

EDCine: “System specification and user requirements for advanced Digital Cinema experiences”

Survey Highlights

Personal profile

Personal data

- This survey collected about **1700** answers to 134 answered questions.
- The target group consisted of 43% in the age range of 45-55, and 30% belong to the age group of 35-45.
- 86% of the population who answered are Male.

Cinema habits

- **56%** of the group have been to the movies for leisure more than 15 times during the last year and 21% visited between 5 to 15 times.
- Also, 50% of the target prefer to watch Art-house type movies and 40% prefer to watch commercial movies.

DC experience

- 86% of the target group have already had a personal experience in digital projection. Of these, **90%** of the people enjoyed the experience. See the complete answer report for user comments.

Personal opinion about digital cinema

- 56% of the population think that the cinema closest to their house already has at least one digital screen.
- **23%** of the population feel that the main advantage of Digital cinema is that it will provide a better cinema experience with better image and sound quality. 17% of the target feels that Digital cinema will reduce business cost and also increase movie choice. **15%** feel that it will improve the impact of smaller cinemas.

Comments: 1700 answers to 134 answered questions leaves an **average** of about 13 answers per question asked. Also, the fact that 56% of the target group has been to the movies more than 15 times in the past year and furthermore that they already have experienced Digital Cinema and virtually all of them enjoyed the experience are all very positive figures. Professionals of this target group being mainly open to Digital Cinema is also an important figure in the context of this survey.

Organisation profile

Organisation data

- 20% of the participants had their headquarters placed in Belgium and in Italy. 14% had their headquarters in France and Germany. 10% had their headquarters in Spain and Finland.
- **70%** of participants were Private organizations with an approximate size of organisation staff between 1-29 people.
- All participants have a world wide audience.

Organisation role

- 45% of the organization belonged to production and post-production
- 27% where Exhibitors
- 10% where Distributors
- Additionally, 18% of the group belonged to Research and Consulting

Digital cinema position

- On questioning about the Digital Cinema position of the organization there was an equal 50% distribution between those who already have an internal service responsible for DC handling and those that did not.
- **80%** of the organisation felt that they will have a positive influence of Digital Cinema on their business.
- Regarding the timeframe evolution of DC, 80% of the organisations feel that it is about to happen.
- In response to what would be the trigger for their organisation to completely focus on Digital cinema, 35% felt that their organisation didn't need a trigger since they are already on to it. In a decreasing order the other triggers would be an internationally adopted standard, an endorsement from the 7 major Hollywood studios, global digital content availability, a well defined business model, the technology to become cheaper and to have reliable and affordable equipment.
- They feel the **main challenges** that the organisation will have to face in order to adapt to digital cinema would be technical issues, initial costs and technical complexity.

Security

- **70%** of the organisation felt that the use of a Security Key (KDM) is mandatory.
- **52%** of the participants felt that the security keys should be delivered to the exhibitors by the distributors and a 20% felt that a neutral third party should deliver the security keys.
- **55%** of the group agreed to have a follow-up logs only if permission from the parties involved were requested. 40% were willing to have such a follow-up log without any restrictions.

Physical media

- For the most appropriate means of transport as a substitute for physical media **36%** opted for Satellite, 33% for XDSL and 22% for Cable.

Intermissions

- 82% of the organisations do not use intermissions in movies.

Distributor survey

Dubbing

- **82%** of the distributors do not use dubbing. For those who dub movies there is an equal 33% distribution for dubbing all movies, less than 25% of movies and more than 50% of movies. The participants who do dub movies have no particular preference to the type of movies and dub almost any type of movies and the task of dubbing is subcontracted to the Post-production house.

Subtitling

- **70%** of distributors subtitle their movies.
- The languages used for subtitling include Norwegian, English, Spanish, French, German, Finnish, Swedish, Dutch, and Catalan.

Censorship

- **60%** of the distributors do not have to apply a censorship procedure
- **69%** have a rating procedure.

Hearing and visual impaired help

- **20%** of the distributors provided support for hearing and visual impaired movie goers.
- **64%** of the participants insert their distributor logo at the beginning of the movie and an equal **64%** feel that their contract forces trailer selection during the pre-show.

Digital cinema business model

- **42%** of distributors feel that having digital copies instead of 35mm will impact their business model by increasing competition and another **28%** feel that it will create more complex distributor-exhibitor negotiation.
- **41%** of the distributors would use the Internet and **30%** would use mobile phones and other portable devices to improve their business model.

Digital cinema project

- **63%** of the participant organisations are currently not equipped for D-cinema are.
- Of those who are equipped **50%** handled digital Advertisements, **30%** handled commercial movies and a **20%** handled arts & independent movies.
- These organisations also plan to increase this volume in the following year.

Exhibitor Survey:

None of the participants were part of an Exhibitor chain.

Certification

- **40%** of the exhibitors have stated that their theatre is compliant to a certain standard/recommendation or guideline. Of these 75% follow the DCI standard while the rest stated to follow Europa Cinema standards.

35mm: Projection Equipment

- **63%** of the exhibitors feel that the average lifetime of their 35mm projector is more than 15 years.

Sound equipment

- The typical sound system of 87% of the exhibitors is 5.1 Dolby digital.
- The typical speaker configuration behind the screen varies equally between 3 and 4. For surround system 57% have from 4 to 8 speakers and 43% have more than 8 speakers. 57% have 1 subwoofer and 43% have 2.

Sound equipment satisfaction

- **85%** of the exhibitors are satisfied with their current sound system.
- When comparing the contribution of audio in comparison to video in the Digital cinema experience 85% feel that image is more important than sound.
- 57% of the exhibitors are not willing to spend money to renew the sound system.

Projection

- **62%** of the exhibitors say that their organisation is currently equipped for D-cinema and of these 80% were planning to increase the number of digital screenings next year.
- **57%** of the exhibitors expect that the average life time of their digital cinema projector will be less than 5 years and 42% feel it to be 5 to 10 years. Let us remind here that 63% of them feel that the average lifetime of their 35mm projector is more than 15 years.
- In case of Digital cinema show cancellation **38%** of the exhibitors expect the reason to be server malfunction and a **30%** expect it be because of malfunction of the security system.
- **All** the participants are interested in using digital equipment to project 3D movies. **31%** of exhibitors would use digital installation for HD productions and 19% would use it for live broadcasting or documentations and a 12% would use it also for business presentations or advertisements.

Postproduction survey

Day-to-day operation practice

- 88% of the postproduction units archive intermediate steps of their productions.
- **78%** use a file-based workflow.
- **70%** use a 2K projector for projection.
- For assessing the image quality **44%** do an informal quality judgment in a controlled environment using calibrated screen or light illumination.
- 33% use a subjective or objective quality assessment methodology.

Projection equipment

- **62%** of the post-production companies feel that their content is played back in cinemas in the same quality as they produced it.

Sound equipment

- The **major shortcomings** of existing sound system is believed to be Quality of loudspeakers or Sampling rate (48kHz).
- All the participants are interested in a high end spatial master format from which all other formats can be generated.

General

- In postproduction intermediate steps 53% find it useful to have digital records of settings, tools and techniques used in each task and 38% would like to have digital records of which task was performed from which film.

Projection equipment

- **71%** of the postproduction organisations are currently equipped for D-cinema.
- 50% of the post production companies plan to increase the number of digital screenings the following year by more than 25%.
- 66% of the participants expect the average lifetime of the digital cinema projector to be less than 5 years
- 33% expect to cancel a digital cinema screening for technical reasons once every 6-9 months or once a year. Of these 50% expect the reason to be server malfunction.

Technical specification

- **80%** of participants feel that the aspect ratio of 1.85 would be most appropriate for Digital cinema.
- An equal group of **40%** feel that the 2K (2048x1080) and 4K (4096x2160) would be most appropriate for Digital cinema.
- **60%** of participants feel that the most appropriate frame rate is 25. 24 and 50 are the other two chosen frame rates, with a 20% answer rate each.