the telephone for NRI and Indian preferably in vocal class. But today after the introduction of Skype technology in Internet all types of carnatic classes are taken both audio and video. According to me our music has reached the world through the
usage of internet and Skype which has converted the conventional carnatic into a modern carnatic and also it helps carnatic music to get its popularity throughout the world. Learning, listening and performance of carnatic music is easily available in Skype and other video conferencing, like yahoo video chat, Google video chat, Youtube videos and other media’s available in Internet. It has increased lot of enormous interest to learn Carnatic music among young soul. For Global mean, carnatic music concerts, classes, conduct festivals, competitions everything are done throughout the world. This stage of our South Indian Music is attained only because of Internet Media Technology. Hearing of more live concerts and live classes are the reasons for the development of music. Today, these two things are easily available in Internet Technology. Even our very old records are available in Internet. Old singer’s song collections are forgotten, but Youtube and Internet shows the good quality audio and video records. The Internet technology and Youtube media has lot of well known and unknown composer’s songs.

Buying Tyagaraja’s songs, musical books, notations of songs and musical articles was a very tough task for the foreigners and even Indians. Earlier we do not know whom to ask and where to go for purchase, everything was difficult. But today just we can surf the internet because South Indian Music websites offers lot of books, materials, songs etc. So doubt clarification, mailing, printout, scanning and sending, audio and video song downloading and pronunciation of the songs etc, could be learnt through internet. For example, www.tyagarajavaibavam.blogspot.com website shows the detail about Tyagaraja kritis with meaning, song, pronunciation with multi language references like Tamil, Telugu, Malayalam, Kannada, Hindi, and English. In past there was no chance to think about these types of developments. Today, wherever we live in the world, we will get the details about South Indian Music through
Internet. Minimum 100’s of websites are available at Internet technology. Same way we can get the details about other composers like Mutuswamy Dikshitar, Syamasastri, Papanasam sivan, Gopalakrishna Bharathi and Ambujam Krishna. Current Internet, Media and Technology aids to develop South Indian Music which is equal to IT field today. It has a vast development. I believe that earlier sound technology and instrumental technology was not available. Today most of the foreign countries and people appreciate and accept our music’s fine values, so people’s appreciation is increasing the chances of high quality performance to rasikas. I opine that webcast and free uploading has reached globally through internet and millions of people see Youtube and appreciate it. Then they approach him for classes and concerts. One particular area of concert reaching globally is helpful for the development of South Indian Music and popularity to musicians and it shows the advancement of technology. But it is a great disadvantage for every artist in commercial aspect”.

6. When the researcher interviewed Dr.V.L.V.Sudarshan violinist\textsuperscript{6}, on the impact of modern technology in the current trend of South Indian Music and Music Education. He says “The evolution of carnatic music through the years, before and after independence has witnessed a lot of change in academics and as well as in the performance arena. In music, the technology is playing a vital role to achieve its purpose. I have also noticed a considerable change in learning music between past and present. In post independence massive changes was underwent in carnatic vocal and instrumental scenario where in the art was democratized so that the patronage shifted from kings and queens to government and non-governmental institutions which is a landmark transformation that was set during the earlier 20\textsuperscript{th} century. Due to the advent of technology, today’s South Indian Music has attained huge development and the sophisticated system of performing arts which does not
depend on spiritual values but it depends on a great broaden of creativity and performance. In past, the music education was restricted to gunukulam. Later it emerged as a title course in music institutions and universities. They have music departments. Recently our state government started ‘Kavinkalai University’ for south Indian music and dance. As far as I’m concerned about the impact of technology the musical instruments have seen changes. During the period of my father V.L.Vedagiri who is a renowned conventional violin artist, there was no development in the field of technology. But today the technology has mingled with the field of music. Collections of AIR recordings were very limited in earlier days. But today, we have lot of musical CD’s, DVD’s, online radio facility so we can obtain anything from internet. I admit that not only the violin is converted but many instruments are converted into modern digital instruments. Same thing happened to various new types fine tonal quality of violin and spares of quality strings, bridges, bow and so on. New performance and recording devices like advance pickup mike, micro phone, amplifier, equalizers etc are used by most of the artist to know the measurement of Sruthi pitch level and tala speed level. Even software and musical APPS are also referred. ‘Tala’ or timing is now calculated through a ‘Tala scale’ or the laptop and rather than using the traditional harmonica or Tambura, a Sruthi box is being used to measure the pitch way of I-tambura APP. I like to discuss about the usages of computer and internet in music. I opine that the computer can produce many varieties of sounds without any limitation. Arrival of digital technology in the musical instrument can produce so many varieties of sound including human voice. Technology is merely an objective product, without man power it cannot compose any music on its own. Likewise, present musical life is through digital sound technology and information technology. In the advent of technology the traditional
tone of an instrument is already fixed in a computer and it can be used for fine music recording with the support of sound recording software, mixer and microphones. It can be done in a single studio room. A computer can be programmed to create so many varieties of musical notation which produces music of all the compositions for future reference. Computer’s music is very much useful in the field of south Indian music and popular music. My thoughts are that the technology is an objective product, anyway music education of our tradition has changed and musical learning takes place in online through Skype, Webex and Google Talk. Because of modern trends and technological innovations mobile phones and broadband connections have facilitated consumption of online digital music. Music has undergone transformation through the process of digitization. After implementation of technology in the universities and other institutions through multimedia lab or internet we can find out the various composers of songs in same raga and song lyrics availed in different languages. Various singer’s audio collections are available in songs and ragas which clear the students doubts to equip his or her knowledge. Today there are more chances to hear traditional rare songs with fine digital technology of audio and video collections. Carnatic music, through its wider reach has now fused with western music and a lot of concerts named as ‘fusion’ or ‘jugalbandhis’ are increasing. Advent of technology, arrival of youngsters in South Indian Music is likely to be increased because millions of people see our music through internet, youtube and other search engine. Finally the impact on technology in our South Indian Music and Music education definitely to reach worldwide”.

7. A very senior most artist Sri.P.S.Narayanaswamy Vocalist expressed his views from the past days. He narrated how the carnatic music was restricted to only
temples and marriage functions. He said, “There were no live concerts. I am of the opinion that today music has come to us through various technologies. According to me, today we can hear live concerts. I caution that even though the music is readily available, the knowledge on music is insufficient. I would like to talk about the use of you tube, websites, face book and modern mobile storage equipments like Pendrive, CD, etc. Only due to technological improvement we know the three periods of tradition, medieval and modern at one place. My opinion is that for learners, these technologies are highly useful. Many concerts which we hear in live around the world is so difficult to register in mind. But due to today’s advancement of technologies, concerts are lively heard and better education on music is available. Our people are spread wide by livelihood, same way our culture and South Indian Music has also spread worldwide. The participant, musicians, music programs, media, channels, sabhas everything are developed in our systems. There are no words to express about the development of today’s technology. Because who ever sings in the concerts becomes popular overnight and their programme will be in youtube, recordings, CD’s etc with clear picturization and sound clarity. These technologies are very useful for learners, beginners, rasikas, layman and all type of people around the world. Technology is very useful to South Indian Music without no doubt and no defects”.

8. A senior artist Sri.O.S.Thiyagarajan8 Vocalist traces the historical background of the technological development with All India Radio. He says, “The technological development as for as music is concerned has started at the time when All India Radio was inaugurated. In past days spool recordings were used. Now it is available on AIR. Then audio cassette systems were introduced. The spool recording was compact for that period. Now this current world got enormous development in
computer systems. Now Information technology and Multimedia is more helpful to South Indian Music and Musicians. In the period of 90’s if we consider the Bombay concert, the ticket purchase of Flight, Train, Bus anyone and Area map, Hotels, Best food accommodation everything will be surfed through Internet. Same way if I have a doubt about Krithi, for example, if I type ‘Sree Ramapadama from Tyagaraja’ in search to Google, Yahoo, etc, the internet would immediately deliver that krithi’s audio, video, notation, pronunciation, lyrics, meaning etc. The songs of all the singers of all the countries are available in Internet. Without computer, world will not run today. Especially in South Indian Music technological improvement and usage is very high. Very interestingly as a senior artist, I want to also talk about the kind and levels of recordings before and after the advent of technology. Almost all the performing artists have highlighted the development of technology in recording and its techniques. I also stress the importance of computer in the field of music. As a senior artist, I want to narrate how much I struggled without the help of technologies. I opine that the present day artists need not undergo such sufferings due to the development of technology. All the artists of Carnatic music are using mobile tambura, i-tambura APPs (or) tambura droid APPs. Manual tamburas are of affordable cost nowadays. Except a few sabhas all are insisting to use manual tambura to keep up the tradition. This thought is good thing without any doubt, but the maintenance is hard and the sound varies from usage of persons according to handling the fingering types. I also like to express the use of internet in the development of music. I also like to talk about the levels of education and concerts before and after the growth of technologies. I was teaching South Indian Music to the students of Canada, Australia, Dubai, America, Singapore etc over by phone and Skype classes through Internet. Many more students from abroad are learning
Carnatic Music from many musicians through networking. I watch the student’s style of singing, pronunciation, mannerism, talas, and ragas, etc through video conferencing classes based on Internet. Because those classes will be available in internet, both in audio and video forms. So we can clarify and clear all types of defect in music with the use of this mode. These are nice experiences for both side like live classes (Technology based education provide originality of music). My students have all given very good performance in concerts and participation in International competitions in every music festival at Chennai and foreign countries. In my point of view, technological improvements on south indian music has no disadvantage. Everything is positive and it has no negative part. Because of internet the south Indian music has attained the ability to cover all area of people. They hear our music through youtube, websites, and other audio facilities. Now artists are performing well in Europe, America, Switzerland, Paris, Dubai, Canada all over the world”.

9. Sri.Sikkal Gurucharan\(^9\) Vocalist also shared his views on modern technology usages in South Indian Music field. He said “I am interested in music and technology as well. Music along with today’s technology is doing wonders. Current trend of South Indian Music is that musicians are well equipped with the technology. I believe that they do self research and prepare for their concerts with the help of technology (or) they record their own concerts for feedback or self analysis. All these are based on today’s technological advancements. Though South Indian Music has seen developments in 2000, it also has some drawbacks. We are just entering the web automatically and it shows all technological improvements like Tambura APP, It is more effective than traditional tambura. Previously I used to carry electronic sruhti box & tambura. It is very difficult to enter abroad because
of the more checking process, but current tamburaApp in my mobile having small
speakers used via Blue tooth is really a boon. There is nothing to worry about
except of carrying one chargeable battery so that I can play it 24hrs continuously.
Sound is also very pleasing. Nowadays I am maintaining the songs notation in word
copy (or) PDF file photo copy. In some concert, we attempt to sing new songs
where we can open the PDF file and use the ‘tamburaApp’, ‘sunadam’ and
‘suswaram’ and it will be good to hear. So I do not keep books or scripts nowadays
instead of these, I prefer PDF, notepad or word document in Laptop or Tab. My
thought about using laptop on stage in concert is that it is used for referring scripts
(or) song lyrics but I generally do not prefer using it on stage as the feel of music
would be low and also it is not fair to concentrate on laptop instead of divine music.
I will just use the Tab for reference. Sometimes one rasika might ask for a rare
slokam or song, in that situations I use my tab to connect to web for reference. This
is also technology hype. I particularly aired the positive approach of artist’s use
laptop on stage, for addressing we are all having own websites and have no visiting
cards today. I think that the artists want to listen, learn and record the concerts
through the technology in music field. For example, I frequently use E.mail,
Facebook, Twitter, WhatsApp, Viber etc. I have an exclusive website in my name
www.sikkalGurucharan.com. I also want to highlight that the mobile phones has
brought music so near to the audience and it is so helpful to the artist. Today, we
have no Gurukula systems, people are taking Skype, video online classes both
Indian and NRI’s but still maintaining the Gurukula teaching on holidays. Same
way today shisyas are helping in technological ways to guru by sending mails,
attending phone calls, typing songs and other things in notepad (or) word
document, creating mail account, helping in traveling by car, medium, shopping
etc. Skype classes are not equal to live classes because of the feeling of music and behavior etc, so that students take live classes on leave days. In some occasions some basic class recordings are more useful to students because after guru’s performance, they could rewind and practice well. Without basic, we cannot explain or discuss and teach minute advances through Skype. Many vidwan’s take Skype classes. For instance, my friend, one of the musicians altered his room with high quality speakers, monitors, lighting, camera, internet to conduct the quality Skype education. Day & night he takes classes in that room. As the environment is similar to live class, all over the world more people are used this technology, so music, musicians, learners everybody has been developed through technology (not only for music and percussion, degree also). There is also more responsibility from a guru’s side in handling classes. I opine that the development of our music has to reach globally but without doubt, today South Indian Music has reached worldwide. Thanks to technology because of the net, TV, media etc it has reached foreign countries. Without technology we cannot do music concerts. Also musicians must know the sound engineering techniques of various things. When our music does not reach people effectively, automatically our concert value becomes low, so musicians must know about Microphones, Base, Sharp, Ecosystems, Sound values, Auditorium, Acoustical things etc, for every concert we have to check the Audio test, Monitor test, Sound test, and then we have to do the performances. Only westerners operate that sound systems. We have audiences of both Indian and Foreigners. I like to discuss on the society needs of media and technology. Because these are the things done for social effect. I believe that social things have moved to the global level. People have moved abroad, shaped organizations, they invited us, then we performed, traveled, took classes etc. I also like to talk about these
technological development via media like TV, radio, Doordarshan, Jaya TV, Vijay TV. I opine that private channels and FM radios broadcast the carnatic programmes, conduct competitions, festivals, etc. They are also telecast concerts, interviews, music data’s on December music season. I believe that technology and media has developed the people’s awareness of South Indian Music. As far as I am concerned nowadays all musicians have Cellphones, Net cards, Facebook, Whatsapp, Viber etc. so that we are getting connected easily to fix the programs through Message (or) Calls and even free calls are also available. To fix the appointments for concerts, while on travel, play or other works I really use the technology easily and quickly. We can also store our time schedule in Cell Phone Calendar App. In this fast world, time is more important, everybody is busy with their works, but we all could be united by technology. Nowadays Rasikas also give their immediate Feedbacks about concerts, both appreciations and suggestions through mail (or) message on Facebook, Twitter, Whatsapp, Viber etc. These messages reach him before he enters in his house after a concert. These fast technologies help to easily connect the musicians with the public. On the contrary, unwanted things are also available because that communication circle is very short. In the today’s fast world, technology is definitely a needed one. It is more helpful for music, musicians and social network. So without technology we can’t do anything. I opine that the technology is more effective for south Indian music. This technological world is very close to everyone. Similarly, music world has also become very small, not just for customer and popularity. But it has become within our reach today. In Earlier days for live concerts nearby 100 rasikas would be there. But today, rasikas are huge. Live as well as recorded programmes are uploaded easily in the internet throughout the world so it easily reaches thousands of people.
Technology gives popularity to music and musicians but from business point of view it will be affected. Rasikas upload for their entertainment, curiosity, hobby, etc in Social Networking Sites. So we started one Website called ‘Sraviyam.com’ where we upload our concerts and it’s a website with paid feature. My musical team Sanjeev for Violin, Padri Sathish kumar for Mirndhangam, we record our every live concert with high quality sound recording, using new technology and upload to ‘Sraivyam. Com’. If you want to download, just pay and download and collect it with quality sound systems. This pays for our hard work and our music, we have no copy right but we share it. Before starting concerts, we have to tell Sabha people and public not to record through cell phone (or) recorder and not to upload in net. Because we bring the devices and sound engineers, we record this live concerts with high quality recording and sound effects so that in future people could view it through internet via ‘Sraviyam.com’ and also pay and download (or) we also send CD copies to those who are interested. This paid arrangements are made because after concert we spend maximum four hours for good editing (technology). Music software and recording technology is very useful for, editing, mixings, noise clearance and it improves high quality music, multiple instruments correcting through multi track in recordings and fusions concerts”.

10. Sri.Diwakar subramanyan\textsuperscript{10} Music Director, singer, instrumental player also expressed a very positive view when asked about the technological advances on the current trend of South Indian Music, instruments and recordings. He said “Camatic music has three parts, sruthi, layam, and bhavam. In western music the fourth part is harmonic. In those days composers tuned music for bhakthi, we are following that same krithis. Why should not we create the new composing styles in South Indian music? We compose and create the new music using south Indian Ragas
based on popular song’s music like film and jingles. Yes, at present we have more advantages in digital sound technology. I am sure these technologies were not available in the past days. Basic tune settings in keyboard is based on one (or) multiple ragas, with Layam parts, Tala meter and Beating softwares are also available. We can use this software and fix the Emotional and Attractive beats then alter the Tunes (or) Effect changes. Then we can decide on the other instrument’s what we need and it is completely based on the composer’s idea. This is how good music is produced. Then according to instruments, microphone, amplifier are connected to computer, we start to play the music. In this kind of recording system, whatever we need is easy to change, we could contact music players online. Both receiving and uploading the music through online is easy and later we have started to arrange it through Software. Like Multi track recording, Editing, Equalizer setting, punch in and punch out settings with digital sound woofer technology. So music is stored in computer through amplification then it will be converted to binary and then transferred easily as per technical terms. Today more Mobile applications are available in market. Mobile technology having Apps, Moorchanas, Significant number of chords, all these tell about composers, history etc. These are all the easily available information. Just a click of the button will provide us with all the details in South Indian Music PDF, melakarta chart, ragas, talas, etc are available. One more thing is Toners, it tells about the singer’s singing and calculates whether its right (or) not (both musician and composer). Then comes Tambura apps, I have the i-Tambura, whatever pitch we want we could just select it in a single touch. So Mobile Technology apps also have contributed to the South Indian Music education, training, composing etc. Current days we do not use rows in Mirdangam. Other things are also available, these are the technological
developments. My friend plays two violins at the same time plugged into the
computer. Today every musical instrument is being plugged into the computer. It is
the interface of music, currently every instrument is available in digital technology.
Some say that the sound effects are not real but we need not bother about it and
neither do people. We like these fine technological developments. We have more
advantages in digital sound technology. These technologies were not available in
the past. I appreciate the use of software for different kinds of recordings. I have
noticed contacting of music players online, receiving and uploading the music
through online etc. Nowadays technology plays an important role in music
education and classes are taken through Skype. Lots of musical data are available
on the internet, software, both practical and theory websites etc are also available.
So we can search as well as research. According to me the research methodology
has more ideas which are gathered through internet from many universities and
music institutions globally because more journals, articles, experts are available and
we could collect it easily through the web. I opine that I always use Youtube, so
that we do not need teacher nowadays. I am not dependent with the one guru and go
sit in classes, if I need about 35 tala, I will get the multiple details through Internet.
On the other hand digital technology in performance and recordings has gained its
own significance. They are mainly used to avoid lot of external noise and digital
sound produces the clarity and effective sounds reach to last one. Then digital
technology is cheaper compared to analog. So these are all in business aspects that
the Digital Technology is very effective. Another thing is that, even if we play
wrong in recordings, it can be easily corrected using digital technology. It is not
possible in analog technology. Analog is destructive whereas digital is non
destructive. If we need previous one we could just press undo button and retrieve it.
Digital music technology is less expensive, easily serviceable and it seems to give up a better movement, widely available, easier to manipulate. DAW – Digital Audio Workstations, sound from mike wires are converted to electrical pulses, then the process audio transaction represents electrical signals that are converted to 1010 binary forms to USB, computer uses the 1010 binary and manipulate the music, software coordinate and handle the music, such is manipulated in the DAW S/W Logic Error, Digital performer, etc. We should work hard to produce good music, so we are working hard for good performances but the primary thing is that we must know Camatic music, then other things comes easily. Same way thanks to Sound Engineering Technology. Yes, at present we have more advantages in digital sound technology. These technologies were not available in the past days. So today our music has attained global market’.

11. Smt.Mala Chandrasekar Flautist, The Member, Ministry of Culture, Govt of India, her views on the modern technology usages in current trend of our music revolves around internet. She says “In the field of South Indian Music has seen more developments through modern technologies like internet, television and media. I say that the other side of the technology has been enlightened. But there are also disadvantages like webcast and free up loadings. We do work hard and practice more for live performances. But people easily shoot, record through mobile and other gadgets and then upload it free on net. This in turn, I believe there is only poor attendance in live concerts. According to me, this will demoralize the artists and the modern technology has brought both advantages as well as disadvantages to South Indian Music. I say that today I used to send a scanned copy of script (or) songs and a PDF file via internet. In the same way practical classes will be recorded and sent (or) conduct live classes using Skype via net. It is a very big advantage to
both the guru and the student. Online classes give the perfection from 60 to 80% balance 20% they have to learn from live classes on some occasions. I opine that our music has reached the global level. When it comes to my own experience. My student who lives in New jersey has given promising results from global level music competitions, then her father recorded the competition and uploaded it on Youtube, in the name ‘Music For Change’. (US) An America based global organization saw it through the YouTube then approached and asked me about another shoot by my students, so now I am ready to offer music classes through online. I believe that the growth of concerts are through technology because if one message is sent through Facebook, it will reach minimum of 1000 members. So, through network, audience may come to concerts. In concerts, it is more helpful. Because as a musician I feel my flute is playing through effective sound technology with good count of audiences. According to me the South Indian Music has developed and reached the global level through various media, concerts, technology, competition etc. Many more organizations, sabhas have appeared today, the company sponsors are also high, musician’s financial status is also high through concerts and online classes and media shows”.

12. Sri.Dr. Karthik Ghatam Artist he appreciated the researcher for choosing this topic, He said, “This type of research is needed for current society. During the period of ‘Mike’ usage in carnatic music, current technology trends evaluated in our field. Then came the electronic sruthi box, spool recording cassette, LP record, AIR, TV etc. For example M.S. Subbulakshmi had sung all over the world and her music had also spread out through AIR and TV. First Carnatic Musical Service Organization is Doordharshan and All India radio. When I was studying we have heard that old version of rare artist’s personal and rare ragas, only from AIR and
Doordarshan (GNB, Ramnad Krishnan, Madurai Mani Iyer, Palakad Mani Iyer mirdangam etc) other private channels will not Relay and Broadcast such things. AIR, DD has done real service to South Indian Music and it will be remembered forever. We have discussed on technological devices and its contribution to South Indian Music. Nowadays we use IPod, Internet, Youtube, anywhere and anytime. We just touch and enter GNB, lot of collections are available in Net so GNB automatically sing for us. In Internet both good and bad things are available, we have to choose good things. When we want to know about musicians like Mamundiya Pillai, Palani Subramania Pillai, GNB etc and about their songs, we learn their history from Internet. Many people are booking concerts through Facebook, they check for my free dates and availability with just a message. I also respond to them with the help of smart phones. That’s the reason we need smart phones today. Let me share a incident, actually my concert was on the day after tomorrow. I was free for two days in between. Someone asked me through Facebook for a concert booking on the next day, payment was also made through fund transfer. Immediately I went to Yatra.com, typed and collected the ticket to Coimbatore and completed the concert well as per schedule. Earlier days we use trunk calls in some case (or) telegram, in those methods passing a message takes time and at times concert would have been finished even before the message reached. With technology everything will be quick and easily handled and it saves time. You are also recording this interview for a research, this is also a technology development. I opine that in recent days South Indian Music has definitely developed throughout the world. Different types of concerts, recordings, audience have developed. Carnatic music has reached all the areas because of technology. I believe that without technology we cannot imagine all these current achievements.
Computer and Internet are more useful to camatic music, for Education, Research, Listening, Concerts, Websites, Software, Concert Arrangements, Travelling, Online booking, Fund transfer, Meet and Practice, Upload and downloading the file etc. In earlier time we had just one mike for all, later each artist had to play with individual mikes with loudspeakers but currently we use microphone, pickup, amplifier, equalizer and use digital sound technology, so the output is very high. Quality sound is the outcome in concerts. Both rasikas and artist have more enthusiasm, energy and interest. Concert halls, auditoriums are more decorative with LCD projection and good acoustical effects. Recordings and global concerts has a very efficient growth currently, like Smartphone, Ipod etc. I love the technology because through this I have played for Ilayaraja, A.R. Rahman, Harris Jayaraj, Vijay Antony, upto G.V. Prakash , then played with Foreigners, Jazz Musicians, African, Americans, Norwegians, Dutch people, New York, Loss Angles, Washington, Cambodia, Venezuela etc. Skype classes and Recordings in very big file are uploaded through Youtube, Google drive etc, then they are downloaded from other countries by other part of the world. People say that they have heard my playing from those files uploaded. In another circumstances first they would send music details to me, then I would play and upload the file to particular directors, without my physical presence my contribution is done and my payment will be paid through Western Union Fund Transfer. These are also technological developments. Without recording studio I have only one PC with Skype and other applications, I play Ghatam through Skype to one UK based music director. When I play here through Skype, that Audio .wave file from on Base, ProTools, LogicPro Software are shown with effective quality. It will be more effective, I did a song for A.R.Rahman, I used this type of digital technological recording. Once Rahman was in UK and I
was in Chennai, through Net he asked me to play and upload to him so whatever he needs he will use it and other things will be cut and stored for future use. Then I played in a Movie called ‘7am Arivu’ song ‘Yamama Yama Kadal Ponnamma’ but I didn’t see S.P. Balasubramanyan, Maymadam, Sangamam etc. Similarly not only for movies I have also released lot of albums, like ‘Takadhimitakajunu’, ‘Takadheerana Jam’, threw HeartBit s/w. These recordings of Mirdangam, Ghatam, Ganchira, Tabla everything was recorded and played separately and they were not recorded in studio. Click track software my pet name is ‘BramhaLayam’. Sankeernam, Thisram, whatever you need can be played well with current technology, editing has also more improvements, on the playing moment in online itself we can edit the music and rhythm. For example, in place of ‘ThakadhimiJunu’ director’s view slightly change and he asked me to put ‘junu’ in the place ‘dhimi’ it is possible to cut, paste and edit through the internet. Recent days sruthi software availed the name as ‘Melodine’. We sung ‘Gananathane’ in which a part took false sruthi, then we adjusted the way of ‘Melodine’ software to match that exact one. For example, if ‘sangathis’ are missing at a particular place, then we put our needed one. If popular singers did not sing in a satisfactory manner then we can adjust it through Melodine, MIDI-Music Instrument, digital interface. Nowadays more samples are available. If one keyboard sample is fixed as a Mandolin, then our tonal will be changed to Mandolin. They produce clarity, through Midi sound chord. When we assume instrument weight, we can put the Ghatam patch so Ghatam sample assigns with pad then we could play it well. These cases are done more at fusion concerts. Thavil playing on keyboard, nadaswaram playing on keyboard, thavil playing on laptop etc. Nowadays musical instruments are fixed with contact mike. Even Ghatam special mike is AKG. It is a condenser mike, it is a boom that
instrument sound with nature accompanied with trial. Definitely it will be used to boost the natural sound, this mike will produce special gain. This mike works on Fantum Power Mixer. So, current musicians must know the sound engineering is not only the music. In recording and performing we pan the mixer right and left, right is mirdagam and left is violin. We fix both at one place. So the output is effective and recording is done. Through this sound engineering and another software like Auto Tune, we put the svarams in that software, it automatically tunes it. Condenser microphones, Normal microphones, SM58 mike, Beta mike etc are available today. I use SM58 Beta mike, it is nice and throw is good for Ghatam. Microphones produce attractive sound effect to Mirdangam, Thavil, Ganjira, Flute, Mandolin, Veenai etc. Mike frequency level is also more important. Musicians must know about sound engineering techniques. Every successful kutcheris also depends on technology. Independent acoustical i- Tambura Android App is available. 72 Melakarta App is available where we use Swaram in that App’s singing the route of raga. Instrument fibre glass box packing coverage is also a technology. Synthetic Ganjira and digital veenai is also available. These are all the newly arrived instruments, that technology has updated in this field of Research and development. I believe that the mobile technology apps also have contributed to the South Indian Music Education, listening, composing etc. We use Skype classes, phone classes, doubt clarification through phone message, Facebook, Twitter, etc. Current Apps like Whatapp, Viber are also more useful for both audio and video file. Jaya TV, Vijay TV, Doordarshan, Sun TV, Carnatic concerts, Competitions, webcast etc are the results of technology. After the competition and performance, feedbacks and messages are passed throughout the world via Facebook, WhatsApp, Viber etc. They all teach or suggest to rectify the participant’s mistakes. The usage
of modern technology in our music is to reach global attention and concerts growth. I admit that in recent days, South Indian Music has definitely developed throughout the world”.

13. The researcher also interviewed Sri.Madipakkam Murali\textsuperscript{13} Ghatam Artist and asked about the modern technology usages in current trend of South Indian Music. He talked about the use of technology in fixing programmes and recollected how in earlier days programmes fixed through written communications from faraway places. He said “The lack of technology causes undue delay. And how it has been changed due to the development of technology. The use of internet, face book, Messages in flight tickets, train tickets, hotels, payments, entertainment and etc are very useful to the mankind. I was conducting carnatic music festival in US (Cleveland). But my feeling is only during last five years it has became famous worldwide because of Jaya TV telecast and internet uploading of the festival to many more countries. I like to stress about the role of electronic media in the present day world in the developing and spreading South Indian Music. More youngsters, children are learning our music worldwide through computer, multimedia and TV channels. I believe that full time and part time professionals of our music industry especially musical instrument players are using this technology to the most. I opine that radio, FM radio, radio online, private channels of Jaya TV, Sun TV, Vijay TV, internet, Youtube also contribute more. During private classes (or) institution classes we take today, recording the class’s audio and video is very helpful to practice more. So we could easily improve and cover syllabus more and more with quality education. When we discuss the impact of technology on the instruments, I describe that in earlier days manual tambura was used for sruthi purpose, it was difficult to handle because its size was big, suddenly the strings
might lose, manual sound was low, sometimes we will be unable to hear and so on. Most importantly a human is employed for maintenance and playing, hence salary will also be so expensive. Hence the technology involved on electronic tambura and electronic sruthi box its size and simple usage is so nice. Keeping a traditional tambura makes us very uncomfortable in many situations, for example, while going to abroad the embassy will not allow us to carry it. We should answer the embassy checking and clear the verification, which is a toughest task. But present advanced digital technology contributes more to South Indian Music. One of the very famous companies like apple has released i-Tambura and Tamburoid Apps for sruthi. It is a very high-tech instrument through software with very clear sound. It is not an instrument, it is just an APP download via net (or) transfer via Bluetooth. We should just have a smart phone only then it amplify to sound systems. In any type of hall, it produces the effective fine quality sound that to reach all. We keep it very easy to without any embassy checking. I opine that current days sabhas are also organizing well by proper seating arrangements, A/c (or) Fans, Sound Proof, Canteen, Toilet, Parking everything so that the level of audience has increased. I opine that after 2000, youngsters and other people’s arrival is high both public and sponsors. Number of sabhas and musician’s income has also got increased. Here I would like to mention about Krishna Gana Sabha conducting concert series for every month of the year; August, September and October for Gokulashtami music fest, then December for Music season and following the month of January and February for Nadaswaram festival and month of March, April and May for Sri Rama Navami Utsav, etc. Today IT and NRI sponsors are highly provide a lot of money for South Indian Music concerts. In Chennai there are overall 100 sabhas. Every season I play Ghatam in Minimum of 35 sabhas. December season ‘Music
Utsav’ is world famous. It is for continuous 60 days from morning to evening, no other country in the world conducts music festival like us. My opinion is that our South Indian Music has moved to global level. Many advanced speakers are available today, I went to Musket recently that auditorium had bass speakers. That speaker’s specialty is when we play music, the item will get delivered first to artist and then the artists could check the system whether the level and clarity of sound is good or not (quality testing) then it will deliver the sound to rasikas. The day before of concert, the audio operators did full check up rehearsal with us and then did the programme. Western people gave this much of importance to our music and sound systems. So today, before concert Sabha or Auditorium people have to plan, based on the acoustics for how many people are attending the programme and artists seated positions, how to protect both right, left and rear surroundings of sounds, how to satisfy that last row of rasikas, everything should be pre planed with artist and sound engineer. Today newly invented ‘Talamer’ instrument in music field is more helpful for Practice and Education. Because it shows much level of playing and practice for Skype classes too. For vocal concerts, technology delivers the effective voice to people. Microphone, Mike, Equalizer, Amplifier everything produce the base and sharp voice effectively. Today an artist without knowledge of sound technology will not be able to deliver fine music. Ghatam will have only one mike, some people use the contact pickup mike but I won’t use it. Earlier in a Japan programme that audio engineer tested my Ghatam with improved sound systems through the minute piece of sound. That much of quality sound technology they were keeping, while I was playing Ghatam. Japan concert was very great experience in my life before that concert I haven’t heard that much of quality sound. I believe that today around the world South Indian Music has a good reach. I
have done concerts in Australia, Japan, Korea, China, Malaysia, Sri Lanka, US, European countries, Musket, Dubai and in 14 countries. I have also played Ghatam concert in South Africa. In Japan and china I did a special programme for dance and rhythm, Europeans like our violin concert so violin and ghatam has spread well. NRI audiences also participate and enjoy our South Indian Music today. In Japan, China participant’s ratio is 10% Indians and 90% NRI peoples. In US, Europe, Musket and other countries 50% of Indian and 50% of foreign peoples participated in our music concerts. The festival of ‘Tyagaraja Arardhana’ concerts are conducted worldwide today by countries like Australia, US, Musket, India and other countries. By the impact of technology, our music and Tyagaraja has also reached the whole world”.

14. When the researcher interviewed Sri. Pakkirisamybarathi on the advancement of technological usages in Current trend of South Indian Music. He said, “After influences of Science and Technology, the Carnatic Music has developed throughout the world. After 2000, mp3, CD recorded varieties are available in the market. In past days Devaram, Tirupugazh, Tiruvasagam songs are written and traced out from ‘Olai chuvadi’ (Palm leaves). Divya Prabandam songs are fully collected from oral tradition. Today various singers have sung these songs and its records are also available. In Ancient days we got many more songs like Devaram, Tirupugazh etc. But without having a ‘Recording Technology’ most of the songs got missed. One sixty years ago, Sri Tyagaraja had guru-shishya parampara so he recorded his songs through culture of oral, palm leave and writing tradition. But Purandara dasar was basically a business man and had no students. So he was without shishyas, followers and recorders. So most of the Purandara dasa songs are missed. After that we had started using this science and modern technology in
South Indian Music, we got more recordings, development of songs, recorded data’s of both audio and video, learning, listeners, concerts and it has reached all. My views on the technology in music education is much positive. In ancient days south indian music was learnt through Gurukula. But today we see that the students are learning it with cd, pendrive, internet, mobile technology etc, it equips them with the knowledge for concerts and competitions and it has given them results. How the vidwan handles Sangathis, Tala, Grammar in music, style of singing and everything are easily available in the Internet (or) recorded learning. It is the very big achievement of technology for the growth of our South Indian Music. Current media of Radio, Doordarshan and private channels conduct the competition shows, live and recorded concerts. It has a worldwide reach. So millions of people especially youngsters, children wanted to learn ‘Carnatic’ and ‘Bharatanatiyam’ to participate in such competitions and for concert purposes. Today children are also getting more practice through Radio, TV and Internet as well. So they are easily ready to give quality music in short period. It is an another achievement of technology in South Indian Music. Because Gurus (or) masters live in various places. So people are not able to reach them easily. So they couldn’t attend live classes. Both Teacher and student wavelengths, expenses, time management everything will be affected. So people those who like technology based education system can pursue their classes through Skype. Lot of songs are available in Youtube both audio and video. Video conferencing classes through Webex, Skype reflect the audio and video part of Guru’s Behaviour, Expressions, Feel of songs etc. So technology based education saves more time, energy and money can be prepared easily in a short period of time. TV shows conduct the music competitions, those songs are from popular music but the subject is based on our
South Indian Music. Judges also ask the competitors about Raaga, Sangathis, Sruthi sudham and tala system etc, based on our music. So that popular music songs and TV shows indirectly help the children to learn carnatic music. So today our music has spread out worldwide. These achievements are happening in South Indian Music through technological advancements. In cine songs, people find out the ‘carnatic ragas’ and ‘sangathis’ because cine songs are easy to understand the music. In Gurukula system female are not allowed to stay and male are not allowed to stay for long time. Guru didn’t take classes for all students. Learning of a song in gurukula will take more days. Because both would be busy on other works. In institution based system they provide daily classes and time tables. They are conducting course in classes based on one pattern of syllabus system for a certain period of 3 years or 4 years and give ‘Honour Title’ award of ‘Isaimani’, ‘Isaikalaimani’, ‘Sangeetha Bhooshanam’ etc and its now on B.Music, and M.Music degree. These institutions give opportunity to all people, so music would reach commonly for all. Along with studies we have to learn musical instruments as an allied subject (or) part time, based in the same campus. So single time is spent to get knowledge on one or more subjects. In another stage, then distance education system is started in carnatic music the concept based on without age limit, only interest based admission is provided through distance education. From the beginning stage most of the people opposed to start music through distance education. But we provided the subject of both practical and theory through CD cassettes and Books. So people join institutions (DDE) and take classes privately with our CDs, books and to learn this art. Both of these systems are successful in state and national wise. My views about that Current advanced technology implemented in institutions which are more useful for south Indian music to reach
worldwide. Through technology we can move our music to various countries via online, Skype classes, our recorded CDs are relayed to foreign channels to reach globally. In ancient days, we followed single sound music instrument. Current days, we play well for multi sounds of vocal and Instruments concerts, Music Fusion etc. computer is a most useful device for voice. Instruments concerts through Electronic media, Keyboard playing, Multi instruments create variety of music. Our traditional rhythmic Panchamuka Vadyam is called as western drums now. Similarly, music waves on multi way is called Tarangam. It is following like Jalatarangam, Tabela tarangam, Mirdanga tarangam. Multi playing is available in multi track. Today technology on modern Drum set is called as ‘Rhythm Pad’ instrument. So on impact of technology our South Indian Music is developing in a new way”.

15. When the researcher interviewed Mr. Subramanyan\footnote{15} who is the editor of ‘Nadabramam’ international music magazine. He says very positive view of the present trend, education system, concert growth of south Indian music. He opines, “Today Radio, FM radio, online radio, Doordarshan, Private and Foreign TV channels begin the day with Carnatic music of morning songs. Newspapers and magazines talk of music on their front pages. I express that the current music festivals a series of concerts, dance programs and lecture-demonstrations around South Indian Classical Music is better known as Camatic music. It is a form of music intended to blend the deepest wells of emotion in people. It is a combination of devotion, musical grammar, rhythmic discipline and unpredictable experiences born from artistic improvisation. The trend trapped on so well and that associations of listeners are called as ‘Sabhas’ sprung up all over the world establishing a tradition that is driven purely by private effort and some of government help. Our Chennai music season has now become the world’s largest musical event. More
than 40,000 listeners turn up to listen to 2,000 concerts by 400 musicians in various languages and several lecture-demonstrations on music research. I believe that present recognition of Carnatic music has been winning around the world. Our South Indian concerts grow to Europe, China, Saudi Arabia, Australia, London, America, Canada, South Africa, Sri Lanka, Malaysia, Singapore, Japan, New Zealand, France, Israel, Muscat etc. My discussion is that now it has magnetized not just the Indian Diasporas but also it is musically trending among the locals. Research and experiments amalgamation on a variety of music with Carnatic are being carried out in universities around the world. Our music directors have developed ever more passion upon classical singers to deliver their tunes on Mobile. In past music season and concerts have no much more attention to people. I see that digital music systems and quick online downloads would change it. While the music industry around the world still grapples with the online search of traditional patent models, Carnatic musicians have gone in advance and embraced the internet and other technologies. I would like to express my views on youngsters’ attraction of Carnatic music. I say all the credit goes to technology. Hence today teenagers with concert-quality voices are many about 20 and even 13 years olds who are stepping into the professional path of present technological era. I would like to talk about today musicians and people have let a lot of their music to be shared online, especially on Youtube. Musicians take classes, through internet services such as Skype, Webex, for students to globally. I like to share my thought about recording and webcasting of live concerts. Listeners share the musical interactive on social networking like Facebook, Twitter, WhatsApp, Viber and so on. I opine that present Carnatic music has spread through new media and it only ruined up enthusiasm to new listeners as well as young soul. Music legends told,
our Carnatic music have approximately above 10,000 ragas. Today most of the ragas pursue through internet and music software. Finally my view on the impact of modern technology is an immense help to develop our South Indian Music to reach around the world”.

**Summary**

The researcher has interviewed fifteen famous South Indian Music artists of Vocal, Violin, Flute, Mandolin, Veenai and other people related to Music such as Journalist, Academician, Music Director, Sound Engineers, Instrument Players, and Singer. They all strongly accept that South Indian Music has attained International recognition only after technological growth in music field. The artists who use the advent of technology in music, especially for Theory and Practical reveal that they could extend the South Indian Music to the world only after development of technology in the field of music. When technology supports the various stages in the development of Music, recording, concerts, instruments and education were transformed in to a new dimension which has achieved international fame.

In general all artists agree that science and technology has caused a great impact on every field. So the music is not an exceptional one, because the music is integrated with Society and Human. As society undergoes many changes in every stage, it makes a great impact on music. The music itself also gets many changes.

According to the artists, the South Indian Music could reach all parts of the world only with the support of technology. As far as Music Education is concerned, they use multiple source of technology to conduct classes for both in India and abroad. The artists say that even regular classes can be taught through internet with the support of technology like Skype, Webex and Mobile learning etc. The students also use multi TV channel and Radio to Learn Music. The majority of artists strongly
opine that there is no chance of learning music without the support of technology. Very few artists express that there are some disadvantages in learning music with the support of technology. They say it has no proper tone quality and there is pause in between lines of song.

Every artist has almost the opinion on the impact of technology on Music. They say that handling of digital technology instruments has become simple and it is the sound technology which attracts the people very well. The computer can produce the sound of so many varieties of musical instruments, including human voice and it can be played in a single instrument. A few artists say when we use digital sound technology, the natural sound of instruments are likely to be changed. Thus, when we talk about recordings and music concerts, all artists agree that the growth of technology in music plays a vital role to conduct concerts throughout the world. According to them, after the arrival of digital technology and software for Learning, Composing, Mixing, Editing, Multitrack Recording and device of advanced Microphone, Amplifier, Equalizer and Internet, Skype, Webex, Free uploading, Webcast are effectively being used in the field of music. As the technology includes all these things, it helps South Indian Music to reach its international popularity. The artists of other countries are willing to come forward to join with our musicians and conduct a new innovative music concert like Fusion, Western Classical, Jazz, Jugalbandis etc together. So the artists openly say Music concert with support of technology, have increased their life standard financially. The present day music halls equipped with air conditions, modern acoustics, audio systems, LCD projection, seating arrangements, canteen and toilet facilities helps more people to take part in live concert. Only a few artists express their grief over the act of free uploading and
webcast which prevent people from attending live concert. So they are being affected economically by the advent of technology in the field of music.

Based on this complete analysis and interview with the fifteen artists, it has been proved that with the development of technology, South Indian Music and music education have certainly reached its growth to the international level. According to their views, only after the advent of technology, South Indian Music and Music Education have become 100 percent successful globally. Only twenty percent of artists opined that online uploading and webcast technology cause people to have less enthusiasm to attend live concerts and it causes the artists to be affected economically.
End Note of Performing Artists

1. Sri.Mudikondan Ramesh Veenai Artist, was Interviewed by the Researcher on 23-09-2014 at his residence, Chennai.

2. Sri.DurgaPrasad Veenai and Gottuvadyam player, Staff Artist, AIR was Interviewed by the Researcher on 20-10-2012 at AIR, Chennai.

3. Sri.U.P.Raju Mandolin Artist, was Interviewed by the Researcher on 23-10-2013 at his residence, Chennai.

4. Sri.Sriram Parasuram Violinist and Music Director, was Interviewed by the Researcher on 23-10-2012 at his residence, Chennai.

5. Sri.Nagaisriram, Violin artist, was Interviewed by the Researcher on 12-9-2010 at his residence, Chennai.

6. Sri Dr.V.L.V.Sudarshan, Violinist, Associate Professor in Music, Annamalai University was Interviewed by the Researcher on 12-6-2014 at Department of Music, Annamalai University.

7. Padmabushan, Sri.P.S.Narayanaswamy, Vocalist, was Interviewed by the Researcher on 21-7-2012 at his residence, Chennai.

8. Sangeetha Choodamani, Sri.O.S.Thyagarajan, Vocalist, Ex-dean Faculty of Fine Arts, Annamalai University was Interviewed by the Researcher on 15-7-2014 at his residence, Chennai.
9. Sri.Sikka|Gurucharan, vocalist, was Interviewed by the Researcher on 12-6-2011 at his residence, Chennai.

10. Sri.DiwakarSubramanyan, Music Director, Instruments player, Chairman of IFM was Interviewed by the Researcher on 12-8-2012 at his residence, Chennai.

11. Smt.Malachandrasekar, Flautist, The Member, Ministry of Culture, Govt Of India, was Interviewed by the Researcher on 12-12-2012 at his residence, Chennai.

12. Sri.Dr.Karthik, Ghatam Artist, was Interviewed by the Researcher on 12-8-2013 at his residence, Chennai.

13. Sri.Madipakkam Murali, Ghatam Artist, was Interviewed by the Researcher on 12-11-2012 at his residence, Chennai.

14. Sri.Pakkirisamybarathi, Formerprincipal, Madras Music College, Chief Editor of ‘Isaikaruvooolam’ Music Magazine was Interviewed by the Researcher on 12-10-2011 at his residence, Chennai.

15. Sri.Subramanyam, Chief Editor, Nadhabrahmam, National and International Music Magazine, was Interviewed by the Researcher on 12-5-2011 at his residence, Chennai.